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The Formative Evaluation of an Educational Tool to Help Curb Children's Intake of Sugary Beverages

A thesis submitted in partial fulfillment
of the requirements for the degree of

Bachelor of Science in Nutrition-Dietetics and the Honors Program

by

Brittany Dunn

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Abstract

Since 1977, consumption of sugar-sweetened beverages has doubled and the average portion size has increased by 46% (Rader, 2014). The impact of sugar-sweetened beverages on a child's health could be detrimental; identifying cost-effective methods to reduce to reduce their intake is an active area of research (Boles et al., 2014). For this reason, the Rethink Your Drink campaign is an effort to limit children's consumption of sugar-sweetened beverages and support healthier selections. The purpose of this thesis was to conduct formative research via interviews regarding a three-dimensional model developed as an additional educational resource for use in primary and dental care settings. The purpose of this model is to highlight the importance of limiting sugary beverage consumption and to encourage more healthful beverage choices by children and parents/guardians. Semi-structured in-depth interviews occurred with eligible health care professionals in Washoe County who provide care to school-aged children from low-income households. I listened to the recorded interviews, transcribed quotes verbatim, coded the quotes for meaning, recognized patterns, and categorized them into groups. While some participants expressed overall satisfaction with the model, many provided suggestions in areas to improve the model and increase its effectiveness. The results of this study provided new, informative data from health professionals concerning the features and characteristics of the three-dimensional educational model for use in primary and dental care settings to help curb children's intake of sugary drinks and promote more healthful beverage choices.

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Chapter 1

Introduction

This chapter includes an overview of the research problem, the overall purpose of the thesis study, and the methods that are related to health care professionals' preferences of a three-dimensional model to be provided as a resource for educating parents, guardians and children about sugary beverages. This section summarizes previous research about the consumption of sugary beverages and related health consequences. The chapter concludes with how this behavior may be improved with education from health professionals.

Statement of Problem

Americans are consuming an excessive amount of added sugar from sugary beverages (Ervin et al., 2012; Malik & Hu, 2012). Sugary beverages include any beverages with added caloric sweetener. Examples of sugary beverages include nondiet soda, fruit drinks, sport drinks, and energy drinks. The energy (calories) from sugary beverages may be a modifiable driver of childhood obesity (Rader et al., 2014). The consumption of these sugary beverages may also lead to the manifestation of other health related risks such as cardiovascular disease and type 2 diabetes (Malik & Hu, 2012). It is explained in the US Department of Health and Human Services and the USDA's Dietary Guidelines for Americans that too much added sugar from sugary beverages is being consumed. The recommended intake of added sugars is less than ten percent of an individual's total caloric intake; only about thirty percent of the population ages 1 year and older are below this limit of added sugars and about seventy percent of this population is at or above the limit (U.S. Department of Health and Human Services and U.S. Department of Agriculture, 2015).

Because of the health risks associated with excessive intake of sugary beverages, many research studies have been conducted for the purpose of identifying cost-effective methods that can be implemented in a community setting to curb intake (Boles et al., 2014; Randolph et al., 2012). Research, conducted on ways to reduce the sugary beverages, has included the implementation of taxation, medical intervention and media as resources of persuasion to alter sugary beverage consumption patterns (Kansagra et al., 2015; Malik & Hu, 2012; Polacsek et al., 2009). Public health and social marketing campaigns have been examined as potential tools to improve health behaviors, attitudes, and awareness at a population level; these campaigns and marketing instruments may prove to be effective in nutrition-related interventions (Boles et al., 2014; Randolph et al., 2012).

The Rethink Your Drink (RYD) campaign in Northern Nevada is an example of a public health campaign. The purpose of research completed for this campaign is to discover community-based strategies that successfully reduce the consumption of sugary beverages among young school-aged children in low-income households in Washoe County. Its goal is to encourage the healthy beverage selections of children and the decrease in consumption of sugary beverages while increasing the children's and parents' self-efficacy to implement and maintain the healthy beverage choices. This campaign, directed by Dr. Jamie Benedict, professor of nutrition at the University of Nevada, Reno, has several components: partnerships with medical and dental professionals, a media campaign, a website, and direct mail to households with children.

Development of the RYD effort began in the fiscal year 2011. The main goal at that time was to conduct situational analysis in preparation for a social marketing campaign. The results of the assessments concluded that the primary target audience should be children ages 6-12 years

old. It was found that in order to modify their behavior, education resources should first be geared toward the parents/guardians. In the 2012 fiscal year, focus groups were conducted with parents enrolled in the Head Start Program (providing childhood services to low-income children and their families) to learn about their experiences with sugary beverages and their preferred methods of receiving nutrition information. A survey of health care providers in Washoe County was also conducted and resulted in information pertaining to their concern about children's intake of sugary drinks. Fiscal year 2013 was the first year Supplemental Nutrition Assistance Program (SNAP) households benefited from the campaign while health providers also received educational tools consistent with the goal of the campaign. In the following fiscal year 2014, a survey was conducted with health professionals who had received RYD materials during the previous year to determine the degree to which they found the RYD materials to be effective with their patients. Health professionals expressed concern about children's intake of sugary beverages and implementing steps to reduce their consumption (Benedict et al., 2013). SNAP households were reached via direct mail and a media campaign was established.

In the Spring of 2015, formative research was conducted to assess physicians and dentists' opinions about educational resources to reduce intake of sugary beverages for RYD (Brock, 2015). The results of this research provided in-depth information in specific resources that may be added to RYD (Brock, 2015). From the interviews (N=25), it was learned that 36 percent of the participants were interested in educational displays about sugary drinks if made available for free or at minimal cost (Brock, 2015). As a result of this information, a component of the campaign for the fiscal year 2016 involves the development of a tool-kit for use in medical and dental care settings. The tool-kit will include brochures for parents, posters for waiting and examination rooms, stickers for children and a three-dimensional educational model. The

purpose of the three-dimensional educational model is to increase awareness of the amount of sugar in one type of sugary beverage—a 12 ounce can of soda. Consistent with best-practice in community education, formative research was conducted for the purpose of vetting the model with health professionals prior to its distribution.

Essentially, this thesis aims to understand the preferences of participating primary care providers and dentists for the purpose of finalizing the three-dimensional model as a component included in the RYD toolkit. This formative research study included interviews with health professionals, who have previously participated with RYD, to obtain information from participants about their preferences and opinions regarding a three-dimensional model. Information received from the primary care providers and dentists pertained to the dimensions (size, shape, storage) of the model, its potential appeal to patients and parents/guardians, desired learning outcomes by the patients and parents/guardians, and possible ways to use the model in their practices.

In sum, by comparing and considering the results of the interviews conducted with primary care providers and dentists, this study increased understanding of the health professionals' preferences regarding the educational model. The results of the interviews will aid in the final execution of a three-dimensional model with the purpose of educating children on the amount of sugar in sugary beverages. This research study may potentially contribute to the overall success of the Rethink Your Drink campaign in reducing children's intake of sugary beverages and - thus reducing health risks.

Purpose and Methods

The purpose of this thesis was to perform formative research regarding an educational model for use in primary care and dental practices. This model is intended to display the amount

of sugar in a typical soda primarily, and secondarily, to encourage patients and parents to limit sugary beverages. Qualitative methods were used in this study to answer the following research questions:

- 1) What are the preferred characteristics and features of a three-dimensional model developed with a purpose of educating patients on the amount of sugar in a typical sugary beverage among primary care physicians and dentists?
- 2) How do primary care providers anticipate using the three-dimensional model in their respective practice settings?
- 3) To what extent do primary care providers and dentists perceive the three-dimensional model to be informative to their patients and/or parents?

The interviews were semi-structured and in-depth resulting in qualitative data concerning the stated research questions. Those who were interviewed were primary care providers and dentists of children from low-income households within Washoe County who have previous experience utilizing tools from the Rethink Your Drink campaign.

Chapter 2

Review of Literature

Sugary Beverages

Sugary beverages, otherwise known as sugary beverages, include any beverages with added sugars and syrups during preparation (Rader et al., 2014; Malik, 2012). Sugary beverages are essentially those that contain one or more naturally derived caloric sweeteners including sucrose (a combination of half glucose and half fructose) and high fructose corn syrup (commonly a combination of 45% glucose and 55% fructose), and dextrose (Malik & Hu, 2012).

Consumption Patterns

Evidence shows that Americans are consuming an excessive amount of sugars. From 2005-2008, added sugars provided an average of 16 percent of the total calories in American diets; consumption of calories from added sugars by boys ages 2-19 was an average of 16.3%, whereas consumption of calories from added sugars was an average of 15.5% for girls within the same age range (Ervin et al., 2012). More recent information shows that there has been some decline in added sugar consumption; nonetheless, added sugars account, on average, for almost 270 calories (greater than 13 percent of calories) each day in the U.S. population (U.S. Department of Health and Human Services and U.S. Department of Agriculture, 2015). For most, sugar from sugary beverages is the largest single contributor to calories consumed from sugar. Sugary beverages account for nearly half (47%) of all added sugars consumed by the American population (U.S. Department of Health and Human Services and U.S. Department of Agriculture, 2015).

Sugary beverages, soft drinks and other sugary beverages collectively constitute the largest source and contributor of added sugars in the diet and surpass the U.S. Department of

Agriculture's recommended total sugar consumption for children and adolescents (Harrington, 2008; Malik & Hu, 2012). The World Health Organization (WHO) emphasized the importance of reducing added sugars. Information that supports this reduction is that the intake of sugars should be less than 10% of a child's total energy intake; additionally, a decrease of sugar intake to less than 5% of a child's total energy intake leads to further health benefits such as reduced health risks of diseases associated with excessive sugar intake ("Healthy Diet", 2015). The recommendation of added sugars (less than 10% of daily caloric intake) is a goal to help the population reach healthy eating habits; this means that the population will need to meet nutrient and food group requirements through nutrient-dense food and beverage (U.S. Department of Health and Human Services and U.S. Department of Agriculture, 2015).. There are many options to reduce intake of added sugars from beverages including low-fat or fat-free milk, 100% fruit or vegetable juice and water; these alternate beverages can be consumed within suggested amounts in place of sugary beverages (U.S. Department of Health and Human Services and U.S. Department of Agriculture, 2015). Consuming beverages such as these, rather than those containing added sugars, will increase the likelihood of staying within the recommended limit for added sugar (less than 10 percent of total daily calories) and decrease the possibility of negative health outcomes related to the consumption of too much sugar.

Health Risks of Sugary Beverages

WHO explained that the overconsumption of sugar can cause increased health risks including the increased possibility of dental carries (tooth decay) and unhealthy weight; the unhealthy weight associated with the overconsumption of sugary beverages has the potential to cause overweight or obesity as a result of the excess calories from beverages with a high sugar content ("Healthy Diet", 2015). Sugary beverages have been associated with a number of

diseases including obesity and associated risks such as type 2 diabetes, as well as the onset of additional metabolic conditions such as gout, gallstone, kidney disease, and other health risks including dental caries and inadequate bone mineral density (Malik & Hu, 2012; Kansagra et al., 2015). The consumption of too many sugary beverages may increase type 2 diabetes and cardiovascular risk because sugary beverages are a supply to a high dietary glycemic load (GL); this causes inflammation, insulin resistance, and impaired-cell function (Malik et al., 2010). Additionally, fructose or high fructose corn syrup, commonly listed as an ingredient in sugary beverages, may also raise blood pressure and cause the buildup of visceral adiposity (body fat stored within the abdominal region), dyslipidemia, and excess fat tissue in areas not normally associated with fat tissue storage; this is due to increased conversion of excess carbohydrates into lipids for storage (Malik et al., 2010).

In regards to the excess consumption of sugary beverages, it is explained that the odds of becoming obese multiplies 1.6 times for each extra serving of a sugary beverages consumed outside of a child's normal daily intake of the beverage (Harrington, 2008). Studies have shown that there is a definite parallel between the rise in added sugar intake and the global obesity and type 2 diabetes (Malik & Hu, 2012; Slining & Popkins, 2013). The American Academy of Pediatrics reports that sugary beverage intake in school-age children and adolescents is associated with a greater body weight (Deboer et al., 2013). Data from the National Health and Nutrition Examination Survey showed that among children between the ages of 2 and 19, 31.8% are overweight or obese, and of those, 16.9% are categorized as obese (Ogden et al., 2014). Excessive consumption of sugary beverages is shown to influence weight gain to some extent because of the inadequate compensation for energy at meals followed by intake of liquid calories from sugary beverages (Malik & Hu, 2012). For example, preschool-aged and kindergarten

children who more frequently drink sugary beverages compared with infrequent or nondrinkers, had larger body mass index z scores (Deboer et al., 2013). These beverages may also increase risk of type 2 diabetes and cardiovascular disease (Malik & Hu, 2012) in childhood through adulthood. Because of the associated risks with obesity, prevention of the disease, especially through health campaign interventions, is of great significance.

Health Intervention Methods

It is very apparent that procedures need to be taken to combat the excess intake of sugary beverages in children. Various methods have been researched and developed to discourage the consumption of these beverages. Health campaigns provide information to a target audience using different media sources; they provide recommendations and advice related to the health focus of that campaign. Some of these campaign intervention processes are provided through media, government agencies, community-organizing strategies, entertainment education and medical and dental professionals themselves. Another example is direct mail to target audience; a study to reduce sugary beverages among households participating in SNAP in Washoe County, NV suggest that surface mail is an effective method of providing information (Benedict et al., 2014).

Much success can be attained in affecting and altering the family and child lifestyles in health promotion. Health promotion through the use of mass media campaigns may be effective for some individuals (Rice & Atkins, 2001). Mass media presents itself as a successful tool in the area of health promotion to alter the lifestyle of individuals in a healthier manner. Mass media advertising is explained as media advertising and techniques that communicate health promotion messages to large audiences through television, radio, and print over a finite period of time (Randolph et al., 2012). An example of a mass media campaign was executed by New York City

through educational promotions and organizational food policies to reduce sugary beverage consumption; its efforts may be related to the decline in youth sugary beverage consumption from 56.7% to 41.5% from the years of 2007 to 2013 (Kansagra et al., 2015). Contrastingly, while efforts by local communities are continually underway to decrease youth intake of sugary beverages through the implementation of public health campaigns, these efforts are often times mitigated as beverage companies continue to significantly advertise their products (sugar-sweetened soda, fruit drinks, sports drinks, iced tea, flavored water, energy drinks/shots) (Harris et al., 2014). In fact, in 2013, beverage companies spent a total of \$866 million to advertise sugary beverages in all media forms, at the same time, they spent \$465 million to advertise other beverages, including diet drinks, 100% juice, and plain water (Harris et al., 2014).

The World Health Organization states that the government plays a dominant role in generating a healthy food and beverage environment that causes people to implement and continue healthy dietary behaviors (“Healthy Diet”, 2015). One method of health promotion is policy change and enforcement; these “standards for behavior that are formalized to some degree [i.e., written], and embodied in rules, regulations, and operation procedures” (Randolph et al., 2012). For instance, government policy in today’s society regarding health promotion is embodied in the new rules that have been implemented by the US Department of Agriculture for food packages in the Special Supplemental Nutrition Program for Women, Infants and Children; state- and community-level interventions financed by the Centers for Disease Control and Prevention (CDC) has funded; in addition to the large amount of information and proposals released by the Institute of Medicine, the US Surgeon General, and the White House (Ogden et al., 2014).

Other intervention methods that involve the government include developing consistency in national policies and investment strategies, including trade, food and agricultural policies, to encourage a healthy diet and maintain public health (“Healthy Diet”, 2015). The World Health Organization provides examples including its suggestion to promote reformulation of food products to decrease the contents of salt, fats and free sugars, and apply the WHO recommendations on the advertising of foods and non-alcoholic beverages to children (“Healthy Diet”, 2015). A meta-analysis was conducted to identify health intervention methods and to understand the effectiveness; it was determined that there was a decrease in the targeted health behavior in areas where policies were enforced to reduce the participation of this health behavior (Randolph et al., 2012).

Additionally, public policy methods such as taxation have been proposed to reduce intake and produce revenue to counterbalance health care expenses sustained as a result of the consumption of sugary beverages (Malik & Hu, 2012). This is because the health costs associated with obesity are very high; in 2008, the medical costs related to obesity were estimated to be \$147 billion (U.S. Department of Health and Human Services and U.S. Department of Agriculture, 2015). In 2012, the overall projected cost of diagnosed diabetes, a disease associated with obesity, was \$245 billion, with \$176 billion in direct medical costs and \$69 billion in decreased productivity (U.S. Department of Health and Human Services and U.S. Department of Agriculture, 2015). A study was conducted with pre-school aged children to determine the potential effectiveness of a 20 percent tax on sugary beverages; the results of the tax resulted in lower caloric intake by participants, revealing that a 20 percent sugary beverage tax could decrease added sugar consumption from sugary beverages (Ford et al., 2016).

Furthermore, health intervention methods can be provided directly through physicians and dentists. Pediatric health care has encountered substantial challenges in the area of childhood obesity; the challenge remains in improving outcomes for children and adolescent who are overweight or obese and providing successful approaches and plans to contribute to making lifestyle modifications within the home environment of the child's family (Camp, 2014). Decreasing the consumption of sugary beverages is important for obesity prevention and control (Ludwig, 2001). The American Dental Association explains that sugary beverages are the leading cause of dental cavities and dentists must act to help curb children's intake (Beaglehole, 2015; Marshall, 2013).

A multitude of plans and approaches are used in health promotion campaigns to improve health-related outcomes within populations that overconsume sugary beverages. (Randolph et al., 2012). One of these plans includes equipping health care professionals with tools necessary to encourage behavior change and health promotion. Equipping providers with proper training is an intervention approach intended to advance provider communication procedures for distributing health-related information to patients (Gilmore, 2012; Randolph et al., 2012). A study in Maine was conducted to assess a pediatric primary care-based intervention, on enhanced clinical decision provision and regulation of risk behaviors causing childhood overweight by patients and parents/guardians (Polacsek et al, 2009). The parent surveys from this research showed progress in the providers' performance and amounts of counseling, and providers reported that there was also progress in information, perceptions, self-efficacy, and practice of sugary beverages and decreased consumption (Polacsek et al, 2009).

There are many forms of health intervention methods, many of which are still being analyzed to determine effectiveness. Nonetheless, these interventions aim to modify a health-

related behavior and are often times successful at doing so, especially if they are in conjunction with one another. It is important to establish different methods of health campaign interventions because people respond differently to each one; by providing varying forms, a larger population can be reached and positively affected.

Chapter 3

Methods and Materials

This chapter describes the research purpose, aims, and methods used for this thesis study. In addition, information on participant recruitment and data collection are also described in this segment.

Research Purpose and Aims

This project aims to obtain information from medical and dental professionals that may be useful in refining interventions used in the Rethink Your Drink (RYD) campaign, specifically, a three-dimensional model (Appendix E) used to inform patients and/or parents/guardians of sugary beverages. Once the model is refined and the final product is completed, it will be made available to eligible health care professionals in Washoe County who treat children from low-income homes as part of the RYD toolkit.

Design. Qualitative methods were used in this formative research study. Formative research is described as a type of developmental research or action research with the purpose of refining design theory for constructing instructional practices or procedures (Reigeluth & Frick, 1999). Interviews were conducted with primary care physicians and dentists to obtain qualitative information about the three-dimensional model. This semi-structured in-depth interview included open-ended questions for the purpose of answering the following research questions:

1. What are the preferred characteristics and features of a three-dimensional model developed with a purpose of educating patients on the amount of sugar in a typical sugary beverage among primary care physicians and dentists?
2. To what extent do primary care providers and dentists perceive the three-dimensional model to be informative to their patients and/or parents?

3. How do primary care providers anticipate using the three-dimensional model in their respective practice settings?

Methods Employed

Interview instrument. An interview instrument was drafted. The draft included semi-structured questions pertaining to the three-dimensional educational model, preferred characteristics, and desired expectations of both the interviewees and their patients and parents/guardians regarding their comprehension of the model. Previous information on the development of interview guides and processes were referenced to create an effective instrument. During the drafting process, potential answers to the questions were considered to determine the necessity of a probe question such as, “Can you tell me more about that?” Potential interview questions were also checked for redundancy in wording and condensed or removed to mitigate the inclusion of unnecessary questions. Additional attention was paid to the wording of the interview questions to ensure ease of understanding by the participants. Once the draft was complete, it was tested by Dr. Chenin Treftz on a dentist interested in the efforts of the RYD campaign. From the interview test, feedback was used to refine the interview instrument. For instance, after the interview instrument was tested, it became evident that all of the probe questions did not need to be asked in order to ensure a thorough response.

IRB protocol. A protocol was submitted for approval to the University of Nevada, Reno Institutional Review Board (IRB), through the Research Integrity Office. IRB approval was obtained before the interviews began. A description of the all recruitment methods, data collection steps, and processes taken to protect participants was submitted in the IRB protocol. The protocol addressed the protection of the participants as well as information about obtaining

the participants' consent and maintaining the privacy and confidentiality. Approval was granted on March 18, 2015.

Sample. Potential participants included medical and dental professionals with prior participation in the Rethink Your Drink campaign in Washoe County who were still practicing (N=20). The original sample size was 20 health care professionals; 12 physicians and 8 dentists. Using the recruitment procedures described below, eight health care professionals agreed to participate in the interviews.

Participant recruitment. To recruit health professionals, first, an invitation, otherwise referred to as the "Letter of Introduction" (Appendix A), was sent to the physicians and dentists who requested RYD materials in 2014 (N=20). The letter thanked them for their involvement in the campaign and provided information about the planned interviews as a means to obtain preferences and opinions of the educational model to be used as an additional resource in primary care and dental settings. The letter informed health care professionals that they would be contacted by phone in regards to their potential participation in the interview. Approximately one-week after the letters were mailed, I personally contacted the health professionals by phone to extend an invitation to participate in the interview. The "Phone Call Script" (Appendix B) was used for this purpose. During the call, if the health professionals agreed to participate, a date, time and location for the interview was established. If the health professionals did not return the first phone call, additional calls were made to the front offices or medical assistants to find a better time to reach them and/or a note to call back was left. However, if the individual was not reached or did not return the call after five attempts, they were subsequently removed from the recruitment list and no further attempt was made to reach them. Of the original list, (N=20), eleven of the potential subjects refused the invitation and one could not be reached. On the other

hand, there were eight physicians and dentists (N=8) who expressed interest in participating. The “Phone Call Script” was also used to schedule an interview date, time and location.

Interview procedures. All interviews were face-to-face and conducted at the offices of the health professional by either Dr. Chenin Treftz, a contributor to RYD, or myself.

Introductions were made by the interviewer and the health care professional at the health professionals’ place of work. The participant was then provided with the “Rethink Your Drink Information Sheet” (Appendix C) and they were given a sufficient amount of time to read the sheet. Signed participant consent was waived because the “Rethink Your Drink Information Sheet” outlined the goal of the research and provided the opportunity to continue or withdraw at any point of the interview. As/if needed, the interviewer answered any questions from the participant. Once they indicated his or her willingness to participate, the interview proceeded immediately.

Directly before the audio-recording began, participants were asked their preferred pseudonym. The interviews were audio-recorded using pseudonyms chosen by the research participant to maintain confidentiality. The “Interview Instrument” (Appendix D) was used by the interviewer to guide the interview. During the interview, the proposed three-dimensional educational model (Appendix E) was shown to the participant. All of the numbered questions were asked to the participant; if the interviewer needed additional clarification of the response provided, probe questions were asked also. The interview was between 15 and 20 minutes in duration.

When the interview was completed, the participant were thanked and provided with a \$50 gift card as a token of appreciation. They were asked to sign a form noting their acknowledgment of receiving the gift card on the “Participant Acknowledgment Form,” (Appendix F) which was

then provided to the university's controller's office. Additional brochures and stickers were also provided as they were to be included in the updated materials of the RYD campaign.

Data management and analysis. Immediately following the interview, the audio-recording was downloaded onto a secure University of Nevada, Reno server. First, I listened to the audio-recorded interview, some portions were transcribed verbatim and then coded with respect to the research objectives and applied to the impending formation of the model. I recognized patterns and similar responses among the quotes that were related to a specific research question. Categories were developed based on perceived patterns. The categories are as follows: Perceived Characteristics of the model that contribute to its effectiveness as an educational tool; Health Professionals' perceptions of the model that suggest areas of improvement; Methods to use the model in practice as reported by providers. Within each category, I interpreted the participants' answers and separated those that were similar, and assigned a title to them (i.e. text, visual impact, color, etc.). I then interpreted and summarized the overall intent of the participants' quotes with explanations such "Lack of seriousness", "Not enough shock value", and "Ensure durability".

In summary, the analysis and organization of the feedback from participants allows for further understanding of their perceptions of the model and provides information of the effectiveness of the model, as well as areas that may need to be altered. Categorizing participants' quotes based on patterns revealed areas that were consistently addressed because of their perceived effectiveness in relation to the goal of RYD or their attributes that suggested needs for improvement.

Chapter 4

Results

This chapter explains the results of the semi-structured interviews with health care professionals in Washoe County. This chapter presents the characteristics of the sample and the qualitative findings from the interviews.

Sample Characteristics

The eight study participants included in this sample were physicians and dentists in Washoe County who treat children from low-income households and have already participated in the RYD campaign. Because of the IRB protocol, recruitment attempts stopped after the health professional indicated their participation decision or after five attempts to reach them were made. This ultimately resulted in a 40 percent participation rate with six physicians and two dentists. Out of all potential participants, 50 percent of physicians participated in the study and 25 percent of dentists participated in the study.

Qualitative Findings

Upon completion of coding, the data were organized into categories consistent with the research questions. Data tables, labeled Perceived Characteristics of the model that contribute to its effectiveness as an educational tool; Health Professionals' perceptions of the model that suggest areas of improvement; Methods to use the model in practice as reported by providers, were then created with respect to the research questions and ordered based upon described characteristics, perceptions or methods of use for the model as provided by health professionals.

The first and second research questions, 1) "What are the preferred characteristics and features of a three-dimensional model developed with a purpose of educating patients on the amount of sugar in a typical sugary beverage among primary care physicians and dentists?" and 2)

To what extent do primary care providers and dentists perceive the three-dimensional model to be informative to their patients and/or parents?” were answered by questions within the interview instrument. These questions inquired about participants’ opinions regarding ways in which the model may be effective and areas in which the model needs improvement to increase effectiveness and/or patient and parent receptivity to the information displayed on the model.

As shown in Table 1, participants’ answers to the question 3, about the model’s effectiveness, were organized into the following categories 1) text, 2) visual impact, and 3) size. In areas of the model that contributed to its effectiveness was text. It was found that the text conveys the goals of the Rethink Your Drink campaign and was direct in the message it delivers. The perceptions provided for the model’s visual impact were that it showed that there is a large amount of sugar in a can of soda, it has the ability to generate conversation with patients and/or parent, it looks like a soda can, and the transparency of the model contributes to the visual value. The data revealed that the provider’s perceived the size of the can to be consistent with that of an actual can of soda.

As shown in Table 2, participants’ responses that indicated areas in which the model is ineffective or could use improvement were categorized under text, visual impact, additional resources/information to be included along with the model, color and functionality. Some suggested components of the model requiring change were altering the color to be similar to that of a soda brand that is popularly consumed, stating how much added sugar is “too much” or providing the recommended limit, increasing the shock value to better ensure the discouragement of sugary beverage consumption, and providing a Spanish version of the model to increase its audience and comprehension.

Regarding the potential use of the model, participants expressed three ways: leaving the model in their examination rooms, using it as a prop or visual example, and using it to generate a conversation with patients and parents/guardians. The quotes to support these categories are shown in Table 3.

The information received from the participants helped answer the research questions. The responses were coded and categorized to organize and illustrate the feedback given. By use of tables, there is a clear organization of the patterns found in the participants' responses. As a result of these patterns, there is a stronger understanding of areas of effectiveness, areas of improvement, and potential use of the educational model as provided by participants.

Table 1	
<i>Perceived Characteristics of the model that contribute to its effectiveness as an educational tool</i>	
Characteristics	Representative Quotes
Size <ul style="list-style-type: none"> • The size mimics that of an actual soda can 	"...it's the same size as a normal can" "This is accurate, so that's good." "It's the size of a can of soda and it kind of looks like a soda you can open."
Text <ul style="list-style-type: none"> • The text conveys the goals of RYD • Direct 	"It's got good text on it..." "I think that it conveys the fact that it is a lot of sugar and we should not be drinking these." "It tells you what could happen if you drink too much sugar." "I think it's direct; it tells you exactly what it's for."
Visual impact <ul style="list-style-type: none"> • There is a large amount of sugar in a can of soda • Generates conversation • Looks like a soda can • Transparency of container 	"Without saying a word, they can look at it and be alarmed." "It's shocking how much sugar is in there." "...this is really eye-opening" "...there's an awful lot of sugar in soda." "...honestly this is a great conversation starter." "It's pretty self-explanatory." "I like how you made the top look like a soda can." "I like how you left it clear so that you can actually see the sugar."

*All characteristics are researcher's personal interpretations of representative quotes.

Perceptions	Representative Quotes
Text <ul style="list-style-type: none"> • Lack of seriousness • Lack of continuity • Lack of information • Too much text • Include Spanish version 	“Maybe in a different font possibly; the font makes it seem a little less serious.” “This doesn’t relate all three sentences together...but this never says that this is too much sugar. I didn’t really connect the two.” “Show how much is too much.” “...something that says what your recommended amount of sugar—total sugar—should be in a day.” “Your daily amount should be this...” “I don’t understand how this is really bad for me.” “Liver disease, non-alcoholic fatty liver disease can result from taking in too much sugar.” “Less text; more visual.” “Maybe having it in Spanish would be beneficial too...”
Visual Impact <ul style="list-style-type: none"> • Not enough shock value • Decreased visibility with colored sticker 	“I don’t know how this would damage me.” “If you’re going to present something to emphasize how big it is, you want to use a scale that shows big.” “10 teaspoons might be more emotionally evocative than that level of sugar in the can.” it’d be nice if it were a little bit more sparkly on the outside.” “This is pretty, you know, boring.” “If the sticker were clear with black text on it...”
Additional Resources/Information <ul style="list-style-type: none"> • Include additional information card • Include information/models about juice, sport drinks and diet soda 	“...a small laminated card that goes along with it” “...providing them tips on maybe how to start conversations about, not only the whole rethink your drink campaign, but also, you know, segways into obesity and management and discussions.” “Maybe a facts sheet.” “...statistics would be kind of nice.” “You might include a poster that the kids can use.”
Color <ul style="list-style-type: none"> • Red 	“I would actually make it red because most of the soda that people consume is actually red.”
Functionality <ul style="list-style-type: none"> • Place stickers on inside • Ensure durability 	“...if it’s possible to put this piece on the inside. Just...because we want to wipe it down.” “Is it breakable?”

*All perceptions are researcher’s personal interpretations of representative quotes.

Table 3	
<i>Potential ways to use the model in practice as reported by providers</i>	
Ways to use model	Representative Quotes
Leave in examination room Use as a prop/visual example Use to generate conversation	“What I would do is leave a model in each exam room...” “I can certainly use it as a prop.” “We can use it to just kind of give them a visual.” “Well I would bring it out; I would talk about sugar...” “...so being able to reference this during that conversation would be good.” “...acts as a good prop rather than saying 10 teaspoons, to show what it looks like in an average can of soda.” “I would have it just sitting visible in the office to see if anyone asks any questions about it.” “This would be perfect to have, you know, when I’m having that discussion with parents...”

*All ways to use the model are researcher’s personal interpretations of representative quotes.

Chapter 5

Discussion and Conclusions

The purpose of this thesis was to perform formative research regarding an educational instrument to use in primary care and dental practices. This model is intended to display the amount of sugar in a typical soda primarily, and secondarily, to inform patients and parents of the health concerns associated with consuming sugary beverages. Semi-structured interviews were conducted with primary care physicians and dentists in Washoe County who treat children from low-income households and who have been involved in RYD prior to these interviews.

Qualitative methods were used in this study to answer the research questions:

- 1) What are the preferred characteristics and features of a three-dimensional model developed with a purpose of educating patients on the amount of sugar in a typical sugary beverage among primary care physicians and dentists?
- 2) How do primary care providers anticipate using the three-dimensional model in their respective practice settings?
- 3) To what extent do primary care providers and dentists perceive the three-dimensional model to be informative to their patients and/or parents?

The interviews provided insightful data regarding the research questions. This chapter explains the categories and findings from the in-depth interviews with physicians and dentists and relates them to associated literature. Next, the strengths and limitations of the study are discussed and the recommendations for future research are given.

Use of Primary and Dental Care Settings to Reduce Intake of Sugary Beverages

Throughout the interview process, the participants expressed a significant interest in and desire to relay information about sugary beverages and the associated health risks to patients and

parents/guardians. Each participating physician and dentist seemed enthusiastic during the interview and provided personal perceptions and thoughts about the proposed three-dimensional model. Many of them expressed the importance of engaging the patient and parents in a manner that would enable them to grasp the information about sugary drinks; this model was explained to be a helpful tool to do so. While there were many positive opinions about the model, there was also a variety of suggestions for improvement.

The *2015 – 2020 Dietary Guidelines for Americans*, aimed at highlighting the importance of a healthy eating patterns to support health and reduce risk of disease, suggest that behavior modification will allow for increased health among the population. To reduce the amount of added sugars consumed from sugary beverages, steps need to be put into action to encourage change. Regarding sugary beverage consumption, a study showed that parents would likely decrease sugary beverage intake when recommended by the physician (Rader et al., 2014). Therefore, the implementation of the RYD campaign is consistent with research as it includes relationships with health professionals to promote behavioral modification through an organized intervention. Additional research makes it clear that equipping health care professionals with tools necessary to encourage behavior change and health promotion will more effectively contribute to health campaign intervention methods (Gilmore, 2012; Randolph et al., 2012). The RYD campaign is consistent with this information in that its goal is to provide effective educational resources as tools for physicians and dentists to use within their practices to encourage behavioral changes of patients and their parents/guardians.

Target Audience

This research is aimed to understand how informative the three-dimensional, educational model may be to both patients and their parents/guardians. It is consistent with current research

that parents have the ability to significantly influence their child's sugary beverage consumption. In a study regarding opportunities to decrease children's unnecessary consumption of calories from beverages, surveyed the parents in their study; 90.4% of parents believed they had a large amount of control over what their child drank, additionally, 55% of parents always kept track of what their child drank (Rader et al., 2014). Because parents can have a large amount of influence and supervision of their child's sugary beverage intake, it is important that this model, and other RYD materials are also geared toward them. In 2014, a survey was conducted on the opinions of the RYD campaign components, awareness of sugary drinks, and the degree to which parents monitor and regulate their children's consumption; it was shown that parents had a positive response to the campaign as it was relevant, practical, and effective in increasing ability to recognize sugary beverages and improved the likelihood of monitoring and limiting their children's sugary beverages (Benedict et al., 2015). It is explained that encouraging parents to regulate and monitor their child's consumption of sugary beverages may protect against unnecessary calorie consumption from added sugars and subsequent onset of related health risks (Randolph et al., 2012).

Visual Impact to Invoke Behavior Modification

Throughout this research, many of the individuals interviewed expressed their preferences on the visual impact of the three-dimensional educational model, more specifically, the shock value that some believed the model possessed, while others disagreed. One of the dentists stated that, "I don't know how this would damage me.", conveying that the model did not evoke enough inspiration to reduce sugary beverage consumption. Additionally, a doctor communicated that, "If you're going to present something to emphasize how big it is, you want

to use a scale that shows big.” This statement suggests that the size of the model is not consistent with a scale that will cause patients and parents/guardians to decrease sugary beverage intake.

This feedback from physicians and dentists is consistent with previous research given that a concrete representation of what the sugar content *looks like* decreases sugary beverage attractiveness outside of simply providing textual information of how much sugar is in the beverage (Adams et al., 2014). A research study was conducted to determine if people could relate added sugar content in sugary beverages and, as a result, find them less appealing and be less likely to consume them (Adams et al., 2014). During this research, participants were provided with three visuals 1) a bottle of soda, 2) a bottle of soda with textual information about the sugar content, and 3) a bottle of soda with textual information about the sugar content along with a visual example of the amount of sugar in the beverage. The results revealed that the largest decline in sugary beverage consumption intentions resulted from the concrete sugar-nutrition representation of the sugar content (Adams et al., 2014).

It is shown that a concrete, visual representation can have a greater impact in causing the audience to change the targeted behavior. The proposed RYD model is a concrete representation of the sugar content in a typical 12 ounce can of soda, it is shaped and sized like a soda can, and also provides text highlighting the health risks associated with sugary beverages. Because one research participant specifically expressed that the model exposes just how “...shocking how much sugar is in there.”, and another participant perceived that the model lacked shock value, it may be difficult to gauge the model’s influence on patients and parents/guardians. Nonetheless, using shocking imagery in a campaign considerably raises attention, assists with memory and retention, and positively effects behavior among (Dahl et al., 2003).

Limitations and Strengths

There are many limitations in this research. For example, the findings from the interviews are not generalizable, and cannot be applied to all physicians and dentists as opinions. The sample was very limited by its size and inclusion. Only participants in the Washoe County who provide care to children from low-income households who had already participated in the Rethink Your Drink efforts were invited. Also, only 40 percent of eligible candidates chose to participate in the study.

Additionally, the study possessed one significant strength. The results from the eight interviews were rich in substance providing information about perceptions and suggestions for the improvement of the three-dimensional educational model for use in primary and dental care practices, to reinforce the importance of reducing sugary beverages and to promote healthier options. Finally, there is limited research in this specific area, as a result, this study contributes to broadening this area of research.

Conclusion

In conclusion, this qualitative research gathered relevant information from health care professionals on ways to discourage sugary beverage consumption and encourage healthier beverage choices, specifically through the three-dimensional educational model. The findings of this research is consistent with physicians and dentists' recommendations for a model that provides "shock value", is not easily breakable, shows the amount of sugar in the beverage, and explains the health consequences related to sugary beverage consumption (Brock, 2015). As a result of this study, evidence was obtained and suggests 1) the model may be effective in medical and dental settings and 2) ways to strengthen the model to contribute to its overall effectiveness.

The results from this thesis research also presented suggestions for future research. The findings from this study could be useful to develop additional educational resources and their evaluation of effectiveness in medical and dental practices. Ultimately, the efforts described in this study may help to curb children's intake of sugary beverages and promote more healthful beverage options by children and their parent/guardian.

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Appendix A
Letter of Introduction

Date

Health Professional's Name
Practice Name
Street Address
City, State Zip Code

Dear Dr. (Health Professional's Last Name):

Thank you for your previous participation in the Rethink Your Drink campaign. As you recall, the overall goal of this effort is to promote healthy beverage choices and to reduce children's intake of sugary drinks. Because of the support provided by you and other health professionals, we have been able to reach many more families.

With funding provided by the U.S. Department of Agriculture's Supplemental Nutrition Assistance Program (SNAP), we have the opportunity this year to distribute free tool-kits to eligible primary care providers and dentists in Washoe County. The contents of the tool-kit were guided, in part, by feed-back provided by participating health professionals in 2015. Before we finalize the tool-kit, we are planning interviews with select physicians and dentists for the purpose of getting their opinions regarding a newly developed educational model designed to illustrate the amount of sugar in a typical soda. The results of the interviews will help us refine the model before distribution. The interviews will also include questions about noting sugary drinks in the patient medical record, and how best we can recognize campaign participants such as you.

We will be calling you in the next few days to invite you to participate in an interview. If you do not wish to hear from us, please let us know by calling 775-784-6450 or sending an e-mail to rethinkyourdrink@cabnr.unr.edu. We recognize that your time is very valuable. As a token of our appreciation, each interview participant will receive a \$50 gift card.

Thank you so much for your support of the Rethink Your Drink campaign. We look forward to talking with you soon.

Sincerely,

Brittany Dunn
Honors Student

Chenin Treftz, PhD, RD, LD
Research Assistant Professor

Appendix B Phone Call Script

Good afternoon (health professional's name). My name is Brittany Dunn and I am a Nutrition Undergraduate Student working with Drs. Jamie Benedict and Chenin Treftz on UNR's Rethink Your Drink campaign. The reason for this call is to follow up on the letter we sent you a few days ago. Do you recall receiving this letter?

“Yes” Response: That's great! Well, as you know, we are in the process of developing an additional educational resource to strengthen this campaign. Because you have previously used the Rethink Your Drink materials, I am contacting you to personally invite you to participate in the research study. The study involves an interview to obtain your opinions regarding an educational model to be used with your patients as a component of the campaign. In addition, we have a few questions about

“No” Response: Okay, well that's not a problem. I will go ahead and summarize the letter briefly. First we would like to thank you for your earlier participation in the Rethink Your Drink campaign. Your support is greatly appreciated. We have the opportunity this year to distribute free tool-kits to eligible primary care providers and dentists in Washoe County. The contents of the tool-kit were guided, in part, by feed-back provided by participating health professionals in 2015. Before we finalize the tool-kit, we are planning interviews with select physicians and dentists for the purpose of getting their opinions regarding a newly developed educational model designed to illustrate the amount of sugar in a typical soda. The results of the interviews will help us refine the model before distribution. The interviews will also include questions about charting sugary drinks in the patient medical record, and how best we can recognize campaign participants such as you. As a token of our appreciation, we have \$50 gift cards for each participant.

The interview should only take about 20-30 minutes. I would be happy to come to your office for the meeting. Would it be possible to schedule an interview in the next few days or next week?

“Yes” Response: Wonderful! Is there a certain day or time that would be best for you for me to come to your practice and complete the interview?

(Schedule appointment day and time)

“No” Response: Okay, is there a better day or time for you?

“Yes” Response: We can work around that.

(Schedule appointment day and time)

“No” Response: Okay, well thank you for your time. I hope you have found the educational resources helpful in your practice. If you happen to change your mind and would like to participate, please do not hesitate to contact me. My contact information is located in the letter sent to you.

Appendix C Rethink Your Drink Information Sheet

We are conducting a research study to obtain the opinions of physicians and dentists regarding a 3-D educational model designed to illustrate the amount of sugar in a typical soda. The results of these interviews will be used to refine the model before it is distributed to other health care providers as part of the Rethink Your Drink campaign.

If you volunteer for this research study, you will be asked to participate in an interview. The interview will take about 20-30 minutes to complete. During the interview, you will be asked to examine the model, including the label, and to answer several questions about it. Next, you will be asked about charting discussions about sugary drinks in the patients' medical record. Lastly, we would like to ask about how we can best recognize campaign participants such as you in the future.

This study is considered to be minimal risk of harm. This means that the risk level is typical of those encountered during daily activities. While we do not anticipate it, some questions may cause you to feel uncomfortable. If this occurs, please inform us and we can skip the question or you can withdraw from the study entirely.

Benefits of doing research are not definite; however, we hope to learn how to more effectively reduce children's intake of sugary drinks and promote more healthful beverage choices. Over time, we anticipate that this may improve children's nutritional health. There are no direct benefits to you. We would like to give you a \$50 gift card as a small token of our appreciation for your time and effort. Please note that you will be asked to sign a receipt for the gift card; this receipt will be given to the University of Nevada Controller's Office for accounting purposes only.

The researchers; the University of Nevada, Reno; U.S. Department of Agriculture's Supplemental Nutrition Assistance Program and the Nevada Division of Welfare and Supportive Services will treat your identity and the information we collect about you with professional standards of confidentiality and protect it to the extent allowed by law. To ensure your confidentiality in today's interview we will be using made-up names so your actual name will not be on the resulting audio-recording or in the written notes. The researchers; the University of Nevada, Reno; U.S. Department of Agriculture's Supplemental Nutrition Assistance Program and the Nevada Division of Welfare and Supportive Services may look at your study records.

You may ask questions of researchers at any time using the contact information below: Jamie Benedict, PhD, RD, LD: email jamieb@cabnr.unr.edu, phone 775-784-6445 Chenin Treftz, PhD, RD, LD: email ctreftz@cabnr.unr.edu, phone 775-784-6450 Brittany Dunn: email brittanydunn@nevada.unr.edu

The University of Nevada, Reno Research Integrity Offices oversees all human research conducted by University researchers. If you have questions or concerns about the conduct of the study, call this office at 775-327-2367.

Your participation in this study is completely voluntary. You may stop at any time. Declining to participate or not answering specific interview questions will not have any negative effects on your opportunity to receive material as a part of the Rethink Your Drink campaign in the future.

Thank you for your participation in this study.

Appendix D Interview Instrument

Introduction

Thank you again for taking the time to meet with us today. We appreciate the opportunity to obtain your opinions about ways we can strengthen the Rethink Your Drink effort. As noted in the Information Sheet, today we want to ask you some questions about an educational model we are developing, about charting children's intake of sugary drinks in their medical record, and about ways that we might recognize practitioners who participate in the Rethink Your Drink program.

The interview should take about 20 to 30 minutes. During the interview I will be using an audio-recorder (have the recorder on the table at this time) and taking notes to help stay organized. Please do not take offense if I ask for more information about your answer. I just want to be sure I understand what you mean. There are no "right" or "wrong" answers to these questions – we are interested in your opinions and experiences.

To ensure confidentiality of today's interview is maintained, we will be using made-up names so that your actual name will not be on the recording or in the written notes. What name would you prefer to be called today?

Do you have any questions before we begin? (Answer any questions the participant has before proceeding.) I am turning on the recorder now.

Questions

Part I:

Based on the feed-back that we have received previously from physicians and dentists, we are developing a tool-kit for health care providers such as you. The general purpose of the tool-kit is to provide resources that may be used in medical and dental care settings to educate young, school-age children, and their parents and guardians about sugary drinks and the importance of making healthy beverage choices.

The tool-kits will be provided free-of-charge to eligible providers, and will include, 1) the updated brochures, now available in English and Spanish; 2) posters for use in your waiting and/or examination areas; 3) stickers for kids, and 4) a 3-D educational model meant to illustrate the amount of sugar in a typical soda. I have a prototype of the model with me today and would like to focus on that for the first part of the interview.

(The model should be on the table and close enough to the participant so that they can reach it.)

Would you please take a minute or so to look at the model? Feel free to pick it up.

(Give them adequate time to pick up the model, and read the text.)

1. In general, to what extent do you think this model effectively illustrates the amount of sugar in a typical soda?

Possible probes: Can you tell me more about that? How can we improve the size and appearance?

(If they haven't already read the text, encourage them to do so at this time.)

2. To what extent do you think the text printed on the model conveys the importance of limiting sugary drinks, such as soda?

Possible Probes: Can you tell me more about that? How can we improve the text? Is there something missing from the text?

3. Next I would like to talk with you about your patients. To what extent do you think your young, school-age patients will be interested in this model?

Possible probes: Can you tell me more about that? What do you think they might learn from the model? What can we do to make the model more interesting and informative to young, school-age children?

4. Would you be comfortable allowing young, school-age children handle the model?

Possible probes: What concerns do you have about having young children handle the model? How can we address those concerns?

5. Next I would like to talk with you about parents and guardians. To what extent do you think parents and guardians will be interested in this model?

Possible probe: Can you tell me more about that? What do you think they might learn from the model? What can we do to make the model more interesting and informative to parents and guardians?

I have just a couple more questions about the model.

6. If you were provided with a model such as this, can you tell me how you might use it in your practice?

Possible probes: Where do you think you would place/keep the model? To what extent would you use it when you were talking with your patients and/or parents and guardians?

7. What are some reasons you may not use the model?

Possible probes: Can you tell me more about that?

8. When we distribute these models, what, if any, information do you think should be included to help practitioners use it?

Possible probes: Can you tell me more about that?

9. Before we transition to a new topic, do you have any other suggestions for improving the model?

Part II:

Now I would like to talk with you about charting in the medical record. Your opinions about this will be useful as we develop additional strategies to promote healthful beverage choices and encourage families to limit sugary drinks.

1. To what extent do you currently chart in the medical record, the discussions you have about sugary drinks with your patients and/or their parents/guardians ?

(If they indicate that they don't ever chart discussions about sugary drinks in the medical record, skip to #4.)

2. In your opinion, how does charting these discussions about sugary drinks benefit you, your practice and patients?

3. What challenges or barriers have you encountered in discussing and charting discussions of sugary drinks?

Possible probes: What are some reasons you may not chart the discussions about patient's intake of sugary drinks?

4. Other than charting in the medical record, what are other ways that primary care providers (or dentists – depending on the interviewee), can emphasize the importance of limiting sugary drinks?

5. Before we transition to our last section of the interview, do you have any other comments about charting in the medical record?

Part III:

The last part of this interview relates to our interest in recognizing practitioners such as yourself for your support of the Rethink Your Drink campaign. We are very grateful for your time and effort and believe that these contributions warrant recognition. Toward that end, I want to get your opinion about a few ideas.

1. Would you have any concerns about having your name included among a list of practitioners that participate in the Rethink Your Drink campaign? The list may be published in an ad in the Reno Gazette Journal, on our website, and/or the Rethink Your Drink Facebook page.

Possible probe: Can you tell me more about that?

2. If you were given a plaque that acknowledged your participation in the Rethink Your Drink campaign, would you have a place to display it? What is your opinion about this type of recognition?

Possible probe: Can you tell me more about that?

3. What are some other ways that we may recognize practitioners such as you?

4. Are there any other thoughts you would like to add before we finish today?

Closing

Thank you again for sharing your opinions with me.

Appendix E
Three-Dimensional Model

Image 1: Front View of Model



Image 2: Rear View of Model



Image 3: Top/Side View of Model



Appendix F
Participant Acknowledgement Form

Rethink Your Drink Study

Receipt of Participant 'Thank You' Gift

Instructions: To show receipt of your gift certificate, please print and sign your name below.
This information will be provided to the UNR Controller's Office for accounting purposes only.

Name (please print): _____

Signature: _____ Date _____

Gift Card # _____