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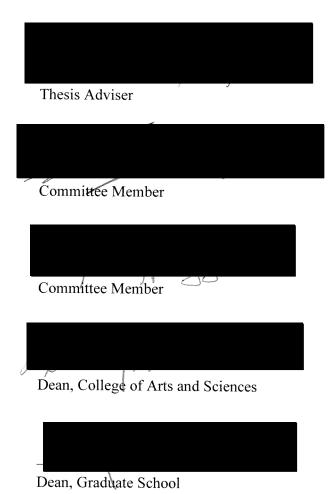
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To the Dean of the Graduate School:

We are submitting a thesis written by Susan Tyler Wallace Harding entitled Evaluating the Impact of a SNAP Challenge on University Participant Attitudes Toward Poverty.

We recommend acceptance in partial fulfillment of the requirements for the degree of Master of Science in Human Nutrition.



EVALUATING THE IMPACT OF A SNAP CHALLENGE ON UNIVERSITY PARTICIPANT ATTITUDES TOWARD POVERTY

A Thesis

Presented to the Faculty

Of the

College of Arts and Sciences

In Partial Fulfillment

Of the

Requirements for the Degree

Of

Master of Science

In Human Nutrition

Winthrop University

May, 2015

By

Susan Tyler Wallace Harding

ABSTRACT

Objective: The purpose of this study was to evaluate whether a week-long SNAP Challenge completed by university participants influenced perceptions about poverty.

Design: Pretest and posttest questionnaires measured changes in attitudes toward poverty after the SNAP Challenge using the Attitude Toward Poverty Short Form scale comprised of three factors: Personal Deficiency, Stigma, and Structural Perspective. Dispositional empathy was measured with the Interpersonal Reactivity Index and analyzed as a potential mediating variable of attitude change.

Subjects: Student and non-student subjects were recruited from Winthrop University. Four hundred forty-six pretest questionnaires were initiated, 363 were completed, and 363 were eligible for inclusion. One hundred forty-three posttest questionnaires were initiated, 121 were completed, and 117 were eligible for inclusion. Eighty matched pairs met study inclusion criteria.

Results: Attitudes toward poverty related to Stigma, but not Personal Deficiency or Structural Perspective improved significantly (t(79) = -3.421, p = .001, d = 0.38). There was no correlation between days participants completed the SNAP Challenge and changes in attitudes toward poverty. Human Nutrition participants did not differ from other participants in the magnitude of attitude change observed. Empathy did not mediate the relationship between the SNAP Challenge experience and attitude change.

Conclusion: The SNAP Challenge improved attitudes related to Stigma. It offers a unique experiential learning method for broadening perspectives about poverty. The Challenge should be integrated with classroom teaching about poverty and re-evaluated.

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CHAPTER I

INTRODUCTION

According to U.S. Census Bureau (2014) data, in 2013, 45.3 million Americans were described as living in poverty, and the nation had a poverty rate of 14.5%. While the poverty rate improved slightly from 2012 (15.0%), it remained elevated from 11.3% in 2000 (U.S. Census Bureau, 2014). Fremstad (2011) described the first decade of the 21st century in the United States as a "lost decade" when declines in poverty rates achieved in the 1990s were erased by economic recession and stagnant job growth. The current definition of the poverty line is widely accepted as an insufficient measure for identifying people in poverty. Fremstad (2011) notes the original definition of the poverty line was based on 50% of median income in the 1960s; however, it is now only about 30% of median income given the only adjustments made have been for inflation over the years. In 2013, the poverty threshold for a family of four, including two children was \$23,624 (U.S. Census Bureau, 2014). Individuals not falling below the official poverty line may in fact experience many of the challenges of living in poverty and "making ends meet" (Fremstad, 2011). Thus the actual portion of the U.S. population that struggles with poverty may be greater than national statistics portray.

Poverty is one of the most influential factors impacting health status as low-income individuals face greater difficulties accessing, understanding, and using health services (Pettit & Nienhaus, 2010). Additionally, income is strongly associated with the ability to acquire adequate food (Coleman-Jensen, Nord, & Singh, 2013). Poverty is also connected to the diet quality and food security status of families. Wang et al. (2014)

recently demonstrated a widening gap in the diet quality of wealthy and impoverished Americans that tracks along with income disparity trends. Although the quality of the overall U.S. diet improved from 1999 to 2010, greater improvement occurred at higher socioeconomic levels. Disparities in diet quality present in 1999 were actually amplified over the past decade. People in poverty may experience poorer diet quality due to many environmental factors including limited resources, higher food prices, and access to supermarkets (Morland, Wing, & Roux, 2002). The U.S. Department of Agriculture Economic Research Service (2014) defines food security as "access by all people at all times to enough food for an active, healthy life" (Overview, para. 1). "Marginal food security" describes intermittent anxiety over food sufficiency or shortage in a household without substantial changes in diet or intake while "Low Food security" describes reduced quality or variety of diet without reduced intake. "Very Low food security" describes multiple instances of disrupted eating patterns and reduced intake. Gunderson, Kreider, and Pepper (2011), examined the causes of reduced food security, highlighting an inverse relationship between income and food insecurity. They note, however, poverty does not always translate to lack of food security, potentially due to the availability of liquid assets in some households or an absence of negative income shocks that increase the likelihood of insecurity. While poverty does not always translate to reduced food security, a substantial portion of the U.S. population regularly experiences food insecurity, 14.3% of all households in 2013, with 5.6% of these experiencing very low food security (Coleman-Jensen, Gregory, & Singh, 2014).

A number of studies have demonstrated the deleterious effects of food insecurity and poverty on health. Ryu and Bartfield (2012) highlighted the long-term negative effects of persistent food insecurity on health status in children. Gowda, Hadley, and Aiello (2012), also described an association between food insecurity and increased inflammatory markers in adults, a link to chronic disease. Seligman, Laraia, and Kushel (2009), showed a relationship between cardiovascular risk factors including hypertension, hyperlipidemia, and diabetes and varying degrees of food insecurity. In pregnancy, food insecurity has been implicated in heightened risk of increased weight gain and pregnancy complications, associations outlined by Laraia, Siega-Riz, and Gundersen (2010).

With widening disparities in income, food security status, diet quality, and health status, a substantial portion of the U.S. population is reliant upon public assistance. The Supplemental Nutrition Assistance Program (SNAP) is the largest federal government assistance program in terms of both participation and spending available to help low-income households purchase food. In 2014, 46.5 million Americans received SNAP benefits during the year (approximately 15% of the total population), and total government spending associated with the program was 74.1 billion dollars. These figures were up from 23.8 million participants (approximately 8% of the total population) and 27.1 billion dollars spent a decade earlier in 2004 (U.S. Department of Agriculture Food and Nutrition Services, 2015; U.S. Census Bureau, 2014, Population Estimates). The increased utilization of SNAP benefits reflects the most recent economic recession and increased food costs and suggests a significant number of low-income individuals may be at risk for food insecurity (Wilde, 2013) and impaired health.

As evidenced in the codes of ethics across social work, dietetics, and various health disciplines and educators, a commitment and responsibility exists to serve this diverse low-income population inclusively without discrimination (American Dietetic Association, 2009; National Association of Social Workers, 2008). To this end, it is necessary to teach pre-professionals about the realities of poverty such as challenges with food security so they are able to perform as effective practitioners to meet the needs of this U.S. population in poverty. Additionally, individual perceptions about poverty and its relationship to health may influence support for social programming and policies developed to address these issues (Reutter, Neufeld, & Harrison, 1999).

Unfortunately, poverty and issues of food security are often discussed in preprofessional education programs in an abstract fashion primarily focusing on statistics,
data points, and facts about those living in poverty (Vandsburger et al., 2010). There
appears to be less emphasis on developing an understanding of life in these
circumstances. Additionally, education has become increasingly segregated by income.

As reported in the research newsletter *Postsecondary Education Opportunity* (Economic
segregation of higher education opportunity, 1973 to 2001, 2003), there has been a
growing segregation in U.S. higher education over several decades with low-income
students concentrated in 2-year universities and higher-income students attending 4-year
institutions. The most affluent students are concentrated in the most prestigious 4-year
schools. Four-year universities outnumber 2-year universities, and they are where many
health professionals receive initial training and education. As many enrolled students do
not come from low-income backgrounds, they may not have had experience with poverty,

and they may hold biases towards those living in poverty (Bowman, Bairstow, & Edwards, 2003; Vandsburger et al., 2010). Cozzarelli, Wilkinson, and Tagler (2001) demonstrated stereotypes held by undergraduate students about people in poverty were significantly more negative than those about the middle class. Students also had a greater tendency to attribute poverty to individual behavioral factors rather than structural factors. Individualistic explanations of poverty include flaws in an individual's character or decision making such as lack of work ethic, poor money management skills or substance abuse while structural explanations refer to flaws in society and the "system" such as inequality, disadvantage, and prejudice (Cozzarelli, Wilkinson, & Tagler, 2001).

Many undergraduate and graduate students, especially those pursuing healthcare careers, will encounter diverse, impoverished populations. Without an understanding of the financial constraints and barriers to health that accompany poverty, undergraduate and graduate students will be limited in their ability to deliver competent health-related interventions and treatment plans. In dietetics, specifically, developing this competency has implications for how effectively a dietitian conducts counseling sessions and connects clients to health resources. Income, access to resources, and health are inextricably connected (Gundersen, Kreider, & Pepper, 2011). Awareness of this reality is crucial for future practitioners to develop more favorable attitudes toward those living in poverty in order to eventually provide a higher standard of care.

Poverty simulations have previously been used to teach about poverty in higher education with students in pre-health and other majors as well as medical students (Menzel, Wilson, & Doolen, 2014; Nickels & Nielsen, 2011; Patterson & Hulton, 2012;

Strasser et al., 2013; Wallace, Miller-Cribbs, & Duffy, 2013). Participants in simulations assume different roles in low-income families and are tasked with meeting basic needs and navigating social services all while dealing with unpredictable challenges of living in poverty. Overall, research on these activities suggests they promote increased insight related to the conditions of poverty and stimulate thinking about poverty. While simulation activities have demonstrated some success in improving student perceptions of poverty, the SNAP Challenge (also, the Challenge) represents a unique experiential learning opportunity for students focused on nutrition, food security, and specific federal policies related to hunger and the people in poverty. Participants are challenged to follow a restricted food budget for several days reflecting average SNAP benefits of about \$4.50 a day per person, depending on the state. This requires participants to make significant, often difficult changes in their daily eating habits. The experience has been used by public figures and policy makers as well as in medical schools to demonstrate the difficulties of eating solely on SNAP benefits ("CEOs Taking", 2013; Lomax, 2013; MacMillan, 2014; Webb, 2011). To date this experience has not been empirically evaluated as a teaching tool employed simultaneously across disciplines as a campuswide event. It is anticipated this experience will generate positive changes in attitudes toward poverty of participants. There has also been no research conducted to evaluate the impact of an organized SNAP Challenge on undergraduate and graduate students. In order for the SNAP Challenge to be deemed an effective activity for teaching about poverty, it is important to explore student outcomes. The present study was designed to study if student attitudes toward poverty were impacted in a positive manner. Positive

changes in attitudes may suggest this activity is important in developing more favorable perceptions of poverty that can translate to improved actions towards and care provided for impoverished people.

Problem Statement

There is limited focus in higher education in the United States on poverty, and undergraduate and graduate students often lack a deep understanding of the realities of poverty while maintaining stereotypes about people in poverty (Bowman et al., 2003; Nickols & Nielsen, 2010; Steck et al., 2011; Vandsburger et al., 2010). Impactful and practical teaching methods that foster awareness and understanding about the challenges of poverty are needed to prepare students to become professionals who can work effectively with low-income individuals.

Purpose Statement

The purpose of this study was to evaluate whether participation in a week-long SNAP Challenge by undergraduate and graduate-level students as well as non-student employees at a small public liberal arts university influenced perceptions about poverty and people in poverty.

Research Objectives

In order to fill gaps in the literature regarding use of the SNAP Challenge to teach about poverty, this study intended to fulfill the following objectives:

- To determine if participant attitudes toward poverty changed following the SNAP Challenge.
- 2. To determine if outcomes observed in Human Nutrition participants following the SNAP Challenge were different compared to other participants.
- 3. To determine if changes in attitude following the SNAP Challenge were mediated by dispositional empathy.

Hypotheses

Alternative Hypotheses (H_a)

- Participants will score higher on the three overall factors of the Attitude Toward
 Poverty Short Form (APS) instrument (Personal deficiency, Stigma, and Structural
 Perspective) following the SNAP Challenge.
- 2. It is expected Human Nutrition participants will display more improvement in overall APS factor scores after the SNAP Challenge than participants from other academic fields due to the limited focus in dietetics education on learning about poverty through experience.
- The relationship between SNAP Challenge participation and change in attitudes
 toward poverty as measured by the APS factor scores will be mediated by
 dispositional empathy.

Null Hypotheses (H_o)

- There will be no significant change in overall APS factor scores after the SNAP Challenge.
- There will be no significant difference between Human Nutrition participants and those from other academic fields in the amount of change in overall APS factor scores after the Challenge.
- 3. Dispositional empathy will not mediate the relationship between participation and changes in attitude.

CHAPTER II

LITERATURE REVIEW

Introduction

Disparities in the dietary quality and health status of people in poverty highlight a subset of the U.S. population with unique needs. In 2013, 14.3% of households experienced low or very low food security and 45.3 million lived below the federal poverty line (Coleman-Jensen et al., 2014; U.S. Census Bureau, 2014). These statistics represent a significant portion of Americans. Whether working in acute clinical care, outpatient counseling, or community nutrition, registered dietitians as well as other health professionals will interact with impoverished persons. It is important to develop students and professionals with an understanding of the realities of poverty and more positive perceptions of those living in poverty to promote better care and equal access to health resources (Krumer-Nevo, Weiss-Gal, & Monnickendam, 2009).

Teaching about Poverty

Teaching social work pre-professionals about issues related to poverty is common. In their framework for poverty-aware social work practice, Krumer-Nevo, Weiss-Gal, and Monnickendam (2009), define the end result of teaching about poverty as having two key parts. The first result of adopting a poverty-aware practice is the development of professionals who "adopt a stand that opposes the existence of poverty and inequality in their work with and on behalf of people living in poverty" (Krumer-Nevo, Weiss-Gal, & Monnickendam, 2009, p.229). This result is important to minimize bias and ensure all individuals are treated fairly, regardless of socioeconomic status.

According to this framework, the second result of teaching poverty is that it will train professionals who are

able to provide "good enough" services to people in poverty based on the understanding of the centrality of poverty in peoples' lives and of the ways in which poverty, and its intersection with gender, age, disability, ethnicity, and race, affects diverse situations of distress that may have behavioral and emotional expressions. (Krumer-Nevo et al., 2009, p.229)

In order to provide quality care, an understanding of the complex realities of poverty is necessary. This framework highlights why education about poverty is crucial in training health and social work professionals. It also demonstrates how poverty cannot be understood as a single, separate phenomenon. It is interconnected with other cultural characteristics, among them race and ethnicity (Krumer-Nevo et al., 2009). It is imperative we develop a sensitivity to diversity in future professionals so they are equipped to serve the underserved and impoverished. The question remains as to what is the best method for accomplishing this. Experience-based learning activities may offer an effective method to develop competent and poverty-aware practitioners and citizens. While the researchers focus on social work, the framework they lay out is applicable to all health professions, including the dietetics profession.

Experiential Learning as a Transformative Process

Experiential learning was defined by Kolb (1984) as "the process whereby knowledge is created through the transformation of experience" (p. 26). Research has shown experiential learning in many forms can be an effective way to teach through

active engagement of adult students (Boss, 1994; Caulfield & Woods, 2013; Perrin, 2014). Perrin (2014) describes experiential learning programs as linking together "theory and practice" (p. 1). Experiential learning has been suggested as an adjunct method for teaching about poverty to be used in addition to theoretical approaches (Vandsburger et al., 2010; Zosky & Thompson, 2012). Steck et al. (2011) noted the integration of experiential learning activities into classroom teaching and discussion can translate to an enhanced understanding of information as well as ability to apply the information in real-world situations.

Prior research related to experiential learning and poverty education has largely focused on the use of poverty simulations and service learning projects to impact knowledge and attitudes about people in poverty (Menzel et al., 2014; Steck et. al, 2011; Proctor et al., 2010). Poverty simulations allow students to actively experience similar conditions as the impoverished by immersing them in a reasonable representation of a real environment. Referring to a poverty simulation with undergraduate students, Zosky and Thompson (2012), noted "learning on an experiential level versus a cognitive level allows students to experience the challenges of living in poverty in a complex and integrated way rather than as sterile facts stripped of context" (p. 80). Similarly, service learning experience where students learn through the action of serving offers personal interactions with others and promote self-reflection on these experiences, promoting the application of cognitive learning in real-world settings and complex critical thinking about conflicting social issues (Eyler & Giles, 2002; Kronick, Gourley, & Cunningham, 2011).

Kolb (1984) describes experiential learning "as a process whereby concepts are derived from and continuously modified by experience" (p. 28). Having experiences related to impoverished persons can challenge stigmas, change attitudes, and promote better understanding of the circumstances of poverty. A week long SNAP Challenge offers an alternate type of experiential learning activity where participants experience one circumstance of poverty, the challenge of acquiring food on a very restricted budget. While a week is longer than the typical half day required for a poverty simulation, we recognize it cannot fully convey the realities of life in poverty. The SNAP Challenge highlights the difficulties of acquiring adequate food on a limited budget; however, this is just one of the difficulties faced by those in poverty. Many of these difficulties will not be experienced by participants of the SNAP Challenge.

Teaching Poverty through Simulation

Recognizing the need to teach about poverty in higher education, simulations involving college students have frequently been evaluated as an experiential learning activity to promote improved attitudes toward poverty. Most studies use a pre/posttest design to assess the impact on knowledge, attitudes, beliefs, empathy, and/or behavior intentions related to poverty (Noone et al. 2012; Steck et al., 2011; Vandsburger et al., 2010). Nickols and Nielsen (2011) and Strasser et al. (2013) noted increased understanding of the conditions contributing to poverty as well as enhanced empathy for the impoverished across both family and consumer sciences and business majors as well as public health graduate students and professionals.

Individual and structural explanations for poverty as well as stigma toward people in poverty have been discussed as separate constructs impacting attitudes toward poverty (Yun & Weaver, 2010). In the development of a multidimensional tool, the APS, to measure attitudes toward poverty, Yun and Weaver (2010) describe individualistic causes for poverty as those related to behavioral or character flaws of the individual. Structural attributes relate to discrepancies in the opportunities afforded by society. The researchers discovered a third construct, stigma, describing attitudes and feelings toward impoverished people as a stigmatized group. Nursing students have been evaluated for changes in attitudes following a poverty simulation using Yun and Weaver's (2010) APS tool (Patterson & Hulton, 2012). The results demonstrated a significant change in attitudes related to stigma, but not in those related to structural and individualistic explanations of poverty.

It is not completely convincing that an experience-based poverty simulation is a more effective tool compared to more traditional teaching methods. Compared to a control module, an interactive poverty simulation was shown to elicit similar changes in nursing students' attitudes toward poverty as well as beliefs about health and poverty (Menzel et al., 2014). In undergraduate social work students it was also observed that while knowledge of the difficulties faced in poverty increased among participants, changes in attitudes toward poverty related to structural and individualistic attributions did not occur (Zosky & Thompson, 2012). While simulations can offer valuable experiences and stimulate thinking about the conditions of poverty, they are relatively brief periods of time carved out of participants' daily lives. It is possible a more intrusive

experience providing a disruption to daily life could have more pronounced effects on attitudes toward those living in poverty.

Supplemental Nutrition Assistance Program (SNAP)

SNAP, formerly known as the Food Stamp Program, provides financial benefits to help millions of eligible Americans acquire adequate food (U.S. Department of Agriculture Food and Nutrition Service, 2014). According to U.S. Department of Agriculture Food and Nutrition Service (2014), benefits for food purchases were provided to over 47 million low-income Americans in 2013. Eligibility criteria are met when monthly gross and net income for a household falls below 130 percent and 100 percent of the poverty level, respectively. In 2012, 52% of households receiving SNAP benefits were deemed food insecure (Coleman-Jensen et al., 2013). SNAP participation can be viewed as a marker of poverty and also food insecurity in America. In 2013, average monthly SNAP benefits per person across the United States were \$133.07 or roughly \$4.40 per day. Participation in SNAP is voluntary and varies with macroeconomic conditions and unemployment rates. Wilde (2013) notes participation reached record levels as a result of the recent financial crisis with new monthly records consistently being set beginning in 2008. For the first time, SNAP purchases accounted for 10% of total retail food spending in the United States in 2010.

Given the prevalence of SNAP participation, research has focused on the effectiveness of SNAP in reducing food insecurity and improving diet quality. Ratcliffe, McKernan, and Zhang (2011) found that receipt of SNAP benefits resulted in a 30% lower chance of being food insecure and 20% lower chance of being very food insecure

over a 4 month period. In contrast, Leung et al. (2014) found that participation in SNAP did not result in improved food security status or dietary quality over a three month period. While SNAP serves as the nation's primary hunger safety net, these studies highlight the key question of how effective the program benefits are at reducing food insecurity. Clearly there are challenges in achieving a significant, lasting reduction in food insecurity and improvement in diet quality. While SNAP is intended to supplement food purchases, many Americans rely solely on these benefits to get enough food on the table.

SNAP Challenge

Participation in a SNAP Challenge involves limiting total daily food purchases to the benefits a SNAP recipient typically receives. Challenges usually last for several days or a week (FRAC 101: SNAP Challenge Toolkit, n.d.). Participants may be provided with resources for help with meal planning and budgeting. They may use coupons; however, they are instructed not to consume any food items from before the challenge. In the past, these challenges have been popular with financial executives (Newswire, 2013; Tam, 2013) and politicians (MacMillan, 2014) trying to demonstrate the difficulties of eating an adequate diet on SNAP benefits. With its longer duration and more pronounced impact on participants' daily lives, it is anticipated by the researcher a SNAP Challenge can generate more significant changes in attitudes toward poverty.

It was anticipated the SNAP Challenge experience would offer a unique and highly feasible way to teach students about the difficulties of poverty, namely as they relate to procuring adequate healthy food. Assessing the SNAP Challenge at Winthrop

University presented the first instance where the activity was evaluated for its impact on university participant attitudes about poverty and impoverished persons. This research helped determine if attitudes toward poverty changed following participation in the SNAP Challenge and explore whether these changes were mediated by dispositional empathy. Surveying participants from different academic majors allowed for comparison between Human Nutrition and other majors. Ultimately, feedback gathered also provided insight into whether students perceived participating in the SNAP Challenge to be a beneficial and worthwhile experience, valuable to their professional development. This evaluation of the SNAP Challenge adds to the body of research related to experiential learning and teaching about poverty.

Attitude Toward Poverty

Attitude is described as an "individual's propensity to evaluate a particular entity with some degree of favorability or unfavorability" (Eagly & Chaiken, 2007, p.583).

Attitudes toward poverty have been described as multidimensional in nature (Cozzarelli, Wilkinson, & Tagler, 2001; Yun & Weaver, 2010). Even while a significant portion of the American population lives in poverty, Cozzarelli, Wilkinson and Tagler (2001) note limited research has been completed to understand attitudes toward the impoverished. The researchers note these attitudes are likely important for their influence not only one willingness to help people in poverty, but also support for public welfare programs.

Several different tools have been developed to measure attitudes toward poverty as described by Yun and Weaver (2010). Commonly, the focus has been on attributions people make for causes of poverty. Two determinants of poverty discussed have been

individualistic, emphasizing a personal deficiency or flaw as the cause of poverty and structural, emphasizing systemic or societal failures that promote inequality and disadvantage (Atherton et al., 1993; Yun & Weaver, 2010). Other proposed determinants of poverty have included a fatalistic or "bad luck" attribution as well as a cultural attribution ("subculture of poverty") (Cozzarelli, Wilkinson, & Tagler, 2001).

Cozzarelli, Wilkinson, and Tagler (2001) note Americans tend to believe individual causes are more important determinants of poverty than structural ones; however, people may believe to some degree in both types of attributions at the same time. Additionally, the researchers demonstrated college students were significantly more likely to hold more negative stereotypes about people in poverty rather compared to the middle class.

Atherton et al. (1993) developed a one-dimensional tool based on these constructs to evaluate attitudes toward poverty. This original Attitude Toward Poverty scale included 37 items with higher scores reflecting belief in structural causes of poverty and lower scores reflecting individual causes. While the tool exhibited validity, conflicting research suggested a more elaborate factor structured existed (Yun & Weaver, 2010). As such, Yun and Weaver (2010), developed a modified, multidimensional Attitude toward Poverty short-form (APS) tool based on the original scale. The researchers discovered three dimensions of poverty: Personal deficiency, Stigma, and Structural Perspective. Similar to the original Attitude toward Poverty tool, the Personal Deficiency factor reflected individual explanations for poverty while the Structural Perspective factor

reflected structural causes. A third factor, Stigma, emerged, reflecting stereotypes and common feelings toward people in poverty rather than explanations for poverty.

The term stigma has evolved to have different meanings and implications in social research; however, Kleinman and Hall-Clifford (2009), argue it is a multifaceted social, cultural and moral process. The researchers note the lack of understanding especially about the moral processes underpinning stigma and suggest a need to "understand how the moral standing of individuals and groups in local context affects the transmission and outcome of stigma" (p. 418). Link and Phelan (2001) describe conceptually how stigma exists, highlighting first the identification of human differences followed by a linking of "different" individuals with negative stereotypes, effectively creating an "us" vs. "them" distinction.

Studies have used the APS tool in pretest/posttest designs to measure changes in attitudes toward poverty after participation in a poverty simulation (Menzel et al., 2014; Patterson & Hulton, 2012; Yang, Woomer, Agbemenu, & Williams, 2014). Menzel et al. (2014) did not see a significant difference between APS scores of students participating in a simulation compared to a control group while Patterson and Hulton (2012) did observe significant changes in the attitudes of nursing students completing a poverty simulation; however, only in the Stigma dimension of the APS. Yang et al. (2014) described a similar result as Patterson and Hulton on the APS, seeing significant changes in the attitudes of nursing students in the Stigma dimension only following participation in a poverty simulation.

A large body of research has focused on how attitudes influence evaluative responses such as judgments, emotions, and behaviors. Eagly and Chaiken (2007) make the distinction between attitude and its expressions, maintaining that while emotional responses and behaviors express attitude, they are separate from attitude. Essentially, attitude plays a role in actions, but is not the sole influence on evaluative responses. Thus attitude influences individuals' actions; however, more research is needed about how attitudes influence behavior intentions and actual behavior. Future research should expand on the impact of events such as the SNAP Challenge on not only attitude, but also knowledge, beliefs, and most importantly behavior of future professionals who will be working with low-income populations.

Attitude and Empathy

There is no one agreed upon definition for empathy. Personal motivations for empathy have been debated as well as its status as a cognitive versus emotional construct; however, there appears to be general agreement empathy is complex and multidimensional in nature (Batson & Ahmad, 2009; Davis, 1980, 1983a, 1983b; Konrath, O'Brien, & Hsing, 2011). Additionally, empathy may be considered as dispositional or situational, where dispositional empathy refers to the inherent, stable tendency of an individual to react to observed experiences of others while situational empathy is the temporary response to a given situation or manipulation (Davis, 1983b; Konrath et al., 2011).

There are two additional categories of empathy discussed in the literature: cognitive and emotional; however, they have been labeled with many different terms (Stephan & Finlay, 1999). In this vein, Batson and Ahmad (2009) further described empathy in the context of four distinct, but related psychological states. Two were cognitive states related to perspective taking: (1) imagining how one would think and feel in another person's situation and (2) imagining how another this is thinking and feeling. The other two states described emotional responses: (3) feeling the way another feels or parallel empathy and (4) feeling for another person who is in need or reactive empathy (Batson & Ahmad, 2009; Stephan & Finlay, 1999).

This framework parallels the Interpersonal Reactivity Index (IRI) scale developed by Davis (1980) to measure individual differences in four separate aspects of dispositional empathy. Davis' empathy tool includes two subscales related to an individual's cognitive tendencies, Perspective-Taking (PT) and Fantasy (FS), and two subscales related to the individual's emotional tendencies, Empathic Concern (EC) and Personal Distress (PD). The PT scale reveals a person's tendency or ability to "step 'outside the self' – when dealing with other people" (Davis, 1980, p. 12) and consider the viewpoint of another. The FS scale reflects the inclination of a person to daydream and imagine themselves in fictional situations or as a fictional character. Both of these states describe the ability to assume the perspective of another person in another situation, real or fictitious. The other two empathy states measure the emotional response a person has when they observe emotion in others. The EC scale measures how much "warmth, compassion, and concern" a person feels for another less fortunate person while the PD

scale assesses "fear, apprehension, and discomfort" felt when observing another's negative distress (Davis, 1980, p. 12). Davis (1980) viewed these four distinct constructs together as a comprehensive measure of dispositional empathy. They are all related because each concerns how an individual react to others; however, at the same time they address separate dimensions of empathy.

Historically, many experiments created scenarios where the situational empathy of participants was modified to study attitude or change in attitude, and differences in dispositional empathy were not considered. Batson et al. (1997) induced and manipulated situational empathy in participants exposing them to different interviews about the personal tragedies of others. The researchers demonstrated empathy could be evoked to lead to more favorable attitudes about a less fortunate group. Davis (1983b), however, suspected dispositional empathy exerted a greater influence than situational empathy over an individual's reaction to the observed experience of others. He demonstrated individual differences in dispositional empathy could better explain the emotional reaction of participants to hearing a plea for help than situational empathy alone.

Barraza and Zak (2009), demonstrated Empathic Concern, one of Davis' four measures of dispositional empathy assessed on the IRI predicted the degree of emotional response of participants showed emotional scenes of video clips. This study supports the idea that individual differences in dispositional empathy could impact the amplitude of a person's emotional response, possibly influencing the degree of change in attitudes related to poverty.

Stephan and Findlay (1999), emphasize "both situational and dispositional empathy are related to prosocial attitudes and behaviors, whereas a lack of empathy is linked to antisocial behaviors" (p.732). While both types of empathy are likely related to changes in attitude, the research discussed in this paper focused on dispositional empathy because of its stability. Rather than measure short-term changes in empathy that may have been generated through participation in the SNAP Challenge, the focus was to explore whether individual measures of dispositional empathy helped explain attitude changes observed among participants. In other words, were some participants moved to a greater degree by the SNAP Challenge experience because of different empathetic tendencies?

Empathy has been suggested as a potential source or influencer of attitude change (Batson et al., 1997). Attitudes can be difficult to change, especially those toward stigmatized groups because cognitive thought processes can resist change (Batson et al., 1997). Conducting three experiments where empathy led to improved attitudes toward a stigmatized group, Batson et al. (1997) proposed a model for how empathy may work to improve attitudes toward stigmatized groups suggesting that by "adopting the perspective of a needy individual who is a member of a stigmatized group" (p. 106) promotes increased empathy for the stigmatized individual which leads "to a perception of increased valuing of this individual's welfare" (p.106). It was then assumed this increased value for the individual was generalized to their stigmatized group, "increasing positive beliefs about, feelings toward, and concern for the group" (p.106).

Using a perspective-taking exercise to arouse empathy, Vescio, Sechrist, and Paolucci (2003) observed improvement in attitudes of participants toward groups with which the participant did not identify, known as outgroups. The researchers speculated this may have occurred by stimulating new cognitive thinking and emotional responses that challenged stereotypes about outgroup members and possibly led to a revision of prior stereotypes.

Exploring the relationship between the different empathy states and attitude has important implications, especially related to healthcare professionals as their stereotypes and biases may impact their treatment provided to patients. Also, broad public support for policies directed at helping disadvantaged or low income populations hinges on the public's attitudes toward these groups. This study will add to the body of research about the impact of dispositional empathy on attitude change.

While fostering more positive attitudes toward the marginalized groups of society is important, the critical need for these attitudes to translate into behavior is acknowledged. Some research suggests empathy directly motivates pro-social, altruistic behavior (Batson & Ahmad, 2009); however, other research does not support a direct relationship between empathy and helping others (Maner et al., 2002). Maner et al. (2002), explored the link between empathy and helping, considering the impact of "nonaltruistic motivators" (p. 1601) such as sense of shared identity with another or the egocentric desire to relieve negative feelings felt about another's condition. The researchers demonstrated while a relationship between empathy and helping did exist, this relationship disappeared when mediating, nonaltruistic, variables were taken into

account. Thus, in this research evidence for true altruism, defined as "acting with the truly selfless motivation to benefit another" (p. 1601) was limited (Maner et al., 2002). The research conducted as the subject of this paper focused on observed changes in attitudes toward poverty; however, a next step would be to evaluate changes in intentions and behavior.

CHAPTER III

METHODOLOGY

Overview

The purpose of this study was to assess the impact of participation in a week-long SNAP Challenge on the attitudes toward poverty of Winthrop University participants. Undergraduate and graduate students as well as non-student employees from different disciplines including, but not limited to Human Nutrition and Social Work were challenged for one week (January 22 - 28, 2015) to maintain a limited food budget comparable to what a participant enrolled in SNAP receives. Participants were informed of the Challenge guidelines at initial information sessions prior to the start of the exercise. They were asked to complete a voluntary, online pretest questionnaire to collect demographic information and measure attitudes toward poverty and general, dispositional empathy. Participants were provided with a voluntary, online posttest questionnaire with debriefing after the SNAP Challenge. This posttest questionnaire also measured changes in attitudes toward poverty and gathered feedback about the activity to inform future use of the Challenge as an experiential learning tool for teaching poverty to pre-professional students in higher education. Sample characteristics, comparison between groups before and after the Challenge, and variable relationships were analyzed using Microsoft Excel and IBM SPSS Statistics (Version 22.0).

Design

The study design was quasi-experimental pre/posttest survey with the SNAP Challenge serving as the intervention. Exposure to the Challenge was the independent variable with change in attitude toward poverty as the dependent variable. To further explore changes in attitude, measures of dispositional empathy were also obtained and analyzed to look for mediating variables potentially accounting for differences in the degree of attitude change observed across participants. No control group or random sampling was employed. Instead, a convenience sample of Winthrop University undergraduate and graduate students was obtained. Non-student employees of Winthrop were also invited to participate in the SNAP Challenge and evaluation.

Sample

The SNAP Challenge was held as a week-long campus-wide event, open to all students, faculty, and staff of Winthrop University. To generate a sufficient sample for evaluation of the Challenge, participants were recruited through email, social media platforms, flyers, and word-of-mouth. Notification of the Challenge and links to the pretest questionnaire were disseminated through daily email announcements as well as flyers and posters (Appendix A) and social media including Facebook, Twitter, and blogging. Two general on-campus information sessions as well as classroom-specific sessions were held the week before the Challenge began to recruit participants. To schedule these classroom-based information sessions, educators were contacted and briefed on the Challenge with permission requested to provide an information session to their classes to recruit participants (Appendix B). This method of convenience sampling

was not without limitation. It increased the likelihood of obtaining an unrepresentative sample with higher percentages of students from some academic areas relative to others. While faculty from all disciplines were contacted about the Challenge, the most responsive fields were Human Nutrition and Social Work. As such a disproportionate number of information sessions were conducted in these classrooms to recruit participants relative to other academic fields. Eligible participants were a minimum of 18 years old and enrolled part-time or full-time as either undergraduate or graduate students, or employed by Winthrop University.

Graduate students from the Human Nutrition Department were recruited to assist with providing information about the SNAP Challenge in classrooms where faculty members had requested a brief information session. These sessions briefly explained the Challenge and allowed time for interested students and faculty to complete the online pretest questionnaire on their personal technology devices. Prior to leading these sessions, the graduate student research assistants all completed the Human Research Curriculum, Social/Behavioral Research Course to satisfy the Collaborative Institutional Training Initiative (CITI) training requirement at Winthrop University. This training was required as part of a graduate-level research methods course completed prior to this research project. Research assistants were trained on how to conduct the sessions using a standardized script provided (Appendix C). From January 12, 2015 through January 21, 2015, 32 classroom information sessions and 2 general information sessions were held, reaching over 850 students and faculty. During these sessions, the researcher and research assistants collected email addresses from interested participants. This information was

collected separate from the survey. Participants were advised their email would not be used to identify them, and the sole purpose for collecting this information was to provide them with a link to the posttest survey after the Challenge concluded. After the SNAP Challenge ended on January 28, 2015, four reminder emails were sent to participants through February 8, 2015 providing a link to the posttest questionnaire and encouraging them to provide feedback regardless of their level of completion of the Challenge (Appendix D). A link to the posttest questionnaire was also made available online on a blog maintained for the Winthrop SNAP Challenge.

Procedure

Specific guidelines for the Challenge were outlined in a handout provided to participants at the general or classroom information sessions (Appendix E). The dollar amount allocated per day for one adult during the Challenge was \$4.20. This figure was based on the average amount received per person per day across South Carolina and North Carolina (U.S. Department of Agriculture, 2015). In reality, individuals with specific circumstances may receive different levels of benefits; however, across the United States, the average adult SNAP recipient receives between \$4.05 and \$4.40 per day. Guidelines were derived from the Food Resource and Action Center (FRAC) 101: SNAP Challenge Toolkit, a resource for planning a SNAP Challenge (FRAC, n.d.). They were straightforward and included limited resources to assist participants with budgeting and meal planning.

Instrumentation

The validated short-form of the Attitude toward Poverty scale (APS) developed by Yun and Weaver (2010) was chosen to measure attitudes about the causes and realities of poverty. This tool is a 21-item abbreviated version of the original Attitude toward Poverty scale, a 37-item Likert-type scale measuring the attitudes of university students to poverty and impoverished people (Atherton et al., 1993). While the original scale has acceptable internal reliability (Cronbach's α of 0.93), it is limited in its dimensionality as a single-factor scale; results indicate either individualistic or structural explanation of poverty. Based on a significant body of research suggesting attitudes about poverty and the impoverished are multidimensional, Yun and Weaver (2010) developed a condensed scale with multiple factors. In contrast to the original scale, the shorter APS is comprised of three factors: Personal Deficiency (seven items), Stigma (eight items), and Structural Perspective (six items). Questions were scored based on a 5-item Likert scale with responses from 1 (strongly agree) to 5 (strongly disagree). Three overall scores were also calculated for Personal Deficiency, Stigma, and Structural Perspective by averaging the individual item scores in each category. Each of these factors is considered a distinct dimension related to attitudes toward poverty. The different factors are not summed together to generate one overall score, rather, they should be assessed separately.

Additionally, the IRI, a multidimensional tool developed by Davis (1980) to measure individual cognitive and affective states of empathy was selected for use in the pretest to assess the dispositional empathy of participants. Dispositional empathy refers to the innate tendencies of individuals to react to observed experiences of others while

situational empathy refers to temporary responses to given situations or manipulations (Davis, 1983b; Konrath et al., 2011). The questionnaire includes a total of 28 items divided evenly among four 7-question subscales: Perspective Taking, Fantasy, Empathic Concern, and Personal Distress and has demonstrated good internal validity (Chronbach's $\alpha > 0.70$) and test-retest reliabilities (0.62-0.71) across these subscales. Questions were scored based on a 5-item Likert scale with responses from 0 (*does not describe me well*) to 4 (*describes me very well*). It is not clear to what extent situational versus dispositional empathy influence attitudes and behaviors; it is intuitive both are likely at play in different circumstances. In this research, dispositional rather than situational empathy was chosen to be evaluated because of its stable nature. It was suspected an experience such as the Challenge might induce temporary situational empathy; while dispositional empathy remained stable throughout. It was suspected stable empathetic tendencies might help explain the changes in attitudes observed as a result of exposure to the Challenge.

The IRI has been widely used since its development to measure differences in individual dispositional empathy. All four dimensions of empathy from the IRI were included in this study because it was theorized the SNAP Challenge would engage both cognitive and emotional empathy of participants. The exercise required participants to cognitively think about assuming the perspective of other less fortunate individuals receiving SNAP benefits. Additionally, difficulties encountered during the Challenge such as shopping for food and "making ends meet" were expected to elicit an emotional response in participants for SNAP recipients.

Standard demographic questions were included at the end of the pretest questionnaire and did not include any specific identifying information. The purpose of these questions was to gather information about gender, race/ethnicity, age, socioeconomic status, grade level, academic field, and experience with poverty. There were a total of eight demographic items.

Data collection was completed online using the Qualtrics survey platform. The pretest questionnaire (Appendix F) included a total of 59 items including two reading check questions to ensure valid responses. The posttest questionnaire (Appendix G) included 31 items including two reading check questions. Pre and posttest questionnaires were matched using a unique, nonspecific identifier created by participants based on a combination of their middle initial and last four digits of their cell phone number to maintain anonymity. Participants were permitted to omit any of the questions on both questionnaires; however, they were required to acknowledge informed consent and provide a unique identifier to proceed in the questionnaires. The pretest questionnaire was available from Monday, January 12, 2015 through Wednesday, January 21, 2015, prior to the start of the SNAP Challenge running from Thursday, January 22, 2015 through Wednesday, January 28, 2015. Following the SNAP Challenge, the posttest questionnaire was available Thursday, January 29, 2015 through Sunday, February 8, 2015.

Ethical Considerations

Informed consent was obtained from all participants prior to completion of the pretest and posttest questionnaires (Appendix F and G). Participants were informed of the study's confidentiality and the minimal risks and benefits associated with their participation in the SNAP Challenge evaluation questionnaires. The study was submitted to the Winthrop Institutional Review Board for approval on November 18, 2014, and approval was granted on November 21, 2014 (Appendix H). In the event faculty opted to offer extra credit to students for participation in this research, an equivalent alternative assignment was made available upon request for students not choosing to participate (Appendix I). No participants selected this option.

Data Analysis

There were 446 pretest questionnaires initiated with 363 completed for a rate of 81.4%. Of the 363 completed pretest questionnaires, 27 were excluded from the analysis for one or more of the following reasons: the participant failed one or both reading check questions, the participant indicated he/she was under the age of 18, or the participant failed to complete more than 30 items on the pretest (50% of total items). A total of 336 pretest surveys were included in the present analysis.

There were 143 posttest questionnaires initiated with 121 completed for a rate of 84.6%. Out of the 121 completed posttests, four were removed because the participants failed to answer one or both of the reading check questions correctly. A total of 117 completed posttest questionnaires were included in the present analysis. Out of the 117 completed posttests, 91 matched with pretest questionnaires. A total of 80 matched pairs

were included in the analysis as 11 matched pairs were excluded because the participants either indicated they completed zero days of the Challenge or they omitted questions from the APS tool on the pre or posttest survey (N = 80, 23.8% of the 336 eligible pretest questionnaires; 68.4% of the eligible posttest questionnaires). Testing the effect of the SNAP Challenge required at least one day's participation in the activity. Omitting any questions on the APS tool excluded participants from the statistical analysis as all tests were run with listwise exclusion. All effects were reported as significant at p <.05, unless otherwise noted.

Organization

Data collection was facilitated by Qualtrics software, and all participant responses were maintained in Qualtrics Reporting. An original copy of all questionnaire data was downloaded from Qualtrics and maintained as Microsoft Excel spreadsheets. All digital files were password protected. Copies of original data were initially explored and prepared for uploading to SSPS for statistical analysis. All research material was kept locked in the office of the researcher's faculty advisor in secured file cabinets. It was decided disposal of data and research materials will occur at least 5 years following collection or longer if required for analysis. All unnecessary paperwork was shredded and digital files were deleted. These steps will be repeated when the data is disposed of in the future.

Statistical Analysis

The primary outcome measure of the study was the change in attitude toward poverty following participation in the SNAP Challenge. Participant attitudes before and after the experience were measured with pretest and posttest questionnaires. Secondary measures included differences between Human Nutrition participant attitude changes compared with other participants and the relationship of dispositional empathy to attitude change. Data collection instruments were applied consistently with all participants completing the same form of the pre and posttest questionnaires. Overall participant feedback about the experience was also collected to supplement results from the quantitative tools administered. This information was used to help explain observed changes in attitudes toward poverty following the Challenge. Descriptive statistics were employed to characterize the experience of different groups of participants. Unless otherwise stated the level of statistical significance was set at p < 0.05. All statistical tests were conducted using IBM SPSS Statistics (Version 22.0).

Paired samples *t*-tests were used to determine if attitudes toward poverty changed following the SNAP Challenge (research objective one) by comparing the mean pre and posttest scores for all items on the APS tool among all participants. In order to determine if outcomes observed in Human Nutrition students following the Challenge were different compared to other participants (research objective two) a 3x2 mixed analysis of variance (ANOVA) and Tukey post-hoc analysis were conducted. This method included two independent variables: academic field of study (between-subjects) and test (pretest vs. posttest; within-subjects). The analysis was replicated three times, once for each of

the three overall factors (Personal Deficiency, Stigma, and Structural Perspective) included in the APS tool described herein. In each of the three 3x2 mixed ANOVAs, the dependent variable was the change in attitudes toward poverty related to Personal Deficiency, Stigma or Structural Perspective. Completing three tests allowed the researcher to explore whether Human Nutrition participants experienced different degrees of attitude change compared to others in any of the three dimensions of the APS tool.

Mediation analysis was used to address research question three and explore possible relationships between level of participation in the SNAP Challenge (predictor variable) and changes in the three factors measuring attitude toward poverty (outcome variables) as mediated by four distinct dimensions of empathy (mediators). In order to support this mediation analysis, bivariate correlation analysis was completed to explore whether relationships existed between the number of days participants completed the Challenge and changes in the overall Personal Deficiency, Stigma, and Structural Perspective scores. Bivariate correlation analysis was also performed to analyze relationships between the four dimensions of empathy measured and posttest as well as change scores for Personal Deficiency, Stigma, and Structural Perspective.

CHAPTER IV

RESULTS

Demographics

As summarized in Table 1, demographics for the total pretest responses and matched pairs differed considerably in terms of gender, race, age, academic standing, and field of study. In general, trends were amplified in the matched pair sample set with 90% of respondents being women and 80% identifying as White. The matched pairs were also skewed more heavily to graduate students than the total pretest responses with graduate students accounting for twice as many participants in the matched pair sample, 38% compared to 19%, respectively (ns = 30 and 63, respectively). Overall, there are discrepancies within the pretest and matched pair groups compared to the general Winthrop University demographics, suggesting the samples are not representative of the wider campus population. The matched pair sample was also comprised of a greater percentage of Human Nutrition and Social Work participants (35% and 36%, respectively) compared to the total pretest sample (22% and 24%, respectively). Rates of self-reported receipt of financial aid remained consistent among total pretest responses and matched pairs (77% and 78%, respectively). Prior experience with limited funds for food also remained consistent among total pretest responses and the matched pairs (53% and 54%, respectively).

Table 1. Demographic Characteristics

Demographic Variable	Total Pretest Responses $n = 336 (\%)$	Matched Pairs $n = 80 (\%)$
Gender		
Female	267 (79.5%)	72 (90.0%)
Male	65 (19.3%)	7 (8.8%)
Transgender	1 (0.3%)	-
Prefer Not to Respond	2 (0.6%)	1 (1.3%)
Missing	1 (0.3%)	-
Race/Ethnicity		
African American/Black	90 (26.8%)	9 (11.3%)
Asian/ Pacific Islander	4 (1.2%)	1 (1.3%)
Hispanic/ Latino	9 (2.7%)	1 (1.3%)
Multiracial	11 (3.3%)	3 (3.8%)
Native American/ American Indian	1 (0.3%)	-
White	208 (61.9%)	64 (80.0%)
Other	6 (1.8%)	1 (1.3%)
Prefer Not to Respond	6 (1.8%)	1 (1.3%)
Missing	1 (0.3%)	-
Age		
18 - 24	265 (78.9%)	54 (67.5%)
25 - 29	26 (7.7%)	10 (12.5%)
30 - 39	22 (6.5%)	10 (12.5%)
40 and older	15 (4.5%)	5 (6.3%)
Missing	8 (2.4%)	1 (1.3%)
Current Academic Standing		
Freshman	46 (13.7%)	3 (3.8%)
Sophomore	56 (16.7%)	11 (13.8%)
Junior	83 (24.7%)	18 (22.5%)
Senior	78 (23.2%)	16 (20.0%)
Graduate Student	63 (18.8%)	30 (37.5%)
Administrator	1 (0.3%)	-
Teaching Faculty	7 (2.1%)	2 (2.5%)
University Staff	1 (0.3%)	-
Missing	1 (0.3%)	-

Table 2. Demographic Characteristics (continued)

Demographic Variable	Total Pretest Responses $n = 336$ (%)	Matched Pairs $n = 80 (\%)$
Academic Field		
Human Nutrition	73 (21.7%)	28 (35.0%)
Social Work	79 (23.5%)	29 (36.3%)
Other	183 (54.5%)	23 (28.8%)
Biology	19 (5.7%)	2 (2.5%)
Business	19 (5.7%)	4 (5.0%)
Chemistry	5 (1.5%)	1 (1.3%)
Education	11 (3.3%)	-
English	5 (1.5%)	-
Family and Consumer	21 (6.3%)	6 (7.5%)
Sciences		
History	8 (2.4%)	1 (1.3%)
Mathematics	4 (1.2%)	3 (3.8%)
Psychology	29 (8.6%)	1 (1.3%)
Visual/Performing Arts	3 (0.9%)	-
Undecided	4 (1.2%)	-
Not Listed	53 (15.8%)	5 (6.3%)
Not Applicable	2 (0.6%)	-
Missing	1 (0.3%)	-
Financial Aid Recipient		
Yes	258 (76.8%)	62 (77.5%)
No	67 (19.9%)	17 (21.3%)
Not Applicable	10 (3.0%)	1 (1.3%)
Missing	1 (0.3%)	-
Experience with Limited Funds for Food		
Yes	177 (52.7%)	43 (53.8%)
No	158 (47.0%)	37 (46.3%)
Missing	1 (0.3%)	-

The number of days participants completed the SNAP Challenge was also collected in the posttest. Responses are highlighted in Table 3, reflecting consistent completion rates among all posttest responses and the matched pairs only. The highest percentage of respondents reported completing all seven days of the SNAP Challenge followed three days.

Table 3. Days Completed SNAP Challenge

	Total Posttest	
	Responses	Matched Pairs
Number of Days	n = 103 (%)	n = 80 (%)
1	5 (4.9%)	2 (2.5%)
2	12 (11.7%)	6 (7.5%)
3	21 (20.4%)	20 (25.0%)
4	9 (8.7%)	8 (10.0%)
5	12 (11.7%)	11 (13.8%)
6	7 (6.8%)	4 (5.0%)
7	37 (35.9%)	29 (36.3%)

Variable Correlation

Bivariate correlation did not reveal any significant relationships between the number of days participants completed the SNAP Challenge and changes in their overall APS scores. Days were not significantly correlated with change in Personal Deficiency scores, r(78) = .07, $r^2 = 0$, p = .559. Days were not significantly correlated with change in Stigma scores, r(78) = .16, $r^2 = .03$, p = .157. Days were also not significantly correlated with change in Structural Perspective scores, r(78) = -.02, $r^2 = 0$, p = .867.

Empathic concern (EC) scores and posttest overall Stigma scores demonstrated a small, positive correlation, r(76) = .23, $r^2 = .05$, p = .039. EC scores and posttest overall Structural Perspective scores also demonstrated a small, positive correlation, r(76) = .24, $r^2 = .06$ p = .037. No other statistically significant correlations were observed between the variables as presented in Table 4.

Table 4. Bivariate Correlations Among APS Factor Scores and IRI Factor Scores

		Perspective	Empathic	Personal
Factor	Fantasy	Taking	Concern	Distress
Change in Scores				
1. Personal Deficiency	.00	.00	.01	05
2. Stigma	00	00	.03	08
3. Structural Perspective	03	.14	.01	.00
Posttest Scores				
1. Personal Deficiency	16	.06	.12	16
2. Stigma	.10	.14	.23*	19
3. Structural Perspective	.21	.14	.24*	.04

Note: Correlation marked with an asterisk (*) were significant at p < .05.

Overall Changes in Attitudes Toward Poverty

Paired t-tests compared the pretest and posttest means of the matched pairs for each of the 21 questions of the APS tool as well as the three overall scores for Personal Deficiency, Stigma, and Structural Perspective. Analysis of these changes are summarized in Table 4. Statistically significant differences between pre and posttest scores were only observed within the Stigma factor. The change in the overall Stigma score following participation in the SNAP Challenge was statistically significant as reflected in Table 4. , and represented a moderate effect, d = 0.38. Within the Stigma factor, significant differences between pre and posttest scores were observed for three individual questions. Differences in one additional Stigma question, "Poor people think they deserve to be supported", trended toward significance. No significance difference following the SNAP Challenge was observed in the Personal Deficiency and Structural Perspective factors of the APS tool.

Table 5. t-Test Effects of the SNAP Challenge on Participants' Attitudes
Attitude Toward Poverty Short Form (APS) Scale

		Post-		
	Pretest	test	t	p
Statement	Mean	Mean	value	value
Factor: Personal Deficiency Poor people are different from the rest of society.	3.98	4.18	-1.471	N/S
Poor people are dishonest.	4.50	4.49	.173	N/S
Most poor people are dirty.	4.43	4.44	168	N/S
Poor people act differently.	3.44	3.54	929	N/S
Children raised on welfare will never amount to anything.	4.84	4.83	.276	N/S
I believe poor people have a different set of Value than do other people.	3.81	3.68	1.394	N/S
Poor people generally have lower intelligence than nonpoor people.	4.18	4.15	.228	N/S
Overall score: Personal Deficiency	4.17	4.18	346	N/S
Factor: Stigma				
There is a lot of fraud among welfare recipients.	3.44	3.76	-3.467	<.01
Some "poor" people live better than I do considering all their benefits.	3.80	3.96	-1.473	N/S
Poor people think they deserve to be supported.	3.65	3.86	-1.730	.10
Welfare mothers have babies to get more money.	3.91	4.06	-1.591	N/S
An able-bodied person collecting welfare is ripping off the system.	3.51	3.64	-1.423	N/S
Unemployed poor people could find jobs if they tried harder.	3.49	3.71	-2.583	<.05
Welfare makes people lazy.	3.56	3.81	-2.545	<.05
Benefits for poor people consume a major part of the federal budget.	3.51	3.50	.142	N/S
Overall score: Stigma	3.61	3.79	-3.421	<.01

Scoring of likert scale: strongly agree = 1, agree = 2, neutral = 3, disagree = 4, strongly disagree = 5.

Table 6. *t*-Test Effects of the SNAP Challenge on Participants' Attitudes (continued) Attitude Toward Poverty Short Form (APS) Scale

		Post-		
	Pretest	test	T	P
Statement	Mean	Mean	value	Value
Factor: Structural Perspective*				
People are poor due to circumstances beyond their control.*	3.53	3.39	1.331	N/S
I would support a program that resulted in higher taxes to support social programs for poor people.*	3.18	3.30	-1.149	N/S
If I were poor, I would accept welfare benefits.*	3.83	3.86	445	N/S
People who are poor should not be blamed for their misfortune.*	3.88	3.76	1.291	N/S
Society has the responsibility to help poor people.*	3.83	3.84	139	N/S
Poor people are discriminated against*	4.39	4.26	1.485	N/S
Overall score: Structural Perspective*	3.77	3.74	.784	N/S

^{*} Structural Perspective statements are reverse scored. Scoring of likert scale: strongly agree = 1, agree = 2, neutral = 3, disagree = 4, strongly disagree = 5.

Human Nutrition Compared to Other Academic Fields

Mixed 3x2 ANOVAs were conducted to analyze the effects of participation in the SNAP Challenge on three overall factors (Personal Deficiency, Stigma, and Structural Perspective) describing attitudes toward poverty of Human Nutrition, Social Work, and Other participants. Results showed no interactions were present for any of the three factors for change in attitude between the pre and posttest and academic field.

As demonstrated in Table 7 and Figure 1, the mean overall Personal Deficiency scores did not appear to change meaningfully from pretest to posttest for any of the groups. The main effect of the within subjects variable, test, was not significant, F(1,77) = .139, p = .711, $\eta^2 = 0$, thus overall attitudes related to Personal Deficiency were similar between the pre and posttests. The main effect of the between subjects variable, academic field of study, was not significant, F(2,77) = 1.985, p = .144, $\eta^2 = .05$, thus overall attitudes related to Personal Deficiency were similar among the different academic fields. The interaction between academic field of study and test was not significant for the Personal Deficiency factor, F(2,77) = .05, p = .952, $\eta^2 = 0$, suggesting the attitudes of participants related to Personal Deficiency did not change significantly, and there were not significant differences in changes between academic fields.

Table 7. Personal Deficiency Scores by Academic Field

	Overall Personal Deficiency Score		
Academic Field	Pretest	Posttest	
	M(SD)	M(SD)	
Human Nutrition ($n = 28$)	4.12 (.57)	4.13 (.56)	
Social Work $(n = 29)$	4.32 (.71)	4.32 (.54)	
Other $(n = 23)$	4.03 (.41)	4.07 (.42)	

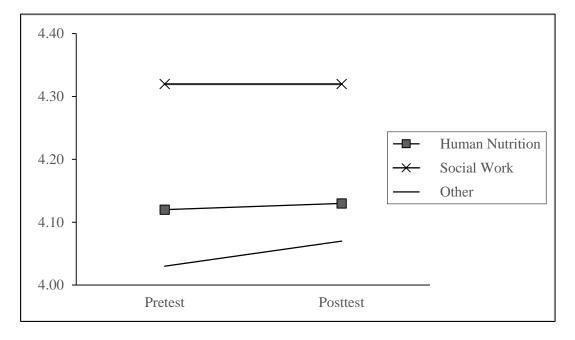


Figure 1. Personal Deficiency Scores by Academic Field

A statistically significant main effect of the within subjects variable, test, was observed for the overall Stigma factor, F(1, 77) = 12.30, p = .001, $\eta^2 = .14$, a strong effect, thus posttest attitudes related to Stigma were significantly higher than those measured in the pretest. The main effect of the between subjects variable, academic field of study, was also significant for Stigma, F(2, 77) = 4.54, p = .014, $\eta^2 = .11$, a strong effect. Tukey post hoc analysis revealed the Stigma scores for Human Nutrition and Other categories did not differ significantly from each other, while the scores for Social Work were significantly higher than Other (p = .021). The analysis suggested Stigma scores for Social Work were also higher than Human Nutrition, based on marginal significance (p = .051). Table 8 and Figure 2 reflect these differences between time of test and academic group. The interaction between academic field of study and test was not significant for the Stigma factor, F(1, 77) = .05, p = .952, $\eta^2 = .02$, suggesting that while overall participant attitudes related to Stigma changed significantly after the Challenge, there were not significant differences in the amount of change between academic fields.

Table 8. Stigma Scores by Academic Field

	Overall Stign	na Score
Academic Field	Pretest	Posttest
	M (SD)	M (SD)
Human Nutrition (n=28)	3.49 (1.04)	3.61 (.92)
Social Work (n=29)	3.97 (.80)	4.13 (.64)
Other (n=23)	3.30 (.69)	3.58 (.74)

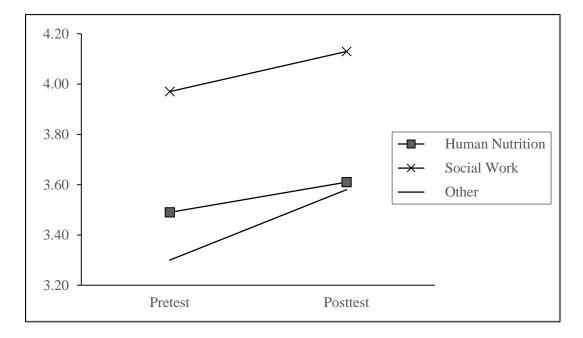


Figure 2. Stigma Scores by Academic Field

When considering the Structural Perspective factor, the main effect of the within subjects variable, test, was not significant, F(1, 77) = .677, p = .431, $\eta^2 = .01$. The main effect of the between subjects variable, academic field of study, was significant, F(2, 77)= 10.38, p < .001, $\eta^2 = .21$, a strong effect. Post hoc analysis revealed the Structural Perspective scores for Human Nutrition and Other did not differ significantly from each other, while the scores for Social Work were significantly higher than both Human Nutrition (significant; p < .001) and other academic fields (significant; p = .019). The main effect of the within subjects variable, test, was not significant, F(1,77) = .68, p =.413, $\eta^2 = .01$, thus overall attitudes related to Structural Perspective were similar between the pre and posttests. The interaction between academic field of study and test was not significant for the Structural Perspective factor, F(2, 77) = .49, p = .614, $\eta^2 = .01$, suggesting the attitudes of participants related to Structural Perspective were significantly different among the academic fields; however, overall attitudes did not change after the SNAP Challenge, and no significant differences in attitude change were observed between the academic fields. Table 9 and Figure 3 reflect demonstrate how the mean scores actually declined in two of the groups.

Table 9. Structural Perspective Scores by Academic Field

	Overall Structural Perspective Score		
Academic Field	Pretest Posttest		
	M (SD)	M (SD)	
Human Nutrition (n=28)	3.45 (.55)	3.47 (.69)	
Social Work (n=29)	4.12 (.52)	4.06 (.42)	
Other (n=23)	3.72 (.56)	3.64 (.64)	

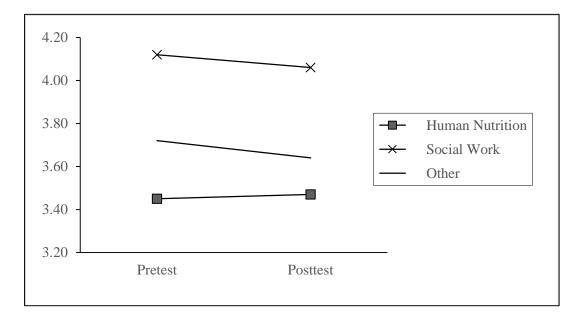


Figure 3. Structural Perspective Scores by Academic Field

Empathy and Change in Attitude Toward Poverty

Davis' IRI was also administered in the pretest only to gauge dispositional empathy of participants. The mean scores for the four dimensions of empathy across the total pretests and matched pairs are summarized in Table 10. Within the Human Nutrition and Social Work groups, mean scores for the first three empathy factors were higher in the matched pairs.

Table 10. Interpersonal Reactivity Index (IRI) Mean Scores

		IRI Factor			
Survey	Fantasy	Perspective	Empathic	Personal	
Responses		Taking	Concern	Distress	
Total Pretest	18.41	19.81	21.20	11.33	
	(n=325)	(n=324)	(n=327)	(n=327)	
Human	16.08	20.06	20.88	10.93	
Nutrition	(n=71)	(n=72)	(n=72)	(n=71)	
Social	19.18	20.60	23.44	11.51	
Work	(n=76)	(n=77)	(n=78)	(n=78)	
Others	18.70	19.36	20.31	11.45	
	(n=177)	(n=174)	(n=176)	(n=177)	
Total Matched	18.37	20.56	21.92	11.13	
Pairs	(n=79)	(n=79)	(n=78)	(n=79)	
Human	17.93	21.19	22.19	10.63	
Nutrition	(n=27)	(n=27)	(n=27)	(n=27)	
Social	19.62	21.14	23.38	10.38	
Work	(n=29)	(n=29)	(n=29)	(n=29)	
Others	17.30	19.09	19.68	12.65	
	(n=23)	(n=23)	(n=22)	(n=23)	

A series of mediation analyses were conducted using the predictor variable, days completed SNAP Challenge (one through seven), three outcome variables (change in the Personal Deficiency, Stigma, and Structural Perspective factors), and four potential mediators (Perspective-Taking, Fantasy, Empathic Concern, and Personal Distress empathy states). The conceptual model for these analyses is pictured in Figure 4. The analyses were run separately 12 times using the different combinations of these variables. The analysis was run three additional times using all four empathy factors as mediators at the same time. In total 15 mediation analyses were conducted. In all mediation analyses, none of the standardized regression coefficients between the variables included in these tests reached significance, thus no dimension of empathy exerted any significant indirect effect on changes in attitudes related to Personal Deficiency, Stigma, or Structural Perspective.

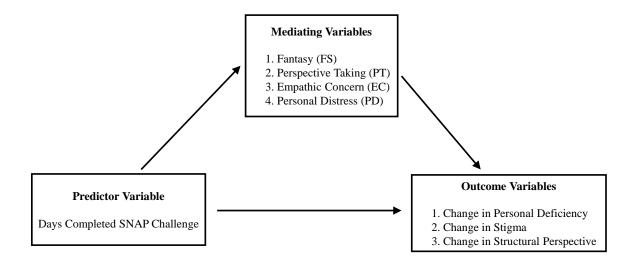


Figure 4. Mediation Conceptual Model

Other Findings

Participant feedback is summarized in Table 11 and demonstrates overall the Challenge was considered a positive and worthwhile experience. Additionally, participant comments are included in Appendix J. It is noted many of the comments express difficulty with adhering to the Challenge and "making ends meet". However, 46% of participants disagreed with the statement that the experience was uncomfortable for them. This result could be due to the fact the activity was voluntary and temporary. Participants could stop participating at any time throughout without penalty. Additionally, the overall positive comments that the Challenge stimulated thinking about poverty and was a useful, worthwhile experience may reflect participants responding in a way they thought the researchers wanted to see. Considering the open-ended comments reflecting the difficulty participants experienced during the Challenge, it is possible the positive posttest positive evaluation results reflects participants' efforts to rationalize the experience.

Table 11. Percentages of Participants' Evaluation of the SNAP Challenge (n=103)

Statement	Percentage strongly agree or agree	Percentage Neutral	Percentage strongly disagree or disagree
Participating in the SNAP Challenge helped me better understand the effects of poverty on peoples' lives.	83.5	9.7	6.8
My feelings about poverty have changed after participating in the SNAP Challenge.	55.3	22.3	22.3
The SNAP Challenge stimulated my thinking about poverty and solutions.	89.3	5.8	4.9
The experience was useful to my duties as a professional or future professional.	84.5	13.6	1.9
This experience was very uncomfortable for me.	35.0	19.4	45.6
Overall, this was a valuable experience.	95.1	2.9	1.9

Note. Data were summarized from student posttest surveys.

Chapter V

DISCUSSION

Findings from the present study suggest the SNAP Challenge was effective at improving overall participant attitudes toward poverty related to Stigma, but not other dimensions of poverty. This is consistent with recent research findings (Patterson & Hulton, 2012; Yang et al., 2014) related to poverty simulations. Researchers in these studies also demonstrated significant improvement in Stigma, but not other dimensions of poverty.

It is not clear why movement was only seen in the Stigma factor. The items in this sub-scale included the statements "welfare makes people lazy" and "unemployed poor people could find jobs if they tried harder." Perhaps living on a simulated welfare food budget prompted participants to acknowledge the significant difficulties associated with living on such a restricted budget. Many students acknowledged the challenging nature of this experience. One participant made the comment, "I could not last the entire time. It takes a good amount of drive to participate, you can't be lazy." Another participant noted, "...your mindset really changes when you're hungry." It is possible the experience forced participants to confront some of their preconceived ideas about the type of people who receive benefits such as SNAP and the challenges they face. Stepping into the shoes of another person with limited funds for food seemed to elicit an emotional response that may have impacted attitudes related to stigma. The experience may have been able to bridge the gap between "us" and "them", allowing participants to revise their stereotypes and feelings about people in poverty. While the Challenge did not appear to impact attitudes related to the structural or individualistic causes of poverty, it's impact

on Stigma does have merit as this could be the first step in improving overall attitudes towards people in poverty or revising beliefs about the causes of poverty.

Research Objective 1: Overall Changes in Attitudes Toward Poverty

While a significant increase in Stigma scores was observed overall, no statistically significant improvement was observed in Structural Perspective or Personal Deficiency factors. Notably the Structural Perspective and Personal Deficiency factors of the APS tool represent explanations of poverty while the Stigma factor reflects the degree to which a person identifies with certain stereotypes and unfavorable feelings about people in poverty. It appears this Challenge was successful in overcoming some stigma held toward the impoverished; however, it did not impact beliefs and understanding about why people may be in poverty. It is possible, participating in the Challenge enabled participants to take on the perspective a stigmatized group, a process that challenged commonly held beliefs toward this group.

Participants' attitudes related to the Structural Perspective or society-rooted explanation of poverty may not have improved after this activity because it may not be a broad enough experience to engage them in thinking about the structural determinants of poverty. The focus of the SNAP Challenge was not to teach about the SNAP program or discuss the policy implications. Rather, SNAP benefits were used as a proxy for simulating a very restricted food budget so participants could see what it is like to live with one of the realities of poverty. The structural items of the APS relate to broader governmental and societal determinants of poverty. Participants may not have been engaged to think about these aspects of society as the emphasis of the experience was

more individual in nature. It is reasonable then that outcomes of the Challenge might be enhanced by adding a knowledge-based component. This didactic piece could take the form of classroom lectures, readings and discussions emphasizing the facts of poverty as well as the determinants and social programing. Additionally, interaction with people in poverty through a service learning activity completed in conjunction with a SNAP Challenge could help participants move from attributing poverty to individual causes toward structural attributions. Prior research involving medical students demonstrated improved knowledge and attitudes toward underserved patient populations following completion of a service learning activity in conjunction with faculty-led or web-based curriculum (Cox et al., 2006). It is plausible both types of learning, the experiential and the traditional, could work together, influencing emotional and cognitive processes to generate attitude change.

Interestingly, there appeared to be no significant association between number of days participants completed the Challenge and their amount of attitude change in any of the APS factors. Participant dispositional empathy also did not appear to be a significant mediator of the relationship between SNAP Challenge participation and attitude change. The majority of matched posttests completed the Challenge three or seven days; however, it appears those only reporting a day of participation still benefited from exposure to the activity. During the information sessions, many students expressed doubt and concern over the week-long duration of the Challenge. This may have deterred some students from even attempting the Challenge. A shorter SNAP Challenge might be able to attract

more participants, but may or may not generate similar results as the week-long Challenge.

Additionally, while many students commented about the importance of budgeting and the difficulty of "lasting" in the Challenge, only 35% of participants reported feeling the experience was uncomfortable for them. It is possible participants may have provided feedback about the Challenge they thought the researchers wanted to hear. Alternatively, completing the SNAP Challenge or a portion of it may have bolstered participants' sense of self-efficacy and belief that while the Challenge was hard it could be accomplished with commitment and planning. This may explain why scores in the Personal Deficiency factor representing individual attributions of poverty were not significantly more favorable toward poverty after the experience. It is also acknowledged that college and graduate-level students may have additional skills and training people in poverty with less education may not have. Participants also did not have to contend with the comprehensive demands of living in poverty as they focused solely on food and diet during the Challenge. These differences may help explain why participants did not develop more positive attitudes related to structural attributions of poverty. The experience did not fully represent all the complexities and challenges of living in poverty.

This research set out to test the following null hypothesis related to the first research objective:

There will be no significant change in overall APS factor scores after the SNAP Challenge (reject in favor of the alternative hypothesis for the Stigma factor only). The research supports the conclusion that participation in the SNAP Challenge,

regardless of duration, results in a significant positive change in attitudes toward poverty related to Stigma.

Research Objective 2: Human Nutrition Compared to Other Participants

When considering Human Nutrition participants compared to other groups there

did not appear to be significant differences in the magnitude of attitude change observed.

The lack of significant interaction between pre/posttest scores and academic field in the

3x2 ANOVAS conducted for the Personal Deficiency, Stigma, and Structural Perspective
factors suggests changes in the attitudes of Human Nutrition participants did not differ

significantly from participants in other academic fields. This suggests participants from

different majors including non-health fields can also benefit from the Challenge to the
same degree as Human Nutrition students.

The lack of significant main effects for the Personal Deficiency factor suggest there was no significant change in scores from pre to posttest and thus the experience was not successful in changing attitudes related to this dimension of poverty. There were also no statistically significant differences between the attitudes of Human Nutrition, Social Work, and Other academic fields in this factor. This suggests, regardless of major, students may share similar beliefs about how individual deficiencies cause or lead to poverty.

For the Stigma factor, the significant main effect for test suggests all participant attitudes increased significantly after from pretest to posttest. This is consistent with the results of the paired t-tests showing overall changes in the Stigma dimension.

Interestingly, both the Stigma and Structural Perspective factors revealed significant main

effects for academic field. This suggests scores in these factors varied significantly between the different categories of participants. Based on the post hoc analysis, it appears for both Stigma and Structural Perspective, Social Work students started off with significantly higher scores than Human Nutrition, and Other students. The analysis suggests the different academic groups are starting at different places with respect to attitude to poverty. This is likely due to differences between the academic and professional fields and their approaches to teaching about poverty. The Social Work field emphasizes understanding of the "environmental forces that create, contribute to, and address problems in living" (National Association of Social Workers, 2008, Preamble, para 1), as well as the "inherent dignity and worth of the person" (NASW, 2008, Ethical Principles, para 3). This theme is consistent throughout the education and training of social work professionals, and it clearly appears to be ingrained in members of this field. The magnitude of change in scores (attitude) between the groups did not appear to differ after the Challenge for Stigma or Structural Perspective.

This research set out to test the following null hypothesis related to the second research objective:

There will be no significant difference between Human Nutrition students and those from other academic fields in the amount of change in overall APS factor scores after the Challenge (do not reject). The research does not support the conclusion that the amount of attitude change observed in Human Nutrition students differed from other students.

Research Objective 3: Empathy as a Mediator of Attitude Change

Mediation analysis conducted revealed none of the four dimensions of empathy measured nor a combination of these factors helped explain the relationship between SNAP Challenge participation and change in attitude toward poverty. Bivariate correlation analysis did detect positive relationships between EC scores and posttest Stigma and Structural Perspective scores; however, the strength of both associations was relatively small. These relationships may suggest EC is associated with attitudes toward poverty, specifically those related to Stigma and Structural Perspective. There also may be other relationships between dispositional empathy and attitudes toward poverty that could not be detected in this analysis due to a small effect size and insufficient statistical power. While it is intuitive dispositional empathy could mediate attitude change, this relationship was not apparent in the data, suggesting this theoretical model may lack merit.

This research set out to test the following null hypothesis related to the third research objective:

Dispositional empathy will not mediate the relationship between participation and changes in attitude (do not reject). The research does not support the conclusion that dimensions of dispositional empathy mediate the amount of attitude change resulting from participation in the SNAP Challenge.

SNAP Challenge as an Experiential Learning Tool

The Challenge requires very few resources, does not require licensing fees, and can easily be implemented at any time with little planning. The Challenge provided a

unique out-of-classroom opportunity for participants to experience one of the realities of living in poverty. While attitudes related to explanations for poverty did not change as a result of the Challenge, the experience resulted in statistically significant improvement in attitudes related to Stigma about people in poverty. This has value as stigma affects many aspects of an individual's life, and stigmatized groups have limited opportunities and resources (Link & Phelan, 2001). Link and Phelan (2001) suggest "stigmatization probably has a dramatic bearing on the distribution of life chance in such areas as earnings, housing, criminal involvement, health and life itself" (p. 363). Effective interventions to erode stigma toward people in poverty are necessary to make real change and promote equal treatment for the impoverished and actions that help life people out of poverty.

It is possible the experience of participating in the Challenge emphasizes emotional rather than cognitive processes, making it less effective at impacting participant ideas about the causes of poverty. Participants in this Challenge were not formally educated about poverty or its determinants, rather they were encouraged to follow the Challenge guidelines and immerse themselves in the experience.

Implementing a classroom-based, didactic component in addition to the Challenge may be a way to enhance the effect on attitudes toward poverty by providing a more comprehensive "picture" of poverty and stimulating greater contemplation of the issue.

Combining the SNAP Challenge with a poverty-focused curriculum could amplify improvements in Stigma and generate more support for the Structural Perspective rather than Personal Deficiency as explanations of poverty.

Assumptions and Limitations

It was assumed students and employees would be motivated to participate in the SNAP Challenge and follow the guidelines set forth for the exercise. It was also assumed participants would provide honest and accurate feedback regarding their experience.

The design of this study is a limitation because there was no control group with which to compare the participants of the SNAP Challenge. Additionally, the method of convenience sampling used did not generate a randomized sample representative of the Winthrop University campus demographics. Results must be interpreted with caution, with generalization being limited. Additionally, demographics of the student population at Winthrop University (38% minority students and a student body of 67% female and 33% male students) may not represent the demographics of other institutions and generalization to other university students is limited (Fast Facts about Winthrop University, 2014; WU at a Glance, 2014).

Response bias could also have occurred as Winthrop students and employees who were exposed to the SNAP Challenge may have responded to questionnaire items in a way they thought the researcher wanted instead of reflecting their true beliefs.

Additionally, there was the risk of self-selection bias given the voluntary nature of the Challenge. Participants agreeing to take part in the Challenge may have had increased knowledge or interest in poverty-related issues that may have further skewed results.

The number of matched pre and posttests was also relatively small at 80 eligible matched pairs for data analysis. Ideally the sample size would be much larger to improve the chance of detecting smaller effects.

Future Implications

Participation in a week-long SNAP Challenge demonstrated significant changes in attitudes toward poverty related to Stigma. The magnitude of change was consistent across different majors including Human Nutrition, suggesting the Challenge could be beneficial for all academic fields, regardless of whether they are health-related.

It was clear Social Work students have the most favorable attitudes toward poverty followed by Human Nutrition students and then those from other majors. Even though Social Work students started out with more positive attitudes related to Stigma, they still saw improvements in attitude on par with students from Human Nutrition and Other majors, further supporting the use of this activity as a broad tool for teaching students about poverty. Results demonstrate the SNAP Challenge can be effective at improving attitudes related to Stigma regardless of academic field or initial starting point.

To date, this is the only study this researcher is aware of that has evaluated the impact of a campus-wide SNAP Challenge on attitudes toward poverty. Additional research is needed to clarify the influence of this experience on attitudes toward poverty and why Stigma improved while other areas of Personal Deficiency and Structural Perspective did not. Also, participant intentions and actions should be studied to determine if the SNAP Challenge moves beyond attitude to promote increased pro-social behavior toward the people in poverty.

Future research should examine whether a SNAP Challenge with a shorter duration can produce similar or improved results than the week-long Challenge analyzed in this research. It would also be beneficial to explore ways to generate significant

positive changes in attitudes related to Structural Perspective and Personal Deficiency. Combining the Challenge experience with a knowledge-based didactic component may generate more significant change in attitudes related to individual and structural attributions for poverty. In addition, more specific questions to understand participants' prior experience with poverty should be asked as this may impact attitudes and attitude change.

Participation in this Challenge and associated evaluative research was completely voluntary. It is possible this activity could generate more significant positive changes in attitudes and stimulate increased thinking about poverty if it were required as part of a course or training program as this would capture those students with less interest and may result in a greater change in attitudes. Previous poverty simulations conducted within defined student groups or as a course requirement have demonstrated significant changes in awareness and attitudes related to poverty (Menzel et al., 2014; Steck et al., 2011; Yang et al., 2014). Future studies would benefit from a larger sample size with increased representation across the different academic fields.

Chapter VI

CONCLUSION

Winthrop University participants in the SNAP Challenge demonstrated improved attitudes toward poverty related to Stigma (p<.01). Attitudes toward poverty related to Personal Deficiency and Structural Perspective did not change significantly. Human Nutrition participants did not experience changes in attitude significantly different from other academic fields; however, it was observed the general attitudes toward poverty of Social Work participants were significantly more favorable than Human Nutrition and other majors. This difference reflects a need in dietetics education and other professions for effective ways to teach about poverty in order to improve attitudes and reduce biases held against the often underserved, low-income population.

Teaching about the challenges of poverty is a critical part of education to develop competent and compassionate healthcare workers as well as non-health professionals. Integrating experiential learning activities into classroom teaching about poverty can enhance student understanding of the subject and the ability to apply the information in practice. The SNAP Challenge experience helped participants reduce stigma towards people in poverty and gain a greater understanding of the challenges faced in acquiring adequate food. More research is needed to confirm these results and explore ways to move attitudes about the causes of poverty from individualistic to structural in nature. The SNAP Challenge is an experiential learning tool that should be used to complement classroom teaching about poverty as it supports the development of pre-professionals with greater awareness of poverty and less stigma towards the impoverished.

REFERENCES

- American Dietetic Association/Commission on Dietetic Registration Code of Ethics for the Profession of Dietetics and Process for Consideration of Ethics Issues. (2009).

 Journal of the American Dietetic Association, 109(8), 1461-1467.
- Atherton, C. R., Gemmel, R. J., Haagenstad, S., Holt, D. J., Jensen, L. A., O'Hara, D. F., & Rehner, T. A. (1993). Measuring attitudes toward poverty: A new scale. Paper presented at the Social Work Research and Abstracts.
- Barraza, J.A. & Zak, P.J. (2009). Empathy toward strangers triggers oxytocin release and subsequent generosity. Values, Empathy, and Fairness across Social Barriers, 1167, 182-189.
- Batson, C. D., Polycarpou, M.P., Harmon-Jones, E., Imhoff, H.J., Mitchener, E.C.,
 Bednar, L.L., Klein, T.R., & Highberger, L. (1997). Empathy and attitudes: can feeling for a member of a stigmatized group improve feelings toward the group?
 Journal of Personality and Social Psychology, 72(1), 105-118.
- Batson, C. D., & Ahmad, N. Y. (2009). Using empathy to improve intergroup attitudes and relations. Social Issues and Policy Review, 3(1), 141-177.
- Betancourt, J. R., Green, A. R., Carrillo, J. E., & Ananeh-Firempong, O., 2nd. (2003).

 Defining cultural competence: a practical framework for addressing racial/ethnic disparities in health and health care. Public Health Rep, 118(4), 293-302.
- Boss, J. A. (1994). The effect of community service work on the moral development of college ethics students. Journal of Moral Education, 23(2), 183.
- Bowman, S., Bairstow, R., & Edwards, M. (2003). Poverty education in the classroom

- and beyond. Journal of Teaching in Marriage and Family, 3(1), 23-46.
- Caulfield, J., & Woods, T. (2013). Experiential Learning: Exploring Its Long-Term

 Impact on Socially Responsible Behavior. Journal of the Scholarship of Teaching and Learning, 13(2), 31-48.
- CEOs Taking the SNAP Challenge to Shine a Spotlight on Food Assistance. (2013, September, 16). *PR Newswire US*. Retrieved from:

 http://www.prnewswire.com/news-releases/ceos-taking-the-snap-challenge-to-shine-a-spotlight-on-food-assistance-223939981.html
- Coleman-Jenson, A., Nord, M., and Singh, A. (2013). Household food security in the
 United States in 2012. Washington, DC: U.S. Department of Agriculture,

 Economic Research Service. http://www.ers.usda.gov/media/1183208/err-155.pdf
- Coleman-Jenson, A., Nord, M., and Singh, A. (2014). Household food security in the United States in 2013. Washington, DC: U.S. Department of Agriculture, Economic Research Service.
 - http://www.ers.usda.gov/media/1565410/err173_summary.pdf
- Cox, E. D., Koscik, R. L., Olson, C. A., Behrmann, A. T., Hambrecht, M. A., McIntosh, G. C., & Kokotailo, P. K. (2006). Caring for the underserved: blending service learning and a web-based curriculum. American Journal of Preventive Medicine, 31(4), 342-349. doi: http://dx.doi.org/10.1016/j.amepre.2006.06.024
- Cozzarelli, C., Wilkinson, A. V., & Tagler, M. J. (2001). Attitudes toward the poor and attributions for poverty. Journal of Social Issues, 57(2), 207-227.
- Davis, M. H. (1980). A multidimensional approach to individual differences in empathy.

- JSAS Catalog of Selected Documents in Psychology, 10, 85.
- Davis, M. H. (1983a). Measuring individual differences in empathy: Evidence for a multidimensional approach. Journal of Personality and Social Psychology, 44(1), 113-126.
- Davis, M. H. (1983b). The effects of dispositional empathy on emotional reactions and helping: a multidimensional approach. Journal of Personality, 51(2), 167-184.
- Eagly, A. H. & Chaiken, S. (2007). The advantages of an inclusive definition of attitude. Social Cognition, 25(5), 582-602.
- Economic segregation of higher education opportunity, 1973 to 2001. (2003, October).

 *Postsecondary Education Opportunity, 136, 3-18.
- Eyler, J. & Giles, D.E. (2002). Beyond surveys: Using the problem solving interview to assess the impact of service-learning on understanding and critical thinking. In A. Furco and S. Billig (eds.), *Service-Learning: The Essence of the Pedagogy* (pp. 147-160). Retrieved from:

 http://www.loyola.edu/~/media/department/ccsj/documents/servicelearning/readings/eylergilesbeyondsurveys.ashx.
- Farson-Gray, K. (2014). Characteristics of Supplemental Nutrition Assistance Program households: fiscal year 2013 (summary). U.S. Department of Agriculture Food and Nutrition Service. Retrieved from:
 - http://www.fns.usda.gov/sites/default/files/ops/Characteristics 2013-Summary.pdf
- Fast Facts about Winthrop University. (2014). Retrieved from http://www.winthrop.edu/admissions/secondary.aspx?id=2070

- Food Resource and Action Center (n.d.) FRAC 101: SNAP challenge toolkit. Retrieved from frac.org/pdf/snap_challenge_toolkit_frac.pdf
- Fremstad, S. (2011). New census numbers make it official: 2000-2010 was a lost economic decade. Center for Economic and Policy Research. Retrieved from http://www.cepr.net/data-bytes/poverty-bytes/new-census-numbers-make-it-official-2000-2010-was-lost-economic-decade
- Gowda, C., Hadley, C., & Aiello, A. E. (2012). The association between food insecurity

 And inflammation in the U.S. adult population. American Journal of Public

 Health, 102(8), 1579-1586. doi: 10.2105/AJPH.2011.300551
- Gundersen, C., Kreider, B., & Pepper, J. (2011). The economics of food insecurity in the United States. Applied Economic Perspectives & Policy, 33(3), 281-303.
- Kleinman, A., & Hall-Clifford, R. (2009). Stigma: a social, cultural and moral process.

 Journal of Epidemiology and Community Health, 63(6), 418-419. doi: 10.1136/jech.2008.084277
- Kolb, D.A., (1984). Experiential learning: Experience as the source of learning and development. Retrieved from: http://academic.regis.edu/ed205/kolb.pdf
- Konrath, S.H., O'Brien, E.H., & Hsing, C. (2011). Changes in dispositional empathy in American college students over time: a meta-analysis. Personality Social Psychology Review, 15(2), 180-198. doi: 10.1177/1088868310377395
- Kronick, R. F., Gourley, M., & Cunningham, R. (2011). Experiencing Service-learning.

 Knoxville: Univ Tennessee Press.
- Krumer-Nevo, M., Weiss-Gal, I., & Monnickendam, M. (2009). Poverty-aware social

- work practice: a conceptual framework for social work education. Journal of Social Work Education, 45(2), 225-243. doi: 10.5175/JSWE.2009.200600144
- Laraia, B. A., Siega-Riz, A. M., & Gundersen, C. Household food insecurity is associated with self-reported pregravid weight status, gestational weight gain, and pregnancy complications. Journal of the American Dietetic Association, 110(5), 692-701. doi: 10.1016/j.jada.2010.02.014
- Leung, C. W., Cluggish, S., Villamor, E., Catalano, P. J., Willett, W. C., & Rimm, E. B. Few changes in food security and dietary intake from short-term participation in the Supplemental Nutrition Assistance Program among low-income

 Massachusetts adults. Journal of Nutrition Education and Behavior, 46(1), 68-74.

 doi: 10.1016/j.jneb.2013.10.001
- Link, B. G., & Phelan, J. C. (2001). CONCEPTUALIZING STIGMA. Annual Review of Sociology, 27, 363.
- Lomax, A. (2013, September 9). Why Panera's CEO is going hungry. *The Motley Fool, Fool.com*. Retrieved from:

 http://www.fool.com/investing/general/2013/09/18/why-paneras-ceo-is-going-hungry.aspx
- MacMillan, T. (2014, March 28). SNAP challenge saps senator's strength. *New Haven Independent*. Retrieved from http://www.newhavenindependent.org/index.php/archives/entry/snap_challenge_s aps_senators_strength/#
- Maner, J. K., Luce, C. L., Neuberg, S. L., Cialdini, R. B., Brown, S., & Sagarin, B. J.

- (2002). The effects of perspective taking on motivations for helping: still no evidence for altruism. Personality and Social Psychology Bulletin, 28(11), 1601-1610. doi:10.1177/014616702237586
- Menzel, N., Willson, L. H., & Doolen, J. (2014). Effectiveness of a poverty simulation in Second Life(R): changing nursing student attitudes toward poor people. Int J Nurs Educ Scholarsh, 11. doi: 10.1515/ijnes-2013-007
- Morland, K., Wing, S., & Roux, A. D. (2002). The contextual effect of the local food environment on residents' diets: the atherosclerosis risk in communities study.

 American Journal of Public Health, 92(11), 1761-1767.
- National Association of Social Workers. (2008). Code of ethics of the National

 Association of Social Workers. Washington, DC. NASW Press. Retrieved from

 http://www.socialworkers.org/pubs/code/code.asp
- Newswire, P. R. (2013). CEOs taking the SNAP challenge to shine a spotlight on food assistance. Retrieved from http://www.prnewswire.com/news-releases/ceostaking-the-snap-challenge-to-shine-a-spotlight-on-food-assistance-223939981.html
- Nickols, S. Y., & Nielsen, R. B. (2011). "So many people are struggling": developing social empathy through a poverty simulation. Journal of Poverty, 15(1), 22-42. doi: 10.1080/10875549.2011.539400
- Noone, J., Sideras, S., Gubrud-Howe, P., Voss, H., & Mathews, L. R. (2012). Influence of a poverty simulation on nursing student attitudes toward poverty. J Nurs Educ, 51(11), 617-622. doi: 10.3928/01484834-20120914-01

- Patterson, N., & Hulton, L. J. (2012). Enhancing nursing students' understanding of poverty through simulation. Public Health Nursing, 29(2), 143-151.
- Pettit, M. L., & Nienhaus, A. R. (2010). The current scope of health disparities in the U.S.: a review of literature. Health Educator, 42(2), 47-55.
- Perrin, J. (2014). Features of Engaging and Empowering Experiential Learning Programs for College Students. Journal of University Teaching & Learning Practice, 11(2), 1-12.
- Proctor, P., Lake, D., Jewell, L., Racine, L., D'Eon, M., & Reeder, B. (2010). Influencing student beliefs about poverty and health through interprofessional community-based educational experiences. Journal of Research in Interprofessional Practice And Education, 1(2). Retrieved from:

 http://www.jripe.org/index.php/journal/article/view/24
- Ratcliffe, C., McKernan, S.-M., & Zhang, S. (2011). How much does the Supplemental Nutrition Assistance Program reduce food insecurity? American Journal of Agricultural Economics, 93(4), 1082-1098.
- Ryu, J.-H., & Bartfeld, J. S. (2012). Household food insecurity during childhood and subsequent health status: the early childhood longitudinal study-kindergarten cohort. American Journal of Public Health, 102(11), e50-e55. doi: 10.2105/AJPH.2012.300971
- Seligman, H. K., Laraia, B. A., & Kushel, M. B. (2010). Food insecurity is associated with chronic disease among low-income NHANES participants. The Journal of Nutrition, 140(2), 304-310. doi: 10.3945/jn.109.112573

- Steck, L. W., Engler, J. N., Ligon, M., Druen, P. B., & Cosgrove, E. (2011). Doing poverty: learning outcomes among students participating in the community action poverty simulation program. Teaching Sociology, 39(3), 259-273. doi: 10.1177/0092055X11407347
- Strasser, S., Smith, M. O., Pendrick Denney, D., Jackson, M. C., & Buckmaster, P. (2013). A poverty simulation to inform public health practice. American Journal of Health Education, 44(5), 259-264. doi: 10.1080/19325037.2013.811366
- Stephan, W.G. & Finlay, K. (1999). The role of empathy in improving intergroup relations. Journal of Social Issues, 55(4), 729-743.
- Tam, R. (2013, June 30). Republican aide challenges democrats in real-life 'hunger games'. *The Washington Post*. Retrieved from http://www.washingtonpost.com/blogs/post-politics/wp/2013/06/20/republican-aide-challenges-democrats-in-real-life-hunger-games/
- U.S. Census Bureau (2014). 2013 highlights. Retrieved from:

 https://www.census.gov/hhes/www/poverty/about/overview/
- U.S. Department of Agriculture, Economic Research Service. (2014). Food Security in the U.S. Retrieved from: http://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us.aspx
- U.S. Department of Agriculture, Food and Nutrition Service. (2014). Supplemental Nutrition Assistance Program (SNAP). Retrieved from: http://www.fns.usda.gov/pd/supplemental-nutrition-assistance-program-snap.
- Vandsburger, E., Duncan-Daston, R., Akerson, E., & Dillon, T. (2010). The effects of

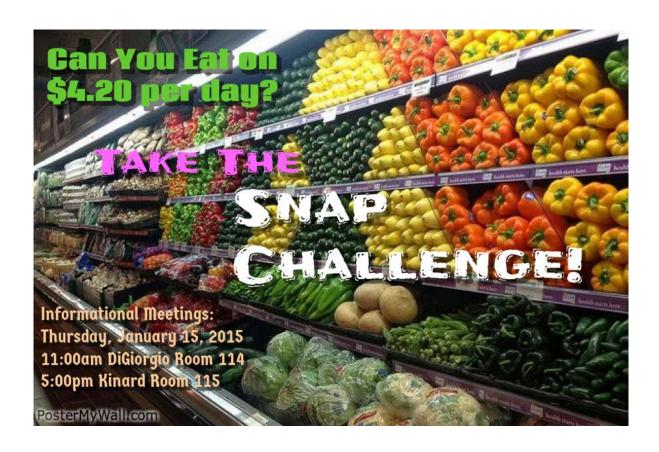
- poverty simulation, an experiential learning modality, on students' understanding of life in poverty. Journal of Teaching in Social Work, 30(3), 300-316. doi: 10.1080/08841233.2010.497129
- Vescio, T. K., Sechrist, G. B., & Paolucci, M. P. (2003). Perspective taking and prejudice reduction: the mediational role of empathy arousal and situational attributions.

 European Journal of Social Psychology, 33(4), 455-472. doi: 10.1002/ejsp.163
- Wang, D. D., Leung, C. W., Li, Y., & et al. (2014). Trends in dietary quality among adults in the United States, 1999 through 2010. JAMA Internal Medicine. doi: 10.1001/jamainternmed.2014.3422
- Webb, L.E. (2011). Standing in the patient's shoes: medical students take the SNAP Challenge. Medical Education, 45: 1131-1162.
- Wilde, P. E. (2013). The new normal: the Supplemental Nutrition Assistance Program (SNAP). American Journal of Agricultural Economics, 95(2), 325-331.
- WU at a Glance. (2014). Retrieved from http://www.winthrop.edu/aboutwu/
- Yang, K., Woomer, G.R., Agbemenu, K. & Williams, L. (2014). Relate better and judge less: poverty simulation promoting culturally competent care in community health nursing. Nurse Education in Practice, 14, 680-685.
- Yun, S. H., & Weaver, R. D. (2010). Development and validation of a short form of the attitude toward poverty scale. Advances in Social Work, 11(2), 174-187.
- Zosky, D., & Thompson, J. (2012). Poverty simulation: an experiential learning tool emphasizing economic justice content. Journal of Baccalaureate Social Work, 17(-1), 69-84.

APPENDICES

APPENDIX A.

SNAP Challenge Marketing Materials





Winthrop University SNAP Challenge

Thursday, January 22, 2015 – Wednesday, January 28, 2015

What is SNAP?

SNAP stands for Supplemental Nutrition Assistance Program, formerly known as food stamps. It is a major federal nutrition program that provides benefits to purchase food for eligible recipients.

What is a SNAP Challenge?

In a SNAP Challenge, participants follow a restricted food budget for a set period of time that reflects the average daily SNAP / food stamp benefit.

Could you live on \$4.20 a day?

Take the SNAP Challenge and find out.

Learn more at one of the information sessions

Thursday, January 15 11:00 am Room 114, DiGiorgio Campus Center Thursday, January 15 5:00 pm Room 115, Kinard

Questions? Contact Tyler Wallace - Wallaces14@winthrop.edu

APPENDIX B.

Email to Faculty Regarding In-Class Information Session

Dear <Faculty Member>,

Winthrop University is hosting a seven-day SNAP Challenge from Thursday, January 22, 2015 through Wednesday, January 28, 2015. SNAP stands for the Federal Government Supplemental Nutrition Assistance Program (formerly, food stamps). The Challenge involves committing to follow a limited food budget reflective of the typical SNAP benefits given to recipients in North and South Carolina, \$4.20 per day per person. Participants are challenged to limit all food and beverage purchases to \$29.40 for the week of the Challenge.

Related to the SNAP Challenge, I am conducting a separate research project to evaluate the exercise as a potential teaching method. This study consists of a short online Pre- and Post-SNAP Challenge Questionnaire to gather data about the value and impact of this experience.

I am looking to recruit students from a variety of majors to participate in the SNAP Challenge and complete the pre- and post-test questionnaires. I have assembled a team of Graduate Human Nutrition research assistants to help me explain the SNAP Challenge and my research as it relates to it. Would you be willing to allow me or one of my trained research assistants to visit your <specific course> class between Wednesday, January 14 and Wednesday, January 21, 2015 to facilitate an information session? This session would last approximately fifteen minutes and will include a brief overview of the SNAP Challenge and allow time for students to complete the pre-test questionnaire on their personal electronic devices.

Please note, if you wish to offer extra credit to students for their participation in this research you may do so; however, it is not required. In the event you do offer extra credit I have created an equivalent alternative assignment for students who do not choose to participate in the research. Any students requesting an alternative assignment can be referred to me or I can provide you with the assignment upon request.

An anticipated benefit of participating in the SNAP Challenge as well as the pre- and post-test evaluations is that subjects will learn more about poverty. Additionally, this research will help determine whether the SNAP Challenge is a valuable experiential learning tool that can be used to teach pre-professionals about the realities of poverty.

Please contact me with any questions or concerns. You may also contact my Faculty Advisor, Dr. Simone Camel at camels@winthrop.edu or (803) 323-4552. Thank you for your support!

Sincerely,
S. Tyler Wallace
Graduate Student
Department of Human Nutrition

APPENDIX C.

Information Session Script

Research Assistant: Hello, my name is ______. I am a Human Nutrition student assisting with data collection for Tyler Wallace's thesis project.

Beginning on Thursday, January 22 and continuing until Wednesday, January 28, Winthrop University will host a week-long SNAP Challenge. SNAP stands for the Supplemental Nutrition Assistance Program, formerly known as food stamps. SNAP is a major federal nutrition program that provides benefits to purchase food for eligible participants.

If you choose to participate in the Challenge you will commit to spending no more than \$29.40 on your food and beverage purchases during the week. This equates to \$4.20 per day which reflects the benefits received on average by SNAP recipients in North and South Carolina. This activity challenges you to test your budgeting and planning skills. Essentially, can you maintain an adequate diet on \$4.20 per day?

This is a completely voluntary challenge. We would love for you to participate. If you are up for the challenge please also consider participating in a graduate student research project related to evaluating the SNAP Challenge. Your participation in the study is completely voluntary, and it will involve completing two brief online questionnaires: one before the SNAP Challenge begins and one after it ends.

Before I review the SNAP Challenge guidelines, I want to ask you to complete the pre-challenge questionnaire now. This will help us gather your perspective before we go into detail about this experience. If you are willing to assist with this research please complete the first online questionnaire now.

From the time you connect to the survey, it should take no more than ten minutes to complete. You can use your phones or other electronic devices (Assistant writes website on board and students complete questionnaire in class with personal technology).

http://tinyurl.com/ov4stlt

(Students complete pre-test questionnaire. After all have finished continue with script.)

Now I will review the Challenge guidelines (Assistant passes out handouts with the guidelines). I am also passing around a blank sheet of paper for you to write your Winthrop email address if you are considering or have decided to participate in the SNAP Challenge. Your email will only be used to send you the link to the final online questionnaire to gather your thoughts after the challenge ends. It will not be used for any other purpose and will be deleted from any research materials after the Post-SNAP Challenge Survey closes on February 8, 2015. There will not be any way for the researchers to link your email or identity to your questionnaire responses.

SNAP Challenge Guidelines

1. Each person should spend no more than a total of \$29.40 on food and beverages during the Challenge week.

- 2. All food purchased and eaten during the Challenge week, including groceries, fast food, dining out, and campus dining, must be included in the total spending. If you eat out you may box up your leftovers to eat later as long as the meal(s) fit within your budget.
- 3. If you have a Winthrop meal plan, you may eat in Thompson Cafeteria and use Café Cash to purchase food. However, these expenses should be included in your total budget.

For meals eaten in the Thompson Cafeteria, the following costs have been assigned:

Breakfast: \$6.00

Lunch: \$7.00 Dinner: \$8.00

- 4. During the Challenge, only eat of that you purchase for the project. Do not eat food that you already own (this does not include spices and seasonings).
- 5. Avoid accepting free food from friends, family, or at work, including at receptions, meetings or parties.
- 6. Keep track of receipts on food spending, and take note of your experiences throughout the Challenge week.

While the goal is to complete as much of the seven-day SNAP Challenge as possible, we realize it is a challenge. We ask that you still submit the post-SNAP Challenge Questionnaire even if you weren't able to complete the entire challenge. This information is valuable for the research being collected on the experience. After the SNAP Challenge ends on January 28, 2015, be on the lookout for an email reminder with a link to the final questionnaire.

Are there any questions? (Assistant takes questions)

During the Challenge we ask that you share your experience on our blog at **WinthropSNAPChallenge.blogspot.com**. Two entries with general questions will be posted each day during the challenge. Provide your feedback on the blog.

You can also post to our Facebook page (https://www.facebook.com/winthropsnapchallenge) and Tweet us at @WinthropSNAP. Use the hashtag #WinthropSNAPChallenge.

Thank you for your time. If you have any questions about the Challenge please contact Tyler Wallace Wallaces 14@winthrop.edu.

APPENDIX D.

Posttest Reminder Email Message

Good Morning,

Thank you for your interest in the SNAP Challenge. Now that the Challenge has concluded we ask that you complete a short Post-SNAP Challenge questionnaire. It will take approximately 5 to 10 minutes to complete. We are interested in gathering your perspective on the SNAP Challenge, regardless of your level of participation.

Please take a few minutes to complete the questionnaire online using the link below:

Follow this link to the Survey:

Take the Survey

Or copy and paste the URL below into your internet browser: https://winthrop.qualtrics.com/WRQualtricsSurveyEngine/?Q_SS=8e7c2rR4wq9qypL_0OPCDd_S4njKJXXT&_=1

The questionnaire will remain open until <u>Sunday, February 8, 2015 at midnight</u>. This questionnaire is anonymous. No personal identification information will be gathered. You may contact Tyler Wallace, at <u>wallaces14@winthrop.edu</u> or Dr. Simone Camel at <u>camels@winthrop.edu</u> with any questions.

The blog will also remain open for comments through the end of Friday, January 30, 2015. Head over to http://www.winthropsnapchallenge.blogspot.com/ to share your experience.

Thank you!

S. Tyler Wallace Graduate Student Department of Human Nutrition

Follow the link to opt out of future emails: Click here to unsubscribe

APPENDIX E.

SNAP Challenge Guidelines

Winthrop University SNAP Challenge

How long will the Challenge Last? 7 days: Thursday, January 22 – Wednesday, January 28, 2015

SNAP Challenge Guidelines:

- 1. Each person should spend no more than a total of \$29.40 on food and beverages during the Challenge week.
- 2. All food purchased and eaten during the Challenge week, including groceries, fast food, dining out, and campus dining, must be included in the total spending. If you eat out you may box up your leftovers to eat later as long as the meal(s) fit within your budget.
- 3. If you have a Winthrop meal plan, you may eat in Thompson Cafeteria and use Café Cash to purchase food. However, these expenses should be included in your total budget.

For meals eaten in the Thompson Cafeteria, the following costs have been assigned:

Breakfast: \$6.00 Lunch: \$7.00 Dinner: \$8.00

- 4. During the Challenge, only eat of that you purchase for the project. Do not eat food that you already own (this does not include spices and seasonings).
- 5. Avoid accepting free food from friends, family, or at work, including at receptions, meetings or parties.
- 6. Keep track of receipts on food spending, and take note of your experiences throughout the Challenge week.

Social Media:

If you decide to take the challenge we welcome posts using the hashtag

#WinthropSNAPChallenge

Facebook: http://www.facebook.com/groups/winthropsnapchallenge

Twitter: @WinthropSNAP

Blog: WinthropSNAPChallenge.blogspot.com

Resources:

• SNAP Ed Connection:

http://snap.nal.usda.gov/

Good Food on a Tight Budget:

http://www.ewg.org/goodfood/

• Recipes and Tips for Healthy, Thrifty Meals:

 $www.cnpp.usda.gov/sites/default/files/usda_food_plans_cost_of_food/FoodPlansRecipeBook.pdf$

• Good and Cheap:

http://tinyurl.com/mjflyvp

Questions? Contact Tyler Wallace at Wallaces14@winthrop.edu

Taking the Challenge? Help us evaluate it by completing the Pre-SNAP Challenge Survey:

http://tinyurl.com/ov4stlt

APPENDIX F.

Pretest Questionnaire

Informed Consent Agreement

Thank you for considering participation in this questionnaire which is part of my thesis research. This study is in addition to the week-long SNAP Challenge at Winthrop University scheduled from January 22, 2015 through January 28, 2015. The questionnaire will be used to gather your thoughts about participation in the SNAP Challenge. It will take approximately 10 to 15 minutes to complete. Your participation is completely voluntary. It is not required that you complete the questionnaire in order to participate in the SNAP Challenge. You may stop the survey or refuse to answer any questions without penalty at any time.

This questionnaire is anonymous as no personal identification information will be gathered. Only the researcher and thesis committee members will have access to the questionnaire data during the analysis process.

There is no compensation to you for participation in the questionnaire or SNAP Challenge; however, it is expected you will learn more about poverty through the process. The risks are minimal with only the inconvenience of the time needed to complete the questionnaire and participate in the challenge.

Should you have any questions or concerns about the research you can contact me, S. Tyler Wallace, at wallaces14@winthrop.edu. You may also contact my faculty advisor Dr. Simone Camel at camels@winthrop.edu or 803-323-4552 or Teresa Justice, Director Sponsored Programs and Research, at justicet@winthrop.edu or 803-323-2460

323-2460.	Sponsored Pro	grams and Res	earcn, at justic	et@wintnrop	edu or 803-
Please select below to confirm your partic	ipation in the st	udy and procee	d with this que	stionnaire:	
 I agree I have read the above Informed Con part in this study. 	sent Agreement, u	inderstand what is	involved and ag	ree to take	
The following question will allow us to mat Challenge Questionnaire. The codes will replease fill in your middle initial (lower case between.	ot be used to id	dentify your spe	cifically.	·	
The statements below depict some percer answer. Please read each statement, one understanding of poverty.					, .
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

Poor people are different from the rest of society.		\circ	\circ		\bigcirc
Poor people are dishonest.					
Most poor people are dirty.		\bigcirc			
Poor people act differently.					
Children raised on welfare will never amount to anything.	0	\circ	\circ	\circ	\circ
I believe poor people have a different set of values than do other people.	0	\circ	0	\circ	0
Poor people generally have lower intelligence than nonpoor people.	0	\circ	0	\circ	0
There is a lot of fraud among welfare recipients.	0	\circ	0	\bigcirc	\circ
Some "poor" people live better than I do, considering all their benefits.	0	\circ	\circ	\circ	0
Please select "Agree"			\circ	\bigcirc	\bigcirc
Poor people think they deserve to be supported.	0	\circ	0		0
Welfare mothers have babies to get more money.	0	\circ	\circ	\circ	0
An able-bodied person collecting welfare is ripping off the system.	0	\circ	\circ	\circ	\circ
Unemployed poor people could find jobs if they tried harder.	0	\circ	0		0
Welfare makes people lazy.			\circ		
Benefits for poor people consume a major part of the federal budget.		\circ	\circ		0
People are poor due to circumstances beyond their control.	0	\circ	\circ	\circ	0
I would support a program that resulted in higher taxes to support social programs for poor people.	0	\circ	0	0	0
If I were poor, I would accept welfare benefits.	0	\circ	0		\circ
People who are poor should not be blamed for their misfortune.	0	\circ	\circ	\circ	\circ
Society has the responsibility to help poor people.	0	\circ	0	\circ	0
Poor people are discriminated against.	0	\circ	\circ	\circ	\circ

Select the answer that best matches how the item describes you.

	Does Not Describe Me Well	2	3	4	Describes Me Very Well
I daydream and fantasize, with some regularity, about things that might happen to me.	0	\circ	\circ	\circ	0
I often have tender, concerned feelings for people less fortunate than me.	0	\circ	\circ	\circ	0
I sometimes find it difficult to see things from the "other guy's" point of view.	0	\circ	\circ		0
Sometimes I don't feel very sorry for other people when they are having problems.	0		\circ	\circ	0

I really get involved with the feelings of the characters in a novel.		\bigcirc		\circ	
In emergency situations, I feel apprehensive and ill-at-ease.					\bigcirc
I am usually objective when I watch a movie or play, and I don't often get completely caught up in it.		\circ	\circ	\circ	\circ
I try to look at everybody's side of a disagreement before I make a decision.		\circ	\circ	\circ	\circ
When I see someone being taken advantage of, I feel kind of protective towards them.		\circ	\circ	\circ	\circ
I sometimes feel helpless when I am in the middle of a very emotional situation.	0	\circ	\circ	\circ	0
I sometimes try to understand my friends better by imagining how things look from their perspective.	0	\bigcirc	\circ	\circ	\circ
Becoming extremely involved in a good book or movie is somewhat rare for me.	0	\circ	\circ	\circ	\circ
When I see someone get hurt, I tend to remain calm.					\bigcirc
Other people's misfortunes do not usually disturb me a great deal.			\bigcirc	\bigcirc	
If I'm sure I'm right about something, I don't waste much time listening to other people's arguments	0	\circ	\circ	\circ	\circ
After seeing a play or movie, I have felt as though I were one of the characters.	0		\circ	\circ	0
Being in a tense emotional situation scares me.					
When I see someone being treated unfairly, I sometimes don't feel very much pity for them.	0	\circ	\circ	\circ	\circ
I am usually pretty effective in dealing with emergencies.					\bigcirc
Please select "Does Not Describe Me Well"		\bigcirc		\bigcirc	
I am often quite touched by things that I see happen.				\bigcirc	\bigcirc
I believe that there are two sides to every question and try to look at them both.	0		\circ	\circ	0
I would describe myself as a pretty soft-hearted person.					\bigcirc
When I watch a good movie, I can very easily put myself in the place of a leading character.	0	\circ	\circ	\circ	0
I tend to lose control during emergencies.		\bigcirc		\bigcirc	
When I'm upset at someone, I usually try to "put myself in his shoes" for a while.	0		\circ	\circ	0
When I am reading an interesting story or novel, I imagine how I would feel if the events in the story were happening to me.	0		\circ	\circ	0
When I see someone who badly needs help in an emergency, I go to pieces.	0		\circ	\circ	0
Before criticizing somebody, I try to imagine how I would feel if I were in their place.		\circ	\circ	\bigcirc	

Please complete the items below to help us gather information about your demographics.

Gender

\bigcirc	Male
\bigcirc	Female
\bigcirc	Transgender
\bigcirc	Prefer not to respond

Rad	ee / Ethnicity
\circ	African American/Black
\bigcirc	Asian/Pacific Islander
\bigcirc	Hispanic/Latino
\bigcirc	Multiracial
\bigcirc	Native American/American Indian
\bigcirc	White
\bigcirc	Other
\bigcirc	Prefer not to respond
Wh	at is your age?
Wh	at is your home (permanent address) zip code?
_	
Cur	
0	rent Academic Standing
0	rent Academic Standing Freshman
\circ	
\circ	Freshman
0	Freshman Sophomore
	Freshman Sophomore Junior
	Freshman Sophomore Junior Senior
0	Freshman Sophomore Junior Senior Graduate Student
	Freshman Sophomore Junior Senior Graduate Student Administrator
0	Freshman Sophomore Junior Senior Graduate Student Administrator Teaching Faculty
0	Freshman Sophomore Junior Senior Graduate Student Administrator Teaching Faculty
0	Freshman Sophomore Junior Senior Graduate Student Administrator Teaching Faculty
0	Freshman Sophomore Junior Senior Graduate Student Administrator Teaching Faculty University Staff

\bigcirc	Chemistry
\bigcirc	Education
\bigcirc	English
\bigcirc	Family and Consumer Sciences
\bigcirc	History
\bigcirc	Human Nutrition
\bigcirc	Mathematics
\bigcirc	Psychology
\bigcirc	Social Work
\bigcirc	Visual/Performing Arts
\bigcirc	Undecided
\bigcirc	Not Listed
\bigcirc	Not Applicable
Do y	you receive financial aid?
	Yes
	No
\bigcirc	Not applicable
Hav	e you ever experienced having limited funds for food?
0	Yes
0	No

APPENDIX G.

Posttest Questionnaire and Debriefing

Informed Consent Agreement

Thank you for considering participation in this questionnaire which is part of my thesis research. This study is in addition to the week-long SNAP Challenge scheduled from January 22, 2015 through January 28, 2015. The questionnaire will be used to gather your thoughts about participation in the SNAP Challenge. It will take approximately 5 to 10 minutes to complete. Your participation is completely voluntary. It is not required that you complete the questionnaire in order to participate in the SNAP Challenge. You may stop the survey or refuse to answer any questions without penalty at any time.

This questionnaire is anonymous as no personal identification information will be gathered. Only the researcher and thesis committee members will have access to the questionnaire data during the analysis process.

There is no compensation to you for participation in the questionnaire or SNAP Challenge; however, it is expected you will learn more about poverty through the process. The risks are minimal with only the inconvenience of the time needed to complete the questionnaire and participate in the challenge.

Should you have any questions or concerns about the research you can contact me, S. Tyler Wallace, at wallaces14@winthrop.edu. You may also contact my faculty advisor Dr. Simone Camel at camels@winthrop.edu or 803-323-4552 or Teresa Justice, Director Sponsored Programs and Research, at justicet@winthrop.edu or 803-323-2460

Please select below to confirm your participation in the study and proceed	ed with this questionnaire:
 I agree I have read the informed consent agreement, understand what is involved this study. 	ved and agree to take part in
The following question will allow us to match your Pre-SNAP Challenge Challenge Questionnaire. The codes will not be used to identify your specific process.	
Please fill in your middle initial (lower case) followed by the last 4 digits of between.	of your cell phone number with no spaces in
The statements below depict some perceptions about poverty and peop answer. Please read each statement, one at a time, and rate it on a five understanding of poverty.	
	Strongly Disagree Disagree Neutral Agree Strongly Agree

Poor people are different from the rest of society.					
Poor people are dishonest.					\bigcirc
Most poor people are dirty.					
Please select "Disagree"					\bigcirc
Poor people act differently.					
Children raised on welfare will never amount to anything.					\bigcirc
I believe poor people have a different set of values than do other people.			\bigcirc		\bigcirc
Poor people generally have lower intelligence than nonpoor people.					\bigcirc
There is a lot of fraud among welfare recipients.			\bigcirc	\bigcirc	\bigcirc
Some "poor" people live better than I do, considering all their benefits.				\bigcirc	\bigcirc
Poor people think they deserve to be supported.			\bigcirc	\bigcirc	\bigcirc
Welfare mothers have babies to get more money.					\bigcirc
An able-bodied person collecting welfare is ripping off the system.				\bigcirc	\bigcirc
Unemployed poor people could find jobs if they tried harder.				\bigcirc	\bigcirc
Welfare makes people lazy.				\bigcirc	\bigcirc
Benefits for poor people consume a major part of the federal budget.					\bigcirc
People are poor due to circumstances beyond their control.	0		\bigcirc	\bigcirc	\bigcirc
Please select "Agree"				\bigcirc	\bigcirc
I would support a program that resulted in higher taxes to support social programs for poor people.	0	\circ	\circ	\circ	\circ
If I were poor, I would accept welfare benefits.					\bigcirc
People who are poor should not be blamed for their misfortune.	0		\bigcirc	\bigcirc	\bigcirc
Society has the responsibility to help poor people.			\bigcirc	\bigcirc	\bigcirc
Poor people are discriminated against.					\bigcirc

Please answer the following questions about your experience with the SNAP Challenge.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Participating in the SNAP Challenge did not help me better understand the effects of poverty on peoples' lives.	0	0	0	0	0
The SNAP Challenge stimulated my thinking about poverty and solutions.	0	0	0	0	0
This experience was very uncomfortable for me.	0	0	0	0	0
The experience was useful to my duties as a professional or future professional.	0	0	0	0	0
My feelings about poverty have changed after participating in the SNAP Challenge.	0	0	0	0	0
Overall, this was a valuable experience.		\circ	\circ	\circ	\circ

What would yo	ou say to stude	ents thinking ab	out participatir	ng in the SNAP	Challenge ne	kt year?	
							h
How would you	u improve the	SNAP Challeng	je experience	in the future?			
							10
How many day	s did you com	plete the SNA	Challenge?				
0 days	1 day	2 days	3 days	4 days	5 days	6 days	7 days
	0				0		\circ

Debriefing Statement

Thank you for agreeing to participate in this study and share your thoughts. Your participation was very valuable to the research. We appreciate the time you took to complete both the pre and post-SNAP Challenge questionnaires.

In this study we were interested in understanding how the SNAP Challenge and other factors impacted attitudes towards poverty. If you have any questions or concerns you may contact S. Tyler Wallace at wallaces14@winthrop.edu or Dr. Simone Camel at camels@winthrop.edu. Thank you again for your participation!

APPENDIX H.

Institutional Review Board Approval



Sponsored Programs and Research

IRB PROTOCOL #: IRB15060

Evaluating the Impact of a SNAP Challenge on University Participant Attitudes Toward

Poverty

RESEARCHER OF RECORD: Susan Tyler Wallace, Graduate Student Researcher

CO-RESEARCHERS: none

FACULTY ADVISOR: Simone Camel, Ph.D.

EXEMPTION DATE:

November 21, 2014

EXEMPTION CATEGORY:

14(b) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior unless (a) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; or (b) any disclosure of the human subjects' responses outside the research could reasonably place the subject at risk of criminal or civil liability or be damaging to the subjects'

financial standing, employability or reputation. [45CFR46(b)(2)]

Research involving children (subjects who have not attained the age of 18 years) is not exempt unless the research involves only the observation of public behavior and the researchers do not participate or impact the activities being observed. [45CFR46.401(b)]

The Request for Review of Research Involving Human Subjects identified above has been reviewed by the Winthrop University Institutional Review Board (IRB) and has been determined to be exempt from IRB review. You may begin your research on or after the Exemption date show above.

A Request for Modification of Previously Approved or Exempt Protocol must be completed by the researcher and submitted to the IRB for review for any proposed changes or modifications to the protocol. IRB approval must be received prior to amended changes or modifications being implemented by the researcher. These changes may include a change in a survey instrument, the addition or deletion of a research site, a change in personnel, a change in methodology or a change in the Researcher of Record.

Use the form *Adverse Event Report* to report any negative consequences that occur as a result of participation in a research project. An "adverse event" or "adverse experience" is an undesirable and unintended, though not necessarily unanticipated, injury or physical or emotional consequence to a human subject. "Unanticipated Problems" may or may not include specific events experienced by individual subjects, but are developments within the research activity that suggest a potential for increased risks to subjects or others.

Aaron Hartel, Ph.D., Chair Winthrop University Institutional Review Board 803-323-4942

hartela@winthrop.edu

Teresa Justice, Director Sponsored Programs and Research Winthrop University 803-323-2460 justicet@winthrop.edu

APPENDIX I.

Equivalent Alternative Assignment for Extra Credit

In lieu of participation in the online Pre- and Post- SNAP Challenge questionnaires, the following assignment may be completed to be eligible for the same amount of extra credit or course credit outlined by the instructor.

Follow the link below to the article. Read the article, and respond with a paragraph or two including your opinion of this initiative and whether it has merit as a strategy for increasing consumption of fresh produce. What are some potential challenges with this matching program? Would you support this initiative locally? Why or why not?

http://www.npr.org/blogs/thesalt/2014/11/10/361803607/how-double-bucks-for-food-stamps-conquered-capitol-hill

Submit your typed response to your instructor by February 8, 2015.

APPENDIX J.

Participant Feedback From Posttest

What would you say to students thinking about participating in the SNAP Challenge next year?

- "I would ask them go take this seriously to really gain a better understanding of poverty."
- "Give it a shot."
- "Plan ahead and make contingency plans."
- "It [is] a good thing to try it out even if you struggle with it or can't finish it. The whole point is to get a new perspective."
- "They should definitely try it because it opens your eyes to how other people live."
- "It is definitely an interesting experience that allows you to view life from the perspective of individuals who are less fortunate."
- "Do it! It's a wonderful experience:)."
- "Budget! Try not to give in to cravings, but it is very difficult. Your mindset really changes when you're hungry."
- "That the challenge should be modified to better adjust to actual food budgets that participants have. Average benefits received from the SNAP program do not accurately reflect the amount of money most people have coming in. Lower amount of SNAP funding means that the participant has some money coming in from other places that could be put towards food. This challenge in my mind is an insult to poor people (which I have been from ages 20-23 living off of only a small amount of money with no benefits) saying that living off of what you have to eat is a game to us to see if we can make it."
- "If you budget well and decide that you do not need Starbucks or to go out to eat, you can eat enough, nutritious food. Yes, it is hard and requires planning, but it is possible. The hardest part is watching others eat what you cannot have or wanting popcorn but it costs 9 cents more than you have. Also, it would be difficult wanting to give a child something that you cannot give. However, shopping smart and buying food that is filling allows your money to go far." "Plan Ahead!"
- "Budgeting ahead is important."
- "I would strongly advise all students from all disciplines to take on this challenge. This demographic (college students) has the ability to make a significant impact on policy change. I think this challenge not only allows college students to experience the SNAP program first hand, but makes you think about the detrimental effects it may have if it were to be taken away."
- "It is hard. I could not last the entire time. It takes a good amount of drive to participate, you can't be lazy."
- "Plan, plan, but definitely participate."
- "It sucks, and it's somewhat difficult to wrap your head around the situation, but it is a definite and tremendous eye opener into thinking like somebody who really must live off subsistence."
- "You have to find ways to adapt and overcome psychologically and physically. It is probably the most interesting experiment you will do on yourself."
- "It is worth your time and efforts to gain perspective about poverty."
- "This can be a difficult challenge without proper planning. Also, [I realized] I would have to go without certain things that I would usually purchase."
- "Plan meals for the whole week before you go shopping."

What would you say to students thinking about participating in the SNAP Challenge next year?

- "It will really enlighten your views on the individuals who have a limit put on to them, and it will help you to realize how blessed and fortunate you really are."
- "It's okay if you can't go completely by the rules of the challenge, the whole point is that you try."
- "Do it."
- "It is a good experience."
- "Work hard to formulate a strategic meal plan for the week in order to be able to actually do the challenge."
- "Plan ahead- use groceries up ahead of time so not to be tempted by them."
- "Be prepared to feel left out of activities do to strict food restrictions; it's difficult and tempting to give up but it is possible to complete the program with discipline."
- "It is a good activity for someone who grew up with money but for people like myself who grew up in a lot of poverty it did not really help."
- "It is important to consider different priorities."
- "Look for good deals and sales."
- "Yes."
- "I would advise students to plan out their meals for each day of the week to ensure that they have enough food for every day. I would also encourage students to get together in small groups to discuss meal planning because they may find they benefit from the ideas of others on how to remain full and stretch their budget."
- "This challenge is not as easy as you think it will be. I went in thinking I would do fine, but I didn't last 4 days."
- "Definitely participate. It is a challenging 7 days, but a good experience."
- "This definitely requires a lot of planning to do this accurately."
- "I would say to do it if at all possible because it truly allows you to live in someone else's shoes."
- "Very interesting experience."
- "Do it! I am going to do it until I achieve at and understand how people living in poverty feel!"
- "Rice is your best friend!"
- "It will really open your eyes to the truth about SNAP and poverty."
- "The learning experience is worth the sacrifice."
- "Great experience."
- "It is an eye opening experience because it is not enough money to live on daily for food."
- "It's worth it. Even though it's difficult and you'll complain a lot. It will give you a new perspective."
- "Buy a lot of ramen, expect to drink nothing but water, and expect to be hungry."
- "There is an undercurrent of fraud within the welfare system that inadvertently and unfortunately displaces funds that could be used for those individuals and families more in need."

What would you say to students thinking about participating in the SNAP Challenge next year?

Participant comment

"It is very beneficial in that we are able to experience what it is like to live in such a lifestyle where SNAP is necessary. It opened my eyes and made me much more grateful for the things that I have. To share a short story, I was going to target the other day to buy a dress for an event, there was a family in the parking lot holding a sign saying "need pampers, food, money, anything. God bless" immediately after seeing this, I went into Target and bought them \$20 worth of groceries, utilizing every penny. The family consisted of a mother, a father and a 2 year old little girl. The happiness on their faces when I gave them food was indescribable and heart wrenching. My views on SNAP have changed and I would like to help more in any way that I can."

"That this is a great experience for all students to try and learn new things not only about living in poverty but also about themselves. This is something that takes much discipline."

"It's a great opportunity."

"It is a great challenge and a huge eye opener."

"It's really not as hard as you think as long as you don't eat out."

"Plan out your meals."

"Do it. It gives you a whole new way of thinking about the world and other people."

"It's a good experience that shows how much money can affect your eating habits. Just make sure you plan out what you will do before you start the challenge."

"It changes how you view daily life in poverty."

"Make a plan for the week and stick to it. It will be much easier if you have a plan."

"I would tell them that it is a great experience and to try harder than I did to stick with it for the entire week."

"To partner up with someone and collectively buy things."

"Do not eat in Thomson during the week! Too expensive!"

"This is an eye opening challenge! If you can, try to stick it out until the end of the week, even though it is difficult, it is worth it."

"It is a great opportunity to challenge yourself and get some first had experience of what it is like to be on a very strict budget."

"That they should try it might change your perspective on poverty."

"This challenge can help those who are privileged understand a different perspective. Also, it can help with budgeting skills and appreciation for food.

"Plan ahead of time!"

"Do it!"

"Keep a diary of your thoughts during the Challenge."

"I would like to say: Take the challenge, learn to adapt to what could be your very own circumstance. Understanding the struggles can further help us to understand the type of help needed."

"It's easy to forget you are participating, so keep reminders somewhere to help. Also, that it is harder than you think so make sure you plan meals ahead and keep a water bottle with you to refill it."

"Do it; it's a fun experience."

How would you improve the SNAP Challenge experience in the future?

- "I would suggest students keep a journal of their meals & experiences."
- "Let other people buy food for you. In reality, if someone is hungry, they accept free food whether it be on a date or at a school club meeting."
- "I think it's good as it is."
- "Keep it the same."
- "I wouldn't, I thought it was very well done!"
- "I would instead of giving students a set amount of money so low that it is nearly impossible to make it I would instead challenge students to live off of personally cooked meals that are completely healthy and nutritious for as cheap as possible to help teach students and young adults how to cook, make a meal plan and follow through for their future."
- "Make it so that you can include fresh produce you already have in your refrigerator when the challenge begins. It's hard not to use produce that you already have and will go bad if you don't eat them during the challenge."
- "The only thing I thought was unrealistic was allowing people to go out to eat. I think everyone should have to cook as in reality; it is the only way you could make it on SNAP."
- "Send out more reminders of when it starts."
- "It was confusing because SNAP is a supplemental program, so I couldn't help but think that if I were actually on snap my budget would probably be a little less tight."
- "I would have a pledge/registration system. I would also encourage professors to create assignments around this challenge."
- "It may have been different doing it over the summer or during a break. Having to worry about how much Thomson Cafe costs each meal is hard for someone who can only get meals from there."
- "Make suggestions for places that sell food at a good price (i.e. Aldi). Also make students aware that there are other programs that help feed poor people for cheap or free such as soup kitchens and local centers that provide groceries at a discount price to low income families. Students may not participate in these two options, however I feel it's important to keep in mind that people in low income situations do have these options in some cases."
- "Perhaps, offer some type of incentive to join the challenge if possible. Perhaps, partner with a place on campus to provide some type of monetary reward for participating."
- "Collaborate funds and meals with a roommate to make resources go further."
- "I think it is difficult for college students to participate in this challenge since most of us are dependent on meal plan and do not have money to buy the groceries we need for the week of the challenge. The SNAP Challenge could improve by targeting younger adults who are out of college."
- "Help people with buying for families know how much to spend."
- "Explain the whole blogging process for people who do not blog."
- "It was great!! Perhaps adding insights from people/families who live off the SNAP program."
- "Give more time to prepare in advance (few weeks). I had so much produce I ate during my challenge because I had it left over from before I knew about the challenge and did not want to waste it. Don't "charge" students so much for using their pre-paid meal plans."

How would you improve the SNAP Challenge experience in the future?

- "I would suggest also providing a list of snap approved foods to students or faculty who wish to participate. I feel like it is one thing to buy \$29.40 of food you enjoy and regularly eat and it is another thing to be completely limited to certain types of foods which have been approved by the government. Other than that, I felt that the challenge was an effective tool to allow others to see what it is like to live on a limited food budget. It also allowed for good conversation with others who are unaware of the struggles of people who receive snap benefits."
- "I believe this challenge was well organized and well run by the individuals who were researching. I cannot currently think of a more efficient and effective way to run the challenge."
- "This challenge should be held at a week that isn't toward the beginning of the semester. I felt like I was still adjusting to a new semester and trying to handle the challenge all at once."
- "I would allow people to make it their own and continue to give them leverage."
- "Take receipts or do something to so that students can prove to be trying to do it! I think if you keep records of who succeed more people will succeed."
- "More reminders about the challenge a few days before."
- "Strongly suggest that students go grocery shopping with the \$29.40 at the start of the challenge and only eat that food for the week to make the experience more realistic."
- "I feel it was successful and showed what it was like to be poor and eligible for SNAP."
- "Maybe create an assignment for people that actually receive supplemental aid giving them nutrient guidelines, or tips on how to utilize such a small budget. Although it is difficult, it is doable and I think more people need to learn techniques to improving their health even under difficult circumstances."
- "I think that it was a great challenge. I would just like to know more on why people aren't allowed to take food from others."
- "It is fine as is."
- "Take into account that some things last more than a week. For example, cooking oil."
- "Possibly begin the challenge on a Sunday or Monday so as to break up the weekend. Getting through the weekend was really hard."
- "Allow people to be fed off of other people or at jobs etc. because that is part of their personal circumstances."
- "It would have been better to do this if I hadn't had a meal plan."
- "I would improve the SNAP Challenge experience in the future, by including more support to participants."
- "The snap benefits are meant to be supplemental. Therefore, the budget amount should actually be higher considering a person receiving these benefits would have more money than just the snap benefits."
- "Try to survive off less money and let there be more openness to the will to accept free food as will those that are in poverty."
- "Just make it more well-known so more people can participate in it."
- "I thought this challenge was a great experience. I would not change a thing!"
- "After a bit of research and auditing of individuals who are on SNAP assistance, I believe the \$4.20 figure may be slightly low; I just wondered how that figure was derived."

How would you improve the SNAP Challenge experience in the future?

- "You should allow for people to eat if someone else buys or bought the food. It's more realistic to a real world situation."
- "Nothing done different I think it was very appropriate."
- "Don't know how it could be change to be improved. Maybe more notice."
- "Allow participates to accept food as donations, because some of the SNAP participates are giving food."
- "You cannot eat out with snap benefits. Some places do not accept coupons with snap benefits. It makes it even more of a challenge to do it correctly. Having to find time to cook daily. Also you could do a "healthy" spin if you wanted to see that aspect. However, in my personal experience those who receive snap do not eat healthy. They eat cheap."
- "I think that your demographic data should be more comprehensive. Who has been or is on SNAP? That might affect their answers."
- "A committee, possibly through the Student Dietetic Association, should handle and lead the Challenge"
- "More information and instruction on how to fulfill the SNAP challenge."
- "Add a nutrition component to the challenge. As a program that is meant to help provide nutritious meals for families, I believe that most people would see that this eating on the SNAP budget is complicated even without the goal of eating nutritiously."
- "I would do better planning."
- "I would give them information about where they can buy some food that is inexpensive but will fulfill their dietary needs."