2019

Instrumental Role Modeling and the Sensitive Topic of Obesity: A Grounded Theory

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This is to certify that the doctoral dissertation by

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The Office of the Provost

Walden University
2019

Abstract

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Dissertation Submitted in Partial Fulfillment

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Doctor of Philosophy

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Abstract

The nurse practitioner (NP) role is more prominent now than ever before in primary healthcare, positioning them as providers who defend initiatives and ongoing health agendas. Obesity is among those agendas. The concept of instrumental role modeling was explained as a combination of understanding and physical presence that gives meaning and quality to inspire change. It implied that health professionals are not merely insightful clinicians but suggested their expertise is complimented by demonstrations of wellness in knowledge and practice. This topic of weight was perceived as sensitive but must be addressed. In this grounded theory study, the perspectives of NPs from clinical and academic settings were gathered. There was an overarching need for NPs to identify how they perceived themselves consequential to how others perceived them. Using a qualitative method gaps on the construct of instrumental role modeling as an emerging theory was addressed and revealed the ambiguities NPs encountered when challenged to identify their personal perceptions of obesity when counseling weight management. Using a grounded theory design, 11 NPs were interviewed and asked about how they reconciled perceptions of instrumental role modeling around discussions of obesity. Participant remarks produced theoretical constructs that instrumental role models: 1) are mindfully responsible when interacting with others, 2) need to balance accountability, approach and awareness to develop trust, and 3) need to be aware of the creative tensions that exist between accountability and approach when discussing illnesses and their co-morbid conditions. These findings provide evaluative dialogue for positive social change in clinical settings and valuable insight regarding the topic of obesity in academia.

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Dedication

I would like to thank my beloved husband, Julio, for always encouraging me to go on even when I wanted to stop; my two sons, who for what seemed an eternity of me telling them that I could not do something because I had school work; and my two daughters, for challenging me to let them evolve as I challenged myself to progress. At the academic level, I am most grateful to my mentor, Dr. Raymond Thron, for all his advice and incredible patience. I am honored to call him colleague and humbled to call him friend. I could not have reached this point without you all.

Acknowledgments

I would also like to extend a sincere thanks to my other dissertation committee member, Dr. Ronald Hudak, for his patience and consideration. Your critical evaluation motivated me to give more and do better.

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Chapter 1: Introduction to the Study

Instrumental Role Modeling: A Qualitative Research of Nurse Practitioners

Legislative changes stipulated in the federal health insurance reform act were designed to increase access to healthcare for U.S. citizens nationally (Kennedy, Wood, & Frieden, 2017). And with increased access, there is an expectation of increased accountability on health professionals who render services intended to enhance wellness outcomes (Kennedy et al., 2017; United States Department of Labor [USDOL], 2019). Obesity is largely agreed upon as the second leading cause of preventable death in the United States, with this consensus growing internationally (Centers for Disease Control and Prevention [CDC], 2016; World Health Organization [WHO] 2015). Not surprising, the U.S. Department of Health and Human Services (HHS) has mandated primary care providers' accountability to initiate obesity reduction interventions that lead to improved health (CDC, 2018a, 2018b; Nation Institute of Health [NIH], 2015; WHO, 2015).

Nurse practitioners (NPs) are well positioned to enhance obesity management and be regarded as instrumental role model change agents (Bosone, Martinez, & Kalampalikis, 2015; Norful, Ye, Van der-Beizen, & Poghosyan, 2018; Rush, Kee, & Rice, 2010). They are health professionals qualified to serve as primary providers and have had the most rapid enrollment in the domain of health care (Poghosyan & Carthon, 2017; USDL, 2019). In 2012, workforce projection for NPs in primary care was estimated at 20% (Poghosyan & Carthon, 2017) and from 2016 to 2026 that number is estimated to increase more than 50% (to 36%; USDL, 2017).

The term instrumental is defined as an ability to serve as a qualitative tool, that inspires change, fulfills a goal, and causes things to happen (Schroeder & Fishbach, 2015). The term role model is defined as a revered person who motivates behavior change (Hoyt & Simon, 2011; Malik, Blake, & Suggs, 2014; Rush et al., 2010). NPs are assumed to be role models who provide qualitative services that inspire change in desirable health outcomes; however, this is an assumption. The concept of instrumental role modeling was nonexistent in the literature and therefore, defined for this study, as an understanding of how physical presence gives meaning and quality to inspire change. Therefore, I sought to learn how NPs perceived their presence combined with behavior, retained qualitative meaning when interacting with others. While data on role modeling in health professionals were limited (Hensel, 2011; Lobelo & de Quevedo, 2014; Malik et al., 2014), contributory data on the construct of instrumental role modeling were even more narrowed (Lobelo & de Quevedo, 2014; Malik et al., 2014). To contain this study within a reasonable boundary of exploration, I chose to investigate obesity as a popular health concern that fit well with self-perceptions of instrumental role modeling among NPs that counseled weight management in practice or teach it in academic settings. Clinicians and educators are inherently assumed to embody role modeling to less experienced health professionals and the views of those clinicians can hold social implications on surfacing self-perceptions that are not isolated to the self, but actually extend peripherally to dimensions of interaction of the self as experienced by others (Lobelo & de Quevedo, 2014; Malik et al., 2014; Poghosyan & Carthon, 2017). It was

necessary to study those dimensions of interaction in order to learn if there existed any grounded theory to frame a concept for instrumental role modeling.

In this chapter, I present a brief background of NPs, highlight the relevance of obesity in primary care, clarify the problem statement, and elaborate the research questions. Although I focused on a novel theory for instrumental role modeling using the grounded approach, Bem's (1967) self-perception theory had applicable merit and is discussed. The nature of the study, definition of terms, assumptions, scope, delimitations, limitations, significance, and a summary will follow.

Background of the Study

NPs are clinicians who have advanced medical training beyond that of a registered professional nurse (American Academy of Nurse Practitioners [AANP], 2017; Health Resources and Services Administration [HRSA], 2014). A master's degree in addition to certification in an area of specialty is the current minimum education requirement (AANP, 2017). While not official, a doctoral versus the current master's degree as the terminal level of education to parallel the NPs' didactic preparation with that of their counterpart licensed independent practitioners (i.e., dentists, medical doctors, optometrists, osteopaths, pharmacists, podiatrists, physiologists, and psychologists) has been gaining momentum nationwide (AANP, 2017; Mundinger & Carter, 2019). NPs have become a growing presence in primary care, partly resultant of clinical need (USDL, 2019), but also because of growing demands for primary care providers (Kennedy et al., 2017). When compared with other health practitioners, NPs uniquely focus their practice through a combined nursing-medical lens to complement the overall

patient-provider experience (AANP, 2017; Mundinger & Carter, 2019; Poghosyan & Carthon, 2017). Except for the term *patient*, that specifically implies someone who receives health care regardless of cost and sometimes choice, it should be noted that the words *patient, consumer, client,* or *customer* will be used synonymously throughout this study because they are all closely the same in that they refer to people who have authoritative capacity to purchase (see Rocha Ventura, de Godoy, Mendes, & Trevizan, 2014).

I found ample data on the benefits of the NP role but found nothing that isolated NPs as instrumental role models. It was at this juncture that the concept of instrumental role modeling and weight management among NPs were analyzed. The term instrumental was intended to stress an ability to cause things of perceived value to happen among health professionals as they reconciled how provider-client or educator-student encounters disseminated therapeutic benefit.

Carbohydrates, fats, and proteins are macronutrients that when consumed, but insufficiently used for energy, are converted to fatty tissue found most prominently in the visceral areas of the body (i.e., waist, thighs, buttocks, and hips; Weise, Hohenadel, Krakoff, & Votruba, 2014). A sustained imbalance of energy consumption and energy expenditure is then saved in the form of adipose tissue, evidenced in the form of weight gain, and subsequently, that which accumulates weight and contributes to obesity (CDC, 2018a). Measures of height and weight are used to calculate a body mass index (BMI), which is widely recognized for determining categories of underweight, normal weight, overweight, obese, and levels of morbid, or extreme obesity (NIH, n.d.; WHO, 1995).

These definite measures are universally used to quantify preventable disease risk factors (CDC, 2018a; Mui, Hill, & Thorpe, 2018). In cases of primary obesity (i.e., overeating unbalanced with physical activity), the BMI scale is used to predict disease states in certain populations (CDC, 2018b; Mui et al., 2018). Such likelihoods do not rely solely on BMI but use additional variables of gender, race, culture, social influences, and personal experiences collectively to incriminate the compounded outcome of obesity and its comorbidities (NIH, n.d.; WHO, 1995). According to the WHO (2015), obesity is nondiscriminatory in developed and undeveloped countries and over the past 30 years has more than doubled worldwide. The CDC (2013) proposed that U.S. citizens born in or after 2010 could expect to live only up to 72 years of age because of obesity, while the nonobese population was given a life expectancy of 79 years. Though there was extensive literature on obesity and its different facets, the 2016 U.S. Department of Health and Human Services reported that 70% of adults aged 20 years old and older were overweight as defined by a BMI of at least 25kg/m^2 (CDC, 2016).

Obesity is classified when the BMI is $\geq$30kg/m^2 (WHO, 2015). It is implicated as the primary cause of conditions, such as hypertension, coronary artery disease, abnormal blood fats, diabetes, insulin resistance, stroke, respiratory problems, osteoarthritis, and some cancers (e.g., female reproductive tract and gastrointestinal tract; NIH, 2015). Obesity is also linked with common psychiatric disorders, such as depression, eating disorders, and paranoia (Daly, Robinson, & Sutin, 2017; Flint & Snook, 2014; van Leeuwen, Hunt, & Park, 2015). Hence, to Americans, the vision of longevity and quality

of life presents a challenging tension, widening in a nation of growing obese individuals (Healthy People, 2019).

People opting to enjoy the convenience of sedentary lifestyles (i.e., working at a computer or from home); lengthy television watching; extensive game play on electronic (i.e., video, computer, cell phones, etc.,) devices; prolonged surfing of the Internet; ready-made meals; or ordering foods for delivery, may not consider personal physical fitness and consequently succumb to an obesogenic (i.e., obesity promoting) society (Chen et al., 2015; Sherman & Griffith, 2018). While there were ample data linking obesity with certain eating behaviors, it was necessary to first analyze obesity for its relevance in this research because I could find no data regarding NPs as instrumental role models and their perception of obesity in clinical practice or academia.

In society, obese men, in general, are affected less by the distress of obesity than overweight women (Flint & Snook, 2014). In the workforce, women have been stigmatized more by not receiving fair consideration for promotions or salary augmentations compared to their oversized male counterparts (Flint & Snook, 2014; Levay, 2014). Additional literature further supported the interrelationship between obesity and gender because overweight women compared to men were cited as being more prone to psychological disorders of depression and anxiety (Skar, Juuso, & Soderberg, 2014; van Leeuwen et al., 2015; Wadsworth & Pendergast, 2014).

African Americans (AAs) and Latinas have been noted to describe themselves as heavy compared to being called overweight or obese (Cameron, Muldrow, & Stefani, 2018; Riggs, Melton, Bigham, & Zhang, 2017; Tung & McDonough, 2015). Some

argued that body size is more associated with a person's internal frame or bone structure, predisposing them to be perceived as larger (Cameron et al., 2018; Riggs et al., 2017) and that attempts to lose weight would only cause disfigurement or falsely imply illness (Ngoubene-Atioky & Williamson-Taylor, 2017; Peters et al., 2016; Riggs et al., 2017). Some AAs have argued that the normal size implied by the BMI chart did not effectively represent body image expectations of their diverse cultures (Cameron et al., 2018; Riggs et al., 2017). This was not an oversight for the WHO (1995, 2016) that recognized concerns regarding BMI inaccuracies in terms of fat composition in certain populations; however, WHO (2016) concluded that based on the predisposition for morbid conditions prevalent in some populations, BMI classifications should remain constant for all (Lattner & Diao, 2014). It was undisputed that BMI measures offered valuable information about certain groups, especially when combined with ethnic meal tendencies, social behaviors, or economic access (Lattner & Diao, 2014; Malik et al., 2014; WHO, 2016). With additional consideration, WHO suggested that lower cut-off points could be used to purpose early interventions against illnesses that were dominant to specific people (e.g., Asians, who when compared to people worldwide, were smaller; Lattner & Diao, 2014; Mui et al., 2018).

The infusion of culture to a conversation on weight management could be overwhelming. Some nationalities rationalize perceptions that pair obesity with wealth and socioeconomic security, while thinness can be viewed with a relationship to poverty (Kim, Ham, Jang, Yun, & Park, 2014; Ngoubene-Atioky & Williamson-Taylor, 2017). Cameron et al. (2018) found that overweight or obese women either desired to gain

weight or verbalized satisfaction with being overweight for reasons of wanting to portray financial strength or prestige. In a similar way, Ngoubene-Atioky and Williamson-Taylor (2017) reported that traditional African cultures associated obesity with social status and affluence. Pigford, Willows, Holt, Newton, and Ball (2012) found that First Nations children relied heavily on culture and family for choices of healthy foods. In earnest pride for their culture, unhealthy food choices were proclaimed as being healthier than Western fast foods even though a comparison of fried pork rinds with lard (also referred to as Indian popcorn) and any of the healthier options from McDonalds (i.e., grilled chicken sandwich or various wraps) could not hold nutritive comparison (Pigford et al., 2012). These scenarios challenged and suspended the concept of role modeling as inconsistent based on gender, occupation, culture, or socioeconomic status.

Reports and products from market researches use combined observations, direct inquiry, and in some cases, experimentation, to influence the average consumer on places to socialize, things to do, clothes to wear, foods to buy, and ways to behave (Chen et al., 2015; Farsalinos & Polosa, 2014; Ferraro, Patterson, & Chaput, 2015). Social marketers benefit on the display of full-figured, overweight, or obese persons, while simultaneously using sexualizing media as attractive examples to promote their profitable gains (DeBraganza & Hausenblas, 2010; Karsay, Knoll, & Matthes, 2017; Kinnally & Van Vonderen, 2014). Fat activists defend obesity-resultant behaviors as role modeling compared to celebrities who give witness to failed weight loss and regain or recurrent substance abuse and rehabilitation experiences (Ferraro et al., 2015; Marks, 2015; Meleo-Erwin, 2011). Some fat activists have proclaimed obesity as intentionally preferred, while

other marketers exploit this population to sell costly meal preparations; devices; equipment; and tools (e.g., balance boards, hula-hoops, weights, balls, bands, etc.), all aimed at promising weight loss without truly effecting sustainable change (Holland, Blood, Thomas, & Lewis, 2015; Meleo-Erwin, 2011; Monaghan, Hollands, & Pritchard, 2010). This is not to say that self-esteem, confidence, and weight loss tools should not be supported, but they should not contradict health for monetary gains (Czerniawski, 2012; Monaghan et al., 2010).

Einstein was quoted as saying, "Example isn't another way to teach, it is the only way to teach" (Psychology Quotes, n.d.). Healthcare providers diagnose, treat, and prevent illness as well as counsel patients on ways to improve outcomes, but they are also expected to be exemplars of the transformations they recommend (Levay, 2014). Some clinicians will self-describe as being physically fit and profess healthy lifestyles (Lobelo & de Quevedo, 2014), whereas others claim they only need to be experts and not models (Malik et al., 2014). In a study by Malik et al. (2014), health professionals complained that being living role models of health was too time consuming, where ultimately, it was the medical skill and expertise that was most needed and not being an actual role model per se. Providers went on to complain about not knowing enough about how to address the sensitive topic of obesity, lacking enough office time to counsel diet, feeling fatigue from treating acute problems secondary to obesity or receiving low reimbursement as additional obstacles to providing weight management care (Lobelo & de Quevedo, 2014; Mosher et al., 2014; Mosqueira, Rosenthal, & Barnett, 2019). Nevertheless, Lobelo and

de Quevedo (2014) maintained that time and fatigue did not outweigh critical professional obligation to being role models.

High self-efficacy encouraged in educators encouraged some obese persons to become more interactive in working weight group discussions (Wang & Willis, 2016), but Mosher et al. (2014) identified that weight loss impetus was most effective when patients were faced with real limitations imposed from preventable obesity but retained power to control their lifestyle. Even more conflicting were the mixed messages found in the work of Hart, Yelland, Mallinson, Hussain, and Peters (2015), who concluded that some patients declined weight reproach, claiming that they did not need to discuss obesity if they had enough community supports available, while others verbalized wanting to be openly confronted by their health providers about their weight and the urgent need to act on losing it. Participants stated they welcomed the discussion of their obesity because it validated providers were concerned for their health and the dialogue stimulated self-evaluations and motivation to change (Hart et al.).

Treatment options for obesity range from minimal to aggressive interventions (e.g., diets, lifestyle changes, behavioral modifications therapy, physical activity, counseling, psycho/pharmaceutical therapy) to a variety of surgical procedures (Ferraro et al., 2015; Hart et al., 2015; Laddu, Dow, Hingle, Thomson, & Going, 2011; Manning, Pucci, & Finer, 2014) and data are saturated with evidence of diet failure and weight regain despite initially successful responses (Ferraro et al., 2015; Lopez, Hofmann, Wagner, Kelley, & Heatherton, 2014). In most cases, weight loss failure did not discourage determined people from seeking other alternatives and they often

appropriately returned to their primary providers in exhaustive attempts for more options (Faw, 2014; Latner & Ciao, 2014; Whale, Gillison, & Smith, 2014). Therefore, largely studied but vastly unresolved, obesity continues to rise (CDC, 2015). Social media; scholarly research; entertainment forums (i.e., sports, exercise, fashion, food); and pharmaceutical industries all widely market this topic to attract public interest towards the objective of achieving personal physical fitness, but the problem persists. Comorbidities compound, practitioners continue to be confronted by the need to have weight dialogue and academia continues to discuss obesity physiology and related complications without any mention of how it relates to role modeling (NIH, 2015; Ogden, Carroll, Kit, & Flegal, 2014).

Looking to role models for reassurance when faced with obesity and its health obstacles is common (Bosone et al., 2015; Rush et al., 2010). In instances of desired change, role models are viewed as sources of inspiration, encouragement, and motivation (Hensel, 2011). They are those persons who are expected to emulate desirable behaviors and are generally endorsed to health professionals, educators, celebrities, athletes, clergy, political figures, law enforcement, parents, friends, and other ordinary people who achieve extraordinary accomplishments (Hanna et al., 2013; Hensel, 2011; Malik et al., 2014).

According to a report published by AANP (2016), NPs focused mostly in primary care (i.e., 80%) compared to 85% of physicians who went into other non-primary care specialties (Spetz, Fraher, Li, & Bates, 2015). The NPs nursing-medical scope of practice combines the nursing process of assessment, diagnosis, intervention, and planning with

medical diagnosing and treatment to empower active participation of patients to reevaluate long- and short-term goals (Kennedy et al., 2017; Poghosyan & Carthon, 2017; Raji, Chen, Raji, & Kuo, 2016). This more patient-inclusive approach is believed to improve outcomes as NPs inspire, encourage, and motivate through a different perspective of care (Kennedy et al., 2017; Poghosyan & Carthon, 2017; Raji et al., 2016). Yet, I found no data on how NPs perceived instrumental role modeling surrounding the issue of weight management.

Problem Statement

Weight management discussions initiated by NPs that are expected to be role models to patients and students in practice or academia are at times uncomfortable (Hensel, 2011; Lobelo & de Quevedo, 2014; Poghosyan & Carthon, 2017). Interactions demand that ongoing dialogue is carefully considered to analyze how therapeutic goals are established between the patient and provider or academia and its' students. In this construct, *carefully considered* is stressed to embrace the unique perspectives experienced in the clinical and academic arenas. To date, I found no studies on the views of NPs regarding instrumental role modeling when counseling weight management. In a 2013 report on best practices published by the U.S. Department of Health and Human Services, primary care providers were charged with accountability to initiate obesity reduction interventions that improved health (CDC, 2018a). NP perceptions are believed to complement cohesive understandings of patient-provider relationships and therefore, hold the potential to improve successful intervention outcomes on weight management (Difibaugh, 2014). There was an overarching need to understand perceptions of NPs

regarding instrumental role modeling when counseling weight management and how such perceptions collaborated with knowledge and behavior in clinical practice and academia. Gaps on the constructs of instrumentalism, role modeling, and obesity among NPs required inquiry into these viewpoints from first-line providers and educators.

Purpose of the Study

The purpose of this exploratory, grounded theory study was to discover the perceptions of instrumental role modeling among NPs that advise weight management in practice or academia. Being overweight is categorized by a BMI of $\geq$25kg/m^2 and is the starting point from which proactive weight loss recommendations are made for preventive purposes (Lattner & Diao, 2014; Matarese & Pories, 2014; NIH, n.d.; WHO, 2016). The concept instrumental was defined as an ability to serve as a qualitative tool that inspires change, fulfills a goal, and causes things to happen (Schroeder & Fishbach, 2015). Role models were defined as revered persons who motivate behavior change (Hensel, 2011; Hoyt et al., 2011; Malik et al., 2014). The instrumental role model was consequently defined in this study as an understanding of how physical presence gives meaning and quality to inspire change. Therefore, I targeted the views of NPs who met with clients seeking weight management and educators of primary care in academia to reveal their perceptions of role modeling. The findings provided a path to additional scholarly inquiry towards advancing a grounded theory on instrumental role modeling.

Research Questions

In this study, I used three research questions to address gaps identified in the literature between NPs and the concept of instrumental role modeling when counseling

weight management. With Research Questions 1 and 2 I sought to clarify NP perceptions of role modeling and how they articulated the concept of instrumentalism (i.e., an ability to influence others to follow). Question 3 was intended to reveal personal and relevant viewpoints of NPs on instrumentalism, role modeling, and physical fitness when counseling weight management.

Research Question 1: What does role-modeling mean to nurse practitioners?

The objective of Research Question 1 was to gain an understanding of what role modeling meant in a behavioral manner to NPs. The concept of role-modeling alone did not suffice. Role modeling specific to NPs offered greater clarity.

Research Question 2: How do nurse practitioners perceive instrumental role modeling in encounters with others?

The objective of this question was to understand how NPs perceived their behaviors as having an ability to inspire change. I found no previous data highlighting NP perceptions as instrumental role models. Therefore, it was necessary to narrow this question in order to glean a greater understanding of the concept.

Research Question 3: What are the viewpoints of nurse practitioners relative to role modeling, instrumentalism, and personal physical fitness when counseling weight management?

From this question, I aimed to understand the dynamics of self-perception when the concepts merged into a theoretical operational strategy for practice and whether clinicians considered or experienced conflicts when counseling weight management to improve health. This question addressed how NPs articulated an ideological

transformation of physical fitness using normal BMI metrics (i.e., 18.5kg/m^2–24.9kg/m^2) into knowledge, proficiency, accountability, and empathy (see Blake et al., 2013; Mui et al., 2018; NIH, 2015). Knowledge implied understanding how to communicate disease predictions associated with weight (Mui et al., 2018; Norful et al., 2018). Proficiency was the manner with which communications did not isolate or offend but consistently delivered information, and accountability referred to adherence of evidence-based standards of care and how NPs considered their own personal self compared to others (Mui et al., 2018; Norful et al., 2018). The inclusion of empathy was to recognize how sharing and thought processes affect interpersonal encounters (see Borkar, 2014). Empathy was also acknowledged as a pathway to trust and behavior change (see Borkar, 2014). Therefore, when combined, the dynamics of knowledge, proficiency, and accountability as they intermingled with self-perception serve to widen understanding.

Nature of the Study

I conducted this grounded theory study to uncover NP perceptions of instrumental role modeling. The concept of instrumental role modeling was stressed to recognize the active state of being that is both constantly changing yet expected to be reliably stable when engaged in interpersonal interactions. The term instrumental was not measured because that would have been more suitable to a study in which a quantitative approach was used. Instead, I reflexively analyzed grounded theory on instrumentalism with recognition of Bem's (1967) theory of self-perception. Use of the qualitative method was intended to reveal NP perceptions through in-depth interviews and thematic analyses.

Induction and deduction of themes emerged, initiated speculative pathways to instrumental role modeling theory development.

Definition of Terms

Body mass index (BMI): A body fat calculation determined by measures of height and weight, for classifications of underweight, normal weight (i.e., physically fit), overweight, obese, and levels of morbid/extreme obesity (NIH, n.d.; WHO, 1995). The following definite measures are universally used to quantify preventable disease risk factors: Underweight $\leq$ 18.4kg/m^2, normal weight 18.5–24.9kg/m^2, overweight 25–29.9 kg/m^2, obese 30–34.9 kg/m^2, severely obese 35–39.9 kg/m^2, and morbidly obese $\geq$ 40kg/m^2 (Lattner & Diao, 2014; Mui et al., 2018; WHO, 2016).

Client: A person who willingly purchases, consumes, or receives a service regardless of monetary exchange or choice (Brown, 2013; Rocha et al., 2014). The term patient, however, specifically implies someone who receives health care regardless of cost and sometimes choice (Rocha et al., 2014). Whether a patient, consumer, client, or customer, they are all considered the same in that they refer to people who have authoritative capacity to purchase (Rocha et al., 2014). Therefore, I used the words client, patient, consumer, and customer synonymously in this study.

Consumer: A person who uses services or goods (Rocha et al., 2014).

Customer: A person who purchases, consumes, or receives a service at cost or in response to a need (Rocha, et al. 2014).

Empathy: An individual's ability to share another's lived experience. (Borkar, 2014).

Instrumental: The ability to influence change (Schroeder & Fishbach, 2015): A perceived behavior that retains a quality in all forms of presentation.

Instrumentalism: Influencing others to follow (Dewey, 1958). Borrowed from Dewey's (1958) theory of progressive learning, as a figurative vehicle through which experience yields a means-end relationship. For this study, instrumentalism was defined as stated but will be elaborated in the context of instrumental role modeling after assessing how people charged to be role models perceived themselves to uphold behaviors that can be reasonably followed.

Instrumental role model: An individual who is able to motivate behavior change that is perceived as desirable. A formal definition for instrumental role model could not be found; therefore, the stated definition was established for this study.

Patient: Someone who receives health care regardless of cost and sometimes choice (Rocha et al., 2014).

Physical fitness: Retaining a normal BMI ranging from 18.5–24.9kg/m^2 that gives an outward appearance of healthiness (NIH, n.d.; WHO, 1995).

Nurse practitioner (NP): A registered nurse who has completed higher clinical and didactic education in a specialty (e.g., family, adult, critical care, gerontology, psychiatry, etc.; HRSA, 2014). NPs assess patients, diagnose, make determinations on health management through evaluation of diagnostic tests, and prescribe medications or treatments that collaborate health promotion independently and with other affiliated disciplines (AANP, 2017). They are commonly referred to as advanced practice nurses or physicians because they practice at parallel levels with medical doctors (USDL, 2019).

Role model: A revered person who motivates behavior change. (Hensel, 2011; Malik et al., 2014).

Role modeling: Acts implemented by people who are revered for demonstrating and motivating change (Hensel, 2011; Hoyt & Simon, 2011; Malik et al., 2014).

Assumptions

NPs are collectively assumed to uphold the tenets of safety, wellness, and disease prevention associated with obesity; however, the assumption that all NPs comprehended how to instrumentally implement risks prevention, to be revered for inspiring change within client-provider moments of interaction is not absolute (see Lobelo & de Quevedo, 2014; Malik et al., 2014). For this study, I assumed being instrumental, as a collaboration of visual and auditory communications that when mentally processed, inspired change to fulfill goals. Visual exchanges are proposed to occur when the client and provider were in direct contact and notions that auditory words, when mentally processed, combined with visual exchanges, yielded perceptions of instrumentalism (see Dewey, 1958; Schroeder & Fishbach, 2015). Therefore, I assumed that NPs mutually shared the ability to construct deliberate perceptions of instrumental role modeling.

Another assumption was that professionalism implemented in the form of respect, communication of information, and empathy by NPs satisfies role-modeling behavior (Blake et al., 2013; Malik et al., 2014). Obese health professionals are as prominent as the people they interact with (CDC, 2018b); yet, they are expected to give therapeutic advice using evidence-based knowledge that is not contradictory. The concept of instrumental role modeling will magnify perceptions of a dynamic understanding of the interactions

that occur between NPs in clinical practice or academia. These assumptions challenge NPs in the spotlight of primary care to understand their roles beyond licensure and credentials. They suggest role modeling and instrumentalism from the perspective of self-perceptions and mandate consciousness. The purpose of this study was to generate a framework that systematically explained instrumental role modeling in clinical and academic settings.

Scope and Delimitations

Issues of overweight and obesity continue to dominate health discussions for their close relationship to other health comorbidities (NIH, 2015). The Bureau of Labor Statistics within the USDOL (2014) projected that NPs will increase in volumes greater than 31% by the year of 2022 and 36% by year 2026 (USDOL, 2017). This implies NPs are becoming more widely utilized in the primary care field. However, I could find no data regarding NP perceptions of instrumental role modeling as a theory that intersected with weight management. For this reason, it was apparent that NPs, role modeling, overweight, and obesity possessed distinctive boundaries for theory development from which an instrumental role modeling scope of practice could be analyzed. An important consideration was the consciousness of health professionals regarding their roles in modeling change and how they perceived themselves to coordinate such behaviors with care rendered. Self-perceptions are not only fundamental to how people analyze their personal behaviors but also, to how others will perceive them (see Bem, 1967). The scope of this study was the perceptions of instrumental role modeling and weight management

counseling of NPs that consult patients in clinical settings or teach primary care to NP students in academia.

I delimited data collection to the self-perception views of only the NPs interviewed. Physicians and physician assistants were excluded solely to illuminate the role of NPs that represents a steadfast growing presence in primary care. Nonadvanced practicing registered professional nurses were also excluded since they do not operate at the same autonomous capacity as NPs.

Limitations

Critical to qualitative grounded theory research is trustworthiness that data collected are reliable, dependable, able to be confirmed, constant after reduction, credible, neutral of bias, and applicable to the population studied (Guba & Lincoln, 1989). Theory development on the relationship of instrumental role modeling and perceptions of obesity in NPs is, therefore, relevant to implementing therapy in clinical practice and standards of integrity consciousness in academia. However, this study lacked combined triangulation of data, investigator, and method. Implementation of a pilot study to evaluate contiguity of the research questions to the scope of instrumental role modeling as a grounded theory and interviews with NPs from both clinical settings and academia contributed to data source triangulation, served as a precursor to issues of trustworthiness, and supported qualitative guidelines that promoted bias neutrality (see Miles, Huberman, & Saldana, 2014; Morse, 2015; Patton, 2002). Contrary to quantitative measurable significance, the results of this qualitative study provided a balance of social inquiry with valid conclusions through detailed respondent descriptions.

Creswell (2007) affirmed that a participant size of 20–30 people is appropriate for a qualitative, grounded theory method. However, qualitative researchers do not seek to prove a perspective, reveal data that confirms any predisposed truths, or use the number of participants to replace breadth and depth in theory development (Patton, 2002). Therefore, the participants were NPs from combined clinical and academic settings who met the fundamental requirements of counseling weight management and lectured obesity in primary care NP programs. I targeted a designated size of 16 to 20 NPs, but no less than 12, using three separate recorded interviews (for correctness of reporting and meaningful parallelism), to enhance thematic saturation (see Miles et al., 2014). Systematic coding using the Atlas.ti software for data analysis and bracketing of my own personal opinions was done to enhance credibility and auditability (see Miles et al., 2014). In this study, I used a purposeful sampling strategy that lacked randomization but instead facilitated avoidance of superficial data analysis, enhanced data collection thoroughness, and ensured richness of information depth (see Morse, 2015; Tracy, 2010).

To achieve consistency after reduction of the interviews transcribed, I allowed participants to review and comment on accuracy of their responses so that changes could be made accordingly. Dependability could later be confirmed through additional qualitative studies of other NPs, patient perceptions of instrumental role modeling of their providers or observations of NP interactions with colleagues or students. Empirical analyses using instrumental role modeling in NPs paired with patient perceptions or variables of expressive/descriptive traits (i.e., care, compassion, patience, and the likes) could also enhance theory development. Additional inquiries on instrumental role

modeling with health insurances (i.e., preventative care utilization outcomes), provider performance/satisfaction measures, social marketing, organizational absenteeism, mandates for physical fitness in professionals seeking entry into allied health programs, health promotion incentives, outcomes of wellness, or performance improvement would also provide another perspective to support theory development on instrumental role modeling and advance generalizability to NPs. Absent these components of reliability and generalizability, this study was limited in its ability to achieve the rigor of transferability (see Morse, 2015) and the conclusions rendered can only be applied to the participants interviewed.

I was the sole instrument in this study towards fulfillment of this doctoral PhD degree and did not utilize any peer reviewers to identify additional bias. I did however, implement rigorous bracketing to allow for a reliable and intuitive interpretation of the data (see Patton, 2002). I am also an NP who met the inclusion criteria of working in settings where weight management counseling is performed regularly and I attest close proximity to the intentions of this study. Regretfully, I acknowledge that even with the greatest efforts, membership bias could not be perfectly eliminated but reduced marginally at best (see Creswell, 2007; Patton, 2002).

Significance of Study

Academia is the starting point of educational preparation into most professions, and field practice in the community is where learned knowledge and behaviors are applied, implemented, evaluated, and modified (Winch, 2015). Expectantly, primary care providers are accountable to initiate obesity reduction interventions that motivate

customers who seek improved health (CDC, 2018a). Therefore, the concept of instrumental role modeling is considered not new in a literal sense, but scholarly data lacked recognition of how it was perceived theoretically. The term instrumental could easily be understood as playing a key role in allowing something to happen (Schroeder & Fishbach, 2015) and role models are those individuals who hold capacity to motivate behavior change (Hensel, 2011; Malik et al., 2014). But perceptions of the concept of instrumental role modeling could not be assumed as mutually shared by all health professionals. Researchers in the extant literature discussed physicians, nurses, and other allied health professionals on dimensions of role modeling and obesity (Hensel, 2011; Lobelo & de Quevedo, 2014; Malik et al., 2014), but I could find nothing specifically on the concept of instrumental role modeling regarding issues of weight as perceived by NPs.

In the United States, metabolic syndrome, impaired fasting glucose, insulin resistance, immune deregulation, and a variety of cancers are secondary associations to primary obesity, which is the second leading cause of preventable death (CDC, 2018b; NIH, 2015; Van Nuys et al., 2014). Falls and injuries experienced by overweight or obese persons compound functional disabilities that not only interfere with work productivity from absenteeism but also affect healthcare costs and the overall economy (Levay, 2014; Malik et al., 2014; Van Nuys et al., 2014). Obesity has also been implicated in the prevalence of Occupational Safety and Health Administration recordable injuries to the point of raising awareness in organizations of the importance of hiring individuals who are physically fit as opposed to being obese (Pajoutan, Mehta, & Cavouto, 2016;

Wiggermann et al., 2019). This gave meaningful significance to instrumental role modeling and obesity as perceived by NPs that confronted weight management discussions with others.

Projected costs for obesity-related health illnesses in 2018 were at $344 billion compared to $147 billion less than 10 years earlier (NIH, 2015; Van Nuys et al., 2014). Treatment options continue to be advertised on television, the Internet, radio, and any form of social media that promises the competitive captive audience (Ogden et al., 2014). Organizations have purchased weight loss programs (i.e., onsite fitness centers and/or trainers), modified their environments to accommodate physical activity, and even offered incentives prizes for weight loss champions (Blake et al., 2013; Sangachin & Cavuoto, 2015). Schools have renovated lunch rooms and cafeteria selections to encourage healthier choices (Mann, Tomiyama, & Ward, 2015) and policy makers have taken stands against fast food industries that promote empty calories that yield weight gain (Marks, 2015; Wetter & Hodge, 2016; Zaltman, Olson, & Forr, 2015). Meanwhile, NPs continue to consult patients and give weight management recommendations that, in some cases, position them as accomplices of contradictions. Yet, interactions between health professionals and people seeking healthcare should always be straightforward and simple to facilitate understanding and compliance as well as to assure mutually defined wellness goals are reasonably achievable (USDOL, 2014).

NPs implement the fundamental processes of assessment, diagnosis, intervention, planning, and evaluation core to both the nursing and medical profession (Poghosyan & Carthon, 2017; USDOL, 2019). They are advanced practitioners skilled and licensed to

treat illnesses and conditions and projected to augment entry into medical primary practice up to 31% by the year 2022 (USDOL, 2014) and 36% by year 2026 (USDOL, 2017). Existing research did not highlight instrumental role modeling as a theory, much less scrutinize the concepts clearly with reference to NPs. I intended theory development to give therapeutic promise to widening qualitative understanding of the provider-client and professor-student encounter that can lead to valuable thinking and behavior change. Such therapeutic promise is aspired to potentiate personal improvement that resonates value (Prochaska & DiClemente, 2005; Tracy, 2010).

Bem's (1967) self-perception theory positioned that people hold beliefs about themselves based on personal behaviors not previously judged. This theory warranted mention as a precursor to grounded theory development on instrumental role modeling. Some health professionals have argued that personal measures of overweight is a form of role modeling since obesity among clinicians allows them to relate to the challenges experienced by their clients (Rush et al., 2010). However, this does not satisfy the responsibility to provide solutions rather than affirmation (Hensel, 2011). Furthermore, it does not challenge the clinician to evaluate self-perceptions and how they affect constructs of instrumentalism and role modeling as perceived by others. Messages from academia and clinical practice need to be both synchronized and complementary in order to build trust (Poghosyan & Carthon, 2017; Rush et al., 2010). For a variety of reasons, organizations have become more heightened to the ramifications of obesity as it relates to performance, safety, and appearance within the context of role modeling and productivity and similarly NPs need to recognize obesity and role modeling for it's relationship to

health outcomes (Flint & Snook, 2014; Levay, 2014; Malik et al., 2014; Sangachin & Cavuoto, 2015).

Uniform practice among all NPs cannot be assumed but instead investigated for role expectations. Therefore, in this study, I sought grounded theory development of instrumental role modeling through self-perceptions of NPs surrounding issues of weight as a viable start to dialogue. I analyzed components of instrumentalism, role modeling, and empathy regarding obesity, because they intersected academia and clinical encounters, to unlock grounded theory on instrumental role modeling and reveal implications for social change.

Conceptual Framework

There is great breadth in the study of obesity using a variety of theoretical frameworks that can also be applied to role modeling. Self-regulation, cognitive dissonance, social cognitive, health belief, reasoned action/planned behavior, trans-theories, and still more. All offer dynamic perspectives for understanding behavior.

Implicit theories of self-regulation vary according to specific personal internal beliefs or attributes that people do not readily self-disclose (i.e., will power, athletic ability, intelligence, leadership, and the likes; Cornick & Blascovich, 2015; Hoyt, Burnette, & Innella, 2012). These personal attributes have been used in obesity and leadership research to understand underlying drives or forces that explain why people behave the way they do on more individual and preferential levels (Hoyt et al., 2012).

Festinger's (1962) theory of cognitive dissonance operates on inconsistences of voluntary behavior. To resolve guilt or shame, people make conscious efforts to match

their thoughts with their behaviors (Festinger). Cognitive dissonance works in both an intrinsic (i.e., how I understand) and extrinsic (i.e., what has happened to me) direction (Festinger). While Bem's (1967) theory of self-perception is derived from external experiences (i.e., what I am doing), then internalized to the person (i.e., once I considered). An example to understanding Festinger's theory is, the person who knows approved behaviors of a role model, but fails to comport him or herself as such, will try to rationalize their exhibited behavior to fit with their knowledge of what the desirable behavior should be. If changing the behavior is perceived as being too challenging, the person will defend their existing behavior even when it is contradictory to what they know is true (see Ent & Gerend, 2015; Mourre & Gurviez, 2015; Tevik & Feragen, 2014). The dissonance theory is widely referenced in the domain of obesity and behavior change as a failure compensatory strategy (Ent & Gerend, 2015; Mourre & Gurviez, 2015; Tevik & Feragen, 2014). Therefore, I deemed cognitive dissonance as not appropriate to widen the intent of understanding instrumental role modeling as perceived through personal behaviors when interacting with others.

Bandura's (1989) social cognitive theory was also extensively cited in the study of behavior change and obesity management. In this theory, Bandura interpreted social interaction as antecedent to behavior (Marks, 2015; Young, Plotnikoff, Collins, Callister, & Morgan, 2015). In cultures where obesity is recognized as a sign of wealth and overeating is acceptable, the social cognitive theory illustrated why certain social interactions explained behavior (Cameron et al., 2018). Critical to weight loss, therefore, was the understanding of how successful interventions were heavily dependent on

involvement of systematic stakeholders to reeducate behaviors that promoted healthier outcomes (Paek et al., 2015). This framework could have been applied to role modeling but was dependent on extrinsic influences from social surroundings regarding issues of obesity (see Cameron et al., 2018).

The health belief model was another theoretical perspective that has been used to understand opinions of people regarding obesity and how they gauge beliefs (i.e., diet, lifestyle change, weight loss, role modeling, etc.) against issues affecting quality of life views (Linke, Robinson, & Pezmeki, 2014). This model is often used to explain how people modify behavior based on how the change aligns with their beliefs (Linke et al., 2014). The health belief model mingles cultural relationships with family, community, and other external influential sources antecedent to perception (Linke et al., 2014). I did not want to use this model because it targeted perceptions that critically evaluated situations as they related to beliefs and I was seeking perspectives that aligned with professional responsibility to role model.

The theory of reasoned action and planned behavior followed a similar pattern to explain how actions are reasoned to fit past experiences that align with social norms (Linke et al., 2014; Schmied, Parada, Horton, Madanat, & Ayala, 2014). In one study on obesity, the theory of reasoned action and planned behavior was used to understand cultural norms among Latinas for diet and lifestyle modifications (Schmied et al., 2014). The findings suggested that family was the main influencer of behavior change (Schmied et al., 2014). This theory did not fit well with perceptions of instrumental role modeling and, consequently, was not suitable for consideration regarding self-perceptions of NPs.

The trans-theoretical model (also known as stages of change model) is also popular in the domain of obesity research. This model has been used to clarify the importance of change readiness and the processes involved before being able to implement change (Linke et al., 2014; Prochaska & DiClemente, 2005). Franks et al. (2012) studied married partners' readiness to change diet and lifestyle behaviors and found that couples did better when each partner was at the same level of readiness. While the act of self reflection and reconciliation was critical to change readiness (Prochaska & DiClemente, 2005), this theory did not allow for the opportunity to glean the construct of instrumental role modeling without the act of implementing change. I was not seeking to explore perceptions of change as opposed to perceptions of self and how such self-perceptions were perceived to affect others.

Bem's (1967) theory of self-perception was well suited for reference in this study. The theory of self-perception relies on articulations of personal attitudes within a specific construct that was not previously considered: inside out versus outside in (see Bem, 1967). Therefore, elements of the self-perception theory and role modeling were helpful towards constructing qualitative research questions that widened a grounded path towards instrumental role-modeling theory development. I used the personal views of NPs who recognized the nonmeasurable valence of their positions within client-provider or educator-student encounters to broaden understanding of instrumental role modeling and weight management.

Implications for Social Change

The U.S. Department of Health and Human Services mandated as best practice that primary care providers be accountable to initiate obesity reduction interventions that motivate improved health (CDC, 2018a). The concepts of instrumental and role modeling are not new but previous researchers have not mentioned how the perceptions relate to instrumental role modeling as a theory. Nationwide, the profession of nursing represents the largest population in healthcare (HRSA, 2014) and in primary care, the number of NPs is also growing (USDOL, 2014). As such, it was not unreasonable to expect NPs to provide contributory data towards the improvement of conditions affecting primary care. Yet to date, I found no extant literature regarding NPs and the concept of instrumental role modeling as it related to obesity.

Obesity is caused by a variety of factors but individually experienced. It affects society, at minimum, from perspectives of health service utilization, comorbid conditions, and health insurance cost allocation (Kovesdy, Furth, & Zoccali, 2017; Musich et al., 2016). There is also ample data to support how work productivity, absenteeism, and quality of life were affected by obesity (Kovesdy et al., 2017; Musich et al., 2016). In 2008, the cost for treating obese persons in the U.S. was reported at $147 billion and these numbers have only risen since (CDC, 2018b; NIH, 2015; Van Nuys et al., 2014). As the second leading cause of preventable death in the U.S., all professions and domains of health need to give these rising numbers proper recognition (CDC, 2018b; NIH, 2015).

It is needless to say that issues related to role modeling and obesity impact social change. I intended theory development on instrumental role modeling to widen dialogue

from an angle of care not previously considered, not to mention heighten useful awareness to the academic and clinical arenas. In conducting this study, I claimed no guarantee but a promise for social change as it addressed perceptions of instrumentalism and role modeling on obesity for NPs in practice and academia. NP perceptions of instrumental role modeling bring to consciousness, the bidirectional audio, visual, and processing exchange that takes place on the issue of obesity during encounters with others. Hence, theory development on instrumental role modeling provides a framework to deepen reciprocal understanding of therapeutic weight counseling in practice and academia.

Summary

NPs are becoming a leading presence in primary care and expected to role model behaviors they counsel others to change. Obesity is directly related to many of the leading conditions NPs are challenged to treat. There is abundant data on NPs and obesity alike, but I could find no extant literature that merged how NPs perceived instrumental role modeling on the issue of obesity. With obesity being the second leading cause of preventable death in the United States (CDC, 2018b; NIH, 2015), there was a substantial need for additional inquiry on perceptions of how instrumental role modeling intersected communications. Using the lens of self-perception theory, I focused on NPs' articulation of how they perceived themselves and enhanced dialogue in settings of professional practice and academia. Such discussions hold therapeutic implications for analyzing interpersonal interactions. This can be a fundamental contribution to understanding role modeling expectations, obstacles, and failures as they relate to primary care. The existing

literature did not offer any clear understanding of instrumental role modeling as it relates to obesity. Hence, this subject is considered a formidable platform. In Chapter 2, I will discuss issues surrounding knowledge, proficiency, accountability, and empathy relevant to instrumentalism and role modeling.

Chapter 2: Literature Review

Introduction

NPs are increasing in primary care (Poghosyan & Carthon, 2017) and positioned to imprint championing preventable illnesses. They are praised for their communication style and assumed to be role models (Poghosyan & Carthon, 2017). Obesity is a preventable illness in most cases; yet, I found no data associating NPs as role models related to weight counseling. In this chapter, I cover the literature search strategy, theoretical framework, and a literature review discussion of how tenets of knowledge, proficiency, accountability, and empathy came together to clarify the construct of instrumental role modeling related to weight management counseling. From this study, I sought to establish a grounded theory framework for instrumental role modeling using self-perceptions of NPs in clinical and academic practice.

Literature Search Strategy

I retrieved relevant data primarily from the databases of SAGE Premier, MEDLINE with Full Text, and Walden Dissertations using keyword search combinations of *role modeling and obesity, obesity treatments, weight loss and failure, self-perception and obesity, self-efficacy, role models and health care, health professionals and role models, lifestyles and role models, weight loss and role models, physician and role models, practice and preach, judging appearances and obesity, individual perceptions and obesity, role models and motivation, obesity and policy, obesity and marketing, policy makers and obesity, obesity and parenting, obesity and abuse, role models and planning, instrumentalism and business, obesity and empathy, instrumentalism and*

empathy, empathy and health professionals, and *empathy and change*. Instrumental role modeling was not found as an isolated concept but simply mentioned superficially in excerpts of the existing literature. Therefore, to comprise a robust discussion, I relied on available literature regarding role modeling, facets of instrumentalism, and empathy to unify the concept of instrumental role modeling.

Theoretical Framework

In grounded theory development, analyses of participant views are critical to uncovering the *how*'s and *why*'s of human behavior and thought processes (Creswell, 2009). Glaser and Strauss (1967) said that when conducting grounded theory research, concepts of the construct should fit, and the results should work in a meaningful way that gives value to the population studied. Therefore, in this study, I used constant comparison of data from the theoretical sampling of NPs in clinical and academic settings on instrumental role modeling related to obesity counseling to enable an emerging framework for theory development (see Creswell, 2009).

I used Bem's (1967) theory of self-perception as an aide for questioning NPs on how they perceived themselves as role models when counseling obesity. This theory rests on conscious self-evaluation of a viewpoint beyond that which aligns with attitude; a hybrid view developed internally resulting from presumed, unscrutinized social behaviors (Bem, 1967). The self-perception theory postulates that when making decisions absent pressures to be right or wrong on issues previously aligned without dispute, people will be challenged to reevaluate themselves according to their own thoughts rather than outside influences (Bem, 1967). While not intending to replicate the self-perception

theory or use it as a lens from which to guide this study, it offered a useful balustrade from which instrumental role modeling as a distinct theory could be analyzed.

Theory development on instrumental role modeling was the targeted focus of this study. I assumed that the terms instrumental and role modeling were grossly understood by NPs, albeit I could find no data where NPs were asked to deliberately articulate what it meant to them as a theory that translates into practice. Wang, Huang, and Sun (2014) tested a self-perception agent model and found that social influences resulted in gaps of attitudes and opinions. The opinion change of one person could be significant enough to change the behaviors of entire groups (Wang et al., 2014).

Role models are commonly understood as revered persons who motivate change (Hensel, 2011; Malik et al., 2014), but the term instrumental implies a panoramic understanding of how the self influences others (Dewey, 1958). For this study, I simply defined instrumental as influencing others to follow; however, a more robust understanding of instrumental role modeling could only emerge after reflexive comparisons of respondent communications. Role modeling related to obesity was mentioned in general terms of wellness initiatives, but scholarly data regarding instrumental role modeling and NPs was nonexistent. To this end, I identified a gap in understanding how NPs perceived instrumental role modeling when counseling obesity in academia or clinical practice (see CDC, 2014; USDOL, 2014).

If obesity were to be plotted on a continuum chart, the reasons for causing it and treatments to reverse it could go on endlessly (CDC, 2018b; Daly, Robinson, & Sutin, 2017; Flint & Snook, 2014; NIH, 2015; van Leeuwen, Hunt, & Park, 2015; Van Nuys et

al., 2014; WHO, 2015). Researchers have cited weight loss efforts as cyclical with loss and regain constantly recurring and additional treatments tirelessly searched (Fryar, Carroll, & Ogden, 2014). Whether in the provider-patient encounter or when teaching in academia, NPs should address applicable obesity health-risk indicators to target improved outcomes (USDOL, 2014). I employed the grounded theory strategy in this study to uncover a framework that clarified instrumental role modeling as a theory. Self-perceptions of instrumental role modeling are especially suitable when considering lifestyle behaviors as not being isolated to specific people but mutually experienced by many. To that effect, I asked clinicians to consider their roles as instruments, give thoughtful clarity on their perceptions of obesity, and how they perceived it to affect interactions with others. Consequently, how NPs perceived instrumental role modeling when counseling obesity could be a direct driver for dialogue and change agency in clinical settings and academia.

Literature Review: Role Modeling, Instrumentalism, and Empathy

From academia to clinical practice, NPs are expected to counsel obesity using health risk indicators (Khandelwal, Zemore, & Hemmerling, 2018). Patients may present with complaints of binge eating, nighttime consumption, eating influenced by media, or the palatability of junk foods as common obstacles to weight loss and the NP must remain objective, proficient, and accountable, while still being able to communicate empathy with the client (Blake et al., 2013; Mui et al., 2018). As with all health professionals, NPs are vowed always to advocate for the patient (Difibaugh, 2014).

Data was nonexistent on NPs and instrumental role modeling in the literature though healthcare urgencies change continually and obesity counseling remains a steadfast priority (Poghosyan & Carthon, 2017; USDL, 2019). Available data regarding role modeling were prominent but did not emphasize specific perceptions of instrumental role modeling when counseling obesity. Using the defined concept of an instrumental role model as an individual who is able to motivate behavior change that is perceived as desirable, I considered a new theoretical perspective in this study. For this reason, NPs who counsel weight loss in primary care or speak on obesity in academia were the targeted participants (see Poghosyan & Carthon, 2017; USDL, 2019). How NPs articulated perceptions of being instrumental role models in practice relates to an ability to understand the dynamism and bewilderment of counseling the sensitive topic of obesity. As such, I discuss role modeling and instrumentalism because the concepts intersect with the literature reviewed with regards to knowledge, proficiency, accountability, and empathy. Empathy was included because it encompassed how role modeling and instrumentalism are acts of sharing that together serve as a pathway to trust and theory development.

Role Modeling

Role modeling is the initiative of any act implemented by people who are revered for demonstrating and motivating change (Hensel, 2011; Hoyt & Simon, 2011; Malik et al., 2014). The manner of delivering such demonstrations of change requires that communication is consistent and fosters inclusion (Malik et al., 2014). Some organizations, institutions and small groups are role models through the qualitative ways

they service their customers and employees to glean commitment and steady productivity in return (Blake et al., 2013; Pigford et al., 2012). In general, healthcare professionals are not only expected to be proficient in diet and lifestyle suggestions but to be examples as well. The U.S. Department of Health and Human Services mandates primary care providers' accountability to initiate obesity reduction interventions that lead to improved health outcomes (CDC, 2018a). However, Lobelo and de Quevedo (2014) found that only 12% to 27% of physicians compared to other health professionals understood what physical activity recommendations were and some knew even less, about how to counsel patients on living physically fit. Most physicians in their study acknowledged weight loss counseling as being part of their responsibilities but avoided talking about obesity due to excuses of time, scarce resources, low reimbursement for counseling only, insufficient skills to deal with weight loss obstacles, or for other reasons of preferring to deal with more serious comorbidities (Lobelo & de Quevedo, 2014; Mosqueira et al., 2019).

Role modeling is an act of doing, where behavior exhibited inspires behavior alignment (Hoyt & Simon, 2011; Phua, 2014). It could be assumed that in academia at least, students would be taught skills on how to consistently deliver obesity counseling using evidence-based health risk indicators; however, this is only an assumption. Khandelwal et al.'s (2018) findings aligned with existing literature that blamed a lack of experienced educators on the issue of obesity counseling. The common argument of whether diet and lifestyle counseling was more important versus disease pathophysiology and treatment continually surfaced, providing an example of inconsistent communication that did not support accountability expectations of role models (Khandelwal et al., 2018).

Some overweight and/or obese physicians cited higher inclinations to prescribe weight loss medications as their strategy for helping patients before considering counseling prior to prescribing (Seymour, Barnes, Schumacher, & Vollmer, 2018). This finding suggested inconsideration of the patient as an active participant in their care and placed the physician in a director versus collaborative role to dominate control over the patient-provider encounter (Khandelwal et al, 2018; Richard, Furguson, Lara, Leonard, & Younis, 2014; Seymour et al., 2018).

Obesity is repeatedly cited as the second leading cause of preventable death in the United States (CDC, 2018b; NIH, 2015; WHO, 2015) and a main concern of the HealthyPeople 2020 Childhood Obesity Initiative (COI; Healthy People, 2015). When the COI was established in 2006, their purpose was to encourage shared participation between community and private organizations so that role modeling could be reciprocal versus unidirectional (Healthy People, 2015). Systematic strategies were aimed at reducing obesity in affected individuals, their families, friends, coworkers, and the larger community (Healthy People, 2015). Within this initiative, each unique system was expected to have distinct opportunities to model desirable behaviors that supported or motivated health (Healthy People, 2015). From a long-term perspective, sustained childhood behavior modifications would transition to become adulthood habits and consequently, persistent healthy lifestyle transformations (Healthy People, 2015). However, the goals of COI have not succeeded to date and command obesity intervention to remain forefront for its' critical role in causing other illnesses (Healthy People, 2015).

Combating obesity was being challenged by even waiting room vending machines that supplied junk food choices over healthy snacks (Frazier et al., 2014). When attempts were made to alter the contents of the vending machines, patients brought in their own junk foods instead (Frazier et al., 2014). This surfaced another systematic layer of concern that health providers had no control over how patients or their families chose to engage in empty calorie food consumption (Frazier et al., 2014). Even when politicians in New Zealand singly decided to mandate healthy nutrition requirements, opponents argued that control over nutritive choices violated their free will (Sheridan, Kenealy, Schmidt-Busby, & Rea, 2015). It was clear that role modeling required effort and change could not occur without collaboration between all the parties involved (see Frazier et al., 2014; Malik et al., 2014; Sheridan et al., 2015; Wetter & Hodge, 2016).

Not surprising, the fast food industry aligned well with opinions on rights violation when policy makers attempted to control consumer purchase (Wetter & Hodge, 2016; Zaltman et al., 2015). The fast food industry has long been criticized for repeatedly offering larger sizes under the marketing strategy of *getting more for the money* (Bailey, 2010; Sherman & Griffith, 2018; Zaltman et al., 2015). Still, public health, nutritional associations, politicians, health advocates, and government agencies continued to debate, or enact stricter policies regarding health (see Marks, 2015; Wetter & Hodge, 2016). Each time, meeting resistance, all in the name of trying to lead a healthier model for living but failing to remember that change is always a choice (Marks, 2015; Wetter & Hodge, 2016).

The Affordable Care Act established in 2010 was created to lead behavior reform when it stipulated that restaurant chains of at least 20 stores had to disclose nutrition and caloric information, in or near their menus (HHS, 2015; McKenna et al., 2018; Vincent & Reed, 2014). Perhaps this gesture could have been analyzed as strategic to discourage overeating or at least, to create a consciousness for calorie counting (HHS, 2015). However, in their study on associations between a voluntary restaurant menu designation initiative and purchasing power, Sosa, Biediger-Friedman, and Banda (2014) found that patrons of all ages valued taste and cost, before nutritive value, or calories. Only persons between the ages of 18 and 35 showed the propensity to make healthier choices and these tendencies lessened considerably as consumers aged (Sosa et al., 2014). Sosa et al. questioned the value of cornering restaurant industries into being more loyal to their consumers through healthy/lite menu choices and found that attitude changes were inconsistent in the age groups, from conscious awareness in the young, to conscious disregard in those of advancing years. Recognizing the need for the health industry to be forefront in role modeling, Blake et al. (2013) studied a 5-year workplace wellness intervention where systematic multilevel ecological changes were made to the environment. Various health promotion activities, incentives, meals, and campaigns yielded employee engagement in bicycle riding, exercise classes and walking at break times (Blake et al., 2013). However, the level of commitment to move was limited to people who were already inclined to be more physically active (Blake et al., 2013). Participants with diminished momentum to move cited time and fatigue as stronger competing forces (Blake et al., 2013). Behavior change was more complex than being

simply the outcome of forced exposure to healthy versus unhealthy activities (see Frazier et al., 2014; Sheridan et al., 2015).

The concept of role modeling is very broad and encompasses multiple levels of debate. Superficially, leaders, teachers, health professionals, parents, and popular personalities are all perceived as role models (Hensel, 2011; Malik et al., 2014). However, methods of role modeling through enforcing legislation that all do not appreciate, rules that all do not follow, or behaviors that are not replicable in all, remain arguable (Traverso-Yepez & Hunter, 2016; Wetter & Hodge, 2016). Each of these strategies must be perceived as worthy of being modeled before they can be exercised or appreciated as being instrumental to role modeling.

Instrumentalism

The concepts of role modeling and being instrumental are so closely related that it is difficult to outline where one begins and the other ends. Role models are instrumental in the most profound of ways that give ownership to an ability to provoke change (Dewey, 1958; Hoyt & Simon, 2011; Malik et al., 2014). Invoking change however, is abstract, as it does not always align with personal perceptions (Dewey, 1958). Instrumentalism requires first that knowledge is based on evidence and then delivered consistently (Mui et al., 2018). Some authors have defined instrumentalism as a method of giving information that can be used in practice (Ittner & Dowd, 1997; Martin, Kolomitro, & Lam, 2014). For this study, the interpretation of instrumentalism is borrowed from the ideas of Dewey (1958) as an ability to influence others to follow. Nurse practitioners in general are revered for demonstrating and motivating change but

this study sought to learn how they perceived personal instrumental role modeling as a driver in obesity counseling (Hensel, 2011; Hoyt & Simon, 2011).

Martin et al. (2014) clarified instrumentalism as a learning modality with a core training strategy of doing, seeing, and hearing. Clinicians must do what they want the client to see and then change is more likely to occur after they have been told what to do (Martin et al., 2014). When conveyed in the natural environment such as that which occurs in the provider and patient proximity, the learning modalities represented active phases of intervention and influence (Martin et al., 2014). Recalled cues would subsequently complement behavior change and instrumentalism (Martin et al., 2014). Learning modalities are also rooted to academia though health professionals complained obesity was minimally discussed and no mention was made of whether the professors were physically fit to represent the modality of seeing (see Martin et al., 2014). Instead, minimal discussions of obesity and role modeling resulted in poorly prepared clinicians to deal with obesity counseling in primary care (see Flint & Snook, 2014; Khandelwal et al., 2018). Poorly prepared clinicians self-perceived as being ill equipped leaders and subsequently, less qualified to be role models (Flint & Snook, 2014; Harkin et al., 2019; Khandelwal et al., 2018). Literature review supported this issue as ongoing in medical schools though this problem was recognized as a weakness of educational preparation (Harkin et al., 2019; Khandelwal et al., 2018; Schroeder & Fishbach, 2015).

For all intents and purposes, being instrumental essentially means the same as role modeling. Schroeder and Fishbach (2015) explained instrumentalism as acting in ways that allowed perceived behavior to serve as a tool through which value and preference

fulfilled goals. Therefore, if role modeling was an act of doing that inspired change, than the instrumental role model should justifiably be described as someone who could behave in ways that influenced change in others (see Schroeder & Fishbach, 2015). Such an undertaking however, mandates collaboration between behavior and action, with a common denominator of trust (Poghosyan & Carthon, 2017).

With no previously recognized description of instrumental role modeling, cumulative literature implied the concept as a combination of mentalities combined with behaviors that could be the missing link to greater qualitative understanding (Nussbaum, 1997; Schroeder & Fishbach, 2015). One of the first things nursing students are taught is how to effectively interact with patients through personable interviews (McNiesh, 2015; Poghosyan & Carthon, 2017; Schroeder & Fishbach, 2015). The goal is to implement skill, collaborate perspective identifications and learn role socialization towards care planning and interventions (see Penprase et al., 2013; McNiesh, 2015). For the most part, nurses have rated very well in value as role models and at the advanced nurse practitioner level, NPs are expected to master these proficiencies (Bosone et al., 2015; Poghosyan & Carthon, 2017; USDOL, 2019). Contrary to this notion, medical students were found to narrow the concept of instrumentalism when they assigned themselves to authoritative roles as opposed to collaborators with their patients (Khandelwal et al., 2018). They argued the relationship between patient and physician as being one that gave instructions to patients based on the medical knowledge and that was the limit of being instrumental (Khandelwal et al., 2018).

Skillful interviewing is however not solely dependent on asking the right questions but involves concurrent aspects of building trust (McNiesh, 2015; Spetz et al., 2015). Schroeder and Fishbach (2015) experimented interviewing style in physicians counseling on obesity by encouraging them to share personal experiences with their patients. Personal revelations were not perceived as instrumental when provided by physicians; whereas, patients communicated connectedness with nurses when they shared similar stories with them (see Schroeder & Fishbach, 2015). Patients viewed physicians as having more unparalleled capacity to live better and did not appreciate knowing their personal experiences but instead preferred the dialogue to focus on their (the patients) personal needs (Schroeder & Fishbach, 2015).

Still on the issue of instrumental role modeling but from a business perspective, Delbecq, House, Sully, and Quigley (2013) found that some leaders possessed an ability to influence in both figurative and literal designs when people were taught how to glean rewards based on the efficiency of their own productivity. As higher management empowered employees with a favorable environment to achieve their goals and the feedback to help keep them motivated, employees exceled, and management personnel proudly held claim to the title of being professional instruments (Delbecq et al., 2013).

Using a narrative story design to explain the act of being instrumental, Lennon (2015) found that if success as a purpose fueled desire, than desire was the driver that influenced goal oriented planning. Such planning was what translated practice and rendered the construct of being instrumental (Lennon, 2015). Behaving exemplarily during community planning (where chaos was often present), was a practical way of

providing purpose and subsequently what allowed the planner's behavior to embody change agency (Lennon, 2015). Similarly, Forester (2012) challenged his students to analyze not what they envisioned as ideal project goals but what they had done to produce the desired outcomes. This required recurrent circular (project and self) analyses and scrutiny of the here and now of how projects were unfolding, how their involvement critically affected the outcome: Fragmented and disordered or clear and well defined (Forester, 2012). Questions needed to be structured in ways that always involved self-critique as opposed to rationalization for unintended outcomes (Forester, 2012). Purposive planning then translated talent and such talents actualized change agency (Forester, 2012; Lennon, 2015). This was a dynamic implementation of instrumentalism as Forester looked at how people listened, engaged with others and dual role perceptions of leaders and participants. The leaders were the experts much as health professionals are expected to be but when their positions were changed to participants, as in the patient role, the expectation was that of confidence and empowerment, similar to influencing others through instrumental role modeling (Forester, 2012). Still, it was understood that people were not tools in a literal sense but unique and distinct persons with imaginative abilities, to purposely plan how to influence change (see Forester, 2012; Hoggan & Cranton, 2014; Hoyt & Simon, 2011; Lennon, 2015; Lobelo & de Quevedo, 2014; Nussbaum, 1997).

Health policy makers, organizations, insurance companies and researchers all assess populations, identify risks statuses, develop disease control priorities, enact legislation, implement healthy campaigns and update their agendas according to the

constituents they serve, all in the name of being instrumental (Traverso-Yepez & Hunter, 2016; Wetter & Hodge, 2016). Yet, despite efforts some behaviors remain unmoved and outcomes unchanged (Sheridan et al., 2015; Traverso-Yepez & Hunter, 2016). When David Patterson (former governor of New York in 2008) tried to enact a sugared beverage sales tax, opponents did not revere his instrumental efforts; instead, they argued passionately against it (Wetter & Hodge, 2016). In another controversial study, Jones et al. (2014) argued that while extreme childhood obesity could not be confirmed as abusive acts of omission, where caregivers neglected educational, physical, or psychosocial needs of children and acts of commission, where access to unhealthy foods led to obesity, the outcome of childhood obesity was considered none the less, a harmful consequence of evolution (over time), genetics (deeply embedded even before birth) or the environment (behaviors of tolerance; Jones et al., 2014).

There are a variety of perspectives to consider with regards to the concept of instrumentalism, though the real issue is whether they are helpful or harmful towards influencing behavior. The philosophy of New Marketing Science was very influential in targeting not just how to attract consumers but in what made them happy enough to continue to consume (Zaltman et al., 2015). This thinking embraced the idea of large servings without regard to recommended portions or the implications to a worsening obesity crisis (Chen et al., 2015; Zaltman et al., 2015). The idea was to persuade consumers that they were getting more for their money and business profitability was expensed to the consumer (see Zaltman et al., 2015).

Electronic-cigarettes (e-cigarettes) are currently the rage though in truth, some are still poisonous substances under the pretense of being an alternative to nicotine (CDC, 2015; Farsalinos & Polosa, 2014). They simulate the social addictive properties of smoking; an apparatus held between two fingers, exhales white smoke and must be done outdoors (CDC, 2015; Farsalinos & Polosa, 2014). Paralleled, e-cigarettes and fast/junk-foods are mutual commercial players that impact behaviors. Both endorse lifestyles that suffer cost consequences to consumers but still some people argue their comparable significance (see Farsalinos & Polosa, 2014; Traverso-Yepez & Hunter, 2016; Wetter & Hodge, 2016). Some organizations will even offer proactive services designed to attract health and wellness access along with other incentives but it remains on the consumer to be influenced towards a desirable or undesirable lifestyle change (Sangachin & Cavuoto, 2015; Wetter & Hodge, 2016).

Schroeder and Fishbach (2015) defined instrumentality as a tool that fulfilled the goals of others and while various authors established instrumentalism as a means to an end behavior, who benefits from the means to an end, the clinician or the client, remained arguable (Dewey, 1958; Fowers, 2010; Lennon, 2015; Schroeder & Fishbach 2015). Forester (2012) claimed instrumentalism was determined by how well the clinician absorbed the role of leader to position the follower to succeed though they admitted no control over actual behavior change. Meanwhile, Malik et al. (2014) concluded from their participants that the knowledge and expertise of disease treatment by health professionals was more important than the role they played in modeling it. These studies reflected how knowledge is a powerful driver to communication of health inconsistencies, which all

clinicians are accountable (Mui et al., 2018). People need health role models who are accountable to communicate disease predictions, in proficient manners that do not isolate, or offend them and nurse practitioners are positioned to execute this (see Mui et al., 2018).

Instrumentalism in obesity suggests that when people can visualize (see), comprehend and understand communications or know of accomplishments of others, physical presence enhances perspective (Blake et al., 2013; Lobelo & de Quevedo, 2014). It cannot however, be assumed that nurse practitioners recognize how instrumental they are during obesity counseling. Instrumentalism differentiates obligation from choice when people are influence to behave in ways that improve health outcomes (Fowers, 2010; Harkin et al., 2019). The intermittent closeness experienced between them becomes an optimal environment to anchor trust and therapeutic empathy (Fowers, 2010; Lobelo & de Quevedo, 2014; Seiders, Flynn, Berry, & Haws, 2014).

Empathy

Modern literature categorizes empathy into affective/emotional, need/compassionate, and cognitive types (Frates & Bonnet, 2016; Riess, 2017). Affective or emotional empathy involves personal moods and need or compassionate empathy is best described as relating to sympathy, pity, or the anticipation of something that directly relates to the mood or event (Frates & Bonnet, 2016; Riess, 2017). Cognitive empathy requires abstract understanding of another's lived experience as being relatable and is most relevant to the health focus of this paper (Borkar, 2014; Frates & Bonnet, 2016; Riess, 2017). Cognitive empathy triggers pathways of trust, engages change, and is

understood as a mutual byproduct of interaction (Borkar, 2014; Seiders et al., 2014; Seymour et al., 2018).

When health professionals reluctantly became patients' consequent to their own personal illnesses, they experienced both the anxieties and insecurities of the patient role (Borkar, 2014). Although their ability to empathize with cancer patients, they still had little compassion for obese patients who could not overcome weight obstacles (Borkar, 2014). Weight bias was constant though the physicians from the study recognized the validity of their own personal experiences (Borkar, 2014; DiGiacinto, Gildon, Stamile, & Aubrey, 2015; Zestcott, Blair, & Stone, 2016). Health providers who lived exemplary physically active lives openly claimed themselves as role models but could not translate empathy into obesity counseling (Lobelo, & de Quevedo, 2014). Not surprising, some primary providers admitted inclinations to avoid the subject of obesity altogether, partly because of low reimbursement rates but mostly because they perceived no clear therapeutic solution (Hart et al., 2015; Mosqueira et al., 2019; Seymour et al., 2018). While some people declined reproach about their weight, others perceived avoidance of the topic as an affront and perceived a negative association of care with their providers (Hart et al., 2015; Seymour et al., 2018). Patients verbalized needing to feel more connected with their providers in ways that allowed them to openly communicate and that while they did not expect quick remedies for weight loss, the medical encounters were lacking quality when their weight issues were avoided (Hart et al., 2015; Seymour et al., 2018). By contrast, health professionals who empathized with overweight or obese clients were perceived as more caring (Phua, 2014). Ideal examples for challenging

instrumental role modeling through accountability to address disease predictions, using cognitive and empathetic skills, in manners that were targeted not isolate, or offend (Mui et al., 2018). A point of consideration is the value of empathy at the time of patient-provider interactions: Does it assist with opening communication, help with forming perceptions, interfere with preferences and/or inspire a desire to change where change is indicated (Riess, 2017). This is significant to the domain of healthcare that often enrolls patients in positions of vulnerability and of lack of control (Borkar, 2014).

Summary and Conclusions

Health professionals are accountable to addressing health related indicators associated with obesity and NPs are advantageously positioned to be instrumental role models (CDC, 2018a; Mui et al., 2018). NPs are challenged to influence obesity counseling that aligns with interventions that hold achievable identification towards health attainment (Phua, 2014). It is however, an assumption that all NPs comprehend how to instrumentally implement risk prevention that is revered for inspiring change. Such a reality should not be minimized but instead recognized, analyzed, and reconciled to maximize the benefits of NP and patient or student encounters. No literature could be found wholly embracing the concept of instrumental role modeling, though some evidence suggested that health professionals have conflicting views of role modeling and instrumental responsibilities particularly in the domain of obesity counseling. While the literature reviewed positioned NPs as critical leaders in change agency towards improved health outcomes, the concept of role modeling was not isolated to NPs in the available studies. As NPs rise in professional primary practice, the overarching need to learn

whether there exists any grounded theory on instrumental role modeling could open viable discussion and additional empirical inquiry on role modeling, instrumentalism, and perceptions as they influence outcomes.

The literature provided a glimpse of role modeling and altering views of instrumentalism but did not answer the question of what role modeling means to nurse practitioners. Gaps on the constructs of instrumental role modeling in NPs required inquiry into these viewpoints from first line providers. Role modeling is understood as acts that motivate behavior change. However, if this were so easy, health professionals who have a strong sense of confidence would have no problem influencing patients to make lifestyle changes that always achieved sustained health outcomes and discussions about obesity-related health risks would not position obesity as the second leading cause of preventable illnesses. For this reason, theory development on instrumental role modeling drove this study. NPs in clinical practice and those who teach NPs in academia were interviewed. In the next chapter, I will detail the research and how it was implemented.

Chapter 3: Research Method

Introduction

The purpose of this qualitative, grounded theory study was to discover what instrumental role modeling meant to NPs who provide obesity counseling in practice or who lecture on it in academia. In this chapter, I detail the research design and rationale, participant recruitment, data collection, my role as the instrument for data analysis, ethical concerns, and strategies used to protect trustworthiness, followed by a concluding statement.

Research Design and Rationale

I used three questions to address the gaps identified in the literature on instrumental role modeling as perceived by NPs when discussing obesity in clinical practice or academia. With Research Questions 1 and 2, I sought to clarify NP perceptions of role modeling and how they articulated the concept of instrumentalism as it related to role modeling. The third research question addressed the viewpoints of NPs regarding role modeling and instrumentalism, relative to personal physical fitness in clinical practice and academia, when required to provide obesity counseling.

Research Question 1: What does role-modeling mean to nurse practitioners?

Research Question 2: How do nurse practitioners perceive instrumental role modeling in encounters with others?

Research Question 3: What are the viewpoints of nurse practitioners relative to role modeling, instrumentalism, and physical fitness when counseling weight management?

Central Concepts of the Study

Glaser and Strauss (1967) explain grounded theory as developed from a negotiation of abstract thematic communications or observations that collaborate life and work. Such negotiations facilitate researcher construction to subjectively induce grounded theory after a time of constant comparison (Creswell, 2007; Glaser & Strauss, 1967). While it was recognized that emerging grounded theory does not require other theories to border development (Creswell, 2007), I would be remiss to reject the contribution of Bem's (1967) self-perception theory as a complementary scope from which I used inductive reasoning to advance grounded theory development on instrumental role modeling. Bem's self-perception theory proposed that people only assumed themselves as behaving socially acceptable and constant until their behaviors were consciously questioned. Scholarly data regarding perceptions of NPs as instrumental role models was absent, so Bem's theory provided me with a starting point from which to investigate instrumental role modeling as a new theory.

Health professionals are arguably perceived as role models because of their positions of authority, knowledge, ability to manage illness, and licensure to treat (Blake et al., 2013; Hensel, 2011; Khandelwal et al., 2018). This is reasonably accepted to an extent; however, literature supports that role models are also expected to be exemplars of admired behaviors and consistent with their messages (Khandelwal et al., 2018; Lobelo & de Quevedo, 2014). Motivating behavior change holds claim to characteristics of role modeling and being instrumental refers to an ability to influence change (Hanna et al., 2013; Hensel, 2011; Khandelwal et al., 2018; Malik et al., 2014; Schroeder & Fishbach,

2015). Since obesity is widely discussed by health providers, I considered their perceptions of instrumental role modeling advantageous to elaborate on this dialogue. For this reason, I focused on merging the concepts of instrumentalism and role modeling in this study as they related to obesity to analyze perceptions of NPs who counseled obesity in the clinical or academic settings from a grounded theory perspective.

Research Tradition

Phenomena are unique personal experiences that when collected create thematic conclusions transferable to select individuals who share mutual characteristics (Nicholls, 2019). The grounded theory method allows researchers to gather conscious perceptions articulated at alternate times to establish deep meaning of how individuals understand the world (Creswell, 2007). For this reason, I preferred the qualitative approach to a quantitative method. Without measurable elements, I could not use this style of research to make general population speculations; nevertheless, it was used to unfold themes of instrumental role modeling that were found contributory to the advancement of knowledge of human behaviors (see Nicholls, 2019).

Awareness of desirable versus undesirable thematic experiences has an empowering capacity and a social constructivist worldview permitted me to use conscious and real perceptions to advance a grounded theory on instrumental role modeling (see Creswell, 2007). I selected the grounded theory design for this study because I wanted to formulate a deeper understanding of patient-provider and student-professor encounters, where role modeling is an expectation rather than a choice and the assumed ambiguity of obesity, is mutually shared by health professionals and the people

they counsel alike.

Role of Researcher

Standards for quality conclusions in grounded theory research require the researcher to approach human knowledge from a constructivist perspective and assign the investigator as the instrument for data collection and interpretation (Creswell et al., 2007; Nicholls, 2019). As the instrument used for interpretation of this study, I was obliged to recognize my role as interviewer, observer, and participant. I admit a close relationship to the population studied through the qualifiers of being an NP, obese, and that I regularly provide obesity counseling. To an extent, I considered these qualifiers as a form of participation in that I could have easily positioned myself in the encounter environments of the participants studied despite my conscious bracketing. While this was recognized as a normal manifestation, I endeavored to exercise rigorous bracketing to suspend deliberate personal judgments and enhance dependability to maintain the integrity of this study (see Nicholls, 2019). I have not had any direct hospital, clinic, or academic affiliations for more than 6 years and declare no conflicts of interests related to this study. In gratitude of their time, participants were initially offered a $5 Panera gift card for each interview. However, I could not find them to purchase so I instead gave each participant a one-time $20 gift card.

Methodology

Quantitative research is contrarily different from qualitative designs, most uniquely in the shift in focus from seeking measurable and causal significance to revealing how personal recounts have meaningful quality (Creswell, 2007; Patton, 2002).

While quantitative or empirical research affords generalizability, personal self-perceptions using a qualitative approach contribute to ontological debates and can be used to evaluate performance outcomes, albeit, limited only the subject/s from which they originated (Creswell, 2007; Nicholls, 2019). The qualitative grounded theory approach offered flexibility to modify questions as themes unfolded from previous interviews while not directly imposing any assumptions about the individual participants (see Charmaz, 2017). This allowed me to approach the interviews in a constructivist, interpretative manner using the subjective accounts of participant disclosures to interpret, analyze, and assess the need for additional questions and consequently, glean rich thematic data (see Patton, 2002).

Participant Selection Logic

NPs that actively worked in primary care or discussed obesity in academia were the targeted population in this study. These criteria demanded a purposeful sampling strategy for choosing NPs who had personal knowledge and experience of the essential concepts of instrumentalism, role modeling, and obesity (see Creswell, 2007). I also welcomed maximum variation to include NPs in any stage of active practice (i.e., academic, clinical, private, or occupational) to widen the depth of perspectives and establish a rich source of diverse participants (see Maxwell, 2013). Regardless of commonality, self-perceptions are undeniably unique and inherently not identical; therefore, the grounded theory approach I took did not seek saturation for generalizability but instead to establish rich meaning of self-perceptions within a specific context of instrumental role modeling (see Creswell, 2007; Patton, 2002).

In a book on interviews, Kvale (2007) charged researchers to remember the overarching question from which qualitative research was founded: to create questions that revealed the untold story behind the lived experiences of the participants. Ultimately, the conclusions rendered can only be made of the participants studied but, nonetheless, can offer qualitative insight to others who may potentially have had similar experiences. Therefore, the qualitative nature of this study absolved quantitative significance through sample size and saturation was intended only to produce deep understanding for thematic analyses (see Patton, 2002). Creswell (2007) suggested a sample size of 20 to 30 respondents for the purpose of data saturation; however, Patton (2002) recommended that qualitative researchers should not fixate on the number of participants but instead the breadth of information intended and this could range from a single respondent to multiple respondents as long as the outcome yielded results that validated the study. Hence, my targeted participant size was 16 to 20 individuals, but no less than 12, from combined clinical, and academic settings who met the fundamental requirements of being NPs who discussed obesity with patients or students. I chose this designated participant size to enhance thematic saturation and allow for potential attrition.

After securing Institutional Review Board (IRB) permission, I conducted a pilot study and the results are detailed elsewhere in this manuscript. Using a purposeful snowball sampling strategy, source persons in academia, health clinics, and private practices were solicited for recruitment (see Creswell, 2007). Potential participants were contacted via telephone, e-mail, and text messages. No participants were personally known to me prior to their consent to participate.

Instrumentation

As the sole author of this dissertation and unable to find other scholarly data on perceptions of NPs as instrumental role models, three overarching interview questions were developed for this study. Novice researchers are subject to potential handicaps of formulating questions that are biased, leading, ambiguous, or redundant (Creswell, 2007; Maxwell, 2013; Patton, 2002). Utilization of a pilot study was suggested and implemented, to alleviate this flaw, assess unanticipated obstacles of the interview, and enhance validity (Creswell, 2007; Maxwell, 2013; Patton, 2002). The results will follow in a later section of this report.

Content validity in qualitative research is concerned with the richness of information to be gleaned from the selected participants (see Creswell, 2007; Patton, 2002). However, self-perceptions are as different as they can be similar and therefore, cannot be captured with precision. The research findings will be limited to the participants studied and only those participants can judge whether the questions asked, effectively captured valid meanings of how they perceived instrumental role modeling (Maxwell, 2013). For this reason, I chose to include nurse practitioners from all work settings as long as they discussed obesity. This was done to satisfy maximum variation (Creswell, 2007), as all NPs can have valid contributions to the concept of instrumental role modeling. The intentions were to capture phenomena and/or conflicts, ranging from confidences to ambiguities, of an emerging framework, for theory development on instrumental role modeling.

Procedure for Pilot Study

Implementation of a pilot study was indicated to evaluate how well the interview questions aligned with the focus of the research (Kvale, 2007; Roulston, 2010). Upon receiving Walden University IRB approval # 06-18-18-0242955, it was implemented. The pilot study served as an initial opportunity for me as the researcher to evaluate and identify my own personal interpretations of the interview experience (Janesick, 2011; Maxwell, 2013).

NP colleagues familiar to me were used for the pilot study only. They were interviewed in person and via telephone but for reasons of availability, yielded only three NPs who were able to assist. They included two NPs who worked in primary care community settings and one NP who taught in academia. All three NPs mutually discussed obesity with patients and students respectively. The pilot participants were asked to view but not sign the invitation to participate and informed consent and to disclose whether they met the exclusion criteria of past treatment for an eating disorder. Upon establishing appropriate inclusion conditions, they were instructed of their role in the pilot, to evaluate whether the research questions meaningfully aligned with the focus of the study, and if they perceived the questions as biased, leading, ambiguous, or redundant. They were then asked to evaluate relevance of the subquestions to the overarching questions and to determine whether the subquestions facilitated additional depth or breadth. The pilot participants were not used in the actual research.

Procedures for Recruitment, Participation, and Data Collection

Procedures for Recruitment

Pursuing only NPs known to me would not only narrow the purposeful participant selection process but also altogether, bias the study results (Creswell, 2007). Therefore, through a snowball strategy of referrals from clinicians who knew others who could be interested in participating, I sought data collection from NPs whom I did not know to interview (Creswell, 2007). Persons contacted were invited via telephone, texts, and e-mail only.

Low Recruitment

In the event of failure to recruit the targeted 16 participants and not wanting to fixate on the number of respondents versus the quest for breadth and depth, a minimum of 12 interviewees was decided (Patton, 2002). To secure the necessary participation, I was prepared to aggressively repeat initial snowball sampling recruitment endeavors using the same contacts until all referrals were exhausted. At which time, I would advertise through the Walden University participant pool for the additional range of volunteers it could generate. I would however, limit recruitment to those individuals who had easy Internet access and could accommodate integrity of the study through face-to-face interviewing.

Debriefing

The interviews planned for this study were hoped to generate rich depth into personal meanings of instrumental role modeling for nurse practitioners. It was however, recognized that interview settings that promote openness and relaxed comfort to disclose personal or sensitive information could have therapeutic effects that could mistakenly be

perceived as relationships similar to patient-provider or patient-therapist, versus the researcher-respondent (Rossetto, 2014). To counter such occurrences, I reminded participants at the commencement of each interview how many interviews remained and that they would be given the opportunity to check the dictations for corrections. The last interview began similarly, stating that the participant would again be contacted to check and modify statements as applicable. This was done additionally, to satisfy triangular closure through member check feedback (Maxwell, 2013; Patton, 2002).

Procedures for Participation

Potential respondents were assured the interviews would be scheduled according to their availability but to maintain integrity of the study, I required at minimum, face-to-face interactions that would be satisfied either in person or via any form of Internet based or technological method of video conferencing available to both researcher and interviewee (LoIacono, Symonds, & Brown, 2016; Skype, 2014). I additionally required that uninterrupted privacy could be mutually secured for the designated time when each of the three sessions occurred. Dialogue would be voice recorded for accuracy of transcription, with interviews lasting approximately 30 minutes but no longer than 1hour, on three separate dates.

Procedures for Data Collection

Upon establishing willingness to participate, consents were sent either by U.S. postal mail with postage paid envelopes addressed to me or via e-mail as a portable document form (PDF) attachment, to be returned to me in the same manner. Both forms of consent were saved as hard copies and secured separately in a locked file.

Three interviews were structured to focus on each of the overarching research questions and face-to-face dialogue was done through the platforms of FaceTime, Skype, and WhatsApp only (LoIacono et al., 2016; Pourmand, Lee, Fair, Maloney, & Caggiula, 2018; Skype, 2014). Researcher bracketing was performed prior to and at the completion of each interview session to consciously isolate my personal views, emotions, or experiences, from the communications of the participants (Creswell, 2007). No video was saved though audio was digitally voice recorded using a separate device (Sony Corporation, 2013). The recordings were then uploaded to my computer and assigned a unique identifier that assured anonymity of the respondents and then deleted from the recorder device. I am the sole user of the secured desktop computer, housed in an office with a lock, used for this research.

For speed of transcriptions, the audio discussions were deposited into the Transcribe-Speech to Text (2019) software application that upon producing a written text, were also deleted from the software. All audio recordings were transferred into a folder in the Atlas.ti software (2014). Atlas.ti is the qualitative data analysis software I chose to facilitate data collection organization. Among other features, it offered the convenience of viewing field notes and thematic codes displayed vertically next to the written texts. Within the Atlas.ti environment, the transcribed texts were reviewed again alongside the audio, allowing me to highlight replies from both the respondents, and myself with corrections made accordingly in the flow of the interviews. Any remarks I made during the interviews that could have been perceived as leading were otherwise highlighted in each transcript, saved separately, and reviewed frequently, so as to remind me to take

additional precautions in subsequent interviews. Transcriptions were done verbatim with the exception of laughter and once completed, were then sent to the respective participants via their personal e-mail, with instructions to review them for accuracy, make corrections wherever the responses were misinterpreted or erroneously transcribed and send me a return response either stating "Good as is," if no inaccuracies were found or to mark where alterations should be made. Returned feedback from the participants, were considered digitally signed, printed, and saved with the hard copies of consents. Participants were also informed that feedback not received from them within two weeks from the sent date would be assumed "Good as is."

Data Analysis Plan

Iteration by qualitative researchers serves to glean evolved themes and assign conclusions that properly align with the data collected (Miles et al., 2014). Therefore, multiple reviews of the audio recordings were done to identify suggested codes as they related to the research questions and theory development towards instrumental role modeling. The transcribed texts underwent extensive mark ups to catalog affirmations and discrepancies through in vivo, open, and pattern coding procedures that connected or separated instrumentalism from role modeling using the Atlas.ti software. Bracketing was also implemented to isolate my views from the emerging themes of the respondents. Patton (2002) and Creswell (2007) described this critical exercise of bracketing as a way of suspending researcher preconceptions and opinions, to enhance investigative rigor. A final appraisal of the transcriptions served to reconcile emerged codes and framework themes leading to grounded theory development. Discrepant remarks were revealed to

enhance trustworthiness that this study was conducted for the purpose of uncovering grounded theory existence and not to affirm assumptions or research questions. After which and as previously mentioned, thematic findings were resubmitted to participants for member-checking feedback (Miles et al., 2014) and are acknowledged in the final chapter of this report.

Issues of Trustworthiness

Trustworthiness of thematic analyses in qualitative research depended largely on my ability to perform constant self-questioning and to consciously recognize and differentiate my personal perspectives from those of the respondents (Patton, 2002). Essentially, capturing the true essence of respondent communications validates the study as worthy to be trusted. To accomplish this, components of credibility, transferability, dependability and confirmability were vital and are discussed.

Credibility

Research properly worded that lends truth to the findings is considered credible or believable (Patton, 2002). However, to the novice researcher who lacks prior experience in formulating questions, I chose to implement a pilot study to have peers who met the investigative inclusion conditions, evaluate how well the interview questions supported the study intention as my first step towards achieving trustworthiness. Upon receiving IRB approval to begin, I interviewed three NPs that would not be used as participants in the actual study. Their purpose was to critique how well the questions captured meaningful thought, were leading, ambiguous, perceived as biased, or redundant.

Maxwell (2013) and Patton (2002) explained credibility as a form of internal validity where a combination of reflexivity and rigor are mutually exercised to perform qualitative data analysis. Reflexivity implied an acceptance that efforts to completely isolate the researcher from the data collected are psychosocially impossible (Maxwell, 2013). Hence, bracketing my personal views and feelings regarding the study was done before and after each participant interview, as well as throughout subsequent reviews of the recordings. This helped to remind me of my personal perspectives so that I could be more flexible to identify collaborative and contrary participant remarks that would be later used to report findings. Data analyzed repetitively with respondent comments that gave clarity to grounded theory development or showed discrepancies, inoculated into the reported findings, along with rigorous strategies for bracketing and taking notes, were additional methods for gleaning internal truth and credibility (Creswell, 2009; Patton, 2002). I endeavored this tirelessly.

Transferability

The social world does not afford qualitative research measurable precision for generalizations (Patton, 2002). At best, transferability can only speculate but not guarantee similarity using like participants (Patton, 2002). But the use of rich, thick descriptions of perceptions of instrumental role modeling, by the participants studied can certainly be studied in a repeated manner (Creswell, 2009). While replication of the study can certainly be done using more nurse practitioners that discuss obesity in primary care and academia, the resultant perceptions of instrumental role modeling are externally valid only to the participants interviewed in this study.

Dependability

From a qualitative perspective, dependability offers a consistent ability to scrutinize existing data (recordings and transcriptions) that have not been changed over time (Patton, 2002). Additionally, the concepts of role models as recognized and revered persons who motivate change and instrumentalism, that depicts how people are influenced, are believed reasonably stable, not arguable, and offer no foreseeable controversy for their definitions over time (Dewey, 1958; Hensel, 2011; Hoyt & Simon, 2011; Malik et al., 2014). Although, I remind the reader that it was not assumed as equally appreciated by all NPs. Only additional research inquiry audits, carried out in the same manner, can make this assumption (Patton, 2002).

Confirmability

At a loss for avoiding quantitative language in qualitative research, confirmability can be viewed as an objective issue of trustworthiness. The use of quoted remarks to maximize accuracy of thematic codes provides an audit trail of true respondent remarks (Janesick, 2011; Patton, 2002). Miles et al. (2014) suggested that issues of confirmability enable drawing and verifying conclusions that can be trusted and caution researcher skill as what ultimately determines whether confirmability can be resolved through replicated studies. While trustworthiness is enhanced by triangulation through recording, transcription and participant feedback (Patton, 2002), I admit that I did not receive any participant feedback to make corrections or otherwise, though participants were given the opportunity to provide feedback on multiple occasions.

Ethical Procedures

In accordance with the ethical standards set by Walden University IRB, approval # 06-18-18-0242955 to conduct the study was first secured prior to implementing the pilot study and actual research (see Appendix A). This study targeted adults NPs 18 years of age and older and did not involve any treatment or bodily contact to participants. Practitioners who did not offer obesity counseling to clients or discuss obesity in academia were not invited to participate. Purposefully, the invitation to participate and informed consent form was sent to clinicians who met the inclusion criteria only. This was the only form that included personal information and was secured prior to the first interview, in a locked cabinet. It included demographic data: Gender, age, year of entry into practice as NP, branch of clinical practice, height, weight and a specific question regarding prior history of eating disorders. The question regarding treatment for current or prior eating disorders was the only relevant exclusion on the consent form. Eating disorders that require psychological treatment imply distortions of self-image and confidence and were beyond the scope of this study. The additional demographic data placed on the consent was for descriptive purposes only.

At all times throughout the recruitment process and data collection, participants were promised full authority to withdraw from the study without concern of threat, intimidation, or retaliation. The interviews were voice recorded with each participant for the purpose of transcription and recall of their responses. Afterwards, they were uploaded to my computer and assigned a unique identifier that assured anonymity of the respondents. The recordings were then deleted from the recorder device. I am the sole

user of the secured desktop computer, housed in an office with a lock, used for this research. No cloud storage was used. The dissertation committee and myself are the only parties that have access to this research data.

The interview notes are anonymous, recognized only through coded identifiers that allow me to match them with the respondents. At the conclusion of this study, all consents, field notes, transcriptions, requisite approval forms, certifications, and any other documents surrounding this study, will be converted into a PDF and scanned to a removable flash drive. Additional information found on my personal computer will be cataloged, filed, and secured for a minimum of 5 years conditional to scholarly publishing and Walden University requirements. Names of the participants will not be made available or disclosed publicly under any circumstance. In gratitude of their time, participants were initially offered a $5 Panera gift card for each interview; however, when I could not find them to purchase, participants were given a one-time $20 gift card.

Summary

This qualitative study was implemented to investigate developing framework for grounded theory on instrumental role modeling as perceived by nurse practitioners that discuss obesity in clinical practice or academia. Using a purposeful snowball sampling strategy, I set a targeted participant size of 16 to 20 NPs but a minimum of 12 to allow for unintended attrition. Each participant was to be interviewed on three separate dates, using the three overarching questions, and subquestions respectively. Since the idea of instrumental role modeling as a grounded theory was novel, and no scholarly data could

be found, it was necessary to implement a pilot study to assess the research questions for clarity and impartiality, prior to the actual investigation.

Data analysis was repetitive, with rigorous bracketing to glean theoretical indicators of instrumental role modeling. Together, the pilot study and the actual research were implemented to address issues of trustworthiness through how the documents were handled and to reflect adherence to ethical procedures. In he next chapter, I will elaborate the pilot study outcome, detail the research conducted, review data collection, and explain how the interviews were analyzed.

Chapter 4: Results

Introduction

For this study, I conceptually defined instrumental role modeling as an understanding of how physical presence gives meaning and quality to inspire change. However, it was an assumption that NPs mutually perceived this concept, and the gaps in the literature demanded investigation on whether a grounded theory framework existed. I developed the following three overarching research questions to address this gap:

Research Question 1: What does role-modeling mean to nurse practitioners?

Research Question 2: How do nurse practitioners perceive instrumental role modeling in encounters with others?

Research Question 3: What are the viewpoints of nurse practitioners relative to role modeling, instrumentalism, and physical fitness when counseling weight management?

I focused on internal reflections on obesity and weight management in this study for the purpose of exploring NP perceptions of instrumental role modeling through outward appearances and behaviors. Therefore, a pilot study was needed to evaluate meaningful proximity of the research questions with any existing theories surrounding instrumental role modeling. In this chapter, I detail the pilot study; how the results of the pilot study were used to improve the actual research; my regards for credibility, transferability, dependability, confirmability, and the use of rich and thick descriptions of participant responses that support issues of trustworthiness of data collection and analysis; followed by a concluding statement.

Pilot Study

After receiving IRB approval (Approval # 06-18-18-0242955) from Walden University, I implemented the pilot study using three peer colleagues who met the inclusion criteria. Since they were not going to answer the research questions but instead evaluate them, they were only sent the invitation to participate, and consent form for review but were not asked to complete it. Each participant was labeled PilotPart, followed by a number 1, 2, or 3, as a unique identification to clearly differentiate them from future research participants. All three practitioners worked in primary care settings, with the exception of one NP who also worked actively in academia. The pilot study took 5 weeks to complete due to availability of the participants. The interviews were conducted both in person and using video conferencing at three separate times. Prior to and at the completion of each pilot interview session, I bracketed my personal thoughts regarding the research questions from those of the participants. Patton (2002) suggested this exercise also helped with handling silent pauses and to encourage versus leading the interviews using a natural style and voice.

I conducted the interviews in person with one NP and through videoconference with the remaining two. After reading the daily script, each overarching question was read followed by definitions of critical terms as stated for this study. Participants were asked to provide feedback on composure of the script and the questions for characteristics of clarity, bias, leading, ambiguity, or redundancy.

The sessions were audio recorded and converted into a pilot evaluation table showing the daily script, research questions and subquestions on the rows with five

columns labeled clear, biased, leading, ambiguous, and redundant (see Table 1). The data were then returned to the pilot participants for evaluation with instructions to review how their responses were marked and to reply within 2 days of receipt with either “good as is” or to make corrections as applicable. All three pilot participants responded, “good as is” on how their responses were marked. Evaluation of the tables concluded that the introduction script and overarching research questions were collectively clear but the subquestions were not. Therefore, I removed the subquestions altogether from the individual interview plans (see Appendix B). Since the research questions did not need to be modified, additional IRB approval was not needed and this was discussed with the committee chair. The actual research was conducted using only the three overarching research questions.

Table 1

Pilot Evaluation

	Clear	Biased	Leading	Ambiguous	Redundant
Daily Script					
RQ1 – What does role-modeling mean to nurse practitioners?					
Please tell me what comes to your mind when you consider nurse practitioners as role models?					
What do you revere most about academic role models?					
On the issue of obesity, how should or should not role models motivate behavior change?					
What are the characteristics of role models you admire or dislike in practice?					
What characteristics do you recognize or reject as role modeling in you?					
If your place of employment wanted to mandate role modeling for all clinicians, what should or should not this mandate entail?					

	Clear	Biased	Leading	Ambiguous	Redundant
Daily Script					
RQ2 – How do nurse practitioners perceive instrumental role modeling in encounters with others?					
In consideration of yourself in practice, how do you serve as a qualitative tool?					
In what ways do you achieve goals in encounters with others? (Please think of a scenario to elaborate)					
Can you describe something you do or don't do to motivate others to follow or do what you want them to do?					
When discussing body weight and weight loss, how do you perceive your personal fitness as a motivator for change?					
What is your perception on motivating behavior change? -Should this be an expectation of nurse practitioners?					

	Clear	Biased	Leading	Ambiguous	Redundant
Daily Script					
RQ3 – What are the viewpoints of nurse practitioners relative to role modeling, instrumentalism, and physical fitness, when counseling weight loss?					
As a growing presence in primary care, how should nurse practitioners be expected or not expected to role model personal physical fitness?					
What are your thoughts about counseling weight loss?					
How does personal physical fitness translate or not translate into professional practice in terms of having an ability to impact others to follow?					
What should be expected of health professionals who people look up to for helping them make a change?					
Think about an instance where your behavior contradicts your expectations in others. How did you justify the contradiction?					
What role does or does not your personal weight have in the dialogue of counseling diet or lifestyle modifications?					
What are your thoughts about mandating personal physical fitness as an entry into health learning and practice?					

Setting

Using the snowball strategy of people who knew people that may be interested in participating (Creswell, 2007), I sent the invitation to participate and informed consent via e-mail to 60 people: 40 who worked actively in primary care settings and 20 who worked in academic settings. Within 1 week, I received replies from 20 people: 14 from primary care and six from academia. A second invitation was sent to the nonrespondents and I received an additional three replies. Most consents were signed and returned electronically; however, some respondents had technical difficulties with either opening or signing the PDF, so I mailed them hard copies via the U.S. Postal Service with return envelopes addressed to me. A total of 13 completed consents were physically received from willing participants and I personally knew none of them prior to commencing the study. All the consents were locked in a separate file prior to scheduling the first session. It was mutually agreed upon that the interviews would be conducted during nonwork hours, within the confines of our respective homes and with no other persons present.

Demographics

To satisfy a purposeful sample, three inclusion criteria were nonnegotiable. All the participants were required to be NPs, without current or past history of treatment for any eating disorder and who discussed obesity either in clinical or academic settings. The requirement to speak English was an oversight requirement, though it did not present an issue as all the respondents spoke English. The consent requested the following demographic data: gender, age, year of entry into practice, and weight. Some respondents answered thoroughly, while others chose not to fully disclose this information. I asked for

this demographic information only for descriptive purposes, and it was not directly relevant to the study. The consent data disclosed the following information about the participants: One male participant and 12 women, respondent ages ranged between 40 and 61 years old, and years in practice spanned from 6 to 33 years. The request for weight was only to describe BMI; however, height was erroneously omitted from the printed form and, therefore, was unable to be determined. Only one participant stated that she had always been normal weight with the exception of pregnancy. The remaining 11 participants self-disclosed as being either in the overweight or obese categories.

Data Collection

Video conferencing using FaceTime, WhatsApp, and Skype facilitated the inclusion of purposeful participants from the southwestern, Midwestern, and northeastern regions of the United States. These areas would have otherwise been difficult for me to secure participants in, due to geographic distance and out-of-state residence. Each interview session commenced with me thanking the participants for their time and stating that I would be turning on the voice recorder before reading the daily script. Once the daily script, corresponding research questions, and related definitions were read, the respondents were asked to respond. Some interviews lasted a full hour but on average, the duration was 30 minutes.

Every interviewee worked actively in primary care, though five had dual roles as professors in academia where obesity was discussed. Two participants taught solely online. Prior to scheduling the interviews, we mutually agreed that the interviews would occur during nonwork hours and in locations that could provide uninterrupted privacy.

Due to availability conflicts, one participant could never commit a time to conduct the interviews and another repeatedly cancelled the last interview without a foreseeable date to reschedule and, therefore, those two participants were dropped. That left a remaining 11 participants who completed three separate interviews lasting an average of approximately 30 minutes. On nine occasions, participants had personal conflicts with scheduled interview dates and/or times, requiring the interviews to be rescheduled. Some asked if the interviews could be done solely by phone without using the face-to-face feature; however, I explained that lack of face-to-face interaction would alter the integrity of how the study was committed to be conducted, leave open the possibility for respondents to multitask and do other things while the interviews were being conducted, and consequently, potentially affect the breadth and depth of their responses. Therefore, they willingly obliged a reschedule and the interviews were completed in compliance with the method stated for this study. The sessions were digital voice recorded with additional written notes taken as needed. I was always in my home office with the door closed and after experiencing three disturbances by family members on different occasions, I placed a warning, do not interrupt sign while the interviews were being conducted. There were no other variations after that.

Two participants were interviewed through Skype, three were through WhatsApp, and the remaining six were completed through FaceTime. No interviews were conducted in person, but all were face-to-face through video conferencing. On several occasions, video conferencing experienced some minor glitches related to low battery charges or slowing of Internet on the part of the respondents that consequently caused some

temporary freezing in the visual clarity. Inadvertent disconnection occurred four times due to participants' devices having low battery, during which time the recording was either paused or stopped until connection was reestablished (within less than 5 minutes).

I sent transcribed interviews to the respective participants via e-mail with instructions to review them for accuracy and make corrections wherever they believed their responses were misinterpreted. None were returned for corrections.

Data Analysis

Resultant of this study, I proposed development of a grounded theory on instrumental role modeling and used a total of 11 participants. While this was not the minimum target for participation, it satisfied data saturation when repeated interviews provided no new insight. Social constructivists analyze data using inductive reasoning through reflexive exercises of scrutinizing iteration and echoes of internal thinking (Charmaz, 2014, 2017; Miles et al., 2014). Therefore, greater clarity was experienced each time the interviews were listened and transcriptions evaluated. Bracketing before and after each original interview, prior to beginning each audio review, and subsequently each time I listened to the recordings also helped to keep in abeyance my thoughts from those of the participants. While there is no limit to how many times data should be evaluated, there are according to Miles et al. (2014) and Saldana (2013), two stages for coding it. Aligning with a social constructivist perspective, I chose to allow the codes to emerge versus limiting my interview style with preset codes (Creswell, 2007). The first cycle of coding was very repetitive and involved multiple reviews of the data to identify sections that were supposed relevant. In the Atlas.ti environment, I started with in vivo

coding which allowed me to use contents within data segments as a code. They included barriers, boundaries, communication, compassion, credibility, education, hypocrisy, knowledge, limitations, relatable, safety, trust, and sensitivity. Some in vivo examples were as follows:

- Barriers – "It's easier to delve in somebody else's life. I think we're more brave that way. I think that we can, we try to focus on other people and their lives, their emotional status, their coping strategies. Like we can talk about theirs but it's hard for us to deal with our own. Cuz then it starts to break down barriers, and well, and then nobody wants to deal with what's behind that" (NP419).
- Boundaries – "…the word to me that always comes to me is boundaries…. you have to do a good job at reading your audience" (NP105).
- Credibility – "…you have to believe their, their worth. That they, they, they have shown that they have credibility" (NP105).
- Credibility – "I do think it's an issue of credibility is the problem. For somebody again who presents as overweight and is trying to role model better behaviors for somebody else, their credibility is at stake" (NP419).
- Relatable – "I think sometimes patients can relate to a clinician better if the clinicians shares their, their own struggles" (NP604).
- Relatable – "There's so many different avenues and different ways in which to, to reach individuals. That's the whole point, that's why you have to, you have to be relatable to people" (NP1623).

- Relatable – “It’s almost more realistic to take advice from you than someone’s that’s not. That doesn't have that struggle, it’s very easy for someone to relate to someone that’s going through the same thing, than someone’s that’s never been through the same thing that’s telling someone, this is what you need to do” (NP521).

Next, open coding allowed those words that emerged from highlighted data to be assigned to short passages. They included engagement, expectations, literacy, outlook, priorities, professionalism, relationships, responsibility, skill, structure, style, technique, understanding, and values. Once I finished the coding, I then used the code by list feature to assign multiple codes to certain passages.

The second stage of coding entailed analyzing coded groups for patterns (Miles et al., 2014). This cycle was also very iterative as I reflected on the codes for context and meaning. Miles et al. (2014), instructed that pattern coding serves to categorize, explain, relate, and coalesce common themes (see Figure 1).

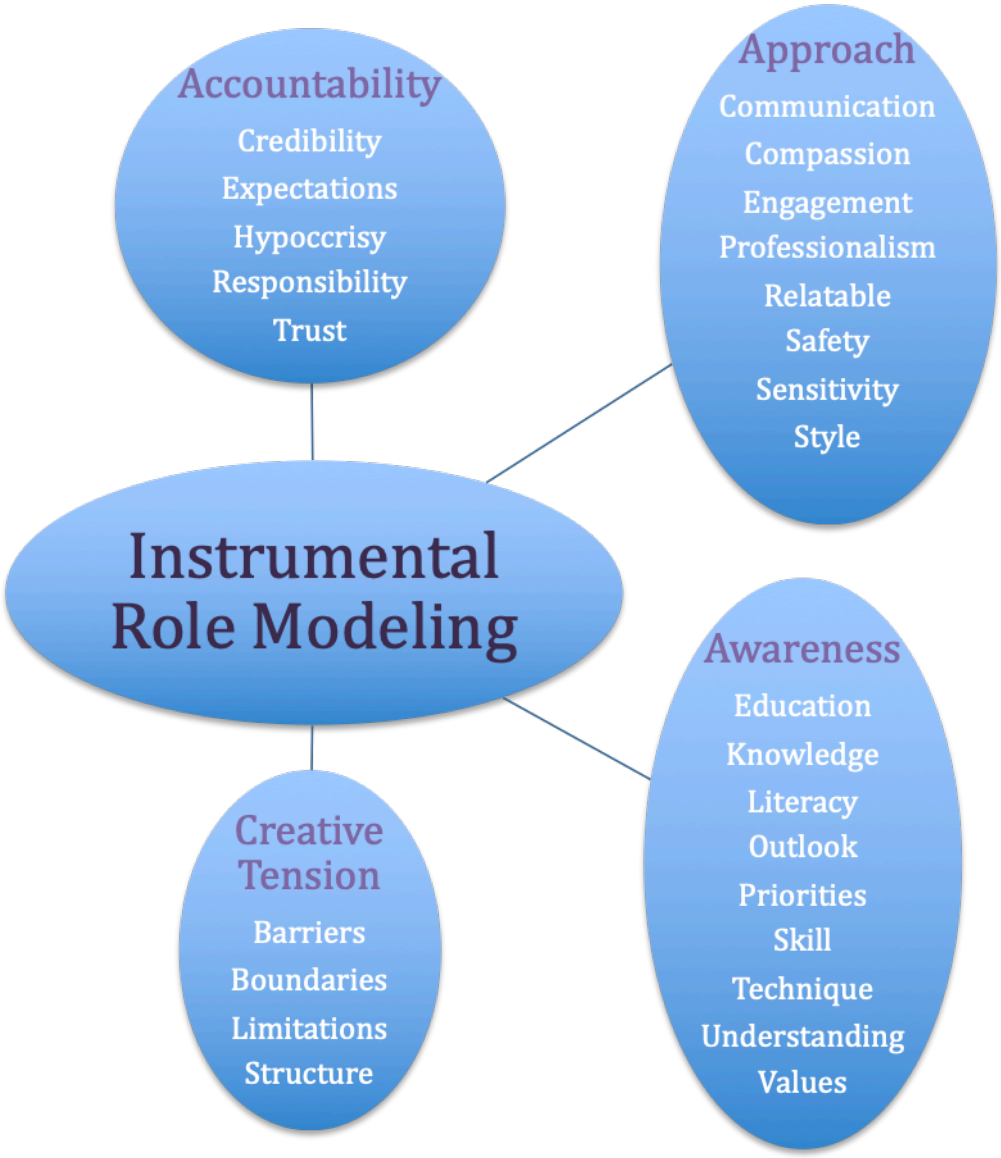

Figure 1. Patterns and codes.

This exercise produced partnered patterns of accountability, approach, awareness, and creative tension. Examples of their corresponding coded quotations are as follows:

Accountability: Credibility, expectations, hypocrisy, responsibility, and trust.

- Credibility – "So to tell somebody how to do it, and you can't do it, it doesn't make you a credible, you know, teacher. I honestly think the viewpoint is I'll avoid that conversation unless it's really something that affects their health" (NP313).
- Expectations – "Portraying oneself and what one does for ones job in a way that is ahm, inspiring, educational, helpful, ahh, the idea of being able to be a role model is ahm, ahm, something that we should all take very seriously" (NP105).
- Hypocrisy – "If I'm not willing to make the change, or I have not, you know, really made the effort, and here I am you know, encouraging people to do it, but, you know, it's somewhat, it's like hypocritical kind of, when you think about it. It's like I'm telling you, and I mean encouraging you to make these changes, but I have not taken them on myself" (NP2213).
- Responsibility – "I think the idea is for us to ahm, certainly show ourselves off in the best light. As far as being well-educated, being well-informed, ahm, being professional, being kind, being patient, ahm compassionate, ahm and ahm, allowing our patients and other nurse practitioners when we work with them, to ahm, you know, to absorb as

much of that as possible, ahm, for their own ahm, medical well-being, and then for, and then for professional ahm, development" (NP105).

- Trust – "So it becomes almost like tough to, to tell them what to do and we're not doing it. So I think that's where it, it lies. It lies within the self because it's tough for me to tell you oh you know, don't do this, and meanwhile, I'm no better" (NP403).

Approach: Communication, compassion, engagement, professionalism, relatable, safety, sensitivity, and style.

- Communication – "I think, if the practitioner had said, you know, I'm going through the same thing I'm telling you, and it's an issue that I'm dealing with now, I think that would have made a world of difference and that would have turned the whole encounter around" (NP521).
- Compassion – "That's just human nature and so that's where, if I've never felt someone's pain, than the thing is I need you to tell me about your pain so I can learn from it" (NP1623).
- Engagement – "I think that they should model the role first and foremost…. You want to play that part. However, you want to be the part. You know, play the part but act the part" (NP403).
- Professionalism – "I ahm, look at a couple of different things that make me ahm, respect them as a role model, one of which is their knowledge base, you know ahm ahh, not as much as let's say education because everyone you know you can have a lot of degrees behind your name and

not necessarily know a lot….do they stay current, ahm and do they show that to others that they know what's going on, ahm, how they are able to, ahm, you know give their information out, you know when if if, how they can explain things maybe better than I'm doing at the moment" (NP105).

- Relatable – "… do as I say, not as I do, because, and but, you also can empathize with the person in their situation because you can relate to them. You know what their struggle is" (NP42).
- Safety – "Whenever they come to see me, I want them to be able to relax. I don't want their time to be with me to be a time where they have to lie or they have to worry that I'm gonna gripe at them or complain, so I try to be even if I may not, it may not be their best health, I try to see the positive in in what they're doing" (NP1623).
- Sensitivity – "I would want them to feel comfortable where you know they can answer and they don't feel like it's rushed. They could, they could learn something from the whole process" (NP816).
- Style – "And what you don't need is a whole bunch of people pointing at you saying yeah, you see the elephant in the room when you're the elephant. You don't need that. You need someone to say it in a manner that you know, this is the problem you know, this is a health problem you know, we have these issues that we need to work out you know" (NP521).

Awareness: Education, knowledge, literacy, outlook, priorities, skill, technique, understanding, and values.

- Education – "We are there to advocate for patients and their health, and that's what we need to be as role models, so it's, it's important for us to, to know more and to be there more for for our patients, so we have to educate ourselves one way or the other, either through academia, where we're learning that way or through continuing education. Ahm, we have to see that there's a problem and educate ourselves and help guide our patients" (NP42).
- Knowledge – "Ahm, listen to them speak, are they well spoken, ahh, do they have a great sound of, you know, sound body of ahh, knowledge. Ahm, do they sound like they know what they're talking about. Ahm, that's what usually, initially attracts me to ahh, ahh, to an individual I suppose" (NP413).
- Literacy – "I was very adamant about ahm, looking the part, ahh, acting the part, uhm, documenting in a way that ahm, the students would present themselves as knowledgeable and professional" (NP604).
- Outlook – "…We take the science of what we've learned, we mix it with ahm practicality, a little bit of common sense, and then we impart that with, to those patients that we come in contact with" (NP521).
- Priorities – "I think the easier way is to hurry up and put the Band-Aid on, by giving the blood pressure medication, by giving you know, the insulin, so, I think that has, you want to hurry, because you don't want the person to have, to uhm, have any harm done to them" (NP42).

- Skill – "It's not a matter of status, its not a matter of position, it's a matter of a person that's able to impart by action, a person that's able to impart by knowledge, a person that's able to impart by deed that has impact on a persons life whether it be positive or negative is to be determined, but a role model has an ability to impart into another persons life" (NP521).
- Technique – "It means to me that they're looking at me to see how I'm doing things, that if I'm doing things the way that it's supposed to be done. Ahm, if I'm not taking shortcuts. They looking at me to say oh well, she's doing things the way it's supposed to be done. I think and ahm, so they looking at me like maybe – is doing this, so she's doing this so well, that, other nurse practitioners could be looking at me and so she's doing this, so maybe we need to follow what she's doing" (NP816).
- Understanding – "I think they look to see if your credible, they look to see if you have an interest in what they're saying, now, I always say I may not tell you exactly what you wanna hear, but I'm gonna tell you what's gonna help you" (NP313).
- Values – "I tell a lot of my patients you know, let's work on being a healthy male, a healthy female, and if you happen to lose weight on the side, you know, in the process, than so be it" (NP1623).

Creative Tension: Lastly, coded categories of barriers, boundaries, limitations, and structure.

- Barriers – “I don’t think we get to the bottom of it, because it’s almost us, identifying an issue with someone else. And it could be us, but you know what I mean, so I think, I think that’s one of the barriers. I don’t think we get past it because it, usually these people are in our lives for a short period of time and I think that there’s a perception, well it’s none of my business” (NP419).
- Boundaries – “These are conversations you should have with patients. It’s harder for me to move that to a peer conversation” (NP105).
- Limitations – “I think acknowledging ones own issue before lecturing someone on that particular topic, I think would enable the member to understand uhh the issue of obesity a lot easier and yeah instead of uhh, lecturing you know, you’re also admitting fault, your own fault, that you have difficulties with controlling your own obesity. Uhmm, and I think admitting that you’re not perfect, that you’re just as fallible as everyone else may make the sour pill a little easier for the member to swallow” (NP413).
- Structure – “Obesity it's not a topic like that, it’s part of, of a scenario. It’s part of a diagnosis, if you’re covering hypertension, then you’ll talk about diet. If you’re covering obesity, you’ll talk about diet. If you talk about ahm, chronic renal failure, you’ll talk about diet a little bit because of proteins” (NP42).

The coded evaluations were then sent back to the respective participants for the last time to allow their feedback. I received no suggestions or comments to render changes or modification. The patterns were then concentrated on for their ability to explain the research questions, and interrelationship to theoretical constructs that further framed a theory for instrumental role modeling. Research Question 1 paired patterns of accountability and awareness. The second (2nd) research question paired patterns of accountability, approach, and awareness, and Research Question 3 paired all the patterns of accountability, approach, awareness, and creative tension. The results section of this chapter will elaborate the theoretical constructs further and the interpretation of the findings will be expanded in the final chapter.

Discrepant case analyses are additional strategies employed by qualitative researchers to show that I handled the data with conscientious consideration for human tendency to confirm my own research questions (see Creswell, 2007). In this study, I sought to learn how NPs from clinical and academic settings, perceived instrumental role modeling related to discussions around obesity. Two separate and unrelated concepts, yet subjectively interrelated for their qualitative implications. NPs are a growing presence in primary care and academia is largely responsible for preparing them. Weight matters that lead to obesity and comorbid conditions maintain a steadfast growth in the U.S. (CDC, 2016) and discussions using NPs concerning instrumental role modeling seemed an appropriate fit. While the research focused instrumental role modeling, which will be detailed in the results section, some remarks offered discrepant views of instrumental role modeling as it related to obesity. Those discrepancies surfaced inconsistencies between

expectations and perceptions and gave meaningful reason for delving deeper into a theory on instrumental role modeling. Discrepant remarks will be presented after the results of each research question and elaborated in the interpretation of findings section of the final chapter to further enhance trustworthiness of the data collected.

Evidence of Trustworthiness

Credibility

Integral internal and external efforts implemented throughout the research process imply how likely the findings will be credible or truthful (Patton, 2002). Therefore, as sole the researcher instrument for this study, I executed a pilot study to assess the external validity of the research questions, after receiving Walden IRB approval # 06-18-18-0242955. Three peer colleagues were asked to evaluate whether the research questions and subquestions were leading, ambiguous, perceived as biased or redundant. Meaningful responses concluded that the subquestions were redundant but the research questions were collectively clear and could stand alone to generate rich depth and breadth. Internal validity of myself as the researcher was guarded through repetitive bracketing done prior to and after each interview, as well as each time I evaluated the data to separate my personal views from those of the respondents.

Transferability

Though this study did not strive application of the findings to all NPs, the research questions yielded detailed descriptions of perceptions and using participants of similar backgrounds could provide structure for future replication. A larger sample size using a mixed method approach would also enhance transferability. Nonetheless, the

resultant perceptions of instrumental role modeling from this study are externally transferable only to the participants interviewed.

Dependability

The definitions of instrumentalism, role modeling, and obesity are constant. The research design method and detailed explanation of my iterative role as the researcher, provides an audit trail for additional scrutiny. The research questions were crafted specifically for theory development on instrumental role modeling using NPs who provide obesity counseling and the respondent quotes give rationale to how they were inductively coded.

Confirmability

Rigorous bracketing, the audit trail, and participant views stated verbatim confirm my role as the researcher instrument. Each journal entry noted my perceptions of instrumental role modeling and any preconceptions of the participants prior to and after each interview. I also implemented bracketing before and after review of the recordings to increase my ability to interpret the participant perceptions. Journaling also provided an iterative chronicle of how I reasoned the study results using a social constructivist worldview.

Results

Three overarching yet interrelated questions were used for this study towards theory development on instrumental role modeling as perceived by NPs. Each question focused on role modeling with direct reference to issues surrounding the topic of obesity.

Therefore, to saturate data collection on perceptions, each prospective question expanded the concept of instrumental role modeling as a theory among the NPs interviewed.

Participants were asked to articulate what they valued in role models and their responses yielded patterns of accountability and awareness. Analysis of those patterned codes then generated a theoretical construct from the NPs interviewed as being mindfully responsible when interacting with others. Mindful responsibility depended heavily on academic preparation and a commitment to continue learning. When NPs enter the medical scene as advanced practice clinicians, they take responsibility for patient care management that involves assessment, diagnosis, treatment, evaluation, and follow-up (AANP, 2017). This demands continued learning that extends beyond the academic scene in order to remain current in improved treatment modalities. As primary providers, NPs are also accountable for using evidence-based standards of care that consistently work towards improving quality of life outcomes.

- Research Question 1: What does role-modeling mean to nurse practitioners?
- Partnered Patterns–Accountability and Awareness.
    - Accountability Codes: Credibility, expectations, hypocrisy, responsibility, and trust.
    - Awareness Codes: Education, knowledge, literacy, outlook, priorities, skill, technique, understanding, and values.
    - Theoretical construct for instrumental role modeling: Instrumental role models are mindfully responsible when interacting with others.

Participants communicated that knowledge with the ability to interact and give care was critical to role modeling. These characteristics were viewed as modular behaviors that complemented interpersonal interactions with others: Patients, colleagues or students. Obesity was not as much a concern as the necessity for expertise and behavior. Role modeling was described as:

> … being somebody who sets an example for others….who tries to keep the higher standard, in their profession, and somebody who can follow in that or emulate that person…. We are there to advocate for patients and their health, and that's what we need to be as role models, so it's, it's important for us to, to know more and to be there more for for our patients, so we have to educate ourselves one way or the other, either through academia, where we're learning that way or through continuing education. Ahm, we have to see that there's a problem and educate ourselves and help guide our patients…. I think that our patients look to us because a role model is somebody who people aspire to be or to emulate in some way. Uhm, that, we're looked to because we have uhm, a strong knowledge base, and that people look to us for direction. (NP42)

> …portraying oneself and what one does for ones job in a way that is ahm, inspiring, educational, helpful, ahh, the idea of being able to be a role model is ahm, ahm, something that we should all take very seriously…. I ahm, look at a couple of different things that make me ahm, respect them as a role model, one of which is their knowledge base, you know ahm ahh, not as much as let's say education because everyone you know you can have a lot of degrees behind your

name and not necessarily know a lot…. Do they stay current, ahm and do they show that to others that they know what's going on, ahm, how they are able to, ahm, you know give their information out, you know when if if, how they can explain things maybe better than I'm doing at the moment…. The idea of how they're able to teach, ahm are they good listeners, are they ahm compassionate, are they ahm clear in ahm, what practice should be and shouldn't be. Can they relate…. You kind of want the whole package in someone who's a role model. You want them you want to ahm, admire them. You want to say I want to be like them…. What I want from somebody else in a role model is what I want to be to somebody. I want to be able to have a good knowledge base, and be able to be a good teacher, that I explain things clearly, and, and, well, and, that other people are enthusiastic about hearing what I have to say…. I value in a role model, someone who's ahm ah, has ethics. Who, I, I, feel like you know, has, has in this day and age, has a good sense of right and wrong…. I think the idea is for us to ahm, certainly show ourselves off in the best light. As far as being well-educated, being well-informed, ahm, being professional, being kind, being patient, ahm compassionate, ahm and ahm, allowing our patients and other nurse practitioners when we work with them, to ahm, you know, to absorb as much of that as possible, ahm, for their own ahm, medical well-being, and then for, and then for professional ahm, development…. you have to believe their, their worth. That they, they, they have shown that they have credibility. (NP105)

…when I first started out as a nurse practitioner… there was a practitioner, she could just fly off her mouth and would just go off on things. She knew this, she knew that, she did, I mean and I used to just look at her and say wow, when am I gonna learn all of that. And one day finally, because you get frustrated and I said hold it, she's 67, about to retire, she's been doing this for how many years. How do I expect me, a new nurse practitioner, to know what she knows. And that's when I made up my mind to learn something new everyday…. She knew her stuff and that what I admired about her, I knew that her patients, if they went to her, they were, they were getting a complete work up. They were being advised properly. (NP313)

I, I, think, I think it's really in driving to, to, to be at the top of the field…. Unless you continue to educate yourself and the public, and maintain that trust, you know, that's how you advance, that's how you keep the public safe and that's how you maintain their trust. In advancement, in educating yourself, in maintaining and staying current you know, in your practice…. It's really in advancing your role, as a provider, and, and, and, and, educating yourself and the public so you can provide trust…. I think that they should model the role first and foremost…. You want to play that part. However, you want to be the part. You know, play the part but act the part…. So, when you want to educate patients about different things, promotion and prevention, you know, of, of, health, in that case, you, you, yourself, make sure that you're doing the right thing by you. You know and in

order to promote it to the patient, because that way you can be that, a, a, true role model. (NP403)

Education I think is just an incredible, incredibly important ahm, aspect of what we do, and educating the future generation of NPs and nurses, is vital to what we do and an essential aspect of our role…. Ahm, listen to them speak, are they well spoken, ahh, do they have a great sound of, you know, sound body of ahh, knowledge. Ahm, do they sound like they know what they're talking about. Ahm, that's what usually, initially attracts me to ahh, ahh, to an individual I suppose…. We have to look the part, and, and fit the part, and be the part, if you're actually getting through to the ahh, the other individual who's receiving that message. (NP413)

… they look to see when you're teaching and instructing. They look at you to see, if what you're saying is valid. Is it working for you. Are you doing what you're saying…. I think the best thing we can be, is an example, to our patients, because I think they'll listen to us more…. But I think they'll have more respect for us, if we can walk the walk and talk the talk too…. I see myself more as an educator, teacher, guider, not necessarily having the sheep follow me. (NP419)

We role model by our practice… the way that we practice. The consistency, the dedication, the ahm, always learning, the ahm you know, always maintaining that knowledge base… the level of professionalism that we bring…. It's not a matter of status, its not a matter of position, it's a matter of a person that's able to impart by action, a person that's able to impart by knowledge, a person that's able to

impart by deed that has impact on a persons life whether it be positive or negative is to be determined, but a role model has an ability to impart into another persons life. (NP521)

I was very adamant about ahm, looking the part, ahh, acting the part, uhm, documenting in a way that ahm, the students would present themselves as knowledgeable and professional…. I feel that I if I don't walk the walk, then it's difficult for me to counsel patients and tell them what they should do if I'm not doing it myself…. I think that our, our actions speak loudly…. when you, when you do conduct yourself in a manner where you're living, you know, you're trying to practice the, the lifestyle recommendations that you're giving to your patients that people around ahm, are affected by it.... If you want respect and you know, you want credibility, than this is what you need to do…. I think that this should be part of the conversation that we're having probably not just in the role course but throughout the curriculum…. I think patients need good role models. You know, they need to see that their health care providers are uhm, are doing what they're asking their patients to do… We need to teach students how to communicate in a professional manner…. Students need to be aware of that. You know, what patients perceive of them and what they think their lifestyle choices might be, is very important, very important to your effectiveness as, as, a health care provider. (NP604)

It means to me that they're looking at me to see how I'm doing things that, if I'm doing things the way that is supposed to be done. Ahm, if I'm not taking

shortcuts. They looking at me to say oh well, she's doing things the way it's supposed to be done I think and ahm, so they looking at me like maybe, is doing this, so she's doing this so well, that, other nurse practitioners could be looking at me and so she's doing this, so maybe we need to follow what she's doing…. they're looking at us to be more accountable…. If I'm looking at a role model to me, I'm not looking at appearance wise, like overweight. For me, it's, I think I see it more towards me like, how I conduct myself. What's my knowledge base, am I doing a good job with how I conduct myself when I get these members…. I would want them to feel comfortable where you know they can answer and they don't feel like it's rushed. They could, they could learn something from the whole process. (NP816)

So we have this ability to implement care for people and we can, we can show it through our personal lives you know, how do we, how do we provide you know, are we, are we a role model in, in how we take care of ourselves…. I tell a lot of my patients you know, let's work on being a healthy male, a healthy female, and if you happen to lose weight on the side, you know, in the process, than so be it…. You have to approach your patient or your person where they are. What's their level of understanding is. (NP1623)

I'm the someone who sets an example for the profession…. Anything that I would like the students to do, I feel that I model that behavior…. Whatever is their responsibility to do, I'm just as responsible to do in my role…. If I'm not willing to make the change or I have not, you know, really made the effort and here I am

> you know, encouraging people to do it, but you know, it's somewhat, it's like hypocritical kind of, when you think about it. It's like I'm telling you and I mean encouraging you to make these changes, but I have not taken them on myself. (NP2213)

These remarks reflected an appreciation for role modeling grounded in academia towards a conscious accountability to foster respect and trust. Yet, some discrepant statements implied at times inconsistent contradiction with how NPs perceived role modeling, further supporting a need for continued discussion to better frame instrumental role modeling as a grounded theory. The participants interviewed were clear about expectations of role models to have knowledge and modular behavior but discrepant testimonies suggested that role modeling did not follow a continuum:

> I mean I think, the role, my role as an NP, I mean they overlap because I am who I, my work, you know, my vocation and my personality are intertwined with one another… but there's a, a, a deviation. At, at some point, one stops, and the other begins, and so when I'm hanging out with my co-workers at a conference, I'm a coworker. I'm not, I'm not their provider. I'm not their educator. I'm not that conscience. And I feel really, really clear about that. And I, I don't think that that's, I mean to me, I don't feel good or bad about it. I feel like it's just a statement of fact. (NP105)

> I think teacher and role model can be separated. You can teach somebody something, but when you're role modeling, you're showing how to do it…. Now

when it comes to nurse practitioners and even dietitians, they,.. If you want people to do something you have to show them that it can be done. (NP313)

I don't think I try to get people to follow me. I try to educate them, more…. I don't really think that people are going to follow me. I think that I see myself more as an educator, teacher, guider, not necessarily having the sheep follow me. You know what I mean. I see myself more as a sheep herder, rather than having the sheep, like just trying to keep them all down the right, like that's how I feel when I'm teaching. (NP419)

If I'm in a private practice, you know, I rely on every single patient I see in order to make money, I'm not gonna to be so harsh on any patient that says they wanna leave my practice…. If being a role model, if I'm gonna make my patient unhappy, that's gonna be a problem. They're not gonna return to me and that's a problem. I want them to return to me. (NP2213)

- Research Question 2: How do nurse practitioners perceive instrumental role modeling in encounters with others?
- Partnered Patterns–Accountability, Approach, and Awareness.
    - Accountability Codes: Credibility, expectations, hypocrisy, responsibility, and trust.
    - Approach Codes: Communication, compassion, engagement, professionalism, relatable, safety, sensitivity, and style.
    - Awareness Codes: Education, knowledge, literacy, outlook, priorities, skill, technique, understanding, and values.

- Theoretical Construct for instrumental role modeling: Instrumental role modeling is a balance between accountability, approach, and awareness that leads to trust.

This question sought to learn NP perceptions of how behavior influenced change. Interviewee responses generated partnered patterns of accountability, approach, and awareness. Analysis of the patterned codes shaped the idea that trust was an important aspect of instrumental role modeling. Trust was established when NPs showed accountability to interpersonal interactions through awareness and approach. Discussions surrounding obesity swayed between intent versus failure. Clinicians needed to show empathy to relate and the ability to understand perceptions of health. Their own circumstances of obesity did not have to be perfect as long as they were able to gain the trust of others, through how they articulated health related illnesses secondary to obesity in a meaningful way. They communicated that they could still be instrumental to influencing change in others. Respondents said:

> The students know that I'm there for them, that I'm not just teaching a class. If they don't understand, they know that they can reach out to me and I try to find various ways to let the students understand the concept that I'm getting, cuz we all learn differently. For myself, I'm a visual learner, so I have to see everything to understand the concept. Some people can just read it in and, and get it, so I understand that people learn in different ways and I think because of that, ahm, I find that the, the students ask me a question and, feel comfortable in that way and I think that's a way of role modeling…. I can relate to the, to the patient, to our

members and let them know that it's not an easy road, but to explain to them the damages of obesity, of high blood pressure, and stress on the heart, uhm, and organ damages, just from diabetes, I mean just from being overweight. And diabetes is one of the other factors that happen from being obese, but to let them know that I understand that it's a struggle, you know and that I'm trying with them and that it's one step at a time and just to try your best. (NP42)

You want to be able to try to ahm, give people as much information as you can, as much support, as much guidance, ahh to help them be as successful as they possibly can be…. I think you can role model behavior by trying, by saying and trying to do your very best. You may be less successful at it, it doesn't mean that you're not trying and I think that you can ahm, show that role modeling even if as an obese provider counseling people, you can you can still do both…

Communication to me is very important, being able to be a good listener…. I want people to feel comfortable in coming to me and the same way that I want to be able to feel comfortable going to somebody else.… You want to ahm, portray yourself very professionally, ahm and ahm, be able to offer them guidance and suggestions and be a good listener…. Allowing our patients and other nurse practitioners when we work with them, to ahm, you know, to absorb as much of that as possible, ahm, for their own ahm, medical well being and then for and then for professional ahm, development…. So my job is to say to somebody even if, if they are overweight, to be compassionate, to be sympathetic, but also to say, these are the things that you, that we suggest you do, and, and go through what are your

stumbling blocks, what are the things that are affecting you. It's a much easier conversation to have with somebody who's a patient, than to have with a coworker… If I'm, in a situation where I'm the mentor, the idea is to offer them ahm, information that I have as far as guidance to how I would potentially uhm, counsel people…. I try to be very present. I mean I, I, I you know, personally, I try to be very present in the moment…. The idea is to role model behaviors, that we help, that encourage people to take good care of themselves. (NP105)

I think they look to see if your credible, they look to see if you have an interest in what they're saying…. Your knowledge base is what, how someone learns so they can improve and and, be better in practice…. I think it's explaining things the way they'll understand. When it comes to my patients, the same thing, you have to really meet them where they are, and go from there…. I find that someone who has a weight problem kind of relates when I explain I understand because I have my own personal struggles…. Now somebody like that, who's been to the bottom, you, you've been there and you were able to rise, I want to hear from you, because I'm sinking. How did you rise…. Its different when somebody who has a problem, talks to you about that problem than if a ninety nine pound person tells you oh you just cut out this and that and you'll lose weight. (NP313)

… being part of those organizations you know, you know, representing our you know, each other and like going to congress and, and, having a voice to advance our practice with practice. In that sense we can make a difference. We can be instrumental in our role. You know as, as, as, as, providers…. So, in in joining

those organizations and being part of that group, right, we're stronger. So that's how we can have a voice and be instrumental in those aspects…. Make a voice heard through national organizations, to join them, to be a part of them. That way you know, their, their, profession can be represented…. Unless we grow in numbers you know and then, get in, get involved into policy changes and stuff like that, you know, by voicing our opinions before congress and stuff. So, so, those in academia or actually, had a better position to be more instrumental to those NPs coming in, and educating them in their future roles…. You really have to look at the self-first and determine okay, how can I discuss this with anybody, even with my patients, when I'm not, where I need to be myself…. Every day in my practice, any persons I encounter, I always try to find ways to change behaviors, whether its smoking, whether its alcohol, whether its drug abuse, you know, whether its opioid dependence, whether its tobacco dependence, whatever it is. So we're always trying to educate them as far as changing their behavior and applying different like you know options. Whether its applying certain modifications, you know, to make sure that behaviors change by any means necessary and also too ahm, especially now with, with, diabetes, obesity. (NP403) It's one thing to help. It's an incredible thing to know that the information that you're sharing with them, they could potentially use…. I very much appreciate the knowledge base of those individuals that I enjoy to follow…. Listen to them speak, are they well spoken, ahh, do they have a great sound of, you know, sound body of ahh, knowledge. Ahm, do they sound like they know what they're talking

about. Ahm, that's what usually, initially attracts me to ahh, ahh, to an individual I suppose…. I think acknowledging ones own issue before lecturing someone on that particular topic, I think would enable the member to understand uhh the issue of obesity a lot easier and yeah, instead of uhh, lecturing you know, you're also admitting fault, your own fault that you have difficulties with controlling your own obesity, uhmm and I think admitting that you're not perfect, that you're just as fallible as everyone else may make the sour pill a little easier for the member to swallow…. A little comedy, a little self-deprecation helps the sour pill go down a little faster…. Well one technique that I tend to use again I suppose, with ahh ahh, motivating ahh, folks with respect to obesity is the fear of diabetes…. We have to try to verify how one values himself. How one sees himself" (NP413).

If I own my own issue, I struggle with this too. Clearly I'm, I'm not winning my own battle at this, but I'm not pre-diabetic or I am pre-diabetic. Don't be like me. Then, if there's, if there's honesty about it, something like that which is obvious to our patients, then I think that we don't have to be ahm, we're not really hypocrites. Because nobody's perfect. Nobody's perfect and ahm, if we own it, then we're OK, but if we are preaching one thing and doing another, then I don't know how much the receiver is gonna to take away..… I do think it's an issue of credibility is the problem. For somebody again who presents as overweight and is trying role model better behaviors for somebody else, their credibility is at stake…. They're gonna hear, what they see in us, more than what we're saying….

They won't look at what they're saying and doing and us first.… But it was more that they practiced what they preached…. But also to lead by example. (NP419)

We take the science of what we've learned, we mix it with ahm practicality, a little bit of common sense and then we impart that with, to those patients that we come in contact with…. I think the level of professionalism, the level of dedication, the ahm, ability and the willingness to impart knowledge…. I think it's all in the manner that you impart knowledge, because anyone can say something to you, I think it's the manner that you deliver it that has the most impact…. Talking the talk and walking the walk. There's a difference and I think when you come off as someone who's real and who has real struggles and real problems and your approach, I think you get more positive results…. If you have a lifestyle that's working, than it's much easier, you know, for someone to, to, to, to, endorse your lifestyle because they see that it's working for you. (NP521)

There's still that, blaming, going on you know. Blaming people for their, for their ahm, for their weight or for their state of obesity…. I think, the whole concept of motivational interviewing where you really try to find out where that person, where that individual is right now, with, with how they're, how they, how they feel about their weight. You know, is it affecting their lifestyle, are they worried that they're gonna have health issues down the road…. to use motivational interviewing and to approach the patient with their weight related health indicators, their BMI, their waist circumference, their percent body fat, and approach it the same way that you would if were counseling them regarding an

elevated blood pressure reading…. I'm, I'm not saying that I'm perfect, but I, everyday I try. And I think when I have difficulties with it myself, it, it only helps me to be more empathetic with my patients when they uhm, are having difficulty, you know, staying with these lifestyle changes. (NP604)

I think probably the first thing that would come to my mind is how knowledgeable they are…. how are they coming across…. I would want them to feel comfortable where you know they can answer and they don't feel like it's rushed. They could, they could learn something from the whole process…. I found when I was paired off with nurse practitioners when they were seeing their patients, they took more time and I could see, they were more caring…. However, I don't think that there should be an issue that okay if I'm coming to a home and I'm overweight and I'm teaching you, that doesn't mean because you're overweight and I'm teaching you to lose weight because, for your health, uhm, because I'm overweight, I can't teach you what I need to teach you. I can still do that. (NP816)

That's just human nature and so that's where, if I've never felt someone's pain, than the thing is I need you to tell me about your pain so I can learn from it…. Whenever they come to see me, I want them to be able to relax. I don't want their time to be with me to be a time where they have to lie or they have to worry that I'm gonna gripe at them or complain, so I try to be even if I may not, it may not be their best health, I try to see the positive in in what they're doing…. I try to make sure when my patients come to see me, that they know that that's a safe

place and we can, I can, I try to be very forthcoming with them from the very beginning…. If we care about our patients, you know, people can, people can see that, and then we're better able to deve…develop plans and treatment plans for them because they are, they're able to tell that we are compassionate about them and even when we make mistakes and we ahm, are insulting or we say something and we misspeak, they can understand, they can see our heart and they can you know recognize it, where we care about them, we're not just trying to be a jerk… I try to create a space where they are just in a place where they can trust…. Well if we're gonna talk the talk, we have to walk the walk. We have to do a lot of that. We can you know, we must, I think we have to ahm, even if we are not perfect at what we're doing, even if we do not have the best BMI and even if I do eat the donuts out of the vending machine in less than a minute, you know, recognizing that that's not the best choice, and that probably you don't need to do that, as being human, and being able to be relatable, and say you know what, that wasn't good and I'm gonna, I'm doing it, I have to do over, I'm just going to start over, you know…. There's so many different avenues and different ways in which to, to reach individuals. That's the whole point, that's why you have to, you have to be relatable to people. (NP1623)

When I think of instrument, I think of you know, how you're helping someone or how you partake in this persons ahm, life as a health care professional…. when I work with my patients in clinic, you know, having visual, you know, I have different things in there for them to visualize, we have models, we have books,

> pictures, you know, we print up materials for them to read, so taking those things into consideration, when you are, you know teaching ahm, the patient about whatever it may be, you know and then you being that instrument, that's, that's in that sense what I was trying to say before, ahm, utilizing all those things that I have learned, to be that instrument ahm, for that patient to ahm, understand or learn whatever they need to learn…. I do discuss weight with them, with my patients, I do express to them that they should lose weight. Uhm, what makes them do lose weight, ahm, and and I just share with them, truthfully, it's difficult, but, you know, I try…. I show them, I bring my own food, you know, how small my bowls, you know, I have things that I eat like an apple…. Depending on their mood. Some of them will you know, have snide remarks, like well you need to lose weight or what size do you wear, you know and things like that, so I'll tell them, I wear an extra large, and they'll say you know, shouldn't you be losing weight and things like that. So, I mean, I do, I try, not hard, but I do try. …. And I'll tell them some of the things that I do. Ahm, I make sure I have my breakfast, I watch what I eat, I measure things, but you know. (NP2213)

Through these statements, the participants communicated the concept of instrumentalism as deriving heavily from knowledge, but requiring some level of relationship building in order to establish trust in their delivered messages. On the topic of obesity however, some comments were still ambiguous with relation to instrumentalism and role modeling, reflecting gaps in knowledge. Again, inconsistent contradictions with how NPs perceived role modeling and backing organized efforts for

continued discussion to better frame instrumental role modeling as a grounded theory. Statements such as:

> I think the easier way is to hurry up and put the Band-Aid on, by giving the blood pressure medication, by giving you know, the insulin, so, I think that has, you want to hurry, because you don't want the person to have, to uhm, have any harm done to them…. Obesity it's not a topic like that, it's part of, of a scenario. It's part of a diagnosis, if you're covering hypertension, then you'll talk about diet. If you're covering obesity, you'll talk about diet. If you talk about ahm, chronic renal failure, you'll talk about diet a little bit because of proteins…. We just barely talk, or it's spoken about in the acute care program in relation to a disease process. Not by itself, so if you're talking about hypertension, or something like that, then, you'd talk about you know, weight, weight loss, but it's barely talked about. (NP42)

> Is it more challenging sure, but on the other hand, I think ahm, somebody may be able to relate better to them than like a stick skinny clinician, ahm, who's gonna to go in there and start talking to people about watching what they eat and obesity, ahm and they make the the patient's themselves, may end up having some resentment to a person like, that, where they say they don't understand my challenges and to someone who is heavier ahm, I think you can again be that role model because you can understand their challenges…. I think society has missed its' mark on obesity…. I don't think this is an issue of academia as much as ahm, we all in society have to face it…. Ahm, so I graduated in 1984 from my NP

program and it was a different time. In that sense, no, I don't think we, there wasn't a lot of emphasis on ahm, obesity, in my program, at that time…. It's interesting because if you had a coworker, that you knew was abusing a, a substance…. You might have a very quick conversation with them about, just you're gonna lose your license…. I think it would be almost easier to address that then if someone was overweight. There's a line that I think, ahm, we don't cross and I don't know if it's, I don't necessarily think it's wrong that we don't cross it…. I mean, the lines are very different. I mean if I had a really good friend, who was not taking care of themselves, I might be able to approach them differently, than per se, a coworker, who I have a professional relationship with, but unless they specifically asked me for information, uhm, I don't think it's wrong that we're not having a conversation…. I think, uh, in our role, as, as nurse practitioners for our patients, we all, we should role model. The idea is to role model behaviors, that we help, that encourage people to take good care of them selves. Taking their medicines, getting exercise, going to the doctors, getting enough sleep. So, ahm, there, it's a wonderful thing, for nurse practitioners to do and I think that that's part, that's an intrical part of our job. It's again, role modeling for your peer is a different story. (NP105)

I think, for people to really ahm, to make changes, some times certain graphic images have to be emblazoned in their minds…. Well one technique that I tend to use again I suppose, with ahh ahh, motivating ahh, folks with respect to obesity is the fear of diabetes…. Now if we were in a socialized system, it would be

different, I think…. If we weren't driven on profits and we had more time to spend with patients than perhaps maybe we would see a bigger difference, or something rather different than we're currently seeing right now…. Well, ahm, we could ahm, delve into many different aspects of the causes of obesity. Where, one may not even have the time to actually go through many of those causes with the member within that 15 minute window, ahm, and, ahm, you may be able to psychia, go into psychiatrically while the member may be obese, or try to delve into a little on their past, to try to figure out what's going on, ahm, but I think within our system, we just simply don't have, we're, we're time, the time constraints ahm, seem to be an issue. (NP413)

I just think that ahm, if I want someone to follow me, than I feel like I need to be perfect. And I don't want them to follow my imperfections. Right, which is again, part of the reality, that no one is perfect and that it's okay…. I see myself more as a sheep herder, rather than having the sheep,… like just trying to keep them all down the right, like that's how I feel when I'm teaching.… So when you get to that man that I said, okay we need to talk about your weight, you know, you're in the obesity category and he's like go ahead, you'll be prying that cold beer out of my cold hard fingers and then you're like okay. So there's non-compliance. We document it. We said we talked about it and then we don't bring it up again because it's been, it's been, held with such resistance.

But I think, if we had an initiative, I think, then we could hide behind it, just like even if we're obese and we're telling our obese patient they need to lose

weight. We can hide behind the standard. We can, we can hide, we can get behind, well this is your patient, you have to educate them about their risks for cardiovascular disease and diabetes, like we can get behind that because there's a standard and we could put our teacher hat on. Now that same standard exists for student, but it's not in the curriculum, so we can't hide behind it…. I don't think societies given us the green light to talk about some things. (NP419)

I mean, we know about obesity. We know it's a leading cause of all these illnesses that we have and how it's causally related to all these medical problems: diabetes, high blood pressure, heart disease. We know all that, but there's no emphasis of that taught in school. I don't think academia emphasizes it enough. I think education has to come first. And then the role modeling, come second. Because I think with education, you kind of encourage change. And when you encourage change, then you can role model the behavior that, you know, that, that you've now integrated into your lifestyle. (NP521)

The correct approach is to you know, ahm, use motivational interviewing and to use, ah, weight related health indicators: BMI, percent body fat, waist circumference, you know and approach it the same way you would approach… if you measured their blood pressure and it was elevated…. But, you know, the more we speak about this, the more I realize this doesn't really come up in, in, in conversation in class. It's, it's, it's, it's really more about, you know, the you know, the tools that we need to diagnose and treat your patient and less about

> what type of an impact are you having on your patients, ahm, you know with you're role modeling, with your you know, your nonverbal behavior. (NP604)

These discrepant statements reflected that while clinicians can recognize benefits of instrumentalism in practice, there still exists a disconnect with understanding how nonverbal behaviors as one participant put it, alters the communication process. "They're gonna hear, what they see in us, more than what we're saying…. They won't look at what they're saying and doing and us first" (NP419). Though there have been targeted efforts to recognize obesity as a primary diagnosis for other secondary problems, that may have more acute instabilities, it is still not uniformly recognized for it's qualitative influence within patient-provider-colleague-academic-student interactions.

- Research Question 3: What are the viewpoints of nurse practitioners relative to role modeling, instrumentalism, and physical fitness when counseling weight management?
- Partnered Patterns–Accountability, Approach, Awareness, and Creative Tension
    - Accountability Codes: Credibility, expectations, hypocrisy, responsibility, and trust.
    - Approach Codes: Communication, compassion, engagement, professionalism, relatable, safety, sensitivity, and style.
    - Awareness Codes: Education, knowledge, literacy, outlook, priorities, skill, technique, understanding, and values.
    - Creative Tension Codes: Barriers, boundaries, limitations, and structure.

- Theoretical construct for instrumental role modeling: Instrumental role modeling demands awareness of creative tensions that exist between accountability and approach when discussing illnesses and their health related co-morbid conditions.

This question sought to understand how NPs communicated perceptions of instrumentalism, role modeling, and physical fitness operationally when counseling obesity. Knowledge of BMI metrics and obesity health related indicators provide clinicians a starting point from which to initiate discussions that are often perceived sensitive, yet fundamental to primary care whether in practice or academia (NIH, 2015). This subject continues to generate awkwardness but must be handled professionally in manners that do not isolate or offend, while consistently delivering consistent information (Mui et al., 2018). Therefore, I questioned participants to self evaluate how their personal perceptions influenced professional behaviors and to compare those behaviors against personal professional role expectations. Responses generated partnered patterns of accountability, approach, awareness, and creative tension. Exploration of the patterned codes molded a theme that grounds instrumental role modeling as an awareness of creative tensions that exist between the consequences of knowing and the responsibility of how to deliver. Instrumentalism, role modeling, and obesity were discussed essentially in all the questions but this question narrowed it more specifically. Resultantly, participant discrepant remarks became increasingly more difficult to isolate as they blended with overall perceptions of instrumental role modeling. The responses showed conflicts between perceptions, knowledge, and how to communicate information when

interacting with others. While the NPs interviewed collectively agreed that instrumental role modeling embodied an appearance and behavior in the first two research questions, their communications progressively struggled between knowledge of the BMI metric, health-related indicators and their approach to implementing the conversation of obesity. There were insinuations that blamed academia, personal failures and social systems; yet, the expectation for instrumentalism remained unchanged. Discrepant statements became increasingly more difficult to isolate as they blended with overall perceptions of instrumental role modeling. This gave clear support for the need to delve deeper into this topic for qualitative solutions. Respondents recognized the need for role modeling but could not reconcile personal accountability to be instrumental role models:

> So I can relate to the, to the patient, to our members, and let them know that it's not an easy road, but to explain to them the damages of obesity, of high blood pressure and stress on the heart, uhm and organ damages…. to let them know that I understand that it's a struggle, you know and that I'm trying with them…. Members who are, normal weight, will say, you're the healthcare provider and uhm, somebody said to me, many of our staff are overweight and we're coming there and teaching them, yet, you know, like, we need the teaching, but you know, I tell them that we understand everything behind it, you know, doing it is another thing…. We're educated and now, the next step is for you to follow through on the education…. I think that once I say that their blood pressure's stabilized, that their diabetes is stabilized, that, that teaching aspect now is gone, of let's lose the weight so you could come off of the medication…. Do as I say, not as I do…. I'm

not looking at myself like, ahm, how did I come across to this person, when I'm talking to the patient. I'm just in the moment with the person and just, empathizing with them and using my knowledge to teach, but to teach the patient.

We will touch on diet and exercise but it's not a subject, on to itself. It's just barely touched on…. We didn't get a lot of education on, on diet and obesity…. To be honest, I think I separate myself from what I'm teaching the students, cuz I'm so much focused on their learning and making sure they're understanding what I'm trying to get across to them. So I, I separate myself from that aspect. Now when I'm with my patients, that's different…. But when I'm with my students, like I said, I'm out of it, but I'm not looking for a self evaluation per se. (NP42)

I think personally, one's own personal weight doesn't impact on how good a clinician they are, how good they can be for that client, and or other NPs, but it, it definitely impacts perception…. Everyone perceives, everyone's perception of weight is different. There are people who I have known over years, who I would look at and think that they're heavy and they think that they're great looking. You know, people, some people like a very curvaceous body and then they think that is, you know, for them and again no right or wrong, but that, that's not being overweight. Where, and so, the question, comes in for the practitioner as well what's their baseline. What's overweight for them…. I think, I mean, you can go straight by BMI, but you know, that's, those are just numbers, that's not real life…. When you're a provider to your patients and that's your role. Then it's

very clear. Our job is to provide education. Ahm, the good, the bad and the ugly. You know, what you're eating, ahm, ahm, good choices that you make, bad choices that you make, being supportive and understanding…. It's much clearer and it's a much easier conversation where you talk about being a role model, and being instrumental, and being an advocate, or, all the things that we can do for our patients. The question as far as a role model to other clinicians, it's much easier to have a conversation about how I can be a role model to other clinicians regarding uhm, ah, ahm, diagnoses, regarding practice, you know, how, how do we provide care for our patients. How do you do this, how do you ask that question. That kind of stuff is really easy to have with, with other clinicians. The weight is a, the obesity issue in itself, is almost an animal all by itself. It's not something I've ever thought about. The questions that you've asked me, are not things I, I think about. I'm not uncomfortable with the conversation, I, you know, I could talk with anybody about anything…. It feels like it's just the boundaries…. A clinician is not a better value if they have a BMI within normal limits versus a BMI that's elevated…. I think what happens is, there's a perception of what people see. If a clinician is significantly heavy and comes into a patients home, there's some real perceptions when they try to educate the patient on diet and exercise, like they hit a wall and that's, that's a challenge in itself…. I find it, the the things that are two completely different conversations when you're talking about yourself as a role, as the NP, at a role, as a, as a nurse practitioner. If I'm mentoring, if I'm in a role where I'm mentoring a nurse practitioner, if I'm training somebody, if I'm

imparting information to them, I might be much more apt to say hey have you thought about this. You know, in a non-confrontational way, but on ah, you know, friendly hanging out kind a level, uhm, yeah, it wouldn't occur to me…. My appearance, does set the stage.… I think the idea of nurse practitioners as role models, uhm as uhm, people who can try to effect change, uh, I think that that's a terrific place to be. I don't know how you combine the role of a nurse practitioner when I'm in the role of a nurse practitioner when I see a member versus when I'm with my peers…. I'm comfortable having conversations that sometimes could be uhm, challenging…. If you're talking to a group of women and or men, that have struggled for, you know, a long period of time, with their own issues of obesity, I think it could become much more uhm, tense, or uncomfortable. If you're with a group of clinicians and if you get, you get ten in the room, who are very fit, the conversation is very different. So that the conversation changes based on who the audience is…. So perception, I mean again, these are things that drive, the day, they drive our opinions, I mean how we all self-perceive, uhm, ourselves and how other people perceive us. Uhm, so, I mean, I, I, I always think it's, it's worth having a conversation and then, again the point comes, like we, whatever we discuss with patients, you can tell when people are receptive to you and when they're not…. These are conversations you should have with patients. It's harder for me to move that to a peer conversation…. For somebody again who presents as overweight and is trying to role model better behaviors for somebody else, their credibility is at stake. It doesn't mean the information you're giving is any less

valid though. But the question is, how do they perceive it. How does the person perceive the information they get from somebody who's BMI is at 32, versus someone who's BMI is 28, versus 21. Uhm, you know, this becomes to me, some other societal issues. Well, you know, the idea that, what's valued. (NP105)

I think we honestly avoid the conversation if we're not physically fit. Because ahm, it leaves you open for the patient to say well, what about you…. To tell somebody how to do it and you can't do it, it doesn't make you a credible, you know, teacher. I honestly think the viewpoint is I'll avoid that conversation unless it's really something that affects their health. (NP313)

Obesity that doesn't mean I'm not healthy…. I've seen the healthiest patients be obese. They don't have one medical condition except they're overweight. Sometimes it's hereditary, it runs in their family. Sometimes it's just you know, it's just like I said, like lack of control…. As far as physical fitness go, sometimes I think that you can't really look at body mass index because some people, they can have a BMI of 20 but they look so sick…. I never look at physical fitness for, with regards to body mass index, because I think it's over rated, body mass index, you know. However. I I, I do look at health. I do look at you know, ahm, ahh mental health and physical health in the sense that, you know, is the person healthy. How's their cholesterol, how's their diet, you know. How's their diabetes. Then, then, when they have these comorbidities, and in addition to obesity, or other, the, the, then I really go on to physical fitness because I tell them, listen, you know, you're at risk for diabetes, you're at risk for COPD and

insulin resistance, etcetera, and high blood pressure…. That's how I perceive you know, physical fitness and also you know, role modeling, with respect to my patients…. I think we should look at it in respect to health, because somebody could be 20lbs overweight, but then they have a perfect, like, chemistry. You know, as far as on paper, they're perfectly healthy. Their blood pressure's perfect, their heart rate is perfect, they, they, they, they're, they're lipid panel is perfect, their A1C beautiful, you know, basically, they have, on paper, they're perfect. You know what I mean and they have a little bit of extra weight, I, I, I, I, I, think there's levels to obesity you know. When we look at like you know, overweight and obesity and morbidly obese to think there's levels you know, to reach because sometimes those things, they can start causing, like I said, chronic condition, like arthritis, you know and then different things like that. So that's when they come to play, when they affect health…. If I have to discuss obesity with my colleagues, I'm preaching to the choir, because they're gonna, they already, they're gonna tell me, I know already. (NP403)

If there was some relatively free reign and you didn't have to worry about anybody coming down on you then perhaps I think a lot of people would engage in-in these important topics, but you know, at the bottom line the clinician is there t-to, I guess at the end of the day, is there to make sure that they do their job to the best of their ability and not be reported or not be I think not be complained about…. Nobody really wants to get into any issues with anybody its, that's one of the reasons people just kind of avoid it or brush it under the rug…. I think, I

think that may be ahh, some NP's may be a bit more ahm, reluctant to bring up I.. sensitive issues like that for fear of possibly making someone, ahm, uncomfortable. Ahm, it is their health afterwards, ahm, they may not mention all the ahm, risk factors associated with obesity. They may just touch up lightly on the subject, oh you might want to benefit from losing some weight, or walking an extra hour will help you. But no one really sits down I think and really talks to everyone about these real horrific risks of, of, of, of, of, of obesity. Just cancers and strokes, and heart attacks and diabetes. Ahm, at least that would be my, my thinking…. I think it's that and also time, you know, when you're being pressed, ahm, if you're working in a clinic, you're being pressed, you know, you really don't have the luxury of sitting there, ahh, and having a very lengthy in depth conversation on obesity with someone. When everyone's looking after the bottom line, which are the numbers…. We're also a society where we like quick fixes. So, there really isn't a lot of money to be made, I guess, if you're counseling someone on the importance of losing weight. When, you know, a consult, an obesity consult will end up you know, ahm, I guess ahh, will end up fixing the short term issue I guess and charging, and making money off it. I mean it's an important topic initially. But you can only, you know, you can only say the same things over and over, a handful of times. At some point you know, there's gonna have to be some other alternatives, and so that's where the other aspects of medicine come in and, we're profit driven, so there aren't any profits in, in, in obe…. in, in, in, educating folks against the importance of ahm, weight loss for

that specific moment in time as there are in, weight reduction, yeah let's ah, we'll give you a lap band, we'll give you this. We'll give you that…. So we don't focus, this is not a country on prevention. We're reactive. (NP413)

I look at people who are in the overweight category as, they're healthy. They eat three square meals; just leave them alone, like that's kind of how I feel. It's not till they get to that obesity category, that I'm like, well, we better talk about it, but it's a difficult conversation every single time…. But I think too, okay I think if I'm being completely honest, teaching is something you can kinda hide behind. Like it's easy to put that hat on and talk about things like obesity like I'm not included…. It's easier to delve in somebody else's life. I think we're more brave that way. I think that we can, we try to focus on other people and their lives, their emotional status, their coping strategies. Like we can talk about theirs but it's hard for us to deal with our own. Cuz then it starts to break down barriers and wells and then nobody wants to deal with what's behind that…. I don't think we get to the bottom of it, because it's almost us, identifying an issue with someone else. And it could be us, but you know what I mean, so I think, I think that's one of the barriers. I don't think we get past it because it, usually these people are in our lives for a short period of time and I think that there's a perception, well it's none of my business…. I'm just probably, a bulldozer I am with my patients. So I probably treat things, I treat people differently. In academia with my students, I probably would never address it…. Now with my patients it's a different story, with my patients, I would absolutely address it. But I do think that, we should be

able to address it at least from the standpoint of, so this is gonna be the expectation for our patients, this is what we're going to teach them, ahm, so you have to be able to look at your own self when they look at you and say, so you're not doing that…. But with my patients, I'm not as afraid. You know it's part of our assessment, their BMI's, so every single day all day long I'm saying, okay so this is the BMI where we'd like to see you and this is your BMI, so you're increased risk for this, this, this and that, even if you can drop it a couple points, it will put you in a better standing…. With students I think, what's preventing me, personally, from saying that, is one I feel like that might create a barrier to their learning because now it's such a sensitive topic they're gonna be, their feelings are gonna be hurt, I can see them get other students involved and say can you believe she said that to me and then it's gonna create a barrier I feel, to they're learning. Now that's not fair to them because then I'm, I'm limiting them. I'm limiting them already, because maybe they wouldn't say that. Maybe they would be like you know you've given me a lot to think about, ahm, so I might be limiting their understanding and their maturity, or ability to take honesty…. I think we have to get to a point where we're not afraid to talk about the elephant in the room when it comes to us. (NP419)

So, I personally have trouble with the BMI scale, but that's just me…. A lot of my clients have told me well the BMI wasn't made for me. It was made for some European person you know…. Do I think it's an effective tool, no, but I do mention it…. If I tell you your BMI is 30 and you look at me and my BMI is 35,

and I tell you that you need to lose weight, then the thought that naturally occurs to most people is, you know, pot and kettle…. We have had the conversation, where I say you know this may be barriers to some of your teaching clients and it may ahm, be a hindrance…. You could say, I know that I'm overweight and I'm working on it and that's why I can come and tell you that this is not healthy for you…. We are a visual society and when you go to a physician, or you go to a doctor and you're sitting there and, and, your clinician walks in, and your clinician is, there's a difference between being overweight and being morbidly obese and being obese, perceptions change…. If I went to a doctor's office and my doctor is, OK, he's five, ten pounds overweight, fine. You know what I mean. But if I go into his office and he's like 70 pounds overweight and he tells me that I need to lose weight, the first thought that comes into my mind, well, you know, you first buddy! But that and that's a human response…. I think when, when, when you go to a clinician and the clinician is overweight and they're telling you about nutrition and they're telling you about diet, telling you about exercise, I think you're listening, I mean, there are two trains of thought. Some people listen and go OK, because I don't want to end up like you and then there are other people that listen and go well, OK fine, we'll do it together or something like that. (NP521)

I think sometimes patients can relate to a clinician better if the clinicians shares their, their own struggles…. So, I'm really trying to work with them in terms of really exploring their own uhm, their own prejudices uhm, working with patients

with obesity. And how to, kind of ah, become sensitized and work with others around them to, to help sensitize them to the specific needs of this population…. It's not just, you know, looking into the literature and summarizing what it is you found about uhm, the medical consequences of obesity, as opposed to you know, how can we really take a deeper dive into this and, and uhm, uhm, and hopefully educate those around us in terms of working with this population…. Patients welcome this conversation most of the time. And, wonder why healthcare professionals tend to avoid it…. If the nurse practitioner ahm, approaches a patient ahm, with the requisite knowledge to ahm, to counsel them, I don't believe that their, their, perceptions of themselves should in any way, ahm, alter the efficacy of that encounter…. I also feel that if a provider is overweight or obese, that does not mean that they do not have skills, they don't lack in the self control, they're not necessarily unhealthy, uhm, and I think that as a provider, if one can come to term with all of those factors, that just because I'm not, don't have a BMI between 18 and half and 24.9 doesn't mean that I cannot be effective in counseling a patient to make lifestyle changes…. the provider needs to, to go into this relationship with a patient having those self perceptions ahm, in order to be effective in counseling that patient about lifestyle modification…. Nurse educators, our nurse faculty ahm, need to be well versed in ahm, how to go and approach patients, and be in touch with their own biases and then, once they are in a place where they are looking at them objectively, then they need to impart that knowledge to their students and I think we need to weave this through the

curriculum so that we're not covering it in diagnosis and management of overweight and obesity, but that we're weaving it through the curriculum ahm, from, from the beginning to the end of the program…. I hear from them that they, they feel ahm, poorly equipped if, if not inadequate ahm, approaching that subject with their patients…. Other than I think what, you know, can be found in the textbooks and the literature now, ahm, it's, I think that the, the ahm, the nurse practitioner texts are probably ahh, a little bit behind what it is that they need to be ahh, including in their uhm, information…. I hesitate having this conversation with uhm, colleagues, because I don't feel that colleagues are patients, because I don't feel well versed enough, I can't uhm, cite the scientific literature and you know, we're all about evidenced based practice, ahm and without that, without having that evidence, at the tips of their fingers, uhm, I feel that they don't feel that they can be uhm, authoritative in any way on this subject… I've heard from colleagues when we're chatting in the cafeteria about this subject, that their not comfortable having this conversation with their patients if they're ah, if they don't think that they're ah, walking in the walk…. If you can accept the fact that uhm, making lifestyle changes are extremely difficult, we see that with our patients, over and over and over again. You know, I think that, we need to be able to forgive ourselves when we struggle to make these changes…. So I think having experience with this allows you to, you know, be kinder to yourself and to be more empathetic with your patients…. Much of it comes back to having a, a, some depth of knowledge when it comes to this disease process…. I think it does

need to, you know, it does need to start at the level of academia. So that we are, you know, graduating individuals, uhm, who are gonna be representing the profession of nurse practitioners who are, you know, who've done some self reflection, uhm, who have an understanding of the disease process and who will know how to approach the patient, ahm and initiate these conversations. So there's, there's a lot of work to be done and I think nurse practitioners are perfectly poised to do that work. (NP604)

I think uhm, if I'm counseling you to like uhm, proper food, diet, or whatever it is, cuz this patient is obese, I always feel like hey, I, I, I should be uhm, uhm, in shape…. It is for me, it is a problem, I think you know. I think it's like a double standard type of thing…. It's not uncomfortable for me to speak to my patients about the obesity, but the only thing is, is that I think about it. That's how come a lot of times I always throw it up front like okay I'm talkin to you about losing weight. Yeah and I know that I'm overweight okay I always kind of like throw that out because I feel like, you know, I am thinking that they might in their mind, say, she's overweight and she's talking to me about losing weight…. I'm not like, I don't want to talk, I see that they are overweight and I'm not going to talk to them because I'm overweight. I do it anyway…. I do talk to my members about obesity, but sometimes, I feel a little bit uncomfortable…. I'm obese myself and I here I am talking about somebody, well for your health, because you have diabetes, because you have high blood pressure, you need to lose weight and look at me…. I think it would be nice, like I said, if I'm, if I'm if I'm teaching

someone about physical fitness and uhm, anything about that diagnoses, that I'm also playing the part…. But I don't have a problem teaching, giving you the tools that you do need, so you can help yourself and I hope that you're not looking at it, that you can't get the information from me because of my physical appearance…. I counsel people according to what the BMI is, but, but sometimes you got to look at the body type, the height. And sometimes, what, what they say and you're looking at the person, they'd be a stick…. But I do, I, I follow the rules…. I don't think I would have a problem talking to my peers about that, but I don't know, because it's a touchy subject, you know with, with everyone…. I don't know if I would be like oh gosh, you gotta lose the weight, I think that we should be, you know, average size, the size that we're supposed to be, before we could you know, when we're approaching a patient. (NP816)

Many times in the nurse practitioner role, we are developing relationships with people and so we are able to discuss hard subjects. And weight is a hard subject and so we can talk about that because there's a lot of psychological and emotional things wrapped around in weight…. I mean, there are, there are times that you know when I might ask somebody what do you think about you know, how do you, how does your weight make you feel or ahm, things of that nature, but it, one of the things, I try to help my patients, I don't want them to feel bad about their weight…. It's sort of like you almost have to be a little bit in the middle, whereas if you're morbidly obese, then it's sort of like, I feel like, people are gonna be like well how can how can you talk, you're morbidly obese…. But if you're in the

trenches with them, even if you're not as bad as they are, even if I mean, even if you're dealing with your own issues or you know, the imperfections uhm, it makes you more relatable and it makes it easier for people to go well okay then I can try that…. You also don't want to be so holy that they could never understand or grasp that you know, you have no idea what I'm going through you know, as a nurse practitioner. (NP1623)

When you try to teach patients this, well you know you are overweight, even if you go the most polite route, you are overweight, no, no, no, no, not me. It's like you going down some dark road with them…. I think teaching them what it means, what the goals should be, what your interventions are, I think we're taught those things. But, how to deal with, when you're challenged delivering that news by the way, you know, you, these numbers that we've obtained from the scale, is saying this and this is what it means, it's like, all of sudden a wall goes up…. If I have be a change agent ahm, you know and encourage the patient to become, ahm, not patients, students, to become change agents, I have to do something too about this…. If I'm not willing to make the change, or I have not, you know, really made the effort, and here I am you know, encouraging people to do it, but you know, it's somewhat, it's like hypocritical kind of, when you think about it. It's like I'm telling you and I mean, encouraging you to make these changes, but I have not taken them on myself…. We're in a culture where you know, you have to look thin…. So if I have to be a role model ah, for someone to lose weight, you know I, I'm thinking that I need to lose weight as well. (NP2213)

These viewpoints showed that the concept of instrumentalism and role modeling among the NPs interviewed had concerns related to confidence of self and knowledge, versus confidence of self and expectations. Respondents struggled with how they perceived themselves to be role models, while still expecting to be role models. In either regard, they communicated that accountability was required for handling tensions encountered between message and behavior to fully perceive instrumental role modeling as a theory.

Summary

Instrumental role modeling as a theory assumed that NPs shared mutual perceptions of an ability to inspire change in others. In the first research question of what role modeling meant to NPs, the participants interviewed described role modeling as using learned standards to impart knowledge in a professional manner. When the concept of instrumentalism was introduced, they expressed perceptions of relationships, empathy, and trust building. Showing understanding and being relatable were critical components to influencing others especially when counseling on obesity and secondary health-related illnesses. When the topic of role modeling, instrumentalism, and physical fitness was presented, responses from the NPs became increasingly more discrepant with regards to articulating when and how responsibilities to role model changed, depending on who the audience was and what was valued as a priority during interactions with others. Thematic findings offered valuable information to frame developing grounded theory on instrumental role modeling. In the final chapter I will discuss the conclusions rendered, expand on the interpretations of findings and discuss their implications.

Chapter 5: Discussion, Conclusion, and Recommendations

Introduction

In this qualitative study, I researched perceptions of NPs on instrumental role modeling as a grounded theory where no previous data could be found in existing literature. The nature of this study proposed qualitative inferences could widen understanding of instrumental role modeling as an evolving theory through learning how NPs perceived interactions with others. While the concepts of instrumental role modeling and obesity are mutually exclusive, I combined them for this study to investigate how NPs reconciled their expectations and perceptions of role modeling with obesity as a diagnosis primary to secondary illnesses, such as hypertension, coronary artery disease, abnormal blood fats, diabetes, insulin resistance, stroke, respiratory problems, osteoarthritis, and some cancers (e.g., female reproductive tract and gastrointestinal tract; see CDC, 2018a; NIH, 2015). In this study, I connected NPs with obesity to learn of their perceptions of instrumental role modeling when counseling obesity in clinical practice or academia. NPs are widely recognized as role models and understandably accountable to discuss obesity reduction interventions that improve health outcomes, whether in clinical or academic settings. In the literature review, I found acknowledgment of role modeling and obesity in general terms related to wellness initiatives but no scholarly data could be found surrounding the concept of instrumental role modeling specifically among NPs. To this end, I identified the perception gap of instrumental role modeling among NPs as critical to deepening understanding of the sensitive topic of obesity in clinical practice and academia.

Bem's (1967) theory of self-perception was not used as a lens from which I guided this study; however, a theoretical relationship was necessary to understand the platform from which NPs being assumed as role models, the subject of obesity, and a grounded theory on instrumental role modeling was investigated. Bem's theory of self-perception positioned that people assume things about themselves until they are asked to do a self-evaluation. Once they internally appraise their external behaviors on a specific topic, they will likely make judgments based on their perceptions versus those assumed by society or outside influences (Bem, 1967). Understanding the self-perception relationship between instrumental role modeling and obesity was significant to bringing awareness to how NPs perceived themselves, are perceived by others, and can potentially use those perceptions towards qualitative social changes as instrumental role models. Using the deductive themes of instrumentalism, role modeling, and obesity and aligning these themes with a social constructivist worldview, I employed inductive pathways to analyze respondent remarks. The term role model was defined as a revered person who motivates change (Hensel, 2011; Malik et al., 2014). Critical to this definition was that a *revered* person did not need to be in physical attendance or physically present in order to motivate change. World famous people, such as Ghandi and Mother Theresa, are deceased but referred as and will continue in the future to be remembered as role models. The term instrumentalism was defined as influencing others to follow (Dewey, 1958). The important word in this meaning was *influencing,* which implied an ever-occurring action. Instrumental role modeling was subsequently defined as an understanding of how physical presence gives meaning and quality to inspire change. A person is considered

overweight once their BMI reaches $\geq$ 25kg/m^2 and this was the starting point of reference for this study since it is supposed to trigger proactive weight loss recommendations (see Matarese & Pories, 2014; NIH, n.d.). The concept of instrumental role modeling was not measured; instead, NPs in clinical practice or academia were queried about how they perceived it with relation to obesity.

I asked three questions of the participants and three themes were constructed from their remarks. Research Question 1 was: What does role-modeling mean to NPs? The results for this question revealed a theme that role models are mindfully responsible when interacting with others. Research Question 2 was: How do NPs perceive instrumental role modeling in encounters with others? The findings for this question indicated a theme of instrumental role modeling being a balance between accountability, approach, and awareness that leads to trust. Research Question 3 was: What are the viewpoints of NPs relative to role modeling, instrumentalism, and personal physical fitness when counseling weight management? The theme uncovered concerning this question was that instrumental role modeling demands awareness of creative tensions that exist between accountability and approach when discussing illnesses and their health-related comorbid conditions. In this chapter, I interpret the findings in relation to existing literature, reassess the limitations and make recommendations for future research, followed by a concluding statement.

Interpretation of Findings

NPs are a growing presence in the health industry and revered as role models for their ability to provide care through a nursing-medical collaborative scope of practice

(AANP, 2017). Patients communicated satisfaction with NPs over physicians simply for using a patient-focused over disease management approach (AANP, 2017; Bosone et al., 2015; Difibaugh, 2014; Poghosyan & Carthon, 2017). The term role model and studies surrounding role modeling were widely available for scholarly review but the concept of instrumental role modeling and how it related to NPs was nonexistent (see AANP, 2017; Kennedy et al., 2017; USDOL, 2014). In this study, I analyzed perceptions of how NPs operationally perceived instrumental role modeling as a grounded theory when interacting with others to discuss the issue of obesity. The findings from this study did not confirm or disconfirm any previous notions; however, participant remarks opened a path to advancing a theory on instrumental role modeling.

Patton (2002) described grounded theory as a powerful outcome of inductive reasoning that is generated after iterative analyses from responses of real people versus controlled experimentation. It almost seemed redundant to use the words instrumentalism and role modeling together as they both shared synonymous attributes (i.e., an ability to influence others). Analyzed separately, they showed qualitative meanings but combined, they exposed synergistic implications.

In the first research question, I asked what role modeling meant to NPs. The respondents uniformly agreed that role models were specific types of people who behaved in specific ways: “Somebody who sets an example,” “practice what you preach,” “to be at the top of the field,” or “acting the part, and being the part.” These comments aligned with my findings in the literature review on role modeling without debate. Respondents referred to academia and work as mutual settings where role modeling

occurred (see Blake et al., 2013; Malik et al., 2014; Pigford et al., 2012). However, on the issue of obesity, they admitted that behavior was more important than appearance. NPs agreed that they knew what was expected of them in clinical and academic settings, which was to discuss health in objective, proficient, and empathetic ways (see Malik et al., 2014; Mui et al., 2018).

The second research question asked for perceptions of instrumental role modeling when interacting with others. Instrumental was defined as an ability to influence change (Schroeder & Fishbach, 2015) and I asked how NPs perceived their personal ability to influence change in practice. Understandably, the participants struggled with being able to clearly understand instrumentalism from role modeling. Dewey (1958) described this concept as abstract and not always aligned with personal perceptions. Respondents confirmed this notion with perceptions of imperfection while still believing in their ability to influence. A higher level of understanding was required by parties interacting to always see beyond the surface (Dewey, 1958). Other scholars suggested that instrumentalism depended on a consistent ability to deliver information that could be trusted in order to change behaviors (Hoyt & Simon, 2011; Spetz et al., 2015). Respondents from this study agreed with trust as the determinant for influencing change. Role models always needed to be objective, proficient, and empathetic (Mui et al., 2018), but the respondents' concept of instrumentalism from this study depended on empathetic consistency to establish trust. Participants reflected on their own limitations and how imperfect circumstances could be used to communicate meaningful outcomes. Learning modalities of doing, seeing, and hearing were active phases of instrumentalism (Martin et

al., 2014), but the method of imparting those modalities did not need to be perfect. Academia was recalled to have overweight and obese professors that were knowledgeable, skilled, and instrumental in their influence similar to clinical preceptors who were also well informed and experienced. Explanations of instrumentalism as valued and trusted behaviors was confirmed by participant remarks, such as: "Your knowledge base is what, how someone learns so they can improve and and, be better in practice" (NP313). "I think admitting that you're not perfect, that you're just as fallible as everyone else may make the sour pill a little easier for the member to swallow" (NP413). "And I think when I have difficulties with it myself, it, it only helps me to be more empathetic with my patients when they uhm, are having difficulty, you know, staying with these lifestyle changes" (NP604). On a more abstract level, instrumentalism was described as strategic means—end motives, manipulated through real behaviors—or outcomes to achieve desirable goals (see Forester, 2012; Lennon, 2015; Nussbaum, 1997). One participant articulated this abstract perception of instrumentalism as: "What I want from somebody else in a role model is what I want to be to somebody" (NP105).

Another aspect of instrumentalism mentioned by only one participant was engagement in public policy. This thinking sided with the literature that found efforts on the part of schools and legislatures to impose healthier options in cafeterias or restaurants, taxes on soft drinks to discourage consumption, or even controversial laws to charge obesity in children as a form of abuse to bring awareness to parents on their instrumental responsibilities to be an area not endorsed enough (HHS, 2015; Jones et al., 2014; Traverso-Yepez & Hunter, 2016). Some how, there still existed an imbalance between

instrumentalism through policy changes to improve health, with views of such policies as violating free choice (Jones et al., 2014; Wetter & Hodge, 2016).

No previous research could be found that linked the concepts of role modeling, instrumentalism, and physical fitness with nurse practitioners that counsel obesity in practice or academia. Therefore, the findings of this study neither confirm nor disconfirm existing literature. When the participants were challenged to reflect on role modeling and obesity, their remarks became increasingly more discrepant and inconsistent with their duties as clinicians to be role models. Responses were very much aligned with existing literature regarding health professionals and obesity: Lack of knowledge on how to approach the topic in constructive ways (Lobelo & de Quevedo, 2014; Richard et al., 2014), pretexts of time, resource, and reimbursements (Blake et al., 2013; Lee et al., 2008; Mosqueira et al., 2019) and being overpowered by larger industries that were indirect accomplices to obesity (Frazier et al., 2014; Sosa et al., 2014).

Respondents identified knowledge of obesity health-related indicators and how the BMI metrics were used in primary care but verbalized different practices with patients and colleagues. Some said obesity was barely discussed as an isolated subject or primary topic in academia. While others openly admitted that due to the sensitivity of the subject of obesity, they were inclined to either graze over it, or avoid it altogether. Medical schools have recognized this deficiency in their didactic programs likewise (Khandelwal et al., 2018). Participants of this study and others reported in the literature accused academia for lacking to properly prepare them for handling obesity as a primary condition versus treating secondary illnesses (CDC, 2018b; Khandelwal et al., 2018;

NIH, 2015; WHO, 2015). Participants said they had no problem discussing the topic of obesity and weight loss but admitted to some guilt if they did not represent fitness. They positioned discussions of obesity as none of their business, preaching to the choir, or a touchy subject. These behaviors supported data that placed health providers in authoritative roles of giving instructions, versus in collaborative positions of helping to find solutions for treating obesity (Schroeder & Fishbach, 2015; Seymour et al., 2018). Discussions of obesity were less of a priority even when obesity caused conditions such as diabetes and heart disease.

The BMI scale though standard, was by some respondents, considered unfairly calculated to reflect body frame. A familiar cultural argument encountered by WHO (2016) did make some adjustment for certain populations but for the most part decided to keep standard measures in order to effectively capture obesity related morbid conditions. Some participants even mentioned that obesity was only a problem when it caused other health illnesses but not otherwise discussed even when health related indicators for prevention were suggested according to primary standards of care (NIH, 2015; WHO, 2015). Whether in clinical practice or academia, the NPs interviewed admitted mutual discomfort with discussing obesity referring to it as *a sensitive topic*. While this study did not confirm existing knowledge, the results gave implications for a theoretical framework on instrumental role modeling as a grounded theory that could serve to improve NP understanding of their interactions with others.

Three frameworks emerged to ground instrumental role modeling as a theory.

- Framework 1**:** Instrumental role models are mindfully responsible when interacting with others.

Participants implied mindfully responsible as an active behavior manifested when engaged in interpersonal interactions. When clinicians want to be perceived as instrumental role models they must be conscious of their accountability to behave in set ways when interacting with others. This accountability commences with academia and extends to all areas of clinical practice. It is ongoing and not negotiable. Most participants could recall role models, but did not collectively agree that this subject was stressed enough to them in academia or practice. They mentioned specific courses that touched on role modeling but did not recall it emphasized as a dynamic component of their practiced behaviors.

- Framework 2**:** Instrumental role modeling is a balance between accountability, approach, and awareness that leads to trust.

Practitioners communicated a shared sense of responsibility to be truthful and consistent when speaking or imparting knowledge. They superficially credited individual talents from remembered professors in academia as role models but most clinicians cited work experiences with other NPs and their ability to train them in meaningful ways as most influential. Training with colleagues showed them how to be role models and gave them aspirations of being admired likewise. Learned communication skills were valuable instrumental and modular components of an ability to influence and awareness of their environment encompassed not only attentiveness and being present but was perceived as

having a solid knowledge base of health. Role models needed to be credible in their messages.

- Framework 3**:** Instrumental role modeling demands awareness of creative tensions that exist between accountability and approach when discussing illnesses and their health-related comorbid conditions.

The NPs interviewed all stated they worked independently in their respective settings but mutually credited academia as the starting places for medical learning, with clinical practice being where learning was implemented (Mundinger & Carter, 2019). Contributed remarks revealed a great dependency on learning, as the pillar that allowed NPs to be considered among other licensed independent practitioners. Yet, within the pattern of creative tension, themes emerged were of barriers, boundaries, limitations, and structure as voiced by the participants. They directed blame towards academia for inadequately preparing them to deal with the subject of obesity. Participants cited it was hardly discussed in school and when it was, some professors who lectured on obesity were not fitness models themselves. Just the same, appearances did not outweigh knowledge or expertise and respondents acknowledged their shortcomings in failing to adhere to their own perceptions of role modeling on the issue of obesity. This exposed a dynamic tension between choice and obligation on the concept of instrumentalism (Harkin et al., 2019; Khandelwal et al., 2018; Seymour et al., 2018). The NPs in this study verbalized challenges to reconciling what they knew about being overweight, obese, and health-related indicators with how they discussed these topics in academia or clinical practice. Knowledge was viewed as a powerful driver to communication of health

inconsistencies, while primary care providers are accountable to initiate obesity reduction interventions that motivate improved health outcomes (CDC, 2018a; Khandelwal et al., 2018; Mui et al., 2018). Thus, responses from the NPs in this study molded a framework that charged academia and clinical settings to share efforts in weaving a clear understanding of health conditions such as obesity that do no compete with trust building interactions, so that clinicians can be instrumental role models consistently with others when discussing obesity.

Participant remarks confirmed that NPs valued respect and empathy as role modeling but disconfirmed that empathy and respect alone satisfied instrumental role modeling. This study also assumed that NPs upheld tenets of wellness and disease prevention associated with obesity and understood how to instrumentally implement risk prevention surrounding obesity using a collaboration of visual and auditory communications; however, participant discrepant remarks disconfirmed this. NPs are as subject to obesity and obesity health-related illnesses as the students they teach or the patients they manage. Therefore, they are challenged to use those limitations of membership to advance knowledge.

Limitations of the Study

This study commenced with the minimum targeted size of 12 persons but due to attrition of one respondent resulted in 11 participants who completed all the interviews. Of the total participants, there was only one male and it is acknowledged that trustworthiness would have been enhanced more by representation of both genders. A purposeful snowball sampling strategy was the only recruitment procedure used though

the Walden participant pool could have generated a more sizeable agreement to participate had it also been utilized. Though participants were given the opportunity to review and comment on their transcriptions and they all acknowledged receiving them, I received no comments to make corrections. Thus, I could not confirm if no comments implied consistency after reduction of the interviews transcribed (Maxwell, 2013; Patton, 2002). I also could not claim triangular closure through member check feedback (Maxwell, 2013; Patton, 2002); did the participants just not read the transcriptions and that explained why no corrections were warranted or whether no corrections were warranted because the transcriptions were clear reflections of their communications.

This was a qualitative study done on instrumental role modeling as a theoretical concept that had no available preexisting theory data. Therefore, with no previous research to compare with and a small population size, the applicability of this study is limited to those persons who participated in it. A repeated qualitative study using this same method could assure dependability or quantitative measures using the themes concluded from this study as variables in possibly a survey or experimental design, to test ability to influence change would be a more suitable method for assessing reliability. Collectively, the different methods would allow for generalizations to other NPs with similar backgrounds on instrumental role modeling to further confirm the theory. Lastly, in fulfillment of this PhD degree, I was the sole researcher in this study. Though I implemented a pilot study to assess contiguity of the research questions to the scope of instrumental role modeling as a grounded theory, I am also an NP that is obese, provides obesity counseling in practice and therefore attest a mirror relationship to the participants

studied. I did however, exercise rigorous bracketing to place in abeyance my personal thoughts from those of the respondents, while I admit membership bias could not be perfectly eliminated.

Recommendations

Cognitive empathy facilitates understanding experiences as mutually shared (Borkar, 2014; Frates & Bonnet, 2016) and a grounded theory on instrumental role modeling could serve to align professors in academia with their students more closely with expectations for learning and counseling in clinical practice. Likewise, this proposed grounded theory could align NP clinicians with their colleagues and clients to the necessity of not only being aware of sensitive topics but also understanding how to approach them in consistent manners that serve to influence change. The respondents clearly acknowledged empathy to relate was critical to establishing trust while attempting instrumentalism. However, empathy does not minimize accountability to deliver information in consistent ways that reflect knowledge of diseases and predictions associated with weight or proficient manners of communication that do not isolate or offend (Blake et al., 2013; Mann et al., 2015; Mui et al., 2018; NIH, 2015). Repeated qualitative research combined with observations of NPs as they interact with patients, colleagues, or students surrounding issues of overweight and obesity and quantitative studies that measure variables related to ability to influence outcomes of change are recommended to validate this proposed theory of instrumental role modeling.

Implications

Nationwide, the numbers of NPs in primary care are rising and as such, NPs are positioned to influence change in mutually experienced dynamic ways as instrumental role models through obesity counseling (HRSA, 2014; Mann et al., 2015; USDOL, 2014). Assumptions about NPs regarding their ability to communicate disease prevention and being revered for their ability to inspire change within client-provider moments of interaction were not absolute (Lobelo & de Quevedo, 2014; Mann et al., 2015; Vincent & Reed, 2014). It is not enough to accept discussions surrounding obesity as awkward, sensitive, difficult, or too time consuming. Conditions secondary to obesity such as hypertension, coronary artery disease, abnormal blood fats, diabetes, insulin resistance, stroke, respiratory problems, osteoarthritis, and some cancers (e.g., female reproductive tract and gastrointestinal tract) continue to manifest nationally and globally (NIH, 2015; WHO, 2015). In 2008, the estimated annual cost for treating obesity related illnesses was $147 billion (CDC, 2018b; Mann et al., 2015; NIH, 2015; Van Nuys et al., 2014). Theory development on instrumental role modeling will heighten awareness of NPs on the need to approach the topic of obesity from a different perspective of accountability to self first, so that existing tensions surrounding this topic can be abated, holds potential to achieve more qualitative outcomes for NPs, as well as when they interact with others.

The concept of instrumental role modeling exposed synergistic implications for NPs in clinical practice and academia. Self-perceptions of role modeling not only heighten awareness but also encourage thoughtful analysis of how personal behaviors influence interactions with others. Academia is where didactics commence and the

clinical arenas are where treatment is implemented (Winch, 2015). However, healthcare is not limited to treatment alone but encompasses consultation as well (see Bosone et al., 2015; Frates & Bonnet, 2016; Manning et al., 2014). This is critical to NPs that are charged with implementing obesity reduction interventions to improve health outcomes (CDC, 2013). Conditions such as hypertension, coronary artery disease, abnormal blood fats, diabetes, insulin resistance, stroke, respiratory problems, osteoarthritis, and some cancers, compound rising costs to consumers, the healthcare industry, and organizations at large (see Levay, 2014; Malik et al., 2014; Van Nuys et al., 2014). As assumed role models, NPs need to approach discussions of weight management with confidence and credibility in order to achieve instrumental behavior change. This however, requires a collaboration between learning how to be instrumental role models that addresses sensitive topics in ways meaningful to academia and clinical settings.

Conclusion

NPs and the topic of obesity fit well with this study since 70% of adults 20 years and older are overweight and anticipated to be at high risk for obesity and all its' health-related illnesses (CDC, 2016). Unfortunately, NPs are not excluded from the obesity projection and will experience it in equal measure with the people they encounter in academia or practice alike. As leaders in primary care, NPs need to remain active in crafting ways of addressing issues that affect their performance and the social environments they interact with. Gaps on the constructs of instrumentalism, role modeling, and obesity, among NPs required inquiry into these viewpoints from first line providers and educators. This qualitative study interviewed NPs for their perceptions and

the results concluded that perceptions of role models were mutually agreed and unchanged from existing literature. Instrumentalism was influenced more from behavior than by appearances according to the participants of this study. However, when the concepts of role modeling, instrumentalism, and physical fitness as they related to discussions around obesity were queried, responses became more discrepant and maligned with respondents prior expectations of role models and instrumentalism. This implied a need to reconsider where the discrepancy originated. Respondent remarks suggested that academia was inconsistent with appointing qualitative valence to discussions surrounding obesity and consequently produced clinicians that were ill prepared to fully discuss this sensitive topic especially when they struggled with the same issues of overweight and obesity. Academia is the starting point from which medical knowledge is learned and clinical settings are where behaviors learned are implemented, evaluated and modified (Winch, 2015). A BMI of $\geq$ 25kg/m^2 is when proactive weight loss recommendations for preventive purposes are to commence. Surely, there is a bridge for transition from learning to implementing between academia and clinical settings. Discussing role modeling as it relates to obesity in the preparation stage of education must be done with confidence versus awkwardness around sensitive topics. Likewise, as a leading presence in primary care, NPs are expected to discuss obesity as the primary cause for many secondary illnesses (NIH, 2015).

A grounded theory on instrumental role modeling serves to align students in academia more closely with expectations for counseling on obesity in clinical practice. Three frameworks emerged to ground instrumental role modeling as a theory:

- Instrumental role models are mindfully responsible when interacting with others.
- Instrumental role modeling is a balance between accountability, approach, and awareness that leads to trust.
- Instrumental role modeling demands awareness of creative tensions that exist between accountability and approach when discussing illnesses and their health-related comorbid conditions.

The findings of this study were valuable as they served to advance and expand perspectives of knowledge. However, discrepant findings were also valuable as they identified areas for improvement and modification. With no other study such as this to compare a theory of instrumental role modeling, this concept represents a viable qualitative grounded theory paradigm relevant to NPs in academia and clinical settings.

References

American Academy of Nurse Practitioners. (2017). What's an NP? Retrieved from https://www.aanp.org/all-about-nps/what-is-an-np

Atlas.ti. (2014). A world of data in your hand: Atlas.ti 7. Retrieved from http://www.atlasti.com/index.html

Bailey, C. (2010). Supersizing America: Fatness and post 9/11 cultural anxieties. *Journal of Popular Culture, 43*(3), 441-462. doi:10.1111/j.1540.5931.2010.00752.x

Bandura, A. (1989). Human agency in social cognitive theory. *American Psychologist, 44*(9), 1175-1184. doi:10.1037//0003-66x.44.9.1175

Bem, D. J. (1967). Self-perception: An alternative interpretation of cognitive dissonance phenomena. *Psychological Review, 74*(3), 183-200. doi:10.1037/h0024835

Blake, H., Zhou, D., & Batt, M. E. (2013). Five-year workplace wellness intervention in the NHS. *Perspectives in Public Health, 133*(5), 262-271. doi:10.1177/1757913913489611

Borkar, S. (2014). Empathy in physician-patient relationship: The construct and its applicability to India's health care. *Social Change, 44*(3), 423-438. doi:10.1177/0049085714536800

Bosone, L., Martinez, F., & Kalampalikis, N. (2015). When the model fits the frame: The impact of regulatory fit on efficacy appraisal and persuasion in health communication. *Personality and Social Psychology Bulletin, 41*(4), 526-539. doi:10.1177/0146167215571089

Cameron, N. O., Muldrow, A. F., & Stefani, W. (2018). The weight of things: Understanding African American women's perceptions of health, body image, and attractiveness. *Qualitative Health Research, 28*(8), 1242-1254. doi:10.1177/1049732317753588

Centers for Disease Control and Prevention. (2015). Tobacco related mortality. Retrieved from http://www.cdc.gov/tobacco/data_statistics/fact_sheets/health_effects/tobacco_related_mortality/index.htm

Centers for Disease Control and Prevention. (2016). Life expectancy. Retrieved from http://www.cdc.gov/nchs/fastats/lifexpec.htm

Centers for Disease Control and Prevention. (2018a). Adult obesity facts. Retrieved from https://www.cdc.gov/obesity/data/adult.html

Centers for Disease Control and Prevention. (2018b). Public health genomics: Behavior, environment, and genetic factors all have a role in causing people to be overweight and obese. Retrieved from http://www.cdc.gov/genomics/resources/diseases/obesity/

Charmaz, K. (2014). *Constructing grounded theory* (2nd ed.). Thousand Oaks, CA: SAGE Publishing, Inc.

Charmaz, K. (2017). Special invited paper: Continuities, contradictions, and critical inquiry in grounded theory. *International Journal of Qualitative methods, 16*(0), 1-8. doi:10.1177/1609406917719350

Chen, C., Pereira, M. A., Kim, K. H., Erickson, D., Jacobs Jr., D. R., Zgibor, J. C., Chung, T., … Fabio, A. (2015). Fifteen-year prospective analysis of television viewing and adiposity in African American and caucasion men and women: The cardia study. *SAGE Open, 5*(3), 1-9. doi:10.1177/2158244015600480

Cornick, J. E., & Blascovich, J. (2015). Consequences of objective self-awareness during exercise. *Health Psychology Open, 2*(2), 1-9. doi:10.1177/2055102915598088

Creswell, J. W. (2007). *Qualitative inquiry & research design: Choosing among five approaches* (2nd ed.). Thousand Oaks, CA: SAGE Publications, Inc.

Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed method approaches* (3rd ed.). Thousand Oaks, CA: SAGE Publications, Inc.

Czerniawski, A. M. (2012). Disciplining corpulence: The case of plus-size fashion models. *Journal of Contemporary Ethnography, 41*(2), 127-153. doi:10.1177/089124161143579

Daly, M., Robinson, E., & Sutin, A. (2017). Does knowing hurt? Perceiving oneself as overweight predict future physical health and well-being. *Psychological Science, 28*(7), 872-881. doi:10.1177/0956797617696311

DeBraganza, N., & Hausenblas, H. A. (2010). Media exposure of the ideal physique on women's body dissatisfaction and mood: The moderating effects of ethnicity. *Journal of Black Studies, 40*(4), 700-716. doi:10.1177/0021934708317723

Delbecq, A., House, R. J., Sully de Luque, M., & Quigley, N. R. (2013). Implicit motives, leadership, and follower outcomes: An empirical test of CEOs. *Journal*

of Leadership & Organizational Studies, 20(1), 7-24. doi:10.1177/1548051812467207

Dewey, J. (1958). *Experience & education*. New York, NY: Kappa Delta Phi.

Difibaugh, S. (2014). Solidarity and alignment in nurse practitioner-patient interactions. *Discourse & Communication, 8*(3), 260-277. doi:10.1177/1750481314537573

DiGiacinto, D., Gildon, B., Stamile, E., & Aubrey, J. (2015). Weight-biased health professionals and the effects on overweight patients. *Journal of Diagnostic Medical Sonography, 31*(2), 132-135. doi:10.1177/8756479314557278

Ent, M. R., & Gerend, M. A. (2015). Cognitive dissonance and attitudes toward unpleasant medical screenings. *Journal of Health Psychology, 21*(9), 1-10. doi:10.1177/1359105315570986

Farsalinos, K. E., & Polosa, R. (2014). Safety evaluation and risk assessment of electronic cigarettes as tobacco cigarette substitutes: A systematic review. *Therapeutic Advances in Drug Safety, 5*(2), 67-86. doi:10.1177/2042098614524430

Faw, M. H. (2014). Young adults' strategies for managing social support during weight-loss attempts. *Qualitative Health Research, 24*(2), 267-278. dio:10.1177/1049732313520079

Ferraro, Z. M., Patterson, S., & Chaput, J. (2015). Unhealthy weight control practices: Culprits and clinical recommendations. *Clinical Medicine Insights: Endocrinology and Diabetes, 8*, 7-11. doi:10.4137/CMED.S23060

Festinger, L. (1962). Cognitive dissonance. *Scientific American, 201*(4), 93-106. doi:10.1038/scientificamerican1062-93

Flint, S. W., & Snook, J. (2014). Obesity and discrimination: The next 'big issue'? *International Journal of Discrimination and the Law, 14*(3), 183-193. doi:10.1177/1358229114534550

Forester, J. (2012). Learning to improve practice: Lessons from practice stories and practitioners' own discourse analyses (or why only the loons show up). *Planning Theory & Psychology, 13*(1), 11-26. doi:10.1080/14649357.2012.649905

Fowers, B. J. (2010). Instrumentalism and psychology. *Theory & Psychology, 20*(1), 102-124. doi:10.1177/0959354309346080

Frates, E. P., & Bonnet, J. (2016). Collaboration and negotiation: The key to therapeutic lifestyle change. *Journal of Lifestyle Medicine, 10*(5), 302-312. doi:10.1177/1559827616638013

Frazier, J.P., Land, M., Hsieh, P., & Barratt, M. S. (2014). Junk food seen at pediatric clinic visits: Is it a problem? *Clinical Pediatrics, 53*(4), 320-325. doi:10.1177/0009922813507996

Fryar, C. D., Carroll, M. D., & Ogden, D. L. (2014). NCHS health e-stat: Prevalence of overweight, obesity, and extreme obesity among adults: United States 1960–1962 through 2011–2012. *Centers for Disease Control and Prevention.* Retrieved from http://www.cdc.gov/nchs/data/hestat/obesity_adult_11_12/obesity_adult_11_12.htm

Glaser, B. G., & Strauss, A. L. (1967). *Discovery of grounded theory: Strategies for*

qualitative research. Chicago, IL: Aldine Publishing.

Guba, E., & Lincoln, Y. (1989). *Fourth generation evaluation.* Newbury Park, CA: Sage

Harkin, N., Johnston, E., Mathews, T., Gou, Y., Schwartzbard, A., Berger, J., & Gianos, E. (2019). Physicians' dietary knowledge, attitudes, and counseling practices: The experience of a single health care center at changing the landscape for dietary education. *American Journal of Lifestyle Medicine, 13*(3), 292-300. doi:10.1177/1559827618809934

Hart, J., Yelland, S., Mallinson, A., Hussain, Z., & Peters, S. (2015). When is it ok to tell patients they are overweight? General public's views of the role of doctors in supporting patients' dieting and weight management. *Journal of Health Psychology, 21*(9), 1-10. doi:10.1177/1359105315571974

Healthy People. (2015). Advocacy, education, and policy development: A collaborative approach to combating childhood obesity. Retrieved from http://www.healthypeople.gov/2020/healthy-people-in-action/story/advocacy-education-and-policy-development-collaborative-approach-combating-childhood-obesity

Healthy People. (2019). About Healthy People. Retrieved from http://www.healthypeople.gov/2020/about/default.aspx

Health Resources and Services Administration. (2014). The future of the nursing workforce: National- and state-level projections, 2012–2025. Retrieved from http://bhpr.hrsa.gov/healthworkforce/supplydemand/nursing/workforceprojections/nursingprojections.pdf

Hensel, D. (2011). Relationships among nurses 'professional self-concept, health, and lifestyles. *Western Journal of Nursing Research, 33*(1), 45-62. doi:10.1177/0193945910373754

Hoggan, C., & Cranton, P. (2014). Promoting transformative learning through reading fiction. *Journal of Transformative Education, 13*(1), 6-25. doi:10.1177/1541344614561864

Holland, K., Blood, R. W., Thomas, S. L., & Lewis, S. (2015). Challenging stereotypes and legitimating fat: An analysis of obese peoples' views on news media reporting guidelines and promoting body diversity. *Journal of Sociology, 51*(2), 431-445. doi:10.1177/1440783313480395

Hoyt, C. L., Burnette, J. L., & Innella, J. N. (2012). I can do that: The impact of implicit theories on leadership role model effectiveness. *Personality and Social Psychology Bulletin, 38*(2), 257-268. doi:10.1177/0146167211427922

Hoyt, C. L., & Simon, S. (2011). Female leaders: Injurious or inspiring role models women. *Psychology of Women Quarterly, 35*(1), 143-157. doi:10.1177/0361684310385216

Janesick, V. J. (2011). *"Stretching": Exercises for qualitative researchers* (3rd ed.). Thousand Oaks: CA: SAGE Publications, Inc.

Jones, D. J., Gonzalez, M., Ward, D. S., Vaughn, A., Emunah, J., Miller, L., & Anton, M. (2014). Should child obesity be an issue for child protective services? A call for more research on this critical public health issue. *Trauma, Violence, & Abuse, 15*(2), 113-125. doi:10.1177/1524838013511544

Karsay, K., Knoll, J., & Matthes, J. (2017). Sexualizing media use and self-objectification a meta-analysis. *Psychology of Women Quarterly, 42*(1), 9-28. doi:10.1177/0361684317743019

Kennedy, J., Wood, E. G., & Frieden, L. (2017). Disparities in insurance coverage, health services use, and access following implementation of the Affordable Care Act: A comparison of disabled and nondisabled working-age adult. *The Journal of Health Care Organization, Provision, and Financing, 54*(0), 1-10. doi:10.1177/0046958017734031

Khandelwal, S., Zemore, S. E., & Hemmerling, A. (2018). Nutrition education in internal medicine residency programs and predictors of residents' dietary counseling practices. *Journal of Medical Education and Curricular Development Volume, 5*(0), 1–10. doi:10.1177/2382120518763360

Kim, H. S., Ham, O. K., Jang, M. N., Yun, H. J., & Park, J. (2014). Economic differences in risk factors for obesity among overweight and obese children. *The Journal of School Nursing, 30*(4), 281-291. doi:10.1177/1059840513509839

Kinnally, W., & Van Vonderen, K. E. (2014). Body image and the role of television: Clarifying and modeling the effect of television on body dissatisfaction. *Journal of Creative Communication, 9*(3), 215-233. doi:10.1177/0973258614545016

Kovesdy, C. P., Furth, S. L., & Zoccali, C. (2017). Obesity and kidney disease: Hidden consequences of the epidemic. *Canadian Journal of Kidney Health and Disease, 4*(0), 1-10. doi:10.1177/12054358117698669

Laddu, D., Dow, C., Hingle, M., Thomson, C., & Going, S. (2011). A review of

evidence-based strategies to treat obesity in adults. *Nutrition in Clinical Practice, 26*(5), 512-525. doi:10.1177/0884533611418335

Latner, J. D., & Diao, A. C. (2014). Weight-loss history as a predictor of obesity treatment outcome: Prospective, long-term results from behavioral, group self-help treatment. *Journal of Health Psychology, 19*(2), 253-261. doi:10.1177/1359105312468191

Lennon, M. (2015). Finding purpose in planning. *Journal of Planning Education and Research, 35*(1), 63-75. doi:10.1177/0739456X14560573

Levay, C. (2014). Obesity in organizational context. *Human Relations, 67*(5), 565-585. doi:10.1177/0018726713496831

Linke, S. E., Robinson, C.J., & Pezmeki, D. (2014). Applying psychological theories to promote healthy lifestyles. *American Journal of Lifestyle Medicine, 8*(1), 4-14. doi:10.1177/1559827613487496

Lobelo, F., & de Quevedo, I. G. (2014). The evidence in support of physicians and health care providers as physical activity role models. *American Journal of Lifestyle Medicine, 10*(1), 36-52. doi:10.1177/1559827613520120

LoIacono, V., Symonds, P., & Brown, D. H. K. (2016). Skype as a tool for qualitative research interviews. *Sociological Research Online, 21*(2), 1-14. doi:10.5153/sro.3952

Lopez, R. B., Hofmann, W., Wagner, D. D., Kelley, W. M., & Heatherton, T. F. (2014). Neural predictors of giving in to temptation in daily life. *Psychological Science, 25*(7), 1337-1344. doi:10.1177/0956797614531492

Malik, S., Blake, H., & Suggs, S. (2014). A systematic review of workplace health promotion interventions for increasing physical activity. *British Journal of Health Psychology, 19*(1), 149-180. doi:10.1111/bjhp.12052

Mann, T., Tomiyama, A. J., & Ward, A. (2015). Promoting public health in the context of the "obesity epidemic": False starts and promising new directions. *Perspectives on Psychological Science, 10*(6),706-710. doi:10.1177/1745691615586401

Manning, S., Pucci, A., & Finer, N. (2014). Pharmacotherapy for obesity: Novel agents and paradigms. *Therapeutic Advances in Chronic Diseases, 5*(3), 135-148. doi:10.1177/2040622314522848

Marks, D. F. (2015). Homeostatic theory of obesity. *Health Psychology Open, 2*(1), 1-30. doi:10.1177/2055102915590692

Martin, B. O., Kolomitro, K., & Lam, T. C. M. (2014). Training methods: A review and analysis. *Human Resource Development Review, 13*(1), 11-35. doi:10.1177/1534484313497947

Matarese, L. E., & Pories, W. (2014). Adult weight loss diets: Metabolic effects and outcomes. *Nutrition in Clinical Practice, 29*(6), 759-767. doi:10.1177/0884533614550251

Maxwell, J. A. (2013). *Qualitative research design: An interactive approach* (3rd ed.). Los Angeles, CA: SAGE Publication, Inc.

McKenna, R. M., Langellier, B. A., Alcala, H. E., Roby, D. H., Grande, D. T., Ortega, A. N. (2018). The Affordable Care Act attenuates financial strain according to

poverty level. *The Journal of Health Care Organization, Provision, and Financing, 55*(0), 1-14. doi:10.1177/0046958018790164

McNiesh, S. G. (2015). Cultural norms of clinical simulation in undergraduate nursing education. *Global Qualitative Nursing Research, 2*(0), 1-10. doi:10.1177/2333393615571361

Meleo-Erwin, Z. C. (2011). 'A beautiful show of strength': Weight loss and the fat activist self. *Health, 15*(2), 188-205. doi:10.1177/1363459310361601

Miles, M. B., Huberman, A. M., & Saldana, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). Los Angeles, CA: SAGE Publications, Inc.

Monaghan, L. F., Hollands, R., & Pritchard, G. (2010). Obesity epidemic entrepreneurs: Types, practices, and interests. *Body & Society, 16*(2), 37-71. doi:10.1177/1357034X0264769

Morse, J. M. (2015). Critical analysis of strategies for determining rigor in qualitative inquiry. *Qualitative Health Research, 25*(9), 1212-1222. doi:10.1177/1049732315588501

Mosqueira, A. G., Rosenthal, M., & Barnett, M. L. (2019). The association between primary care physician compensation and patterns of care delivery, 2012-2015. *The Journal of Health Care Organization, Provision, and Financing, 56*(0), 1-9. doi:10.1177/0046958019854965

Mourre, M., & Gurviez, P. (2015). A proposed integrated model of resistance to anti-smoking messages. *Recherche et Applications en Marketing, 30*(3), 33-60. doi:10.1177/2051570715594111

Mui, P., Hill, S. E., & Thorpe, Jr., R. J. (2018). Overweight and obesity differences across ethnically diverse subgroups of Asian American men. *American Journal of Mens Health, 12*(6), 1958-1965. doi:10.1177/1557988318793259

Mundinger, M. O., & Carter, M. A. (2019). Potential crisis in nurse practitioner preparation in the United States. *Policy, Politics, & Nursing Practice, 20*(2), 57-63. doi:10.1177/1527154419838630

Musich, S., MacLeod, S., Bhattaria, G. R., Wang, S. S., Hawkins, K., Bottone, F. G., & Yeh, C. S. (2016). The impact of obesity on health care utilization and expenditures in a medicare supplement population. *Gerontology & Geriatric Medicine, 2*(0), 1-9. doi:10.1177/2333721415622004

National Institute of Health. (n.d.). Aim for a healthy weight: Calculate your body mass index. Retrieved from http://www.nhlbi.nih.gov/health/educational/lose_wt/BMI/bmicalc.htm

National Institutes of Health. (2015). Health risks of being overweight. Retrieved from https://www.niddk.nih.gov/health-information/weight-management/health-risks-overweight

Ngoubene-Atioky, A., & Williamson-Taylor, C. (2017). Culturally based health assumptions in Sub-Saharan African immigrants: Body mass index predicting self-reported health status. *Journal of Health Psychology, 24*(6), 750-760. doi:10.1177/1359105316683241

Nicholls, C. D. (2019). Innovating the craft of phenomenological research methods through mindfulness. *Methodological Innovations, 12*(2), 1-13. doi:10.1177/2059799119840977

Norful, A. A., Ye, S., Van der-Biezen, & Poghosyan, L. (2018). Nurse practitioner-physician comanagement of patients in primary care. *Public, Policy, & Nursing Practice, 19*(3), 82-90. doi:10.1177/1527154418815024

Nussbaum, M. C. (1997). *Cultivating humanity: A classical defense of reform in liberal education*. Cambridge, MA: Harvard University Press

Ogden, C. L., Carroll, M. D., Kit, B. K., & Flegal, K. M. (2014). Prevalence of childhood and adult obesity in the United States, 2011-2012. *The Journal of American Medical Association, 311*(8), 806-814. doi:10.1001/jama.2014.732

Paek, H., Jung, Y., Oh, H. J., Alaimo, K., Pfeiffer, K., Carlson, J. J., Wen, Y., Betz, H. H., & Orth, J. (2015). A social marketing approach to promoting healthful eating and physical activity in low-income and ethnically diverse schools. *Health Education Journal, 74*(3), 351-363. doi:10.1177/0017896914540294

Pajoutan, M., Mehta, R. K., & Cavouto, L. A. (2016). Obesity effect on isometric strength of the trunk extensors. *Proceedings of the Human Factors and Ergonomics Society 2016 Annual Meeting, 60*(1), 943-947. doi:10.1177/1541931213601217

Patton, M. Q. (2002). *Qualitative research & evaluation methods* (3rd ed.). Thousand Oaks, CA: SAGE Publications, Inc.

Peters, A., Vanstone, M., Monteiro, S., Norman, G., Sherbino, J., & Sibbald, M. (2016). Examining the influence of context and professional culture on clinical reasoning through rhetorical-narrative analysis. *Qualitative Health Research*, *27*(6), 1-11. doi:10.1177/1049732316650418

Phua, J. (2014). The effects of similarity, parasocial identification, and source credibility in obesity public service announcements on diet and exercise self-efficacy. *Journal of Health Psychology, 21*(5), 1-10. doi:10.1177/1359105314536452

Pigford, A. E., Willows, N. D., Holt, N. L., Newton, A. S., & Ball, G. D. C. (2012). Using First Nations children's perceptions of food and activity to inform an obesity prevention strategy. *Qualitative Health Research, 22*(7), 986-996. doi:10.1177/1049732312443737

Poghosyan, L., & Carthon, J. M. B. (2017). The untapped potential of the nurse practitioner workforce in reducing health disparities. *Policy, Politics, & Nursing Practice, 18*(2), 84-94. doi:10.1177/1527154417721189

Pourmand, A., Lee, H., Fair, M., Maloney, K., & Caggiula, A. (2018). Feasibility and usability of tele-interview for medical residency interview. *West Journal of Emergency Medicine, 19*(1), 80-86. doi:10.5811/westjem.2017.11.35167

Prochaska, J. O., & DiClemente, C. C. (2005). The transtheoretical approach. In J. C. Norcross & M. R. Goldfried (Eds.), *Handbook of psychotherapy integration* (2nd ed., pp. 147-171). New York, NY: Oxford Press. Retrieved from http://books.google.com/books?hl=en&lr=&id=w-wpACyzL9gC&oi=fnd&pg=PA147&dq=the+transtheoretical+approach+crossing

+traditional+boundaries&ots=QGOSvufo82&sig=-9NGN67SrhsQvONySSS9ksLjsuI#v=onepage&q=the%20transtheoretical%20approach%20crossing%20traditional%20boundaries&f=false

Psychology Quotes. (n.d.). Example isn't another way to teach, it is the only way to teach. Retrieved from https://www.psychologyquotes.com/albert-einstein/

Raji, M.Y., Chen, N., Raji, M., & Kou, Y. (2016). Factors associated with seeking physician care by medicare beneficiaries who receive all their primary care from nurse practitioners. *Journal of Primary Care & Community Health, 7*(4), 249-257. doi:10.1177/2150131916659674

Richard, P., Ferguson, C., Lara, A. S., Leonard, J., & Younis, M. (2014). Disparities in physician-patient communication by obesity status. *The Journal of Health Care Organization, Provision, and Financing, 51*(0), 1-7. doi:10.1177/0046958014557012

Riess, H. (2017). The science of empathy. *Journal of Patient Experience, 4*(2), 74-77. doi:10.1177/2374373517699267

Riggs, A. J., Melton, B. F., Bigham, L. E., & Zhang, J. (2017). Body weight misconception among female African American college students. *Journal of Black Studies, 48*(7), 698-709. doi:10.1177/0021934717715021

Rocha, E. S. B., Ventura, C. A. A., de Godoy, S., Mendes, I. A. C., & Trevizan, M. A. (2014). Ethical issues in hospital clients' satisfaction: A Brazilian perspective. *Nursing Ethics, 22*(2), 188-193. doi:10.1177/0969733014533235

Rossetto, K. R. (2014). Qualitative research interviews: Assessing the therapeutic value and challenges. *Journal of Social and Personal Relationships, 31*(4), 482-489. doi:10.1177/0265407514522892

Roulston, K. (2010). Considering quality in qualitative interviewing. *Qualitative Research, 10*(2), 199-228. doi:10.1177/1468794109356739

Rush, K. L., Kee, C. C., & Rice, M. (2010). The self as role model in health promotion scale: Development and testing. *Western Journal of Nursing Research, 32*(6), 814-832. doi:10.1177/0193945910361595

Saldana, J. (2013). *The coding manual for qualitative researchers* (2nd ed.). London: UK, Sage Publications Inc.

Sangachin, M. G., & Cavuoto, L. A. (2015). Worksite exercise programs: Why do employees participate? *Proceedings of the Human Factors and Ergonomics Society Annual Meeting, 59*(1), 1197-1201. doi:10.1177/1541931215591187

Schmied, E. A., Parada, H., Horton, L. A., Madanat, H., & Ayala. G. X. (2014). Family support is associated with behavioral strategies for healthy eating among Latinas. *Health Education & Behavior, 41*(1) 34-41. doi:10.1177/1090198113485754

Schroeder, J., & Fishbach, A. (2015). The "empty vessel" physician: Physicians' instrumentality makes them seem personally empty. *Social Psychological and Personality Science, 6*(8), 1-10. doi:10.1177/1948550615597976

Seiders, K., Flynn, A. G., Berry, L. L., & Haws, K. L. (2014). Motivating customers to adhere to expert advice in professional services: A medical service context. *Journal of Service Research, 18*(1), 39-58. doi:10.1177/1094670514539567

Seymour, J., Barnes, J. L., Schumacher, J., & Vollmer, R. L. (2018). A qualitative exploration of weight bias and quality health care among health care professionals using hypothetical patient scenarios. *The Journal of Health Care Organization, Provision, and Financing, 55*(0), 1-6. doi:10.1177/0046958018774171

Sheridan, N. F., Kenealy, T. W., Schmidt-Busby, J. I. G., & Rea, H. H. (2015). Population health in New Zealand 2000-2013: From determinants of health to targets. *SAGE Open Medicine, 16*(6), 306-314. doi:10.1177/2050312115573654

Sherman, L. D., & Griffith, D. M. (2018). "If I can afford steak, why worry about buying beans": African American men's perceptions of the their food environment. *American Journal of Men's Health, 12*(4), 1048-1057. doi:10.1177/1557988318774986

Skar, L., Juuso, P., & Soderberg, S. (2014). Health-related quality of life and sense of coherence among people with obesity: Important factors for health management. *SAGE Open Medicine, 2*(0), 1-8. doi:10.1177/205032114546923

Skype. (2014). Group video calling. Retrieved from http://www.skype.com/en/

Sony Corporation, (2013). *IC recorder: Quick start guide* ICD-PX3333/PX333F.

Sosa, E. T., Biediger-Friedman, L., & Banda, M. (2014). Associations between a voluntary restaurant menu designation initiative and patron purchasing power. *Health Promotion Practice, 15*(2), 281-287. doi:10.1177/1524839912469535

Spetz, J., Fraher, E., Li, Y., & Bates, T. (2015). How many nurse practitioners provide primary care? It depends on how you count them. *Medical Care Research and Review, 72*(3), 359-375. doi:10.1177/1077558715579868

Tevik, F., & Feragen, K. B. (2014). "I want the way I look to matter less': A case study describing psychological aspects of changing appearance. *Clinical Child Psychology and Psychiatry, 20*(4), 626-639. doi:10.1177/1359104514542303

Tracy, S. J. (2010). Qualitative quality: Eight "big-tent" criteria for excellent qualitative research. *Qualitative Inquiry 16*(10), 837-851. doi:10.1177/1077800410383121

Transcribe-Speech to Text. (2019). Retrieved from https://itunes.apple.com/us/app/transcribe-speech-to-text/id1241342461?mt=8

Trautner, M. N., Kwan, S., & Savage, S. V. (2013). Masculinity, competence, and health: The influence of weight and race on social perceptions of men. *Men and Masculinities, 16*(4), 432-451. doi:10.1177/1097184X13502667

Traverso-Yepez, M., & Hunter, K. (2016). From "healthy eating" to a holistic approach to current food environments. *SAGE Open, 6*(3), 1-9. doi:10.1177/2158244016665891

Tung, W., & McDonough, J. X. (2015). Overweight and obesity among Hispanic/Latino American women. *Home Health Care Management & Practice, 27*(3), 162-165. doi:10.1177/1084822314563075

U.S. Department of Health and Human Services. (2015). Affordable Care Act. Retrieved from http://www.hhs.gov/healthcare/rights/law/patient-protection.pdf

U.S. Department of Labor. (2017). Occupational outlook handbook. Nurse anesthetists, nurse midwives, and nurse practitioners: Jobs outlook. Retrieved from http://www.bls.gov/ooh/healthcare/nurse-anesthetists-nurse-midwives-and-nurse-practitioners.htm#tab-6

U.S. Department of Labor. (2019). Occupational outlook handbook. Nurse anesthetists, nurse midwives, and nurse practitioners: Jobs outlook. Retrieved from https://www.bls.gov/ooh/healthcare/nurse-anesthetists-nurse-midwives-and-nurse-practitioners.htm#tab-2

Van Leeuwen, F. (2015). Is obesity stigma based on perceptions of appearance or character? Theory, evidence, and directions for further study. *Evolutionary Psychology, 13*(3), 1-8. doi:10.1177/1474704915600565

Van Nuys, K., Globe, D., Ng-Mak, D., Cheung, H., Sullivan, J., Goldman, D. (2014). The association between employee obesity and employer costs: Evidence from a panel of U.S. employers. *The Science of Lifestyle Change, 28*(5), 277-285. doi:10.4278/ajhp.120905-QUAN-428

Vincent, D., & Reed, P. G. (2014). Affordable care act: Overview and implications for advancing nursing. *Nursing Science Quarterly, 27*(3), 254-259. doi:10.1177/0894318414534494

Wadsworth, T., & Pendergast, P. M. (2014). Obesity (sometimes) matters: The importance of context in the relationship between obesity and life satisfaction. *Journal of Health and Social Behavior, 55*(2), 196-214. doi:10.1177/0022146514533347

Wang, S., Huang, C., & Sun, C. (2014). Modeling self-perception agents in an opinion dynamics propagation society. *Simulation, 90*(3), 238-248. doi:10.1177/0037549713515029

Wang, Y., & Willis, E. (2016). Supporting self-efficacy through interactive discussion in online communities of weight loss. *Journal of Health Psychology, 23*(10), 1309-1320. doi:10.1177/1359105316653264

Weise, C. M., Hohenadel, M. G., Krakoff, J., & Votruba, S. B. (2014). Body composition and energy expenditure predict ad-libitum food and macronutrient intake in humans. *International Journal of Obesity, 38*(2)*,* 243-251. doi:10.1038/ijo.2013.85

Wetter, S. A., & Hodge, Jr., J. G. (2016). Taxing sugar-sweetened beverages to lower childhood obesity. *The Journal of Law, Medicine & Ethics, 44*(2016), 359-363. doi:10.1177/1073110516654129

Whale, K., Gillison, F. B., & Smith, P. C. (2014). 'Are you still on that stupid diet?': Women's experiences of societal pressure and support regarding weight loss, and attitudes towards health policy intervention. *Journal of Health Psychology, 19*(12), 1536-1546. doi:10.1177/1359105313495072

Wiggermann, N., Bradtmiller, B., Bunnell, S., Hildebrand, C., Archibeque, J., Ebert, S., Reed, M. P., & Jones, M. L. (2019). Anthropometric dimensions of individuals with high body mass index. *Human Factors, X*(XX), 1-20. doi:10.1177/0018720819839809

Winch, C. (2015). Professional education, know-how and conceptual ability: The role of education in the attainment of concept mastery in professional work. *Theory and Research in Education,14*(1), 45-62. doi:10.1177/1477878515615022

World Health Organization. (1995). Physical Status: The use and interpretation of anthropometry. Retrieved from http://whqlibdoc.who.int/trs/WHO_TRS_854.pdf

World Health Organization. (2015). Obesity and overweight. Retrieved from http://www.who.int/mediacentre/factsheets/fs311/en/

World Health Organization. (2016). BMI classification. Retrieved from http://apps.who.int/bmi/index.jsp?introPage=intro_3.html

World Health Organization. (2019). Obesity and overweight. Retrieved from https://www.who.int/en/news-room/fact-sheets/detail/obesity-and-overweight

Young, M. D., Plotnikoff, R. C., Collins, C. E., Callister, R., & Morgan, R. J. (2015). A test of social cognitive theory to explain men's physical activity during a gender-tailored weight loss program. *American Journal of Mens Health, 10*(6), 1-12. doi:10.1177/1557988315600063

Zaltman, G., Olson, J., & Forr. J. (2015). Toward a new marketing science for hospitality managers. *Cornell Hospitality Quarterly, 56*(4), 337-344. doi:10.1177/1938965515599841

Zestcott, C. A., Blair, I. V., & Stone, J. (2016). Examining the presence, consequences, and reduction of implicit bias in health care: A narrative view. *Group Processes & Intergroup Relations, 19*(4), 528-542. doi:10.1177/1368430216642029

Appendix: Daily Script and Interview Questions

Daily Script. Today is the first of three interview sessions. There are two remaining sessions. This research study is interested in learning about perceptions of instrumental role modeling from nurse practitioners that perform obesity counseling/lecture in primary care, or academia.

Everything said to me will be kept in strict confidence. To assure confidentiality, personal information that could imply your identity, and your name will, in no way, be connected to the printed text. At the time of consent, your name was assigned a unique code, and the consent form was stored in a secured location. All printed communications will be assigned this code for participant identification only. If for any reason, at any time, you wish to withdraw, you retain complete authority to do so.

This interview is being recorded using a digital voice recorder to assure accuracy of transcription only. The recordings will be stored in qualitative data analysis software on my personal computer. No cloud storage will be used. Upon transcribing the recordings, I will offer you the opportunity to review our dialogue and make corrections anywhere you believe I have misunderstood, or transcribed your response in error. I do ask that upon receiving each transcription, you send me a return response either stating "Good as is," if no inaccuracies are found, or specify where alterations should be made, and it will not be disputed. Your returned feedback will be considered digitally signed. It will be printed, and saved with your signed consent. Feedback not received within two weeks from the sent date will be assumed "Good as is."

In respect of your time I am committed to holding you no longer than one hour, but would like you to take as long as you require, thinking about the questions. Do you have any questions before we begin?

Interview I: Research Question 1

What does role-modeling mean to nurse practitioners?

The term role model is defined as a revered person who motivates behavior change (Hensel, 2011; Hoyt & Simon, 2011; Malik et al., 2014).

So please tell me --, what does role modeling mean to you?

Thank you so much for your thoughts and your time.

Daily Script. Today is the second of three interview sessions. There is one remaining session left. This research study is interested in learning about perceptions of instrumental role modeling from nurse practitioners that perform obesity counseling/lecture in primary care, or academia.

Everything said to me will be kept in strict confidence. To assure confidentiality, personal information that could imply your identity, and your name will, in no way, be connected to the printed text. At the time of consent, your name was assigned a unique code, and the consent form was stored in a secured location. All printed communications will be assigned this code for participant identification only. If for any reason, at any time, you wish to withdraw, you retain complete authority to do so.

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In respect of your time I am committed to not holding you longer than one hour, but would like you to take as long as you require, thinking about the questions. Do you have any questions before we begin?

Interview II: Research Question 2

How do nurse practitioners perceive instrumental role modeling in encounters with others?

The term instrumental is defined as an ability to serve as a qualitative tool of value, that fulfills a goal, and causes things to happen (Schroeder & Fishbach, 2015), and instrumentalism is an ability to impact others to follow (Dewey, 1958).

So tell me -- how do you perceive the concepts of instrumental role modeling in encounters with others?

Thank you so much for your thoughts and your time.

Daily Script. Today concludes our interview sessions. I would like to start by thanking you for giving me the opportunity to have these open dialogue sessions. This research study is interested in learning about perceptions of instrumental role modeling from nurse practitioners that perform obesity counseling/lecture in primary care, or academia.

Everything said to me will be kept in strict confidence. To assure confidentiality, personal information that could imply your identity, and your name will, in no way, be connected to the printed text. At the time of consent, your name was assigned a unique code, and the consent form was stored in a secured location. All printed communications will be assigned this code for participant identification only. If for any reason, at any time, you wish to withdraw, you retain complete authority to do so.

This interview is being recorded using a digital voice recorder to assure accuracy of transcription only. The recordings will be stored in qualitative data analysis software on my personal computer. No cloud storage will be used. Upon transcribing the recordings, I will offer you the opportunity to review our dialogue and make corrections anywhere you believe I have misunderstood, or transcribed your response in error. Please specify where you would like me to make the corrections and it will not be disputed. I do ask that upon receiving each transcription, you send me a return response either stating "Good as is," if no inaccuracies are found, or specify where alterations should be made, and it will not be disputed. Your returned feedback will be considered digitally signed. It will be printed, and saved with your signed consent. Feedback not received within two weeks from the sent date will be assumed "Good as is."

I will then review all three interviews and perform a thematic analysis for theory development on instrumental role modeling. Once completed, I will offer you one last opportunity to review my findings, and comment if I have captured effectively the essence of your communications before submitting my final report to the university. Do you have any questions before we begin?

Interview III: Research Question 3

What are the viewpoints of nurse practitioners relative to role modeling, instrumentalism, and physical fitness, when counseling weight management?

Role modeling is the initiative of any act implemented by people who are revered for demonstrating and motivating change (Malik et al., 2014; Hensel, 2011; Hoyt & Simon, 2011), and instrumentalism is the ability to impact others to follow (Dewey, 1958). Physical fitness is retaining a normal body mass index ranging from 18.5-24.9kg/m^2 (NIH, n.d.; WHO, 1995).

So tell me – what is your view on role modeling, instrumentalism and physical fitness when counseling weight loss?

Thank you so much for your thoughts and your time.