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THE IMPACT OF ATTITUDES AND BELIEFS ABOUT FAT ON SOCIAL WORK EDUCATION IN APPALACHIA: AN EXPLORATORY STUDY

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ABSTRACT OF DISSERTATION

THE IMPACT OF ATTITUDES AND BELIEFS ABOUT FAT ON SOCIAL WORK EDUCATION IN APPALACHIA: AN EXPLORATORY STUDY

Anti-fat bias and the resulting discriminatory behavior is widely documented and impacts almost every aspect of an obese person’s life, including healthcare/insurance, education, employment, interpersonal relationships, and protection under the law. This has serious psychological, social, physical health, and economic consequences for the obese person. The non-social work related literature provides an abundance of evidence that when obese people seek assistance from a helping professional, they are met with the same anti-fat bias and discrimination present in other areas of their lives.

Recognizing that anti-fat bias can lead to negative practice behaviors with obese patients and clients, many professional education programs have implemented curriculum modules and trainings focused on bias reduction. Unfortunately, there is little evidence regarding the existence of anti-fat bias among social work professionals and no evidence regarding whether social work education is including obesity and related issues in its curriculum.

Utilizing the Anti-fat Attitudes Test (AFAT), the Universal Measure of Bias-FAT (UMB-FAT), and researcher created inventories, this study surveyed 129 social work educators in Appalachia to explore whether they have an anti-fat bias, if they include issues related to fat in their courses, and if so, is curriculum inclusion adhering to the dominant biomedical discourse or taking a social justice oriented approach. Findings suggest that social work educators in Appalachia hold mostly positive attitudes toward fat individuals and when negative attitudes are present they are related to physical attractiveness and romantic attraction. The data also suggest that social work educators from the southern region of Appalachia hold more anti-fat bias than educators from other regions. The study indicates that social work educators feel that obesity and related issues are worthy of attention from the profession, but they are less convinced that they should be addressing the topic(s) in the courses they teach. Social work educators who do include obesity in their courses tend to focus on exposing students to
foundational social justice knowledge and how to recognize oppression and discrimination but they do not prepare them to provide services for and advocate for obese clients. Regional differences in curriculum topics are discussed. Results from the study have important implications for professional social work education. Limitations of the study and areas for further research are considered.

KEYWORDS: Professional social work education, anti-fat bias among social workers, social work curriculum, Appalachian social work, social work educators

Genesia Lynn Kilgore-Bowling

October 9, 2017
Date
THE IMPACT OF ATTITUDES AND BELIEFS
ABOUT FAT ON SOCIAL WORK EDUCATION IN APPALACHIA:
AN EXPLORATORY STUDY

By
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October 9, 2017
For my Dad, Paul Kilgore, who was always my biggest fan.
Daddy, you were taken from me far too soon but your pure, unwavering love and
guidance continues to serve as a beautiful source of strength and motivation in all my
endeavors. Oh, how I wish you were here to celebrate this with me.
I love and miss you Daddy.

For my beautiful and brilliant children, Elathan, IreLynn, and Brady.
You are my heart and soul and being your mother will always be
my most amazing accomplishment. I love you.
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As I reflect on the journey to this accomplishment, I am in awe of the many twists, turns, and unexpected challenges I met along the way. Any one of them could have kept me from completing this journey, yet here I am. But I did not do it alone. I am only here because of the grace of God and support of some amazing people.

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Chapter One

The World Health Organization (WHO) (2015) defines obesity as “abnormal or excessive fat accumulation that may impair health” (para. 2) and estimates that approximately 600 million or 13% of the world’s adult population is obese. According to the Center for Disease Control (CDC) (2014), more than 1/3 or 34.9% of adults in the United States over the age of 20 are considered obese. Although the overall percentage is smaller, there is a similar trend occurring among our youth; 17% of children ages 12-19, 18% of children ages 6-11, and 8.4% for pre-school age children, ages 2-5 (CDC, 2015a). Even though the rates of obesity have stabilized, public health officials continue to express concern about the correlation between weight and an increased risk of serious diseases and conditions including hypertension, dyslipidemia, type 2 diabetes, heart disease, stroke, gallbladder disease, osteoarthritis, sleep and breathing issues, kidney disease, some cancers, mental illness, chronic pain, liver disease, reproductive complications, and pregnancy related complications (Lavie, 2015; CDC, 2015b; National Heart, Lung, and Blood Institute (NHLBI), 2014; Food Research and Action Center (FRAC), 2015). As a result of these consequences, health economists have estimated that being obese raises an individual’s health care cost by $2,741 and results in about 21% or $190 billion of national health expenditures (Cawley & Meyerhoefer, 2012).

Given that no state or territory has obesity rates under 20% (CDC, 2015c), these statistics and consequences are a national concern. However, it should be noted that there are geographical pockets where disparities exist and the inhabitants of those areas represent higher rates of obesity and therefore, face more consequences—namely the Appalachian Region and in rural communities. In addition to facing a host of economic
and educational disparities, CDC (2015c) obesity prevalence maps highlight that the Appalachian region has obesity rates that are greater than 30% and is home to the two fattest states in the nation, West Virginia and Mississippi, where the obesity prevalence rates are greater than 35%. Considering both national statistics and those specific to the Appalachian region, it is apparent that a substantial portion of our nation’s population is obese and Appalachia is home to a disproportionate number of obese citizens.

The Framing of Obesity as an Epidemic

Over the last several decades, fatness, or the obesity epidemic, as it is often referred to in the literature, has become what Boero (2012) refers to as a “postmodern epidemic” (pg. 4) where “social problems are medicalized and therefore come to be defined, experienced, and treated as disease that focus on problematic populations (i.e., women, minorities, and children), while emphasizing that no one is safe from fatness, and simultaneously claiming that individual self-correction is the key to the resolution” (Kilgore-Bowling, 2014, p. 61). A good number of scholars have utilized Cohen’s (1972) work regarding “moral panics” to explain the discourse surrounding obesity as an epidemic (LeBesco, 2010; Campos, Saguy, Ernsberger, Oliver, & Gaesser, 2006; Campos, 2004). Boreo (2012) is no exception and holds that this “postmodern epidemic” is the result of a moral panic driven by a collection of “‘moral entrepreneurs’ who play a key role in defining the crisis through their interest-based claims-making” (pg. 6). Borero points out that these “moral entrepreneurs” are aided in their efforts to spread moral panic by the media which elicits a fear of obesity because it is a very dangerous threat to society and that it can and should be prevented and cured. This leads to the obese individual being viewed as both the cause of a dangerous threat and the
target for change. The biomedical war on obesity appears to have become a war on obese people. This biomedical weight focused framing of obesity is a dominate health discourse of modern times. Although heavily debated, the public health position is typically focused on two positions; 1) as a result of increasing obesity, excessive demands will be made on health and social services and 2) obesity is an indication of laziness and moral laxity amongst a population unable to regulate their own behaviors (Boero, 2012; Campos, 2004; Campos, Saguy, Ernsberger, Oliver & Gaesser, 2006; Cawley & Meyerhoefer, 2012; Daneski, Higgs & Morgan, 2010; De Brun, McCarthy, McKenzie, & McGloin, 2014; Elliot, 2007; Fardouly & Vartanian, 2009; Lavie, 2015; Puhl & Brownell, 2001; Puhl & Heuer, 2009; Teachman & Brownell, 2001; Visscher, & Seidell, 2001; Wang, Brownell, & Wadden, 2004). These claims, particularly the one related to morality, have resulted an environment where obese people are stigmatized, devalued, and the target of discrimination.

**Overview of Conceptual Framework**

The bias or negative evaluation of obesity is consistently linked to attributions of controllability (Brownwell, Puhl, Schwartz, & Rudd, 2005; Crandall et al., 2001). In other words, seeing obese people as responsible for their size leads to a negative evaluation of body weight and, in turn, creates a basis for the prejudice of obese people. This attribution of controllability appears to be associated with more negative stereotyping and stigma (Sikorski et al., 2012; Tiggemann & Anesbury, 2000). Obese people are ascribed a great deal of negative attributes and stereotypes, including being lazy, weak, animalistic, lacking will-power or self-discipline, ugly or unattractive, having
poor hygiene, unintelligent, worthless, unpopular, less confident, etc. (Cassell, 1995).

This research confirms Weiner’s (1985; 1993) work regarding attribution theory which holds that obese people are characterized negatively because their fatness is perceived to be controllable. Negative evaluations, such as the ones previously listed, often lead to a specific emotional state that is intimately related to the action that one takes. As such, it is no surprise that these pervasive and often unchallenged prejudicial attitudes often lead to discriminatory behavior. For obese people, this form of bias and negative evaluations are widely documented across the lifespan and are present in many domains of an obese person’s life, including education, healthcare, employment, interpersonal relationships, media coverage, law, and social policy (Rudd Center for Food Policy & Obesity, 2008; Brownwell, Puhl, Schwartz, & Rudd, 2005; Puhl & Brownwell, 2001). Less studied institutional discrimination involves public accommodations, housing, jury selection, adoption, child protection, customer service, health clubs, transportation, and health insurance coverage (Puhl & Heuer, 2009; Solovay, 2000).

In addition, there is evidence that this discrimination is worsening and has led to what Daghofer (2013) refers to as a “shadow epidemic” meaning that as this panic surrounding the obesity epidemic has escalated, so have the rates of stigmatization and discrimination (p. 6). In fact, recent studies have noted that weight discrimination has increased 66% for all age groups except the elderly, and rivals the rate of race and age based discrimination (Andreyeva, Puhl, & Brownwell, 2008). It is the third most reported form of discrimination reported by women with approximately 10% of women reporting daily or lifetime discrimination and the fourth most reported form of discrimination among all adults (Andreyeva, Puhl, & Brownwell, 2008). It has also been
found to be more prevalent and stronger than other major targets of bias, including anti-Muslim sentiment post 9-11 (Latner, O’Brien, Durson, Brinkman, & MacDonald, 2008). This bias and discrimination can have serious psychological, social, health, and economic impacts for the obese, especially women who are disproportionately impacted (Rothblum, 1992; Thompson, Herbozo, Himes, & Yamamiya, 2005; Sobal, 2005; Crocker & Garcia, 2005; Puhl & Heuer, 2009).

Intersectionality, a concept born of feminist thought, rejects the idea that social identities are separate, focuses on the lived experience of having multiple social identities, and emphasizes the simultaneity of oppression (Davis, 2008; Simien, 2007). In other words, there is no single aspect or social identity that accurately captures and defines how we interact with our social environment and how our social environment responds to us (Shields, 2008). This particularly applies to marginalized individuals. The reality of intersectionality cannot be ignored with weight discrimination as studies have documented notable differences with respect to age, gender, race, sexual orientation, and socioeconomic status (Andreyeva, Puhl & Brownwell, 2008; Ernsberger, 2009; Solovay & Rothblum, 2009). While there are no specific studies that examine the intersectionality of weight discrimination and geographic location, one can discern that because Appalachia is a “hotspot” of obesity, it is likely that there is an increased risk based on the lower socioeconomic status and poverty rates inherent in this particular spatiality. In fact, Ernsberger (2009) notes that there is some evidence that poverty causes one to become obese but there is much stronger evidence that obesity is the cause of impoverishment through discrimination and social stigma.
To add insult to injury, individuals who seek recourse from the US legal system because they have been victims of discrimination find that weight is not a protected class and therefore, they have no basis for a legal claim. Although some improvements have been made, current federal laws do not adequately address weight discrimination (Pomeranz & Puhl, 2013; Rudd Center for Food Policy & Obesity, n.d.; 2008; Pomeranz, 2010). Furthermore, only one state (Michigan) and six cities and municipalities (Washington, DC, San Francisco, CA, Santa Cruz, CA, Madison, WI, Urbana, IL, and Binghamton, NY) have laws that prohibit discrimination based on one’s body weight (Pomeranz & Puhl, 2013; Rudd Center for Food Policy & Obesity, n.d.; 2012). It is notable that the areas of our country that have the highest fat populations, namely the south and the Appalachia, do not have state or local policies which address this vulnerability. Not only does the anti-fat bias and discrimination help create vulnerabilities for a huge segment of our population on multiple levels, the absence of legal protection provides mounting evidence that obesity is indeed a site of oppression.

In addition, when obese people seek assistance to deal with those various vulnerabilities, they may face the same anti-fat bias and discrimination in the helping relationship. As early as 1969, researchers were noting that physicians and medical students viewed obese patients as unintelligent, inactive, ugly, awkward, and weak-willed and noted that they preferred not to treat obese patients and that they did not expect success with treatment of obese patients (Maddox & Liederman, 1969). More recent research supports that physicians and students of medicine still hold anti-fat attitudes and has expanded to include other healthcare professionals and their neophytes (nurses, dieticians, fitness professionals, mental health professionals, nutritionists, and exercise
scientists) (Puhl, Latner, King, & Luedicke, 2014; Chambliss, Finley, & Blair, 2004; Soto, Armendariz-Anguiano, Bascardi-Gascon, & Cruz, 2014; Waller, Lampman & Lupfer-Johnson, 2012; Puhl & Heuer, 2009; Puhl & Brownwell, 2001; Brown, 2006; Puhl, Wharton, & Heuer, 2009; Puhl, Luedicke, & Grilo, 2013; Tomiyama et al., 2014; Feister, 2012). In order to address this issue, professional education programs have added trainings or modules to their curriculum focused on bias reduction (Ben-Sefer, 2009; Diedrichs and Barlow, 2011; Kushner, Zeiss, Feinglass, & Yelen, 2014; Marzen-Groller & Cheever, 2010; O’Brien, Puhl, Latner, Mir, & Hunter, 2010; Persky & Ecclesten, 2011b; Poustchi, Saks, Piasecki, Hahn & Ferrante, 2013; Rowen & Huseman, 2010; Rukavina, Li, & Rowell, 2008; Walker & Gantt, 2010).

It is significant to note that social workers are rarely included in the above studies of professionals. Currently, there is a dearth of research exploring social workers’ attitudes, beliefs, and biases toward fat. In fact, only two studies could be found in the literature that focused on social workers as a unique professional group. Both of those studies noted that most social workers have mostly positive attitudes toward the obese, but they also noted that those who held negative attitudes also reported negative practice behaviors when working with an obese client (McCarlde, 2008) and they held beliefs that being obese was associated with severe consequences and that the obese person’s behavior was responsible for their weight and treatment (Shinan-Altman, 2016). Other studies finding weight bias among helping professionals have included social workers in their sample but the results do not yield information specific to social work (Puhl, Latner, King, & Luedicke, 2014). Additionally, it is possible that social workers are included in other studies but are lumped into categories with other professionals or are just listed as
“other” (Kaminsky & Gadaleta, 2002) but again, this does not provide information specific to social work professionals. This gap in the literature regarding the attitudes of social workers toward the obese is important, particularly in light of McCardle’s (2008) finding that negative attitudes impact practice behaviors.

**Social Work and Obesity**

The profession of social work is at the forefront of identifying vulnerable populations and addressing their needs. The profession’s Code of Ethics (2008) which drives and guides modern social work practice, specifically outlines the profession’s commitment to vulnerable populations through emphasizing the core values of social justice and dignity and worth of a person. As a result, populations identified as deviant or non-normative, and therefore vulnerable, are generally embraced by the social work profession. Nonetheless, there is little evidence that social work has recognized obesity as a vulnerability beyond the medical notion of being at-risk.

A review of the literature as it relates to social work’s response to and involvement with the alleged obesity epidemic, or even obesity in general, is limited. The few items that do exist focus on clinical settings with respect to how to change the individual and/or individual’s behavior, and is typically connected to disordered eating (Ciporen, 2012; Dunn, n.d.; Lawrence, 2010; Saunders & Saunders, 1993; Flack & Grayer, 1975). This is a slippery slope for helping professionals because the assumption that obese people must have disordered eating leads to a myth that obese people are pathological and can translate into a professional bias (Melcher & Botswick, 1998).

Within the last decade, there has been an increase in working with obese children and adolescents (Lawrence, Hazlett, & Hightower, 2010; Lawrence 2010; Cecil-Karb &
Grogan-Kaylor, 2009; Eliadis, 2006). Even the child welfare literature calls for child welfare workers to be trained in weight reduction interventions (Schneiderman, Smith, Arnold-Clark, Fuentes, & Duan, 2013). Lastly, there is some indication that social work is beginning to be involved with some of the environmental issues associated with obesity, such as the connection between food insecurity and obesity (Kaiser, 2011), neighborhood safety and television watching (Cecil-Karb & Grogan-Kaylor, 2009) and the urban “obesity crisis” (Delgado, 2013).

This examination of the social work literature and obesity reveals that what little work is being done is clearly aligned with the dominant discourse focused on a biomedical perspective. However, the literature remains silent concerning the topic of oppression and the recognition of obese people as vulnerable, especially in those rural Appalachian areas where obesity is more prevalent, intersectionality is visible, and vulnerabilities run high. Gil (1998) argues that, historically, social work practice has neglected oppression and social justice issues because the profession was socially and politically aligned with dominate classes and the government which resulted in a primary focus of regulating vulnerable populations. Given Gil’s prominence as a policy analyst, it is possible that the profession’s role as a socially accredited expert confirms the aforementioned observation of alignment.

Furthermore, social work has a history of responding to moral panics by becoming agents of control or moral regulators. One example includes social work’s involvement in the early social purity/social hygiene movement, which initially focused on abolishing prostitution and other sexually immoral acts as outlined by Christian morality but evolved due to the scientific, medical focus of the Progressive Era to include
eugenics (The American Social Hygiene Association, 1914 – 1920). This movement, combined with the public health movement, prompted the involvement of social workers which quickly led to workers within the field becoming de facto agents of social control and moral regulation who insisted on cleanliness in both body and spirit to avoid public health crisis (The American Social Hygiene Association, 1914 – 1920; Kennedy, 2008; Friedman, 2012). In fact, a popular publication of The American Social Hygiene Association, appropriately titled, *Social Hygiene*, included many references to social workers as assisting in the control of the “problems”, as well as many article contributions by practicing social workers of the time.

It was also during this time period that social work was focusing on more scientific approaches to casework and social diagnosis so the appearance of valid science and respectability, as well as the focus on prevention that accompanied the rapid changes of the Progressive Era was embraced by many social workers, including many notable foremothers such as Jane Addams and Mary Richmond (Kennedy, 2008; Gil 1998). I would add that it is likely that the pressure and tensions within the profession after the Flexner (1915) report to establish social work as a true profession likely encouraged alignment with medicine and science as a way to achieve professional status and prestige. The end result was that social workers had adopted the lexicon of eugenics, implemented the methods, and advocated for public policy related to eugenics as a way to ameliorate or eradicate many social problems in the name of the greater good (Kennedy, 2008). In fact, the “science” behind eugenics resulted in it being considered a “respectable method for reducing poverty” by limiting reproduction among the poor and those deemed unfit or unworthy (Anastas, 2012, para. 5).
One school of thought holds that social work, in its attempts to create a better society and promote the greater good, bought into the idea that certain individuals were a threat to the establishment of a healthy and effective society (Friedman, 2012). This slippery slope led the profession helping to eliminate the reproductive rights of an unknown number of individuals for reasons including, being poor, black, single parent, feebleminded, and promiscuous. In some cases social workers who were given the power to decide who was “unworthy” of reproduction, sterilized their entire caseloads believing it was the right thing to do (State of Shame, 2011). This is further supported by Friedman who, drawing on the work of Margolin (1997), states that social workers may participate in these panics “under cover of kindness” but that we must recognize it for what it is – moral and social control disguised as helping. In fact, she goes as far as to say that this disguise is a “core philosophy that has situated social work as a profession over the last century” (pg. 62).

A similar course of social work involvement can be found in a more recent example involving practice with gays and lesbians. Crisp (2002) notes that social work did not lead the efforts of advocacy in this area and was not involved until the 1960’s when members of the gay and lesbian community took it upon themselves to create reform. The timing of this involvement coincides with what Gil (1998) identifies as the reemergence of a social justice orientation among social workers which can be attributed to the influence of the movements of civil rights, peace, and feminism. Until that time, social work was aligned with medicine in believing that homosexuality was a pathology and mirrored “treatment” approaches focused on changing the individual behavior of gays and lesbians, thus being agents of social control and moral regulation. It wasn’t until the early 1970s that social work recognized the oppression inherent in sexual orientation. This may have been prompted by the fact that homosexuality was finally removed
from the Diagnostic and Statistical Manual because scientific advancements had made it clear that sexual orientation was not a pathology (Crisp, 2002). This example may show that social work was both prompted and compelled to follow the lead of medicine and scientific advancements in maintaining and contributing to the early oppression of the gay and lesbian population. It follows then, that one might logically make the inference that a similar situation could be occurring in terms of social work’s involvement with fat.

**Social Work Education**

Recent scholarship has begun to explore how educational institutions play an important role in maintaining the dominant “obesity” discourse which is focused on the biomedical weight-centered model as opposed to focusing on the social justice issues (Evans & Rich, 2011; Evans, Rich, Allwood, & Davies, 2008). This reality serves as support for the field of critical pedagogy which is based on the idea that educational institutions are simply extensions of society that reinforce societal structures, even the oppressive ones but that they can also provide opportunities for teaching and learning about how to challenge and resist (Freire, 1970; McLaren, 2005; Giroux, 1997; 2011). Social Work, as a social justice oriented profession, has the opportunity to address the oppressive enterprise surrounding fat through its own educational process.

As the profession has evolved, it has become the responsibility of professional social work education to prepare students to recognize vulnerable populations and to work with and on behalf of oppressed groups to combat social injustices. To ensure that this process takes place, the Council on Social Work Education (CSWE) has required that social work education include content about oppression since 1982 (CSWE, 1982; van Voorhis, 1998).
Continuing that commitment to social justice and in an effort to be more inclusive, in 2001, the CSWE identified “14 variables as potential sources of human oppression, discrimination, and diversity” (Schiele, 2007, pg. 84). Those variables are age, class, color, culture, disability, ethnicity, family structure, gender, marital status, national origin, race, religion, sex, and sexual orientation (CSWE, 2001). However, there is no reference to fat, weight, or body size. Subsequent revisions maintained this focus and attempted to improve the profession’s pedagogical approach to teaching about oppression. For example, in 2003, the CSWE revised its Handbook of Accreditation Standards and Procedures. In this version, van Wormer and Synder (2007) noted that the document had moved away from requiring educational programs to offer content regarding the 14 variables to “a more generalized approach that focuses on the systemic dynamics of oppression” (pgs. 19-20).

Perhaps the biggest change in this arena developed from the CSWE’s 2008 and 2015 versions of Education Policy and Accreditation Standards (EPAS) which created a shift in focus from content delivery to the requirement that programs actually demonstrate how social work students achieve distinct practice competencies. This includes a requirement the area of human rights and social and economic justice requires that programs address factors that perpetuate and uphold oppression and discrimination, as well as theories and strategies associated with social justice principles and practices.

Another noteworthy change of the EPAS (CSWE, 2008; 2015) is that it affords social work educational programs greater flexibility to respond to the context of their specific institution. The EPAS specifically recognize that, “programs are further influenced by their historical, political, economic, social, cultural, demographic, and
global contexts and by the ways they elect to engage these factors” (pg. 2). This is particularly important for educational programs located in the fat hotspots of Appalachia as it opens the door for those programs to adequately prepare generalist practitioners to address the unique challenges found within this geographic area. In this particular situation, it provides social work programs situated in Appalachia an avenue by which to explore not only the traditional characteristics of poverty and intersectionality (gender, race, socioeconomic status, etc.) but to also the relationship between obesity and poverty, as well as the resulting stigma and discrimination.

Another change relevant to this discussion occurred with the Evidence Based Practice (EBP) movement. As previously noted, the profession has historically been in search of scientific approaches (knowledge) to improve social work practice since the times of Mary Richmond, which was a stark contrast to Jane Addams’ social justice approach (Bitensky, 1978). This search resulted in the development of a tension within the profession about whether social work is an art or a science (i.e. do we acquisition knowledge from practice (art) or from empirical research (science)(Boehm, 1960). In the 1960’s Boehm noted that social workers tend to focus on knowledge from practice as opposed to science and as a result, many social workers are not able to explain why they take the actions and implement the interventions that they do. Years later, Howard, McMillian, and Pollio (2003), echoed this concern when they acknowledged that practitioners were still relying on the guidance of other practitioners, supervisors, and their personal and practice experience to make decisions rather than relying on scientific evidence.
It was these kinds of observations that lead to the adoption of the EBP approach. EBP originated in medicine and, in its simplest form, is the conscientious and thoughtful use of the most current and best practices, which have already been documented and assimilated, in making decisions about client treatment (Gilgun, 2006). This approach not only means reviewing the literature to decide which interventions are most effective but also means that the profession should contribute to the body of literature to be reviewed. The hope was that utilization of this approach would lend more credibility and validity to the profession. As such, it would be logical for a profession struggling to be viewed as a legitimate to adopt the approach of medicine, the oldest and truest profession.

It might also be reasonable to interpret the adoption of this movement as further evidence that social work tends to align with medicine. Webb (2001) shares this thought and references the EBP movement as another movement by which social work gets sidetracked and succumbs to mechanistic forces, such the medical establishment. He cautions the profession that jumping on the EBP bandwagon “can have the effect of neutralizing social work’s role in moral and political discourse and undermining its professional autonomy” (pp. 76). Although he disagrees with Webb’s stance, Sheldon (2001) does admit that we are not as critical about fundamental issues that impact our profession.

Despite having a mandate related to the inclusion of oppression and strategies for social justice, Gil (1998) claims that, in application, most of social work education only prepares students to practice within the parameters set by the elitist social orders, and notes that the profession lacks adequate strategies to overcome injustice and oppression. He refers to this as the “intellectual paradox of social work” (Gill, 1998, pg. 129). If
social work is indeed acting as an agent of social control for the elite and as such must follow the lead of mainstream science and medicine, it is easy to discern why the literature on social work’s involvement with fat is primarily clinical and aligned with the biomedical weight centered approach. When this is combined with how the social institution of education serves to maintain the biomedical weight centered approach rather than focusing on social justice issues and Gil’s idea of an “intellectual paradox of social work”, one has a perfect storm resulting in social work education neglecting the issues of oppression and social justice as it relates to obesity. Unfortunately, this storm has a path of destruction that is helping to destroy the social and economic opportunities of obese people.

There are calls within the literature for social work to address the social justice aspects of fat. Lawrence (2010) calls on social work to not only work with the fat child who is experiencing stigmatization because of their body size but to also work to reduce the stigmatization on a macro level. Lawrence, Hazlett, and Able (2012) propose that fat people meet the criteria for being considered an oppressed population and further suggests that social work education should recognize and include fat as an area of social oppression and human diversity. They also stress the need for additional studies related to the presence of anti-fat bias among helping professionals due to the potential of those bias to impact the provision of services. Lawrence, Hazlett, and Abe are so adamant that fat oppression should be included in social work education that they go as far as proposing a curriculum model based on the premise that as student’s gain awareness of self, especially in relation to others, that they will become more committed to social justice and therefore, more likely to engage in social justice oriented action. Their goal is
that “social work students must emerge from schools of social work aware and committed to engaging the process of combating societal oppression as it relates to obesity” (p. 65). Friedman (2012) echoes this by calling for social work to incorporate size acceptance and fat activism into social work scholarship and practice. Regrettably, social work education does not appear to have responded to these calls.

The “O” Words

Advocates of the size acceptance movement and leaders of the field of critical fat studies may be trail blazers when it comes to providing an alternate discourse through which we can understand the alleged “obesity epidemic”. This approach challenges the traditional pathological approaches with the medicalization of “obesity”, transcends disciplinary boundaries, combines popular and academic discourse, acknowledges intersectionality, and focuses on social justice. Cooper (2010) holds that the distinguishing factor of fat studies is that it has philosophical roots in critical theory. More specifically she states that,

Fat Studies is different to dominant obesity discourse in that it is critical; it seeks to expand the understanding of fatness beyond the narrow confines of medicalization or pathology, which is why the term ‘obese’ is frequently censured; it often incorporates a social model which shifts the focus of interrogation away from the fat body itself and more towards a positioning and contingent systems and structures; and it provides a platform for identifying, building and developing fat culture as well as extending alliances between activism and the academy (pgs. 1020-1021).
One of the most striking aspects of critical fat studies is that it does not utilize the “O” words, specifically the words obese and overweight, as the field does not find these words acceptable. Instead they are viewed as biased and malignant (Wann, 2009). Instead, the field has reclaimed the “f word” – fat, “both as the preferred neutral adjective…and also a preferred term of political identity” (Wann, 2009, p. xii). In light of such and in support of the movement to end this oppression, throughout the rest of this research, the term fat will be used and if one of the “O” words must be used, it will be placed inside quotation marks.

**The Problem Statement**

Stigma and discrimination against fat people is pervasive and is “a cradle to grave phenomenon” (Wann, 2009, p. xix) and has been consistently linked to attributions of controllability. Its extensiveness can be explained, in large part, due to the current discourse surrounding how fat is framed as a threat that should be and can be prevented and cured. This leads to the fat person being simultaneously viewed as both the threat and the target. Given that approximately 35% of adults (ages 20+) in the United States are considered obese, the so called “war on obesity” is without a doubt a war on fat people. Although no studies exist related to geographic location, the fact that Appalachia has obesity rates that are greater than 30% leads one to conclude that the stigma and fat bias may be intensified in those areas.

This stigma and discrimination has far reaching implications for quality of life of fat citizens, especially when these individuals have no options for legal recourse and even the very professionals who are skilled to assist them have been found to have negative attitudes toward their fat embodiment. Social workers are not immune to these anti-fat
attitudes and current evidence shows that social work’s involvement with fat is very limited. What’s more, despite being a social justice oriented profession, it is aligned with the current biomedical weight centered framework with no mention of fat oppression and the recognition of fat as a vulnerability. Even more surprising is that social work education does not appear to be addressing this issue even with calls for action, CSWE mandates, and the potential to impact social work practice. This is especially disconcerting when one considers that social work education programs situated within the Appalachian region may not be addressing the contextual issues and intersectionality of poverty and fat oppression.

Therefore, the purpose of this research was to explore whether social work educators in Appalachia have an anti-fat bias, if they include issues related to fat in their courses, and if so, is curriculum inclusion adhering to the dominant biomedical discourse or taking a more social justice oriented approach. More specifically, the following research questions were utilized to assist in addressing the overarching question:

1. What are the attitudes of social work educators in Appalachia toward fat individuals?

2. What are the controllability beliefs of social work educators in Appalachia about fat individuals?

3. What are the beliefs of social work educators in Appalachia regarding equal rights for fat individuals?

4. Do social work educators in Appalachia perceive issues related to fat as relevant to the social work profession?
5. Which CSWE competencies are social work educators in Appalachia using to prepare students to work with the fat population?

6. Among social work educators in Appalachia who include fat in their curriculum, is the pedagogical approach focused on the biomedical weight-centered framework or a social justice framework?
Chapter Two

Review of the Literature

In order to contextualize the study, this chapter will begin with a historical narrative explaining how fat has been framed beginning with ancient times and bringing us to the present day biomedical weight-centered framework. This framework has unfortunately resulted fat people having to navigate life with a stigmatized identity which opens them up as a target of a pervasive bias. In order to understand this, the next part of the chapter will explore how stigma and bias develop and lead to discriminatory behavior. Research regarding the prevalence of fat stigma and discrimination will then be presented. To supplement and highlight the discussion about prevalence, the next part will examine various domains of a fat person’s life where there are impacted by fat stigma and are subjected to stigmatizing situations. Interwoven into this section is a discussion about who perpetrates this stigma and discrimination, with special attention given to helping professionals and how anti-fat bias among this population further oppresses fat people. Next, there is a discussion about how fat people cope with these experiences and how various intersectionalities further increase their vulnerability. Subsequently, a review of stigma and bias reduction techniques in the educational programs of various helping professions is presented followed by a review of social work’s involvement with fat and how that involvement might actually be perpetuating the biomedical weight centered framework. The chapter concludes with an examination of social work education and fat pedagogy.
Layers of Fat

Fat as a Moral Issue

There have been periods of time when being fat was sexy and desirable. It was a sign of wealth, success, resilience, robustness, health, and even fertility. It has also been a sign of evil, the work of karma, greed, gluttony, and other undesirable characteristics. The ancient Greeks and Romans framed fat through the obesus or fat character of period dramatic arts who was always portrayed as a glutton and considered a figure of mockery (Woodhouse, 2008). According to Stunkard, LaFlueur, and Wadden (1998) there is evidence from ancient scrolls dated to medieval Japan that highlight fat as a karmic consequence related to a moral failing. The authors note that the Christian ideals of gluttony being one of the seven deadly sins led to fatness being viewed as undesirable and sinful when sufficient food was available in the 15th and 16th century. This frame permeated into the 17th century and early American culture when Puritanical notions of morality considered indulging both the body and one’s appetite as immoral and as such, encouraged fasting as a way to purge one’s sins and prove worthiness (Fraser, 2009).

During the late 18th and 19th century, cultural ideals of fat usually represented wealth but fat also became a metaphor for greed. Commentaries and cartoons of the time often used fatness to illuminate shady characters associated with political and/or economic power implying that those types of people were gluttonous and perhaps even evil (Farrell, 2011). This association with wealth and health meant that weight was not a medical concern during this time period. In fact, many physicians of the time didn’t feel that fat patients were of concern but they did worry about thin patients because they felt the thin body was evidence of “errors of diet, anxiety, care, too much brain work, an
impure mind, and masturbation” (Farrell, 2011, pg. 37). Instead, patients were urged to find a balanced weight, where they were not too thin nor too fat. Unfortunately, many people ignored the advice of their physicians and insisted on ridding themselves of fat. In fact, as early as the late 19th century, newspapers were advertising so-called cures for “obesity” and reduction techniques ranging from chemical compounds to exercise equipment (Farrell, 2011; Fraser, 2009). A shining example of this trend can be found with William Banting who became known as the “father of dieting” because he bounced from doctor to doctor until he found a diet that worked for him. Later, in 1864 Banting published a letter to the public where he described his battle with corpulence and outlined how he successfully lost weight. In this letter, he described the lived experience of being a fat man which illuminates the attitude of the public during this time.

Any one so afflicted is often subject to public remark, and though in conscience he may care little about it, I am confident no man laboring under obesity can be quite insensible to the sneers and remarks of the cruel and injudicious in public assemblies, public vehicles, or the ordinary street traffic: nor the annoyance of finding no adequate space in a public assembly if he should seek amusement or need refreshment, and therefore he naturally keeps away as much as possible from places where he is likely to be made the object of taunts and remarks of others. I am as regardless of public remark as most men, but I have felt these difficulties and therefore avoided such circumscribed accommodation and notice, and by that means have been deprived of many advantages to health and comfort. (pg. 7)
Fat as a Cultural, Class, Gender, and Racial Issue

By the end of the 1800’s there had been enough social, political, and economic change in the US that being fat was no longer a wealthy privilege because the middle class was also becoming fat (Farrell, 2011; Fraser, 2009; Saguy, 2013). This resulted in a change of perspective about fatness and a new layer was added to the morality frame which pinpointed the culture of the middle class as the problem. In this new viewpoint, fat resulted from the excessive indulgence of the middle class because they were incapable of restraint. Farrell (2011) points out that this was thought to be especially true of women as they were not believed to be as rational as men and were more prone to excess and indulgence. This belief added an additional layer to the fat frame and provided early evidence of a burgeoning gender hierarchy.

As the 20th century got underway, a flux of immigrants entered America with bodies that were much fatter than the early settlers. Combined with the fact that food was readily available to all but the poorest of citizens, the girth of the population grew larger. Fraser (2009) holds that it was during this time that wealthy Americans felt the need to distinguish themselves from the immigrants. This gave birth to the idea that “fat was not white” (Farrell, 2011, pg. 60) which adds a fourth layer to the framing of fat relating to race. This line of thinking was supported by scientists and physicians who claimed to have objective evidence of the inherent inferiorities of certain groups of people (i.e. women, the poor, and non-whites). In addition, this is likely the first time that weight in this country was inversely related to wealth and the inclusion of the fat poor as inferior added a fifth layer to the framing of fat related to social class (Saguy, 2013).
Further advances in science and additional research regarding white superiority claimed to have discovered that certain races and ethnicities were more likely to be fat (Farrell, 2013; Levy-Navarro, 2009). The wealthy Americans, many of them once immigrants from northern Europe, re-embraced European cultural suspicions of fat and adopted the stance that the thin, sickly, pale (from tuberculosis) look was attractive (Fraser, 2009). As a result of the ideas of inferiority and new standards of beauty, it was believed that only uncivilized, primitive folks could be attracted to an out of control, repulsive, fat person. More specifically, only working class and poor men loved fat women but the middle class and upper class men were (or at the very least, should be) repulsed by the fat female body (Farrell, 2011). This belief not only reinforced the gender hierarchy, but it also added an element of deviance to fat women and the men who preferred a fat woman as a sexual partner.

The so-called “evidence” provided by science during this time period, not only added inferior, out of control, and primitive to the identities of fat people; it also provided justification for keeping them from enjoying the same political, economic, and social rights of their thin counterparts. Farrell (2011) cites the plight of women during the suffrage movement as a prime example of this injustice. More specifically, suffrage supporters were portrayed as fat, out of control, masculine, insatiable, and often connected to blackness. The response of suffrage workers was to counter those images by producing their own images of a suffrage supporter as a beautiful, stylish, thin, white, young woman who was cultured, educated, and the exact opposite of uncivilized. The female body became the battleground of the fight for suffrage, both literally and
figuratively, as “the body became the key sign of one’s worthiness, of one’s fitness for citizenship” (Farrell, 2011, p. 95, emphasis in original).

**Fat as a Disease**

In the middle of the 20th century, medical advancements added an additional layer to the fat frame by promoting the idea that fat was a health problem. It was during this time that the term “obese” was adopted to assist in the medicalization of fat (Saguy, 2013). The switch in terms reflects the undesirability of fat. Throughout history terms such as stout, corpulent, mammoth, fat, hefty, plump, massive, grotesquely large, “overweight”, “obese”, and morbidly “obese” have been utilized to describe the fat person and sound pejorative. Collier (2010) explains that this phenomenon is something that linguist refer to as the euphemism treadmill, where a new term is used to refer to a sensitive topic and soon that word is no longer adequate because of meanings attached to it and then we search for another word. Essentially, in order to accurately portray the seriousness of fat from a medical perspective a new term had to be utilized to capture the alleged disease aspect of adipose tissue. Baldwin (2010) states that the adoption of a derogatory term to describe a medical issue was an undesirable choice as it was bound to attach a stigma to those referenced by the term. In fact, he further likens the use of “obese” and “obesity” to describe fat to using the words stupid and stupidity in their derogatory sense to describe those with intellectual challenges resulting in a low intelligence quotient.

Once the road had been paved for fat to become medicalized (as both an independent disease and as a risk factor for other diseases) through the adoption of a new term, experts then set out to discover a way to measure and classify it. The classification
of human body size can actually be traced back to the 1830’s when a statistician named Adoph Quetelet sought to apply the laws of mathematics to man and develop a new science he referred to as social physics (Blackburn & Jacobs, 2014; Boero, 2012; Heffernan, 2015; Lavie, 2014). In this quest, he developed what would be known a century later as the Body Mass Index (BMI), as a way to determine the average size of individuals during that particular time period (Blackburn & Jacobs, 2014; Boero, 2012). The next major development in this area can be attributed to the development of the actuary charts created by the Metropolitan Life Insurance Company which provided an easy way to classify people based on the physical attributes of weight and height to calculate risk for insurance coverage. This approach was very attractive to the medical establishment and was subsequently adopted as the way to measure fat sometime around 1950 (Boero, 2012; Campos, 2004). The adoption of this model created a way for physicians to allegedly provide an objective and accurate diagnosis of “obesity” and essentially fully medicalized fat.

The ability to measure and diagnose “obesity” easily set the stage to make an argument for intervention and management (i.e. weight loss products). This argument was further supported when medicine claimed to have discovered a link between “obesity” and cardiovascular disease, which was the nation’s number one cause of death at the time (Boero, 2012). Although, as previously stated, weight loss cures had been promoted for more than 100 years, it wasn’t until the 1950s that the weight loss culture developed and became deeply embedded in life, particularly for women (Lyons, 2009). During this time, weight loss products and programs, such as amphetamines, diuretics, weight loss drinks, surgeries, and diet/nutrition programs, like Weight Watchers soared
and were prescribed for both adults and children. In fact, Lyons (2009) notes that within a few decades, 70% of American families were using low calorie products and that, in 1971, the diet and weight loss industry was estimated to be reaping profits of somewhere between $250 million and one billion a year. This approach placed a great emphasis on individual responsibility (i.e. it is the fat person’s fault that they are fat) and aggressive behavioral change is necessary to correct the problem. This persistent assault on fat has resulted in a weight loss culture based on fear and moral imperatives that have the potential to destroy healthy identities. This is evidenced by the fact that collectively we now spend approximately $60 billion dollars annually to purchase programs, products, equipment, and other interventions that promise to help us achieve the “ideal” body weight (Bacon, 2010).

Fat as a Public Health Crisis (Epidemic)

It was also around this time that the medical establishment began to show preference for the formula developed by Quetelet, in large part due to the advocacy efforts of Dr. Ancel Keys who thought that the formula was more reliable than the insurance actuary tables (Blackburn & Jacobs, 2014; Heffernan, 2015). Keys coined the term Body Mass Index (BMI) to describe this formula which divides weight by height squared and was much easier to utilize (Blackburn & Jacobs, 2014; Boero, 2012; Campos, 2004; Heffernan, 2015; Lavie, 2015). However, Keys did not want the BMI to be used to diagnose “obesity”. In fact, he envisioned the BMI to be used in large scale health studies and warned against using this formula to classify individual patients. He believed that the BMI did not take other diverse characteristics into account, such as gender, age, muscle mass, and metabolic disorders so it could not be utilized as an
indicator of health (Blackburn & Jacobs, 2014; Heffernan, 2015). His peers did not heed his advice and by 1985 the National Institutes of Health (NIH) began to establish BMI thresholds (27.8 for men and 27.3 for women) which would define “overweight” and “obesity” (Boero, 2012; Heffernan, 2015). These thresholds were then utilized to label folks as having an increased mortality rate due to “obesity related diseases”.

This sparked a number of epidemiological studies that revealed a correlation between increased body mass and premature death; even simply being overweight by a few pounds (12 to be exact) was thought to increase mortality by 60% (Campos, 2004). Shortly after the publication of these studies the NIH determined that the BMI thresholds needed to be adjusted. Those adjustments were made in 1998 and resulted in a BMI of 25 as “overweight” and those equal to or greater than 30 as “obese” regardless of sex or body fat composition (Boero, 2012). Basically, millions of people went to bed having a normal weight and woke up the next morning as “overweight” and the same occurred for those who were “overweight” and woke up “obese”. The shifting of categories permitted the medical profession to present the dreadful statistic that over 30 million people or 50% of American adults were “overweight or obese” (Boero, 2012).

During this same decade, the Department of Health and Human Services (DHHS) published Healthy People 2000 in order to outline the nation’s public health goals for the next 10 years. It is an interesting dichotomy that the report does not place significantly more attention to fat than prior reports but somehow during this decade the fat frame picked up another layer. More specifically, fatness became a public health crisis (Boero, 2012; Saguy, 2013). Providing further proof of this health crisis was a report from the
WHO entitled, “Obesity: Preventing and Managing the Global Epidemic” (Saguy, 2013). This report claimed that “obesity” was spreading at a rate associated with epidemics.

The last two layers of the fat frame can best be described using Boero’s (2012) designation of a “postmodern epidemic” (pg. 4) which was introduced in chapter one. To revisit, Boero holds that a “post-modern epidemic” is where “social problems are medicalized and therefore come to be defined, experienced, and treated as disease that focus on problematic populations (i.e., women, minorities, and children), while emphasizing that no one is safe from fatness, and simultaneously claiming that individual self-correction is the key to the resolution” (Kilgore-Bowling, 2014, p. 61). Drawing upon Cohen’s (1972) work regarding moral panics, Boreo holds that this “postmodern epidemic” is the result of a moral panic driven by a collection of “’moral entrepreneurs’ who play a key role in defining the crisis through their interest-based claims-making” (pg. 6). More specifically, this new framing of fat opened the door for certain groups such as the American Obesity Association (AOA), the North American Association for the Study of Obesity (NAASO) and the International Obesity Task Force (IOTF), to support the public health crisis frame and push “obesity” to the forefront of our nation’s collective health concerns and reports (Boero, 2012; Saguy, 2013). Of course, these “moral entrepreneurs” must be aided in their efforts to spread the panic and Boero (2012) notes that this is accomplished through media messages, which helps to villainize fat.

**Opposing Science**

Currently, this biomedical approach that fatness is an epidemic hinges on the three primary assertions, which were introduced in chapter one. The first assertion is that the rates of fatness keep rising and currently more than 2/3 of the adults in the United
States are considered to be “overweight or obese” with 1/3 or 34.9% of adults in the United States over the age of 20 making up the category of those who are considered “obese”, as are 17% of children ages 12-19, 18% of children ages 6-11, and 8.4% for preschool age children, ages 2-5 (CDC, 2014; 2015a; The National Institute of Diabetes and Digestive and Kidney Diseases, 2012). The second assertion is that being fat puts one at an increased risk of serious diseases and conditions including hypertension, dyslipidemia, type 2 diabetes, heart disease, stroke, gallbladder disease, osteoarthritis, sleep and breathing issues, kidney disease, some cancers, mental illness, chronic pain, liver disease, reproductive complications, and pregnancy related complications (CDC, 2015b; Food Research and Action Center (FRAC), 2015; Lavie, 2015; National Heart, Lung, and Blood Institute (NHLBI), 2014;). The third and final assertion, is an economically motivated one based on estimates from health economists that being fat raises an individual’s health care cost by $2,741 and results in about 21% or $190 billion of national health expenditures (Cawley & Meyerhoefer, 2012).

At face value these assertions are very powerful and persuasive. However, these assertions are not 100% accurate when one conducts a critical analysis. Consider assertion one related to the increasing number of fat people. This assertion can be questioned on two levels. The first level is that research has shown that fatness among the nation’s adult population actually leveled out in the first decade of the 21st century, rather than increase (Bacon, 2010; Flegal, Carroll, Bit, & Ogden, 2012; Flegal, Carroll, Ogden, & Curtin, 2010). The second level is that the BMI thresholds that are used to categorize individuals as “overweight or obese” are not static but are subject to change at the whim of the societal institution of medicine. For example, if the original thresholds
were used (those before the 1998 revision) then the current statistics would look very different.

Additionally, assertions two and three presuming that fat people are at an increased risk of certain diseases that increase their mortality rate and ultimately results in higher health care costs has been challenged by research that fails to find a correlation between increasing weight and increased mortality. In fact, Campos (2004) highlights this by presenting evidence from international and domestic studies which reveals that maximum longevity is most often associated with being “overweight” based on BMI standards and those with the lowest life expectancy were those who were underweight and this held true for population groups (sex, race, ethnicity, etc). He notes that these studies have been consistently conducted since the 1980s but that they are rarely disseminated in the same way as studies who claim that there are direct links between “obesity” and life expectancy and chronic diseases. For example, as early as 1982 there was scientific evidence that being fat was linked to better survival rates for those patients undergoing dialysis but that this phenomena wasn’t ever described in the literature until approximately 1999 (McAuley & Blair, 2011).

Other research has shown that patients who are “overweight” or “moderately obese” have a better prognosis or survival rate than their thinner counterparts after being diagnosed with a disease that allegedly developed as a consequence of their weight (Campos 2004; Lavie, 2014; Saguy 2013). According to Lavie (2014), this phenomenon known as the “obesity paradox” was first coined in 2002 by Dr. Luis Gruberg and his colleagues at the Cardiac Catheterization Laboratory and the Cardiovascular Research Institute in Washington, DC when they discovered that their “overweight or obese”
patients had only about half the risk of dying within one year after undergoing an angioplasty. Science has also confirmed that the “obesity paradox” doesn’t just apply to heart disease but has been found to be present across a host of chronic and deadly diseases, such as cancer and HIV/AIDS (Campos, 2004; Lavie, 2014). Obviously this sparked an increase in studies and additional paradoxes (the fit fatty and a healthy “obesity”) have been discovered (McAuley & Blair, 2011). Therefore, if one considers this scientific evidence we cannot be sure that the aforementioned diseases are caused by being fat. Additionally, given the protective/survival influence of fat, we certainly cannot claim with certainty that being fat increases healthcare costs if a fat patient’s prognosis is better than their thinner peers.

It is interesting that science has been able to easily establish the existence of an “obesity paradox”, but it has not been able to determine the exact mechanism or processes that work together to create this paradox (Campos, 2004; Lavie, 2014; McAuley & Blair, 2011). This is along the same vein of the scientific mystery of why some bodies are fat and some are not. Researchers exploring both mysteries have theories but none of these theories can provide sufficient evidence to address all, or even most, occurrences (Campos, 2004; Center for Consumer Freedom, 2005; Hainer & Aldhoon-Hainerova, 2013; Lavie, 2014; Mayo Clinic, 2015; McAuley & Blair, 2011).

As another case in point, the biomedical and public health frameworks continue to proclaim that personal responsibility and individual behaviors (dietary choices and inactivity) are the principle causes of the so called “obesity epidemic” and that diet and exercise are the solutions to the problem. This personal blame approach is perplexing given that there is no scientific evidence to support any weight reduction theory (Bacon,
2010; Campos, 2004). Gaesser (2009) notes that most people who purposely lose weight will regain 1/3 of that weight within one year and almost all of it within five years.

While we have no current statistics regarding the failure rates of weight reduction techniques, Gaessar holds that the 90-95% failure rate posited by Stunkard and McLaren-Hume’s 1959 report probably still holds true today based upon the prevalence of fat and the millions of US citizens who are at any given time trying to lose weight.

Despite conflicting evidence and the scientific mysteries surrounding how fat isn’t always unhealthy, why people are fat, and lack of proven reduction techniques, this framework still promotes the personal blame stance which adds another layer to the framing of fat. Unfortunately, the addition of this layer helps to reinforce the idea that being fat is a sign of weakness, inferiority, moral laxity, and laziness and has become deeply embedded in the most dominate “obesity” discourse of modern times.

**Conceptual Framework: The Development of Stigma and Discriminatory Behavior**

**Stigma**

Our modern understanding of stigma can be traced back to Goffman’s (1963) work *Stigma: Notes on the Management of a Spoiled Identity*. Goffman (1963) noted that society categorizes people and that each category includes a group of attributes that members of each of those categories would possess. These categories and attributes then allow us correctly identify the “social identity” of strangers. When those strangers do not possess an attribute that we associate with a specific category or is not congruent with our stereotype of who they should be, then that stranger is different and less desirable. More specifically, Goffman (1963) states that “he is thus reduced in our minds from a whole
and usual person to a tainted, discounted one. Such an attribute is a stigma... (pg. 3).
Goffman’s concept of stigma maintains that there is a relationship between attributes and stereotypes. Jones and colleagues (1984) expanded Goffman’s definition to develop a conceptualization of stigma as an attribute or a “mark” that connects an individual to undesirable characteristics or stereotypes. As other theorists expanded and further refined the definition of stigma, the importance of attribution remained constant.

**Attribution**

Attribution theories are concerned with the explanations we devise when we observe behavior (our own and that of others) and how we make the connection between the observed behavior and ascribe it to personal characteristics (also referred to as dispositions) or situational circumstances. Heider (1958), the father of attributional theory, held that attributions provide a path for individuals to explain their social world. He believed that we ascribed behavior to something internal with the individual (disposition) or something external (situation). During his research Heider noted that we tend to lean toward dispositional attributes when observing the behavior of others. Later, this tendency was coined fundamental attribution error (Jones, 1979; Ross, 1977) or correspondence bias (Gilbert & Malone, 1995). In other words, we tend to blame an individual or something internal to the individual for any observed behavior.

In work on the attributional analysis of stigma, Weiner and his colleagues, Perry and Magnusson (1988) held that any attributional analysis of an actor begins with an observed outcome. As applied to stigmata, this means that the stigma represents a negative outcome or an unwanted effect. Once this stigmata or negativity has been observed, then an individual initiates an attribution search for the cause of the stigma.
(Weiner, 1986, 1988; Weiner, Perry, & Magnusson, 1988). In the present situation, the question would likely be, “Why is that person so fat?” The authors also state there are times when the stigma itself implicates a cause or an association with an attribute and in this case, there is no need for an attribution search. For example, one may immediately make an association of HIV/AIDS to homosexuality/promiscuity or fatness to overeating. Once the perceived cause of stigma has been established an emotional response toward the stigmatized person is elicited, along with future expectations of that person and other behavioral responses (Weiner, Perry, & Magnusson, 1988). For example, once an observer has established what they perceive as the cause of someone being fat they then can feel like/dislike, disgust/pity, etc., and determine if they believe that person will ever lose weight, and perhaps even develop a prejudice or discriminatory behavior toward that fat person.

**Controllability**

During Weiner, Perry, and Magnusson’s (1988) research they also discovered that causal controllability played a major role in eliciting a negative emotional response. Causal controllability introduces the notion of responsibility and is defined by Weiner (1993) as one’s ability to alter the cause of the stigma. If the cause of the stigma is perceived as controllable (meaning it was the result of a lack of effort or willpower) then anger dominates with tendencies to punish or neglect the individual displaying the stigmata. On the other hand, if the cause of the stigma is perceived as uncontrollable (meaning due to external causes beyond the individual’s control), pity and helpful behavior are the result. For example, in Weiner, Perry, and Magnusson’s research, when the stigma of being fat was presented as resulting from overeating without exercise,
it was ranked high in terms of controllability and perceived responsibility, along with AIDS, child abuse, and drug addiction. Likewise, when the opposite was true, i.e. the stigma was presented as resulting from a glandular issue, it was ranked low in terms of controllability and perceived responsibility.

Weiner (1993) also noted that this attribution of causal controllability and perceived responsibility also leads to a moral evaluation of a person because the reactions are based, at least in part, on moral principles. This was also noted many years earlier by Bruch (1948) and Cahnman (1968) who recognized the relationship between controllability attributions and moral judgments as an aggravating factor in the stigma of fatness. Weiner’s (1993) work resulted in the application of a metaphor of sin versus sickness to highlight this observation, where sin is controllable and sickness is not controllable. Furthermore, sin is much more likely to elicit anger as an effective response and punishment as a behavioral response.

The attributes of controllability and associated moral judgements, have been found to be related to the development of prejudice and negative attitudes toward fat people. Crandall and colleagues (2001) found that the extent to which fat is determined as bad, as well as the extent to which individuals are held responsible for their fatness, leads to a negative evaluation of the fat person and provides the basis for a prejudice against fat people. Crandall and Reser (2005) also declare that their research and that of others indicate that controllability of fatness “is a primary and proximal cause of prejudice” (pg. 85).
**Resulting Discrimination**

The aforementioned theories provide a plausible explanation of how stigmas develop based on attribution and provides insight as to how prejudice or a negative evaluation develops. However, these theories do not sufficiently determine the process through which those attributions and negative evaluations actually lead to discriminatory acts toward the stigmatized, or in this case fat people. During their critique of various stigma conceptualizations, Link and Phelan (1999) note that most conceptualizations had an individualistic focus which gave little to no attention to structural issues (i.e. how they include or exclude). They further cite that this individualistic focus results in victim blaming rather than focusing on those who discriminate, which allows for diffusion of blame. Considering such, their conceptualization of stigma explicitly addresses discrimination and the process through which it likely occurs. More specifically, their definition states that stigma and discrimination occurs when a particular set of interrelated components occur together. Those components are:

1. The act of distinguishing and labeling human difference
2. Dominant cultural beliefs link people to undesirable characteristics, i.e. negative stereotypes
3. Labeled people are placed in distinct categories in order to establish a separation of “us” from “them”
4. Labeled people experience status loss and discrimination that leads to unequal outcomes
5. Stigmatization is entirely contingent on access to social, economic, and political power that allows the identification of differentness, the construction
of stereotypes, separation of labeled people into categories, and the full execution of disproval, rejection, exclusion, and discrimination (pg. 357)

One distinguishing factor is the emphasis that there are interrelated components that must converge to result in the development of a stigma by allowing the process to unfold. Link and Phelan’s (1999) contribution not only addresses how the act of discrimination is a part of the stigma process, but also initiates a conversation about the social, economic, and political power that shape the development of stigmas, or in this case, the stigma associated with being fat.

The social, economic, and political powers controlling the discourse regarding fatness are directly responsible for the current biomedical framework referencing an “obesity epidemic”. This epidemic framework embodies the characteristics of what Cohen (1973) refers to as a moral panic and highlights that fat folks have become the “folk devils” who act as “visible reminders of what we should not be” (pg. 10). Cohen’s conceptualization states:

Societies appear to be subject, every now and then, to periods of moral panic. A condition, episode, person or group of persons emerges to become defined as a threat to societal values and interests; its nature is presented in a stylized and stereotypical fashion by the mass media; the moral barricades are manned by editors, bishops, politicians and other right-thinking people; socially accredited experts pronounce their diagnoses and solutions; ways of coping are evolve or (more often) resorted to; the condition then disappears, submerges or deteriorates and becomes more visible. Sometimes the object of the panic is quite novel and at other times it is something which has been in existence long enough, but
suddenly appears in the limelight. Sometimes the panic passes over and is forgotten, except in folk-lore and collective memory; at other times it has more serious and long-lasting repercussions and might produce such changes as those in legal and social policy or even in the way the society conceives itself (pg. 9).

Cohen’s model (1973) also implicates mass media as the main driver of the panic discourse especially when it comes to amplifying the deviance associated with the panic. This is integral to the process of moral regulation. Subsequent models building on Cohen’s idea, have tweaked various aspects of the model which slightly alters the focus but the role of mass media remains a central component (Goode and Ben-Yehuda, 2009; Hall, Critcher, Jefferson, Clarke, & Roberts, 1978; McRobbie & Thornton, 1995; Thompson, 1998; Ungar, 2001).

LeBesco (2010), a researcher concerned with the politics of fat, applied fatness or the alleged “obesity epidemic” to the moral panic phenomenon utilizing the criteria outlined by Goode and Ben Yehuda (1994), often referred to as an attributional model of moral panic. More specifically, she outlines that the rhetoric about fat is full of concern about the imagined threat of fatness; how hostility in the form of moral outrage is directed at those responsible for the “obesity epidemic”, namely fat people and some blame placed on larger social structures; how there is consensus that something must be done about fatness; how there is disproportionality in reports of harm; how the concern about the “obesity epidemic” has been volatile; and finally, how the panic is appealing because it speaks to other anxieties in our culture related to race, class, and sex, particularly as they relate to risk and privilege and the correlation between attitudes about fat and attitudes about the poor and minorities [emphasis added]. This is echoed by
Young (2011) who believes that moral panics are mostly concerned with diversity and social class. A running theme of her application focuses on how health has become an oppressive moral enterprise. Of course, this undertaking is not possible without “socially accredited experts who pronounce their diagnoses and solutions” and participate in the panic as moral regulators. In fact, Rich and Evans (2005) hold that it becomes a social duty of these experts to regulate the fat body in order to prevent public health problems and minimize the risk. Unfortunately, public health officials who have been charged with protecting and promoting the collective health of our nation, despite having many tools at their disposal, have come to rely on stigma as a tool to overcome the alleged “obesity epidemic” (Abu-Odeh, 2014).

A review of how fat frames have been layered throughout the years and a review of theories explaining how fat stigma develops and results in discrimination provides a more complete picture of how morality, culture, class, gender, and race have added layers to fat resulting in a multi-faceted framework through which we seek to understand fatness. It also provides the perfect foundation for those same intersectionalities to increase the vulnerabilities of fat people through stigmatization and discrimination across various domains of their life.

**Prevalence of Fat Stigma**

Dr. Albert Stunkard, one of the first medical professionals to condemn the stigmatization of fat wrote in his 1980’s book, The Pain of Obesity, that fat stigma had become last acceptable form of prejudice (Vitello, 2014). Unfortunately, it appears that this statement is as true now as it was then. Although population-based studies that examine current public attitudes and related stigma are not widely available, there is
evidence to show that fat stigma is alive and well. For example, Andreyeva, Puhl, and Brownell (2009) examined whether there were changes in perceived fat discrimination from 1995-1996 to 2004-2006 and found that the changes represented a troubling 66% increase which was more than any other form of discrimination including race and gender. Their work also highlighted an increase in the number of lifetime discriminatory experiences.

A few years later Sikorski et al. (2011) conducted the first nationally representative study by conducting a meta-analysis of relevant literature aimed at reviewing the prevalence of stigmatizing attitudes, causal attribution of fatness and its predictors, and determinants of prevention support. Most of the studies focused on the opinion of the US population and only one was representative of German citizenry. They categorized approximately 24% of respondents as displaying definite stigmatizing attitudes, 22% showed no stigmatizing attitudes, with the remainder lying somewhere in between. However, a notable limitation of this study is that there was only one study reporting the prevalence of stigmatizing attitudes in the sample.

Additional evidence of the prevalence of attitudes toward fat and fat stigma can be also be found in research regarding the experiences of fat people, as well as in the research of how others interact with fat people. In the 1961 seminal work of Richardson, Goodman, Hastorf, and Dornbusch six groups of children were asked to rank order six drawings based on how much they like the child depicted in each. The sample was somewhat diverse; 277 underprivileged, disabled, and non-disabled children attending a summer camp, 104 children who were not disabled attending another summer camp, 42 low-income city schoolchildren, 113 rural schoolchildren, and 104 school children of
middle to high socioeconomic status from across the US. The drawings included a child with no disability, a child with crutches and a brace on the left leg, a child in a wheelchair with a blanket covering both legs, a child with the left hand missing, a child with a facial disfigurement on the left side of mouth, and a child who was fat. The authors found that all six groups of children ranked the drawings in the same order with the fat child being ranked the lowest, thus be the least preferred/likable. Latner & Stunkard (2003) replicated this study in 2001 and had the same result. However, what is more interesting about the 2001 replication is that the authors found that the fat child was liked less. In fact, the difference was a striking 40.8% decrease in the fat child’s likability. This could be indicative that the dislike of fat has increased throughout the years.

One study found that severely fat people who were seeking medical intervention for weight loss (surgery or medication) reported having experienced each of 50 different stigmatizing situations outlined by the researchers “several times” in their lives. They further found that the fatter a person, the more they reported stigmatizing experiences and the more that had to employ a variety of coping skills (Myers and Rosen, 1999).

It is of interest that modern attitudes toward fat and the associated stigma appears to be an affluent, Western nation phenomenon which could indicate that it is culturally bound. In developing nations, thinness is not desirable but instead weight is associated with wealth and higher social status (Rothblum, 1990; 1992). This claim is further supported by Cogan and colleagues (1996) who conducted a comparison of measures of weight, dieting and restraining eating, disordered eating, and attitudes toward fat among college students from both Ghana and the United States. They found that that US
participants rated thin people more positively than their Ghanaian counterparts. In fact, the Ghanaian students preferred a heavier body, especially the males.

The Consequences of Fat Stigma and Discrimination

The strong presence of fat stigma in the United States provides the perfect breeding ground for discrimination against fat people. This discrimination is widespread and can have a devastating impact on various areas of a fat person’s life.

Education

Research shows that it is difficult to be a fat student. One reason it is so difficult is that the fat child tends to have a poor relationship with their schoolmates (Puhl & Latner, 2007). This poor relationship is likely a result of fat stigma as research shows that anti-fat attitudes can develop as young as three years old (Brylinksy & Moore, 1994; Cramer & Steinwert, 1998; Harriger, Calogero, Witherington, & Smith, 2010). Researchers have discovered that anti-fat attitudes are present in elementary school age children (Belle & Morgan, 2000; Kraig & Keel, 2001; Tiggemann & Wilson-Barrett, 1998; Wardle, Volz, & Golding, 1995) with ideas about controllability developing as early as third grade (Tiggerman & Anesbury, 2000).

The prevalence of these attitudes and stigma continues into adolescence (Rukavina & Weidong, 2011). Neumark-Sztainer, Story, and Faibisch (1998) found that 96% of fat adolescent girls reporting having negative experiences with their peers as a result of their weight, that it most commonly occurred in the school setting, and spanned their entire educational journey. Further evidence reveals that as many as 71% of adolescents have experienced some type of weight based violence (WBV) at school
during the last year and 84% of adolescents report observing WBV (Puhl, Peterson, & Leudicke, 2013; Puhl, Luedicke, & Heur, 2011).

Not only do fat students have to deal with the anti-fat attitudes and actions of their peers, they must also deal with it among the very educators charged with protecting and teaching them. In fact, one study revealed that 42% of students who experience WBV received it from physical education teachers and sport coaches and 27% received it from all other types of teachers (Puhl, Peterson, & Leudicke, 2013). This is not surprising given that as many as 50% of teachers hold negative stereotypes of fat people including that they are less likely to succeed (Neumark-Sztainer, & Harris, 1999). This has particularly been documented among physical education teachers who report subscribing to negative stereotypes about fat and having lower expectations for their fat students (Greenleaf & Weiller, 2005; Horn, 1985; Peterson, Puhl, & Luedicke, 2012). Similar attitudes are found among students training to become physical education teachers and contrary to what one might expect, their anti-fat attitudes seem to worsen as they progress through their educational training (Greenleaf, Martin, & Rhea, 2008; O’Brien, Hunter, & Banks, 2007; Peters & Jones, 2010). It could also be said that physical education is often indirectly involved with perpetuating WBV. More specifically, Li and Rukavina (2012) found that 55% of the time physical education teachers are aware that a student is being teased, but their responses were not consistent and were often unsupportive, such as laughing.

This WBV has a profound influence on the fat student’s emotional and psychological development (Einsenberg, Neumark-Sztainer, Haines, & Wall, 2003; Einsberg, Neumark-Sztainer, & Story, 2003; Kostanski, & Gullone, 2007; Menzel et al.,
2010; Puhl & Luedicke, 2012) and physical health (Haines, Neumark-Sztainer, Eisenberg, & Hannan, 2006; Menzel, et al, 2012; Puhl & Luedicke, 2012). Although, we do not have a clear understanding of how it occurs fat children are also more likely to have lower school achievement and performance (Buhs, Ladd, & Herald, 2006; Geier et al., 2007; Glew, Fan, Katon, Rivara, & Kernic, 2005; Juvonen, Nishina, & Graham, 2000; Krukowski, et al., 2009; Puhl & Latner, 2007;).

As teenagers become young adults and make the decision to continue their education, their experiences with fat stigma and discrimination do not stop but simply presents itself differently. As early as 1966, Canning and Mayer noted that fat students were significantly less likely to be accepted for admission to college despite having comparable academic performance. They believed that this was a direct result of anti-fat bias among college admission staff. Crandall (1991, 1995) reported that both fat men and women were under-represented in higher education and presented that one possible explanation for this was that their parents are less likely to support them financially. Crosnoe (2007) found that fat women were half as likely to attend college as non-fat women and believed that it was a result of the psychosocial impact of fat stigma. Their results mirrored the results obtained by Canning and Mayer (1966) some forty years earlier suggesting that fat stigma in higher education has significant stamina. There is also evidence of anti-fat bias on the graduate level as well. Burmeister, Kiefner, Carels, and Eizenman (2013) found that the fatter the applicant, the less likely they were to receive a post-interview offer for graduate school and that this was even more pronounced among the female applicants.
Even if fat students are lucky enough to attend an institution of higher education, they continue to face obstacles and microaggressions within the institutional setting such as classroom furniture that requires students to fit within a certain space in order to participate in the formal educational process (Hetrick & Attig, 2009). Puhl and Brownell (2006) found that 32% of fat women experienced anti-fat bias and stigma from a teacher or professor and 21% experience it more than one or multiple times. This statistic is highlighted by a recent social media fury involving Dr. Geoffrey Miller, an evolutionary psychologist, who tweeted “Dear obese PhD applicants: If you don’t have the willpower to stop eating carbs, you won’t have the willpower to do a dissertation. #truth” (Miller, June 2, 2013). While being criticized for the comment, Miller responded “It’s about willpower/conscientiousness, not just about smarts” indicating his belief the fat people have no willpower (Miller, as cited in Trotter, 2013). A few hours later the tweets were deleted and his Twitter account was set to private but not before the media and private individuals dug around and found other tweets indicating anti-fat bias, including one from a few months earlier, which stated, ““Dean Kamen's new device to suck food out of people's stomachs? Or, fat people could just STOP EATING?” (Kingkade, 2013; Miller, as cited in Trotter, 2013).

Dr. Miller’s actions highlight how educators in a post-secondary setting not only harbor anti-fat bias but also how they can and do blatantly target fat students. Another obvious example of fat students being targeted is that fat students often face dismissal from college or their program of study based on their body size. During the mid-1970s Oral Roberts University implemented a mandatory weight loss program that required fat students to lose a certain amount of weight in order to maintain their status as a student.
(Root, 2015). In the 1980’s a student was dismissed from a nursing program based on being fat and failing to lose weight (Weiler & Helms, 1993). More recently, in 2006, Lincoln University in Pennsylvania, a historically black college, implemented a new graduation requirement for fat students (defined by the institution as a body mass index over 30). The course, titled Fitness for Life, was promoted as a health and nutrition class aimed at battling “obesity” in the African American community (Norris, 2009; Ruiz, 2009). In 2009 the first class to graduate under the new requirement, there were nearly two dozen students facing not being able to graduate because they had not completed the course (Norris, 2009).

**Employment**

The process of obtaining and maintaining employment is also complicated by fat bias and discrimination. Studies utilizing data from the National Survey of Midlife Development in the United States (MIDUS) revealed that among adults 25-74, those who were “overweight” were 12 times more likely to experience employment discrimination, those who were “obese” were 37 times more likely to experience it, and those who were “severely obese” were a whopping 100 times more likely to report having experienced employment discrimination. What’s more, of those fat folks, 60% reported experiencing it approximately four times (Puhl, Andreyeva, & Brownell, 2008; Roehling, Roehling, & Pichler, 2007). Women were 16 times more likely to experience employment discrimination than their male counterparts (Roehling, Roehling, & Pichler, 2007).

Employment discrimination for fat workers takes many forms. One such form is hiring discrimination. Many studies have created fictitious applicants where the researchers manipulate the applicant’s weight in the interview setting. These simulations
reveal that fat applicants are judged more harshly, are ascribed more negative
caracteristics, and are less likely to be hired (Agerström & Rooth, 2011; Giel, et al.,
2012; Klesges et al., 1990; Larkin & Pines, 1979; Pingitore, Dugoni, Tindale, & Spring,
1994; Rothblum, Miller, & Garbutt, 1988;; Swami, Chan, Wong, Furnham, & Tovee,
2008). Along the same line of employability, another form of discrimination presents
itself as the belief that being fat makes one unfit to hold certain positions. For example,
research has shown that fat people are often viewed as unfit to hold positions that require
them to interact face-to-face with the public (Bellizzi & Hasty, 1998; Everett, 1990;
provides examples of fat men and women being turned down for jobs, specifically
substitute teaching and subway train driver, for simply being fat. An additional study
highlighting how fat can influence hiring was conducted by Sartore and Cunningham
(2007) who found that fat people who applied for a fitness related position, such as an
aerobics instructor or a personal trainer, were less likely to be hired than their thin
competition, even with equal qualification. This held true even when the fat applicants
were competing with thin, unqualified applicants.

The current political culture of the United States also embodies the idea that fat
people are unfit to hold certain positions based on fatness (Miller & Lundergen, 2010).
For example, in 2009, New Jersey governor, Republican Chris Christie, has been
relentlessly criticized by journalist and political pundits and even a White House
physician, who claim that his fat body indicated that he was not in optimal health and
should therefore not be considered a viable candidate for the highest office of our land –
President (Siebold, 2013; Wing, 2013). Christie responded by undergoing weight loss
surgery which only seemed to intensify the attention given to his fatness, especially after he had to reprimand a New Jersey National Guard Brigadier General for not adhering to mandatory Pentagon physical-fitness requirements (Perez, 2015). Similar criticisms have been made of Republican Governor Mike Huckabee and President Obama’s pick for Surgeon General, Dr Regina Benjamin (Miller & Lundergen, 2010).

There is also evidence that fat people suffer from a wage penalty and are often denied benefits or expected to pay higher premiums. In an extensive literature review focused on fat bias and discrimination, Puhl & Brownell (2001) identify three ways in which fat people are subjected to a wage penalty: fat people receive lower wages for same job as thinner peers, fewer fat people are hired for high-level positions, and fat people are often denied promotions. In terms of wages, the penalty for being a fat man can range from 0.7% to 3% but for women the penalty is greater and can be as much as 6% (Baum & Ford, 2004). This is not an isolated finding as recent research has also found that the wage penalty for being fat seems to be far more specific to women. For example, when comparing 18-25 year old fat females to thin counterparts, the fat women earn 12% less (Register & Williams, 1990) and are much more likely to only be able to secure a low paying job because they are excluded from consideration for higher paying positions (Pagan & Davila, 1997). Another study conducted by Cawley (2004) mirrored these penalty statistics for women and reported that for every 64 pounds over the average weight, white females will be subjected to an approximate 9% decrease in wages. When one considers the income inequality that women face just for being female and combines it with the penalty for being fat, there is no doubt that the decrease in wages for a fat woman places her at an extreme disadvantage.
While it has been previously noted that fat men do face some wage penalty, that penalty is more pronounced for the fat men who are in professional and managerial positions (Pagan & Davila, 1997; Saporta & Halpern, 2002). Furthermore, fat men are far less likely to hold professional and managerial positions but are overrepresented in transportation/material/moving associated occupations (Pagan & Davila, 1997). The researchers hypothesize that this is likely because fat males sort themselves into certain occupations to offset the disadvantage of being fat.

Although the research is scarce, there is existing research which reveals that fat workers often face obstacles in obtaining employment benefits. For example, employers have been known to demand that fat employees pay higher premiums (Bhattacharya & Bundorf, 2009; Paul & Townsend, 1995). Others have been blatantly denied benefits because of their fatness (Rothblum, Miller, & Garbutt, 1988) or they are targeted for wellness and weight loss programs in an attempt for employers to reduce costs associated with providing employee healthcare (Conner, 2013; Heinen & Darling, 2009; O’Donnell, 2015; Wayne, 2015).

Another type of fat discrimination in employment relates to being denied promotion. Studies have shown that when fictitious applicants are described as fat they are less likely to be promoted (Brink, 1988; Rothblum, Brand, Miller, & Oetjen, 1990; Rudolph, Wells, Weller, & Baltes, 2009). Additionally, one study found that fat people, when lumped into a category with disabled or unhealthy employees, are less likely to receive a promotion than their nondisabled counterparts, despite having identical qualifications (Boridieri, Drehmer, & Taylor, 1997).
Finally, fat people are also more likely to be terminated based on their weight (Rothblum, Brand, Miller, & Oetjen, 1990). It seems that no job sector is safe from termination, as city laborers, state troopers, teachers, flight attendants, and office managers (Puhl & Brownell, 2001), game officials (Freeman, 2002), nurses (Headlines, 1993), nurses aid (Puhl & Brownell, 2001), journalist (“He takes,” 1943), addiction counselors (“In Case You,” 2010), even our military servicemen and women (Brown, 2000) are among the professional groups whose terminations have been documented in the literature.

**Interpersonal Relationships**

Fat stigma and fat discrimination is not something that fat people only experience from strangers or acquaintances but also from their close interpersonal relationships. In a study conducted by Puhl and Brownell (2006), adult aged fat women identified family members as the most common source of fat stigma (72%). The researchers further broke down this broad category to reveal that mothers were most common source (53%), followed by spouse (47%), fathers (44%), sisters (37%), brothers (36%), sons (20%), and daughters (18%). This study mirrored the results of Neumark-Sztainer, et al, (2002) who found that family members were the most common source of fat stigma for fat adolescents; 47% and 34% of girls and boys respectively. Qualitative research yields similar results (Puhl, Moss-Racusin, Schwartz, & Brownell, 2008).

Moving outside of the family system, it has been reported that as many as 60% of fat people are subjected to fat bias from their friends (Puhl & Brownell, 2006). Fat people also experience bias in the dating realm and it begins with adolescent dating. Halpern, King, Oslak, and Udry (2005) found that for each one point increase in the BMI
of adolescent girls there was a 6% reduction in their chance of having a romantic partner. When combined with the previously mentioned difficulty with peers in an educational setting, this could help to explain why fat adolescents are more likely to report feeling lonely and experiencing social isolation (Strauss & Pollack, 2003).

Just like dating in adolescence, being fat as a young adult means being less likely to date (Sheets & Ajmere, 2005). When fat people do date they are less likely to have a physically attractive romantic partner (Carmalt, Cawley, Joyner, & Sobol, 2008) and more likely to have a fat partner, which could be due to assortative mating (Fisher et al., 2014). Being fat also seems to have an impact on sexual relationships. Fat people tend to have fewer sexual partners (Nagelkerlke, Bernsen, Sgaier, & Jha, 2006; Carr, Murphy, Batson, & Springer, 2013). This impact is particularly pronounced for the fat women as she is viewed as sexually undesirable, less skilled, less responsive and warm, and also less likely to feel sexual desire for others (Regan, 1996). In fact, the men in one study found fat women so undesirable that they would have rather responded to the personal advertisement of a former addict than that of a fat woman (Sitton & Blanchard, 1995).

Men are not immune to the impact that fat can have on one’s sexual relationships. For men, being fat can result in having as many as 10 less sexual partners across his lifetime than his thin peers (Nagelkerlke, Bernsen, Sgaier, & Jha, 2006). Murphy, Batson, and Springer (2013) found that super fat men (those known in the medical field as, “Obese II/III”) report a greater chance of having no sex or having less sexual activity and less sexual satisfaction when they do have sex. This seems plausible given that Chen and Brown (2005) found that college students, when asked to rank six sexual prospects with various characteristics, ranging from visible disabilities to a history of sexually
transmitted diseases, ranked the fat hypothetical sexual partner as the least desirable partner.

There is also some evidence that being fat is linked to participation in deviant and risky sexual behavior (Nagelkerke, Bernsen, Sgaier, & Jha, 2006), even among adolescents (Gordon, et al., 2016). A recent study of men who have sex with men (MSM), revealed that when their BMI increases they are less likely to reject a potential sexual partner (Moskowitz & Seal, 2010). The same study also revealed that as the BMI of MSM increased, the number of sexual partners decreased, and so did their use of condoms. The fat female body is considered deviant and as such, it is often viewed as acceptable to objectify the fat and treat the fat woman in a negative manner. Farrell (2011) speaks of abusive Fat Admirers (FAs) who seek out fat women because they think they will be “easy” and grateful for the attention. In addition, recent research regarding homosociality reveals that fat women are often used as pawns for men to gain status among their peers and prove their masculinity through sexual games or competitions known as “hogging” (Prohaska & Gailey, 2009).

**Media Focus and Presentation of Fat**

“The media attention given to obesity is unprecedented, constant, and central to the construction of obesity as one of the greatest social problems facing the United States and the world in the twenty-first century” (Boero, 2012, p. 40). We are inundated with media messages about fat through exposure to the news, entertainment, and even advertisements. As previously mentioned, the media plays an integral role in establishing fatness as an epidemic by creating a moral panic through the dissemination of information about fat. This is accomplished by presenting fat in a certain way. For
example, research regarding how news media frame fat exposes that the focus is disproportionately about personal responsibility rather than being focused on societal or environmental causes (Boero, 2012; Kim & Willis, 2007, Saguy & Almeling, 2008). Even advertisements for diet products have been shown to reinforce the personal responsibility layer of the fat frame (Geier, Schwartz, & Brownell, 2003).

It should also be noted that there is some evidence that new layers of the fat frame may be developing as a result of media coverage. Lawrence (2004) was the first to note that a shift is occurring from the biomedical personal responsibility focus to one highlighting environment causation. More recent research analyzing print news (New York Times and USA Today) coverage of fatness in the South and Midwest (the fattest areas of the U.S.), notes that the responsibility frame is still very much present in news discourse but that cultural causation is emerging as a competing argument/frame (Shugart, 2013).

Another example of media influence on framing relates to how the media portrays fat people. Understanding that approximately one half of adults access the news online, Heur, McClure, and Puhl (2011) conducted a visual content analysis of online news videos and images and found that fat people were more likely to be portrayed in a negative manner. In fact, 72% of the images they reviewed were considered stigmatizing images, such as showing fat people from the side or the rear, showing only their abdomen, showing them eating and being sedentary, dressed in clothes that don’t fit or without clothes and showing their midsection, and headless. This phenomenon of the “headless fatty” was first noticed and named as such by Charlotte Cooper (2007) who recognized how the images further stigmatized fat people. A video content analysis of
online news conducted by Puhl, Peterson, DePierre, and Luedicke (2013) a few years later yielded similar results. More specifically, 65% of videos stigmatized fat adults and 77% stigmatized fat youth. However, this does not seem to occur at the same rate in images presented by print media over the last two decades (Gollust, Eboh, & Barry, 2012).

Stigmatization of fat people also occurs in entertainment media and has become so common that it is now referred to as “fattertainment” (Heuer, n.d.; Puhl, n.d.). It has become acceptable for a fat person to become the subject of humor or be utilized in the media as a juxtaposition to a thin character… and if a fat person isn’t available, a fat suit is utilized to simulate the humor (Giovanelli & Ostertag, 2009; Mendoza, 2009).

Fat stigma is present in adult and children television programming. Klein & Shiftman (2006) conducted a content analysis of children’s cartoons and found that fat characters were more likely to be rated as physically unattractive, unhappy, angry, unemployed, and less likely to be healthy, loving, and smart. Another content analysis of children’s videos and books for ages 4-8 found that fat characters were presented as unattractive, unfriendly, evil, cruel, never in romantic relationships, disliked, and always thinking of food (Herbozo, Tantleff-Dunn, Goke-Larose, & Thompson, 2004). Similar results were found for the fat characters on children’s television sitcoms (Robinson, Callister, & Jankoski, 2008).

Analysis of situational comedies and adult shows provides similar results. Greenberg and colleagues (2003) found that fat television characters are portrayed as less attractive and as having few friends and romantic partners. Fouts and Burggraf (1999) found that the fatter the female character, the more negative comments she received from
male characters and that audience response of laughter reinforced that behavior. On the other hand, the fatter the male character, the more likely the character was to make negative self-references related to his own weight (Fouts & Vaughan, 2002).

Puhl and Heuer (2009) note in their literature review on the stigma of fatness that fat characters are underrepresented in the media. As we have examined, the media portrayals of fat people are usually negative, despite the fact that the public prefers non-stigmatizing portrayals (Puhl, n.d.). This causes the stigma to be perpetuated as the public receiving the messages believe that any anti-fat attitudes they have are justified because it is the fat persons fault that they are fat (Crandall & Reser, 2005). They may even feel that their sneers and jeers could motivate fat people to lose weight (Heuer, n.d.). Furthermore, studies have shown that when people are exposed to news and photos of fat people portrayed negatively, they report higher levels of fat bias and vice versa; when exposed to positive portrayals of fat people, the response is prosocial rather than biased (Jeong, 2007; McClure, Puhl, & Heuer, 2011; Pearl, Puhl, & Brownell, 2012).

**Healthcare**

**Access to care.** It shouldn’t be surprising that the very societal institution that championed the medicalization of fat and was responsible for the proclamation of an “obesity epidemic” is also rampant with fat stigma. Carr and Friedman (2005) found that most fat people reported experiencing discrimination in healthcare. In fact, before the fat patient can even see a helping professional they encounter challenges. One such challenge involves health insurance. Although there have been major improvements in coverage over the last few years, especially since the implementation of the Affordable
Care Act (ACA), there are still major gaps in treatment coverage (Obesity Care Continuum, 2014; Puhl & Brownell, 2001).

Another challenge in accessing care relates to the physical environment. Patients often face waiting rooms with chairs that are too small to hold their fat body and clinic equipment like blood pressure cuffs, examination furniture, and examination gowns are not readily available for their use, if they are available at all (Fabricatore, Wadden, & Foster, 2005; Friedman & Puhl, 2012; Phelan et al., 2015). A physical environment that is not fat friendly often leaves the fat patient feeling as if they do not belong, devalued, and feeling humiliated.

**Physicians.** For more than fifty years, research has found that physicians have negative attitudes about fat patients, such as viewing them as ugly, noncompliant, sloppy, lazy, weak willed and unhygienic, as well as seeing them as personally responsible for their weight (Foster et al., 2003; Hebl & Xu, 2001; Kohrman, & Munroe, 1982; Maddox & Liederman, 1969; Newell, 2016; Schwartz, Chambliss, Brownell, Blair, & Billington, 2003; Teachman & Brownell, 2001). It is interesting to note that as the patient gets fatter, physicians express more negativity, report having less patience, report liking their job less, and report viewing patients as more annoying (Hebl & Xu, 2001).

These negative attitudes have been found to impact clinical practice. It is particularly disturbing that the fatter the patient, the less personal desire the physician has to help the patient (Hebl & Xu, 2001). Other studies support this finding as physicians with anti-fat bias spend less time with fat patients (Foster et al., 2003; Hebl & Xu, 2001; Hebl, Xu, & Mason, 2003), provided less consultation (Bertakis & Azari, 2005), build
less emotional rapport (Gudzune, Beach, Roter & Cooper, 2013), order more tests and
more likely to refer for psychological counseling (Hebl & Xu, 2001), are hesitant about
performing routine preventative health screenings on obese women like pelvic exams,
cancer screenings, and mammograms (Amy, Aalborg, Lyons, & Keranen, 2006;
Friedman & Puhl, 2012; Hernandez-Boussard, Ahmed, & Morton, 2012), and resistant to
provide reproductive assistance to women over a certain BMI (Friedman, 2014).

**Nurses.** A literature review conducted by Brown (2006) found consistent reports
that nurses hold negative attitudes about fat patients and subscribe to the stereotypes
about fat people. Nurses have also been reported to prefer not to touch fat patients,
adMITTED feeling repulsed by them, and said that they would prefer not to care for fat
patients (Bagley, Conklin, Isherwood, Pechiulis, & Watson, 1989; Garcia, Amankwah, &

**Nutritionists/Dieticians.** There are conflicting studies regarding the attitudes of
dietitians toward fat clients. McArthur & Ross (1997) found that dietitians were
ambivalent toward fat clients, as well as about the ability of their fat clients to diet and
exercise. However, the dietitians in this study also believed that fatness is caused by
emotional issues and that fat clients are unable to set realistic goals. Similar results were
found by Harvey and colleagues (2002) however, their study also revealed that dietitians
held more negative attitudes toward those identified as “obese” and felt more justified in
treating the “obese”. Another study focusing on attitudes and practices of dietitians
found that that they reported being frustrated with the lack of commitment, unrealistic
expectations, and poor motivation and compliance of their fat clients, which lead them to
being pessimistic about the client’s ability to achieve long-term success (Campbell &
Crawford, 2000). On the contrary, Edelstein, Silva, and Mancini (2009), administered the Fat People-Thin People Implicit Association Test to registered dietitians and revealed that 76% preferred thin people indicating the presence of anti-fat bias at a rate much higher than the general population.

**Mental Health Professionals.** Research with psychologists has indicated that they are negatively influenced by their client’s weight (Ageli & Rothblum, 1991; Davis, 1998; Davis-Coelho, Waltz, & Davis-Coelho, 2000). Feister (2012) discovered that counselors held anti-fat attitudes and that beliefs about controllability of weight had an impact on those beliefs. For example, if the beliefs about controllability were that the fat person was in control of their weight, the result was more negative attitudes and vice versa. She also found that the more the counselor agreed that it was important to address fatness when working with a fat client, the more negative attitudes were reported.

Studies including various mental health professionals (MHPs) have found that they tend to rate fat clients more negatively and more severely in regards to specific dimensions of psychological functioning (Hassel, Amici, Thurston, & Gorsuch, 2001; Young & Powell, 1985). Psychologist and other MHPs appear to assign fat clients a lower Global Assessment of Functioning (GAF) score (Davis, 1998; Davis-Coelho, Waltz, & Davis-Coelho, 2000; Hassel, Amici, Thurston, & Gorsuch, 2001). Studies have also found that younger MHPs tend to hold more bias toward fat people (Young & Powell, 1985; Davis-Coelho, Waltz, & Davis-Coelho, 2000) and that females in the mental health profession rate fat clients much harsher (Ageli & Rothblum, 1991; Davis-Coelho, Waltz, & Davis-Coelho, 2000; Hassel, Amici, Thurston, & Gorsuch, 2001; Young & Powell).
Professionals specializing in the treatment of eating disorders and obesity.

Puhl, Latner, King, and Luedicke (2014) found that negative weight stereotypes were present among professionals treating eating disorders (psychologists, therapist, registered dietitians, social workers, and other practitioners identified as psychiatrists, nutritionists, nurses, physicians, pediatricians, scientists and professors) although mean scores on explicit measures were somewhat lower than previous work with professionals but still indicated an anti-fat bias. Of interest is that 56% of the participants reported having heard or observed other professionals in their field making negative comments about fat patients, 42% believed that other practitioners often have negative stereotypes about fat patients, 35% reported the perception that practitioners are uncomfortable caring for fat patients, and 29% perceived that their colleagues tend to have negative attitudes toward fat patients. Participants also reported feeling prepared to work with fat patients, but expressed pessimism about treatment outcomes. Only 36% of the sample, believed that fat patients are compliant with treatment recommendations.

Implications for patient care. Phelan and colleagues (2015) conducted a critical review of the literature of regarding fat stigma among healthcare professionals as a way to determine how this particular stigma impacts health outcomes and quality of care of fat patients. They found that when professionals had an explicit bias their verbal behavior and conscious decisions are impacted and if they had an implicit bias their non-verbal behavior and unconscious decisions were impacted which creates issues in communication. For example, the review found that there is less communication between provider and patient because the professional believes that they do not adhere to treatment plans. Phelan and colleagues also found that healthcare professionals
reporting feeling like fat patients are a waste of their time and they were found to have a tendency to blame all health symptoms and problems on a patient’s fatness, which results in failure to refer for tests and offers of treatment beyond suggesting weight loss.

Fat stigma in healthcare often results in health declines for the fat patient. The fat patient is not oblivious to the stigma so they react to it. Unfortunately this reaction often comes in the form of avoiding care if they believe their fatness will be an issue (Phelan et al., 2015; Puhl & Heuer, 2009). Phelan and colleagues, warn that this avoidance can then result in the eventual presentation of advanced medical conditions that are much more difficult to treat. The authors also note that another reaction to the stigma is when the patient immediately withdraws during their time with the healthcare provider after they feel like they are being treated differently or with disrespect. After the patient cognitively checks out of the visit with the provider, they are likely to miss instructions or suggestions from the healthcare provider or they may discount the professional based on how they were treated.

Social Workers. Of particular significance to this study are studies that examine the profession of social work and fat stigma. As noted in chapter one, there are few studies which focus on social workers as a unique professional group. McCardle (2008) found that most social workers possess mostly positive attitudes toward the obese, but did note that some social workers possessed negative attitudes toward the obese. The study also discovered that those social workers who reported more negative attitudes about the obese had more negative practice behaviors. A more recent study conducted by Shinan-Altmann (2016) explored the beliefs about fat among medical social workers working in a hospital setting. This study revealed that while 85% of medical social workers held
positive attitudes about fat patients they also reported holding beliefs about controllability that have been associated with harboring an anti-fat bias. In detail, they reporting believing that fat was associated with severe consequences and that the fat individual’s behavior was responsible for their weight and treatment. Furthermore, the 15% with negative attitudes toward fat patients expressed more negative illness representations, reported greater psychological causes, as well as accidental causes, and they were more likely to believe that weight was controllable by treatment, but also that obesity was chronic.

A previously mentioned study conducted by Puhl, Latner, King, & Luedicke, 2014) that examined weight bias among professionals treating eating disorders explicitly noted that social workers were included in the sample but the presence was small (13%). Furthermore, this study did not specifically tease out the results of the professional groups so it is impossible to understand the perceptions of social workers as separate from the other groups in the study. It is also possible that social workers have been included in other studies but were lumped into categories with other professional groups or listed in the “other” category. For example, Kaminsky and Gadaleta (2002) lumped social work and psychology together in one group when they examined the differences in treatment between multiple healthcare professionals treating fat patients from the perspective of the patient, post-bariatric surgery. Their study revealed that when compared to other groups such as radiology, nephrology, endocrinology, pulmonology, surgeons, primary care physicians, cardiology, dietary staff, nursing staff, laboratory staff, and other groups, social work and psychology were ranked lowest of all groups in terms of perceived supportiveness. This gap in the literature regarding the attitudes of
social workers toward fat people is disconcerting when one considers the impact that this anti-fat bias could have on the services provided to this vulnerable population.

**Additional Domains Impacted by Fat Stigma**

Fat stigma is so pervasive that it doesn’t end with the aforementioned domains. While other domains are less studied, it does not mean that their impact is not as powerful. For example, it was previously mentioned that the lack of accommodations in the physical environment of a medical provider’s office could impede access to care. This also applies to all other public areas. Fat people are often unable to visit, or at the very least visit comfortably, venues such as theatres and restaurants. They may also have problems utilizing public transportation due to small seat size or the fact that the seatbelt size is inadequate or even worse, be asked to leave their seat or purchase additional tickets so they can take up two seats (Huff, 2009; Puhl & Brownell, 2001). Although the research is quiet dated, Pauley (1989) found customer service is much slower for fat customers and Karris (1977) found that fat people are more like to suffer discrimination from potential landlords.

There are also instances where fat people are banned from participating in specific activities. For example, there is an upcoming trend of dining in “naked restaurants” where diners exchange their clothes and their phones for paper underwear, food served by fit and buff men, and a dance show. Unfortunately, fat people (defined by the restaurant as those people who are 33lbs over their ideal weight) will not be found in the new restaurant opening in Tokyo as they have been banned from participating to keep from making other guests “miserable” (Cockburn, 2016). Similarly, there are reports of fat people being overcharged and banned from buffet restaurants (Associated Press, 2008).
Another example comes from the Boy Scouts Organization which has even banned fat male children with BMIs over 40 from participating in their Boy Scout Jamboree (Winter, 2013).

Anti-fat bias is also ever present in our justice system. Attorneys can actually dismiss jurors for being fat (Puhl & Brownell, 2001; Solovay, 2000). Furthermore, Schvey, Puhl, Levandoski, & Brownell (2013) explored whether a defendant’s body weight would have an impact on whether jurors perceived them as guilty. They found that male jurors judged the obese female defendant as being guiltier and more culpable than the thin female defendant. Female jurors judged both defendants equally and when the defendant was male, his body size had no impact on him being perceived as guilty or culpable.

Judges have been known to order weight reduction through diet, commit children and adults alike to an inpatient treatment facility to be placed on a calorie restricted diet, and mandate how much weight one had to lose per week and in total before being eligible for release from the inpatient facility (Solovay, 2000). Parents are often found guilty of crimes when their children are fat, viewed as unfit parents during child custody disputes, are ordered to place their children on weight loss regimens, and subjected to loss or interruption of guardianship (Solovay, 2000). On a related note, hopeful couples are often denied adoption rights based on parental weight (Puhl & Brownell, 2001).

To complicate matters further, Solovay (2000) states that fat people are severely underrepresented in research studies, unless of course the studies are focused on “obesity”. She provides several examples of this underrepresentation, including a study that was one of the largest ever undertaken and funded by the NIH. This was a
longitudinal study that focused on heart disease, cancer, and osteoporosis in women, yet fat women were excluded. Solovay also notes that when this exclusion was questioned one of the researchers made comments about how the fat women needed to be dieting not participating in a study that isn’t focused on weight loss. The response of this researcher is a perfect reflection of the findings of Schwartz and colleagues (2001) who discovered that researchers conducting “obesity” research express significant implicit (attitudes and beliefs about fat that impact our actions in an unconscious manner) and explicit (attitudes and beliefs that are conscious) bias (Schwartz, Chambliss, Brownell, Blair, & Billington, 2001). Building on this research, Tomiyama and colleagues (2014) measured anti-fat bias among researchers and other “obesity specialist” but also examined if this bias had changed from 2001 to 2013. They found that there were lower levels of implicit anti-fat bias in 2013 compared to 2001 for all specialist included in the study but the rate of implicit bias was still significant. On the other hand, they found higher levels of some types of explicit anti-fat bias in 2013 as compared to 2001.

In addition, another type of bias has been discovered among obesity researchers. Allison & Cope (2010) found evidence that data was exaggerated and/or selectively included or excluded in the articles that they examined regarding sugary beverage consumption and breastfeeding. Specifically, the data was manipulated in order to encourage and promote breastfeeding and discourage sugary beverage consumption as a way to prevent obesity. This particular type of bias has been termed “white-hat bias” and defined as “bias leading to distortion of research-based information in the service of what may be perceived as righteous ends” (Cope & Allison, 2010, p. 84).
Coping with Stigma and Discrimination

As BMI increases so does the number of stigmatizing situations experienced by fat people (Meyers & Rothblum, 2010; Puhl & Brownell, 2006). As fat people experience stigmatizing situations and discrimination, they must find a way to cope with the oppression and marginalization. Some fat people cope by eating more/binging or refusing to diet (Bannon, Hunter-Reel, Wilson & Karlin, 2009; Farrow & Tarrant, 2009; Puhl & Brownell, 2006; Puhl, Moss-Racusin, & Schwartz, 2007). This supports the findings outlined in a recent paper by Brewis (2014) that suggests that embodiment of fat stigma and discrimination actually contributes to weight retention and gain which serves to drive up the prevalence of fat and thus creating a feedback loop where fat stigma and discrimination gains strength. These findings mirrored those of Bannon, Hunter-Reel, Wilson & Karlin (2009) who, a few years earlier, found that binge eating as a coping response resulted in an increase in stigma. Other ways of coping include avoidance, ignoring it, or educating others about stigma (Puhl & Brownell, 2006).

The relationship between psychological distress and fat stigma is unclear and research is conflicting. There is some evidence that weight is not related to psychological distress but researchers have also noticed that as the number of stigmatizing situations increases the fat person exhibits more mental health symptoms, negative body image, and lower self-esteem (Meyers & Rosen, 1999; Meyers & Rothblum, 2010). It is interesting to note that Meyers and Rothblum (2010) found that weight loss attempts were associated with worse psychological adjustment among fat people.

There is also conflicting evidence about coping approaches. For example, Puhl & Brownell (2006) reports that some types of coping that are considered positive, such as
prayer and positive self-talk, actually increase depressive symptoms and those that seem maladaptive, such as crying and ignoring, is shown to decrease levels of depression. On the other hand, Meyers and Rosen (1999) found that maladaptive coping approaches resulted in an increase in mental health symptoms.

Another way that fat people may cope with stigma and discrimination is by fighting back through seeking recourse from the US legal system. Unfortunately, most of these attempts have not been successful as weight is not a protected class meaning that there is no basis for a claim. Current federal laws do not adequately address weight discrimination (it is somewhat addressed in terms of disability discrimination but is not widely applicable) (Pomeranz & Puhl, 2013; Rudd Center for Food Policy & Obesity, n.d; 2008). Only one state (Michigan) and six cities and municipalities (Washington, DC, San Francisco, CA, Santa Cruz, CA, Madison, WI, Urbana, IL, and Binghamton, NY) have laws that prohibit discrimination based on one’s body weight (Pomeranz & Puhl, 2013; Rudd Center for Food Policy & Obesity, n.d.; 2012). It is disconcerting that the areas of our country that have the highest fat populations, namely the south and Appalachia, do not have state or local policies to address this vulnerability. In addition, the lack of legislation for equal protection is frustrating given that research as far back as a decade ago shows that US citizens are in favor of anti-discrimination legislation (Oliver & Lee, 2005; Puhl & Heuer, 2011; Puhl et al., 2015; Suh, Puhl, Liu, & Fleming Milici, 2014).

When fat people do persist in seeking legal assistance they often are forced to utilize the protections of the Americans with Disabilities Act (ADA or human rights ordinances which only exist in a few jurisdictions (Puhl & Heuer, 2009; Solovay, 2000;
Tebo, 2005). This path certainly isn’t easy or guaranteed as the ADA has very specific criteria that must be met before fatness can be established as a disability, such as being linked to a physiological cause (Puhl & Heuer, 2009). Another loophole involves perception of fatness as a disability. However, only the super fat or those referred to as “morbidly obese” by the medical profession are potentially protected under this loophole (Puhl & Heuer, 2009). However, there are concerns that utilizing the ADA will create additional problems for the fat community in terms of stigma and suggesting that all fat people are disabled (Puhl et al., 2015; Puhl & Heuer, 2009).

**Intersectionality and Fat**

Just like the many layers of fat framing, characteristics that are often used to oppress individuals can also be layered. Fatness most definitely makes one vulnerable but when fat is layered and intersected with race, gender, sexual orientation, SES, and geographic location, the vulnerability is much more intensified.

**Gender**

As previously discussed, women are more likely to suffer social consequences when they are fat (Rothblum, 1992). Fat women are less likely to attend college and their parents are less likely to support them in this endeavor (Canning and Mayer, 1966; Crandall, 1991; 1995; Crosnoe, 2007). They are more likely to be discriminated against in employment settings and because of such their earning ability suffers (Cawley, 2004; Haskins & Ransford, 1999; Pingitore, Dugoni, Tindale, & Spring, 1994; Register & Williams, 1990; Roehling, Roehling, & Pichler, 2007; Rothblum, Brand, Miller, & Oetjen, 1990). Sixty nine percent of women report feeling stigmatized by a doctor at least once and 52% report having experienced it on multiple occasions (Puhl & Brownell,
It is hypothesized that as a result of these stigmatizing experiences women are more likely to doctor shop and delay preventative texts, such as PAP smears and breast exams (Fontaine, Faith, Allison, & Cheskin, 1990; Sansone, Sansone, & Wiederman, 1998). As a woman’s BMI increases, this delay or avoidance also increases (Amy, Aalborg, Lyons, & Keranen, 2006).

In addition, women are more likely to be targeted by the media in terms of ads and articles that are related to body size and dieting (Anderson & DiDomenico, 1992; Silverstein, Perdue, Peterson, & Kelly, 1986). Exposure to these ads, television programs highlighting featuring thin characters, and beauty, fashion and entertainment magazines fuels a woman’s goal of achieving thinness and the ideal body shape, in terms of waist, hips, and bust, (Harrison, 2003; Harrison & Cantor, 1997) and is related to a higher rate of eating disorders (Botta, 2003). Fat women are less likely to enter into romantic relationships and get married (Halpern, King, Oslak, & Udry, 2005; Regan, 1996; Sheets & Ajmere, 2005). Fat women are also viewed as sexually undesirable, less skilled, less responsive and warm, and also less likely to feel sexual desire for others, but this is not true for fat men (Regan, 1996).

Royce (2009) highlights a very important intersection of fat and violence against women. More specifically she notes that there is little literature about how anti-fat attitudes might encourage violence against fat women and calls for this important work to be undertaken. This is an important area of exploration as there have been links made between fatness and being a female victim of sexual abuse (Aaron & Hughes, 2007; Gustafson & Sarwer, 2004; Noll, Zeller, Trickett, & Putnam, 2007; Rohde et al., 2008; Smith, et al., 2010) and physical abuse (Austin, et al., 2008; Balsom, Rothblum, &
Beauchaine, 2005; Bentley & Widom, 2009; Boehmer, Bowern, & Bauer, 2007; Lissau & Sorensen, 1994; Valanis, Bowen, Bassford, Whitlock, Charney, & Carter, 2000; Wadden, et al., 2006; Wiederman, Sansone, & Sansone, 1999). In addition, in one study, 47% of participants reported their spouse as a source of weight bias, such as teasing, name calling and pejorative comments (Puhl & Brownell, 2006). A related statistic shows that women are also three times more likely than a man to be harassed and mistreated by strangers because of their fatness (Falkner et al., 1999). This fact provides indication that fat women are targeted for this type of violence.

These differences are not limited to those individuals who are born female but those who are transgender. A study conducted by Warren, Smalley & Barefoot (2016) found that among the 61% of the LGBT sample, the fattest were the transgender men. Bergman (2009) eloquently describes the difference in the struggle of being fat when one presents as a woman or presents as a man. For example, presenting as a woman increases the change of experiencing a stigmatizing situation; while presenting as a man doesn’t really present any challenges in navigating everyday social encounters.

**Sexual Orientation**

Another intersection that compounds the oppression experienced by fat people is sexual orientation. Many studies have found that lesbians are two times more likely to be fat than their heterosexual peers (Barefoot, Warren, & Smalley, 2015a; Boehmer, Bowen, & Bauer; Conron, Mimiaga, Landers, 2010; Mason & Lewis, 2015). This particularly disparity has been blamed on everything from the binge eating associated with fat stigma (Barefoot, Warren, & Smalley, 2015) to the “lesbian culture and sexuality” (McPhail & Bombak, 2015).
**Race**

The CDC (2014) reports that people of color are at an increased risk of being fat. More specifically, Non-Hispanic blacks have the highest rates of fatness (47.8%) followed by Hispanics (42.5%), non-Hispanic whites (32.6%), and non-Hispanic Asians (10.8%). This “risk” can be further compounded when one is a female person of color. For example, Hispanic women are 30% more likely to be fat than non-Hispanic white women (Office of Minority Health, 2016a). Another example from Bleich and colleagues (2010) found that black women are more likely to be fat than white women and a current statistic states that 82% of black women are fat (Trust for America’s Health, 2015a). Wilson (2009) speaks about evidence that black lesbians, as a group, are fatter than lesbians of other ethnicities. With that in mind, she calls for the poor health outcomes associated with being a black lesbian to be examined in terms of the impact that dealing with racism, sexism, heterosexism, and anti-fat bias actually has on their life.

Other statistics show that when compared to non-Hispanic whites, American Indians/Alaskan Natives are 50% more likely to be fat (Office of Minority Health, 2016b) and Native Hawaiians/Pacific Islanders are 30% more likely to be fat than their non-Hispanic white peers (Office of Minority Health, 2016b). Given that rates of fatness are very low among the Asian population, this statistic makes Hawaiians/Pacific Islanders four times more likely to be fat than their Asian peers (Office of Minority Health, 2016c).

**Socioeconomic status**

While there is a correlation between socioeconomic status and fatness, it is a complicated one that can vary based on the aforementioned characteristics of gender, race, and education level. Sobal and Stunkard (1989) examined 144 published studies
from the 1960s to the 1980s on the relationship between “obesity” and SES. They discovered that there was no correlation between SES and fatness for men, but that there was definitely an inverse relationship for women. In other words, for women, as education level decreases, fatness increases. For example, recent statistics reveal 42% of women with income below 130% of the poverty level are fat (Ogden, Lamb, Carroll, & Flegal, 2010). This trend occurs for all groups of women, but is only statistically significant for non-Hispanic white women. In addition, children born in low income households are more likely to be fat (Trust for America’s Health, 2015a).

SES has also been linked to fatness based on food costs and diet quality. Studies have revealed that people with a higher SES are more likely to have a healthier diet where they consume lean meats, low-fat dairy, fish, whole grains, and fresh fruits and vegetables while those with a lower SES are likely to consume refined grains, added sugars, and fats, as well as nutrient poor foods (Darmon & Drewnowski, 2008; Drewnowski & Eichelsdoerfer, 2009; Golan, Stewart, Kuchler & Dong, 2008).

Geographic location

As previously noted, there are geographical pockets that represent higher rates of fatness and thus they face more consequences—namely the Appalachian Region and rural communities. According to the Appalachian Regional Commission (ARC) (2015), the Appalachian Region follows the Appalachian Mountain Range and extends from southern New York to northern Mississippi and covers more than 200,000 square miles. More specifically, it includes 420 counties across 13 states (all of West Virginia and parts of 12 other states: Alabama, Georgia, Kentucky, Maryland, Mississippi, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, and Virginia). In
addition, 42% of the Appalachian population lives in a rural area, compared with 20% of the national population (ARC, 2015). In addition to facing a host of economic and educational disparities, Appalachia is home to a disproportionate amount of fat citizens. “Obesity” prevalence maps highlight that the Appalachian region has “obesity” rates that are greater than 30% and is home to the two fattest states in the nation, West Virginia and Mississippi, where the “obesity” prevalence rates are greater than 35% (CDC, 2015c).

There are many factors that contribute to the disproportional statistics regarding fat in Appalachia. One of those factors relates to socioeconomic status (SES) (Ernsberger, 2009). There is no economic parity for the Appalachian region and this is especially true for Central Appalachia which still battles concentrated areas of high poverty, high rates of unemployment, and low rates of educational attainment (see previous discussion of SES) (ARC, 2010; 2015).

It is often difficult for folks living in Appalachia to maintain a healthy diet due to the food environment (i.e. access to healthy foods). The Economic Research Service of The United States Department of Agriculture (2013) and the ARC via a report written by Haskell (n.d.) have dubbed much of Appalachia to be a food desert, meaning that it lacks access to fresh, healthy, and affordable food. These food deserts, while scattered all over the Appalachian region, tend to be clustered in Central Appalachia (Haskell, n.d.). The FRAC (2015) notes that this lack of access could be related to disparities in access to supermarkets, vehicle access to travel outside of food deserts to purchase food, and the expense of healthy foods. This rings even more true for black neighborhoods as they tend to have the least access to supermarkets and fresh produce (The State of Obesity,
2014a) and Latino neighborhoods have 1/3 less supermarkets than non-Latino neighborhoods (The State of Obesity, 2014b). On a related note, ads for less nutritious foods tend to target Black and Latino neighborhoods (The State of Obesity, 2014a; 2014b). Singleton, Affuso, and Sen’s (2015) research highlights this fact. They examined the “obesity gap” between high and low African American populated counties. The research revealed a 3.5% “obesity gap” between the high and low groups and found that approximately 13.81% of that gap could be explained by the retail food environment (access to supermarkets and fast food restaurants).

Subsequently, the built environment of a geographic location has an impact on fatness. The built environment in Appalachia has been said to encourage a sedentary lifestyle (Gulley, 2011). In fact, many areas in Appalachia are not considered walkable, bikeable, and with limited to no options for public transportation, access to public parks, playgrounds, and other recreational activities are limited. In other words, the geography of the land, particularly with respect to the rural areas, combined with the limited resources of the economically depressed areas present major challenges for an active lifestyle. Hispanic and black neighborhoods face similar challenges in having a safe place to be active (The State of Obesity, 2014a; 2014b). Sarifi and colleagues (2016) recently examined the impact that the built environment and SES of the neighborhood would have on child BMI. They discovered that both SES (most significant) and the built environment have a significant influence on the BMI disparities for black and Hispanic children. Another fascinating study exploring the intersectionality of sexual orientation, rural geographic location, and fatness found that lesbians living in rural areas are fatter than urban dwelling residents, have a diet higher in protein, and are less likely to
exercise due to challenges related to the geographic landscape and built environment (Barefoot, Warren, & Smalley, 2015b).

**Stigma and Bias Reduction: A Role for Educators**

Given that an array of practicing helping professionals have anti-fat bias it is no surprise that students of the same also possess these same negative attitudes. The list is extensive and includes, but is not limited to, dietetic students (Puhl, Wharton, & Heuer, 2009; Welborn, Lee, & Johnson, 2013), dental students (Magliocca, Jabero, Alto, & Magliocca 2005), exercise science and physical education students, (Alameda & Whitehead, 2015; Chambliss, Finley, & Blair, 2004; Villablobos, 2012), psychology students (Soto, Armendariz-Anguiano, Bascardi-Gascon & Cruz, 2014; Waller, Lampman & Lupfer-Johnson,2012), counseling students (Adams, 2008), students of marriage and family therapy (Pratt, Palmer, Cravens, Ferriby, Balk, & Cai, 2015), medical students (Davis, Shishodia, Taqui, Dumfeh, & Wylie-Rosett, 2008; Miller et al., 2013; Persky & Ecclesten, 2011a; Phelan et al., 2014; Phelan et al, 2015; Puhl, Luedicke, & Grilo, 2013; Wear, Aultman, Varley, & Zarconi, 2006).

Contrary to what one might think, there is evidence that sometimes professional education programs can actually make anti-fat bias worse. For example, some studies focusing on medical students have found that anti-fat bias often gets worse as they proceed through their training (Davis, Shishodia, Taqui, Dumfeh, & Wylie-Rosett , 2008; Persky & Ecclesten, 2011a; Phelan et al, 2015). However, it should be noted that the rate of implicit bias, while decreasing throughout medical education, was still indicative of anti-fat bias. Another way professional education can negatively impact students is related to students often observing negative comments and derogatory humor about fat patients from role models.
such as attending physicians and resident physicians (Phelan et al., 2015; Puhl, Luedicke, & Grilo, 2013; Wear, Aultman, Varley, & Zarconi, 2006). Perhaps even more disturbing is that there is evidence that most students do not consider this behavior to be inappropriate (Wear, Aultman, Varley, & Zarconi, 2006). Phelan and colleagues (2015) note that this type of behavior among educators is of great concern because role modeling is a very important part of medical education and call for schools to promote an environment where there is respect for size diversity and no room for negative comments and discrimination.

To further compound this problem, there is evidence from the literature that healthcare professionals (including residents, faculty, and practicing professionals) do not feel prepared to work with fat clients (Block, DeSalvo, & Fisher, 2003; Davis, Shishodia, Taqui, Dumfeh, & Wylie-Rosett, 2008; Forman-Hoffman, Little, & Wahls, 2006) and often report little to no training during their educational journey which focuses on working with fat patients (Goff, Holmboe, & Curry, 2006; Jay et al., 2008; Lichwala-Zyla, Price, Dake, Jordan, & Price, 2009). Other studies have found that in spite of the fact that most of the students in their samples reported feeling confident in their ability to treat fat patients, they still expressed frustration about treating them and viewed them as non-compliant with treatment and lacking motivation, and therefore, difficult to cope with (Puhl, Luedicke, & Grilo, 2013; Puhl, Wharton, & Heuer, 2009; Wigton & McGaghie, 2001). It is plausible that one might make the argument that those complaints about fat patients actually indicate the opposite of competence and skill. This is likely how the nursing profession perceived this as well. In particular, the nursing profession recognized that nurses often report this type of inadequate preparedness and they issued
calls to reform nursing education to address fatness more thoroughly (Rowen, 2010a; 2010b; Swift, Sheard, & Rutherford, 2007).

As a result of the prevalence of negative attitudes among students, many education programs have answered calls for curricula reform and have taken steps to address the problem in order to protect the quality of care for fat patients. This typically involves some type of bias reduction intervention. Puhl and Heuer (2009) note that research on stigma and bias reduction in the general population has focused on various approaches from eliciting empathy to education about causality but has only had mixed results. Despite that, educational programs have implemented intervention programs based on previous reduction attempts in the general population, as well as creative approaches. Those intervention programs have utilized standardized patients (Kusher et al., 2014), simulation mannequins that often require faculty to get creative in creating a fat patient and resort to padding the mannequin with pillows or having a seamstress create a bariatric suit (Rowen & Huseman, 2010; Walker & Gantt, 2010), incorporation of sensitivity trainings into curriculum programs (Rowen & Husenman, 2010), immersive virtual environments (IVE) or virtual reality patient encounters (Persky & Ecclesten, 2011b), videos and interactive discussion (Poustchi, et al., 2013), tutorial groups (O’Brien, Puhl, Latner, Mir, & Hunter, 2010), lectures about fatness, weight bias, and multiple determinants of weight (Diedrichs & Barlow, 2011), case studies (Ben-Sefer, 2009; Marzen-Groller & Cheever, 2010) or some combination of approaches (Rukavina, Li, & Rowell, 2008). There have even been efforts to develop entire curricula which are designed to address anti-fat bias and the reported inadequate preparedness to work with fat patients (Huang et al., 2009; Center for Food Policy and Obesity, 2016).
Furthermore, to reach those who are currently practicing, Continuing Medical Education (CME) trainings have been developed (Beno, Hinchman, Kibbe, & Trowbridge, 2005; Kahn, 2006) and a series of “white papers” have been developed for public health professionals to improve their legal competence related to preventing and controlling fatness (Fleischhacker et al., 2009).

As outlined above, many helping professions have recognized the bias among their practitioners and students of their respective fields. They have also heard their practitioners express doubt in their competency to work with fat patients and have taken steps to address both issues. Unfortunately, that is not the case with all helping professions. In particular, there is no indication in the literature if social work is taking steps to address the presence of anti-fat bias within the profession and ensure that social workers are competent to work with and on behalf of fat clients.

**Social Work’s Involvement with Fat**

A review of the social work literature as it relates to fatness as a social work issue is very limited. In fact, the literature that does address fat as a social work issue focuses on clinical approaches to change the individual, and usually related to disordered eating (Ciporen, 2012; Dunn, n.d.; Lawrence, 2010; Saunders & Saunders, 1993; Flack & Grayer, 1975). Melcher and Botswick (1998) state that this assumption that all obese people have disordered eating leads to a myth that obese people are pathological and can lead to a professional bias. In addition, there is an increasing interest in the role of social work in working with obese children and adolescents who are recognized as being especially vulnerable (Lawrence, Hazlett, & Hightower, 2010; Lawrence 2010; Cecil-Karb & Grogan-Kaylor, 2009; Eliadis, 2006). In fact, child welfare literature,
specifically related to foster care and obese kids, calls for child welfare workers to be trained in weight reduction interventions (Schneiderman, Smith, Arnold-Clark, Fuentes, & Duan, 2013). Furthermore, there is some indication that social work is beginning to be involved with some of the environmental issues associated with obesity, such as the connection between food insecurity and obesity (Kaiser, 2011), neighborhood safety and television watching (Cecil-Karb & Grogan-Kaylor, 2009) and the urban “obesity crisis” (Delgado, 2013). Unfortunately, this appears to be the limit of social work’s involvement with obesity and is precisely why Mik-Meyer (2010) argues that “the overweight body remains under-theorized in social work” (p. 386). Building on the argument of Mik-Meyer, what little involvement social work has with fat is clearly aligned with the dominant discourse focused on a biomedical perspective. Additionally, there is no mention of the topic of fat oppression and/or the recognition of obese people as at risk, even in those rural Appalachian areas where obesity is more prevalent, intersectionality is visible, and vulnerabilities run high.

**Social Work Education**

Given that the literature on the practice of social work as it relates to fat is extremely limited, it is no surprise that the literature about social work education and fat is equally limited. Only two articles were found and only one was published in a journal related to social work education (Friedman, 2012; Lawrence, Hazlett, & Able, 2012). Both articles devote a considerable amount of space to arguing that fat is a social work issue and that fat oppression is real and worthy of study and eradication. Furthermore, both articles issue a challenge for social work education to step up, acknowledge, and begin addressing the social justice aspects of fat. While Friedman (2012) shares an
empathetic story about how she once struggled to integrate fat oppression and bias into her teaching. Lawrence, Hazlett and Able (2012) propose a curriculum model that meets CSWE mandates and could be used to reduce anti-fat bias among social work students. This pedagogical approach, based on a previously developed conceptual model combining diversity and social justice, is shared with the belief that its implementation could reduce or eliminate the potential for that anti-fat bias to impact the provision of services to fat clients.

The pedagogical approach proposed by Lawrence and colleagues (2012) is not the only approach available to the profession. Some educators who seek to expand how they present issues related to fat and fat oppress utilize the fact focused area of academic study referred to as fat studies. Fat studies is defined at the end of chapter one so will not be revisited here. This movement was developed and modeled after other identity studies, such as feminist studies, disability studies, and queer studies. What began as a small movement in the 1960s and 70s has snowballed into regional and national conferences and panels, gained a presence in the academy in the form of student groups and interdisciplinary courses on fat studies, and spawned a great amount academic research. In 2009, two academic texts, The Fat Studies Reader and Fat Studies in the UK helped to further ground fat studies within the academy, as did the 2012 development of a journal, Fat Studies: An Interdisciplinary Journal of Body Weight and Society.

This area of study has not only provided a alternative discourse of fatness but it has also inspired the development of what Cameron (2014) refers to as “fat inclusive pedagogies and practices” (pg. 55). Recently, various courses encompassing several disciplines have included some aspect of fat studies into appropriate courses (Watkins,
Farrell, & Hugmeyer, 2012). While there is limited research on the relationship between pedagogy and fat studies, there are a handful of studies which focus on specific strategies that can be utilized to reduce fat bias (Puhl & Heuer, 2009; Danielsottir, O’Brein, & Ciao, 2010; Puhl, Lattner, Mir, & Hunter, 2010) and the experience of teaching from a fat studies perspective (Cameron, 2014; Watkins, Farrell, & Hugmeyer, 2012; Boling, 2011; Hopkins, 2011; Guthman, 2009; Escalara, 2009; Tirosch, 2006). While studying the pedagogical approaches of 26 academics teaching full courses or utilizing an infused approach to challenging the dominant discourse surrounding fat, Cameron (2014) noted that the participants in her sample agreed that pedagogy must take a central role in fat scholarship in order to effectively challenge the dominant discourse. Watkins, Farrell, and Hugmeyer (2012) also recognized this and called for more research to identify best pedagogical practices as related to teaching fat studies.

Cameron (2014) concludes that the pedagogical approaches that she identified for incorporating or teaching about fat were not cutting edge or new approaches. Rather they were drawn from a constructivist, student centered approach, as well as from feminist pedagogy, critical pedagogy, and social justice educational approaches. She further suggests that fat pedagogy is grounded enough that it has become part of the movement and is fueled by critical pedagogy that actively challenges oppression and works to stop the reproduction of inequality. The existence of identified pedagogies to teach about fat, in a way that acknowledges social justice issues, are proof that it can be done and that social work would not have to reinvent the wheel, so to speak. We just have to commit and act.
Summary

Anti-fat bias is rampant and shows no sign of slowing down. In fact, as previously noted, it has been described as the last acceptable form of prejudice. This bias leaves fat people extremely vulnerable to oppression and marginalization. Past and current literature provide evidence of the pervasive nature of this bias in education, employment, interpersonal relationships, the media, and in healthcare. There is also evidence that many helping professionals hold this anti-fat bias, which has been shown in some cases, to impact the quality of care received by fat patients. This anti-fat bias also extends to students of the helping professions in such a manner that some educational programs have felt that their respective curricula warrants the inclusion of bias reduction intervention. In addition, many of those same educational programs have responded to research results showing that many of their practitioners do not feel adequately prepared to work with fat clients by developing trainings to be included in their curriculum or offered as continuing education programs. These trainings are specific to each respective profession and reflective of the dominate layer of the fat frame—the biomedical weight-centered framework.

Unfortunately, based on what is presented in the literature, social work does not appear to be very involved with fat. What’s more, what little involvement can be discerned from the literature indicates that social work has aligned its work with the biomedical weight-centered framework, which has effectively led to the profession ignoring the social justice issues related to fatness. In addition, despite being mandated by the CSWE to address oppression and discrimination, there is no evidence that social
work education has responded to this neglect by taking steps to ensure that social work students are competent to work with and on behalf of fat clients.

The studies outlined in this chapter and the gaps revealed in the literature, provide an entry point to research whether the silence of the literature in relation to social work education’s response to anti-fat bias in the profession is related to the anti-fat bias among helping professionals and educators. Given that anti-fat bias is shown to have an impact on the provision of services to fat clients, it is possible that anti-fat bias is having a similar impact on the provision of professional education. In other words, is anti-fat bias among social work educators impacting how they perceive fat as a social work issue and how they present fat issues to their students? Given that Appalachia is home to some of the nation’s fattest citizens, this is of particular concern for social work programs located in that geographic region. The students and practitioners in those areas face a practice environment where they will have to not only deal with disparities associated with living and working in rural Appalachia but will also face the disparities associated with fat. In order to ensure that these students obtain an education that allows them to address the social justice issues related to fatness, we must first determine if they are exposed to issues related to fat, and if so, in what manner (i.e. biomedical weight centered framework or social justice framework). In addition, we also must explore what factors impact social work educator’s decisions to present fat in a specific way, particularly if anti-fat bias has an impact on those decisions.

The next chapter will provide a detailed account of the research methods through which these issues will be explored. By learning about these issues and gaining an understanding of the influence that anti-fat bias has on social work education in
Appalachia, the entire social work educational process can be enriched. In turn, we will produce graduates who are knowledgeable, skilled, and prepared to intervene on micro, mezzo, and macro levels in order to enhance the lives of our fat population.
Chapter Three
Methodology

The purpose of this study research was to explore whether social work educators in Appalachia have an anti-fat bias, if they include issues related to fat in their courses, and if so, is curriculum inclusion adhering to the dominant biomedical discourse or taking a more social justice oriented approach. This chapter explains the research design and methodology utilized for this study and provides details about the sample, variables, instrumentation, and data analysis.

Research Design

Given that the literature is mostly silent related to the topic at hand, in order to be able to more clearly define the problem at hand, this researcher determined that the study required a research design that would tolerate the recognition of a problem and also tolerate ambiguity in terms of understanding the problem. The research design for this study also had to be conducive to laying the groundwork for future research when more is known about the problem. Therefore, this research employed a non-experimental, exploratory-descriptive, quantitative, cross-sectional research design.

Population and Sample

Participants were social work educators recruited from CSWE accredited social work programs located in the Appalachian region of the United States using a non-probability purposive sample. Selection criteria required that the participants teach either full time or part time in a CSWE accredited social work program located within the boundaries of the Appalachian region and possess the ability to speak and read English.
Variables and Instruments

Demographics. Demographic information was collected from the social work educator using a descriptive characteristic questionnaire developed by this researcher. This instrument was designed to gather information about the educator that may influence other variables in the study. Demographic variables included age, gender identity, race/ethnicity, self-perception of body size, highest level of education, responsible for teaching at undergraduate level or graduate level, years of teaching experience, academic status (full time/part time), and location of educational institution within the Appalachian region. The regional location is important as this study will examine if and/or how, the participants from each region differ with respect to their response(s) related to each variable. In addition, participants are asked if they are currently practicing or have they ever practiced social work in Appalachia. Those who have practiced social work in Appalachia are then asked to provide additional demographic information related to the Appalachian region in which they practice, total number of years that they lived in Appalachia, and if they are a native of Appalachia. If a native, they are asked to identity the region of Appalachia where they were born and raised.

Curriculum inclusion of issues related to fat. The dependent variable in the study was the inclusion of issues related to fat in the curricula of social work programs. This dependent variable was measured through participant responses to questions developed by the researcher. The first question asks “Do you include issues related to obesity and/or fat in the courses you teach?”. If the participant answered yes then they were directed to another question which addressed another variable related to curriculum inclusion.
**Pedagogical approach to teaching about fat.** Once it was determined that the participant teaches about fat, they were directed to another question which addressed one of the independent variables – pedagogical approach to teaching about fat. More specifically, this question allowed the researcher to explore whether the fat issues addressed by the social work educator were related to the dominant biomedical discourse or focused on social justice issues. This question was developed by the researcher and instructed participants to review a list of discussion topics and choose all topics they utilize to teach about fat. These discussion topics included items aligned with the biomedical weight centered framework, such as health consequences, treatment options, diet/exercise, and BMI. The list also included items related to social justice and oppression, such as bias, food desserts, poverty, stigma, and fat studies. Additionally, the list provided an option of “other” to capture any topics not identified.

**Competencies related to fat.** Another variable related to curriculum involved determining which of the competencies established by the CSWE were being addressed by those social work educators who teach about fat. In order to capture this independent variable, this researcher adapted practice behaviors from the 2008 and 2015 CSWE competencies to focus on working with the fat population. This list was presented to the social work educators who were asked to only consider the courses where they teach about fat and then to select all of the adapted behaviors they expect students to be able to competently display after completion of their course(s). A few examples of the practice behaviors are: “understand the forms and mechanisms of fat oppression and fat discrimination”, “practice personal reflection about fat and self-regulation to assure continual professional development with respect to body weight and its implication”, and “substantively and affectively prepare for action with the fat population by creating a fat
friendly physical environment (ex: chairs without arms or extra wide seating) and utilizing weight neutral language”.

**Anti-Fat bias.** A variable of particular interest in this study was whether anti-fat bias exists among social work educators. As an independent variable anti-fat bias was operationalized by this study as the attitudes and beliefs that social work educators hold toward fat people. The attitudes and beliefs were measured by two inventories: The Anti-Fat Attitudes Test (AFAT) and the Universal Measurement of Bias – FAT scale (UMB-FAT). Permission to utilized both scales in the current study were obtained from the developers of the scales via email.

The AFAT was developed by Lewis, Cash, Jacobi, and Bubb-Lewis (1997) to provide a more psychometrically sound scale by which to measure anti-fat attitudes. The AFAT is a 47-item inventory with three subscales: 1) social character/disparagement, 2) physical/romantic unattractiveness, and 3) weight control/blame. Two of these scales will be utilized to measure anti-fat-bias. In detail, subscale one focused on social character/disparagement will be used to measure the attitudes of social work educators toward fat individuals and subscale three which is focused on weight control/blame will be used to measure beliefs about controllability.

The AFAT is a 5-point Likert scale ranging from 1 (definitely disagree) to 5 (definitely agree). To determine a score for the total scale each item is added. However, there are eight items on the inventory which are negative items (i.e. they are phrased in such a way that a higher level of agreement with the item is reflective of a low quantity of the item being measured). These items require reverse scoring. The higher the score the more anti-fat attitudes. All three subscales are scored the same way. Items on the
inventory include: “There is no excuse for being fat”, “If bad things happen to fat people, they deserve it”, “I don’t understand how someone could be sexually attracted to a fat person”, and “Fat people obviously have a character flaw, otherwise they wouldn’t become fat”.

In addition to the subscales of this instrument making it a good match for the study, this instrument was also chosen because it has been shown to have excellent internal consistency as evidenced by a Cronbach’s α of 0.95 for both males and females. In addition, there is good internal consistency across the subscales shown by alpha coefficients ranging from 0.77 to 0.91 (Lewis, Cash, Jacobi, and Bubb-Lewis (1997). The authors also found that the AFAT has discriminant validity evidenced by Pearson r values ranging from -0.02 to +0.19 when calculated for the AFAT and The Social Desirability Scale (SDS).

The UMB-FAT scale was developed by Latner, O’Brien, Durso, Brinkman, and MacDonald (2008) as a way to compare the weight bias to other common biases and to assess its psychometric properties. The final version of the UMB-FAT is a 20- item scale with four subscales: 1) negative judgment, 2) distance, 3) attraction, and 4) equal rights. The subscale of most significance for this study is subscale four regarding equal rights for fat people.

The UMB-FAT is a 7- point Likert ranging from 1 (strongly agree) to 7 (strongly disagree). To determine a composite score, each item is added. There are eight negative items which are reversed scored. The subscales are scored the same way. The higher the scores the more negative attitudes are present. The scale includes items such as “Fat people are sloppy”, “I would not want to have a fat person as a roommate”, “Fat people
are a turn off”, and “Special effort should be taken to make sure that fat people have the same rights and privileges as other people”.

Like the AFAT, the UMB-FAT was considered for this research due to goodness–of-fit of the content of the scale, particularly the inclusion of subscale four focused on equal rights for fat people. In addition, the UMB-FAT was also chosen due to its good psychometric properties. In particular, the UMB fat has acceptable internal consistency with a Cronbach’s $\alpha$ of 0.87 and good discriminant validity with Pearson’s $r$ values between 0.50 and 0.81 when compared with the previously established Anti-fat Attitudes (AFA) scale and the Attitudes Toward Fat People (ATOP) scale. Furthermore, the UMB-FAT scale was not significantly correlated with the Marlowe Crowne Social Desirability (MCSD).

**Belief of fat as a relevant social work issue.** Another independent variable in this study was the social work educator’s belief about whether fat is a relevant social work issue. In order to capture this variable, this researcher created an inventory. The measure is an 8-item Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). A composite score is calculated by adding the responses. Three items are negative items and require reverse scoring. The higher the score the more the social work educator agrees that fat is a relevant social work issue.

These instruments were combined into one electronic survey which was presented to the participants via the web-based survey service, SurveyMonkey. A pdf of the completed survey with informed consent and electronic authorization to participate can be found in Appendix A.
**Procedure**

After securing approval from the University of Kentucky Institutional Review Board (see Appendix B), the survey was distributed via email. Given that the target population was social work educators teaching in social work programs located in the Appalachian region, those prospective participants were identified by this researcher by ascertaining all of the CSWE accredited social work programs located in the Appalachian region and then visiting that program’s website. A database was then created consisting of the first and last name and the email address of the program’s faculty members and the zip code of the school. This database was maintained on a cloud-based storage software that was password protected and only accessible by the researcher. This database was then utilized to send each identified social work educator a personal email via SurveyMonkey to invite them to participate in the study. The email invitation can be reviewed in Appendix C.

In an effort to increase response rates, two reminder emails were sent to the social work educators. The first reminder was sent approximately two weeks after the first email and the second email reminder was sent four weeks after the initial email invitation. This research was also incentivized. More specifically, participants had an opportunity to enter a drawing to win one (1) of four (4) $25 Amazon Gift Cards. Because the responses were anonymous to the researcher and no identifying information was collected, once the survey was completed the participant was be directed to follow a web link that took them away from the survey and to a Google Form to enter their personal contact information. Upon the closing of the survey, the researcher compiled all submitted names and utilized a random name picker to select four (4) names to determine
the winners of the gift cards. As an added measure to protect participant anonymity, the names of the gift card winners were not released. Instead, the winners were contacted directly.

It is important to note that no identifying information was collected from the survey instrument. The survey instrument did not include required questions so participants were free to skip any question(s) they were not comfortable answering. The use of an online, anonymous survey further helped to protect participant confidentiality and anonymity. In addition, all data collected were stored by the cloud based software of SurveyMonkey and protected through their rigorous privacy policy until it was extracted for data analysis by the PI.

Data Analysis

All of the data collected were entered into the computer software program Statistical Package for the Social Sciences (SPSS) in order to organize the data and then complete an analysis of the data. Descriptive statistics were utilized to examine the basic features of each variable of interest. Measures of central tendency were utilized to determine useful information regarding the distribution of data. In addition, measures of variability were used to further examine dispersion of the data. More specifically, the range, standard deviation, skewness, and kurtosis for each quantifiable variable were calculated and examined to provide a snapshot of how different the data are from one another. Finally, measures of relationship were applied to determine the degree to which there may have been a relationship between variables. This was accomplished by calculating correlation coefficients or bivariate correlation. Additional measures, such as
Chi Square, \( t \)-tests and ANOVAs, were utilized to highlight relationships between and among factors and to highlight variability in the data as well.

**Summary**

This researcher utilized a non-experimental, exploratory-descriptive, quantitative, cross-sectional research design in order to explore whether social work educators in Appalachia have an anti-fat bias, if they include issues related to fat in their courses, and if so, is curriculum inclusion adhering to the dominant biomedical discourse or taking a more social justice oriented approach. The information from this data provided useful information for social work education in how the attitudes and beliefs of social work educators about fat can impact the social work curriculum.
Chapter Four

Results

The purpose of this research was to explore whether social work educators in Appalachia have an anti-fat bias, if they include issues related to fat in their courses, and if so, is curriculum inclusion adhering to the dominant biomedical discourse or taking a more social justice oriented approach. More specifically, the following research questions were utilized to assist in addressing the overarching question:

1. What are the attitudes of social work educators in Appalachia toward fat individuals?
2. What are the controllability beliefs of social work educators in Appalachia about fat individuals?
3. What are the beliefs of social work educators in Appalachia regarding equal rights for fat individuals?
4. Do social work educators in Appalachia perceive issues related to fat as relevant to the social work profession?
5. Which CSWE competencies are social work educators in Appalachia using to prepare students to work with the fat population?
6. Among social work educators in Appalachia who include fat in their curriculum, is the pedagogical approach focused on the biomedical weight-centered framework or a social justice framework?

This chapter communicates the results of this research beginning with a presentation of descriptive statistics to define the sample. This is followed by an analysis of the remaining variables as they are presented by each research question previously outlined.
Descriptive Statistics

Sample and Response Rate

As outlined in the previous chapter, participants were social work educators recruited from CSWE accredited social work programs located in the Appalachian region of the United States using a non-probability purposive sample. Selection criteria required that the participants teach either full time or part time in a CSWE accredited social work program located within the boundaries of the Appalachian region and possess the ability to speak and read English. A database of 599 possible respondents was created and the email invitation to participate in the study was sent. Forty of the possible respondents had defunct emails and were removed from the list. Of the remaining, 559 possible respondents, 129 completed the survey for a total response rate of 23%.

Once the analysis began, a decision was made to exclude any responses that were missing more than 15% of the data in the survey. Therefore, 10 cases were removed bringing the actual sample size to 119 responses which were used to complete the analyses.

Sample Characteristics

Of all respondents, 92% (N = 119) were female and 7.8% (N = 10) were male. The ages of respondents ranged from 28 to 79 years with an average age of 51.9 (SD = 11.10). Age was non-normally distributed, with skewness of 0.53 (SE = 0.22). The respondents were overwhelmingly white with 87.4% (N = 104) identifying as such. In addition, 5% (N=6) identified as Black or African American, 1.7% (N = 2) identified as mixed, .8% (N = 1) identified as Asian, .8% (N = 1) identified as Hispanic or Latino, and 3.4% (N = 4) preferred not to answer this question.
Almost half of the respondents perceived themselves as being of a “normal weight” (47.1%, N = 56) and close to 40% (N = 47) perceived themselves as “overweight”. Furthermore, 10.1% (N = 12) perceived themselves as being “obese” and the remaining 3.4% (N = 4) felt as if they are severely “obese”. When perception of body size is examined by Appalachian region, the South Central region has the largest percentage (69%) of social work educators who perceive their body size as either “overweight”, “obese”, or severely “obese”. This is followed by 57% of social work educators in North Central Appalachia, 50% of social work educators in Central Appalachia and 45% of social work educators in both Southern and Northern Appalachia.

In terms of education, most respondents held a doctorate (63.9%, N = 76) and reported being a full time academic professor (all ranks) (83.2%, N = 99). Of the respondents, 38.7% (N = 46) reported teaching at the undergraduate level, 23.5% (N = 28) reported teaching at the graduate level, and 37% reported teaching at both the undergraduate and graduate levels of social work education. The respondents reported an average of 13 years of teaching experience (SD = 9.15) with a range from 1.5 years to 52 years. Years of teaching experience was non-normally distributed, with skewness of 1.27 (SE = .22). Most of the respondents reported teaching in an institution located in Northern Appalachia (41.2%, N = 49), followed by South Central Appalachia (21.8%, N = 26), North Central Appalachia (17.6%, N = 21), Southern Appalachia (9.2%, N = 11), and Central Appalachia (8.4%, N = 10). The number of years that respondents have lived in Appalachian ranged from 1 to 76 years with 40% (N = 48) reporting that they were born and/or raised in an Appalachian region. Of those reporting that they were born and/or raised in Appalachia, 16.8% (N = 20) were from Northern Appalachia, 8.4% (N = 10)
were from South Central Appalachia, 6.7% (N = 8) were from North Central Appalachia, 5% (N = 6) were from Central Appalachia, and 4.2% (N = 5) were from Southern Appalachia.

In addition, almost 70% (N = 83) of respondents reported that they are currently practicing social work in an Appalachian area. Most the respondents reported practicing in Northern Appalachia (30.3%, N = 36) followed by North Central Appalachia (18.5%, N = 22), South Central Appalachia (14.3%, N = 17), Central Appalachia (10.1%, N = 12) and Southern Appalachia (10.1%, N = 12). This question was intended to determine how many of the educators were employed in the field in addition to their employment at their respective educational institutions. While it is possible that 70% of the educators hold additional jobs, it is unlikely. This high percentage is likely due to most of the educators defining their work as an educator at an institution of higher education as practicing social work.

**Research Question 1: What are the attitudes of social work educators in Appalachia toward fat individuals?**

**The Anti-Fat Attitudes Test (AFAT)**

The attitudes of social work educators in Appalachia toward fat individuals were measured by the Anti-Fat Attitudes Test (AFAT) and the Universal Measurement of Bias – FAT scale (UMB-FAT). The AFAT is a 5-point Likert scale ranging from 1 (definitely disagree) to 5 (definitely agree). To determine a score for the total scale each item is added (there are some items to be reversed scored). The higher the score the more anti-fat attitudes. Descriptive analyses of the AFAT total revealed a range of scores from 1.02 to 3.32 with a mean score of 1.59 (SD = .40). See Table 1. The AFAT total score
indicates that social workers tend to have mostly positive attitudes toward fat people. The same can be said of the AFAT subscale related to social/character disparagement, which is of interest to this question. For this subscale, the range of scores were from 1.00 to 3.33 with a mean score of 1.32 (SD = 0.40). The subscale with the highest mean was the subscale related to physical/romantic unattractiveness. These scores ranged from 1.10 to 3.50 with a mean score of 2.00 (SD = 0.48). While still well below the halfway point (2.50) defining positive and negative attitudes, this score indicates that social work educators in Appalachia hold more negative attitudes toward fat people in terms of their physical appearance and romantic attractiveness.

Table 1

*Anti-fat Attitudes Test (AFAT) Minimum Score, Maximum Score, Mean, and Standard Deviation for the Total Instrument and each subscale*

<table>
<thead>
<tr>
<th></th>
<th>Minimum</th>
<th>Maximum</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFAT Total</td>
<td>1.02</td>
<td>3.32</td>
<td>1.59</td>
<td>0.40</td>
</tr>
<tr>
<td>Subscale 1: Social/Character Disparagement</td>
<td>1.00</td>
<td>3.33</td>
<td>1.32</td>
<td>0.40</td>
</tr>
<tr>
<td>Subscale 2: Physical/Romantic Unattractive</td>
<td>1.10</td>
<td>3.50</td>
<td>2.00</td>
<td>0.48</td>
</tr>
<tr>
<td>Subscale 3: Weight Control/Blame</td>
<td>1.00</td>
<td>3.56</td>
<td>1.72</td>
<td>0.51</td>
</tr>
</tbody>
</table>

Table 2 presents the mean, standard deviation, and skewness for each item on the AFAT and shows that the mean scores were higher for nine of items. A closer examination of those specific items reveals that five of the items corresponded with
subscale two which is dedicated to physical/romantic unattractiveness, three of the items corresponded with subscale three which is dedicated to Weight Control/Blame; and one was a filler question. The trend associated with subscale two indicates that social work educators in Appalachia hold some negative attitudes toward fat individuals when it comes to physical appearance and romantic attractiveness. The trend associated with subscale three will be discussed when we address the data associated with question two.

Table 2.

*AFAT Items, Mean, SD, & Skewness*

*N = 119*

<table>
<thead>
<tr>
<th>Item</th>
<th>M</th>
<th>SD</th>
<th>Stat</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is no excuse for being fat.</td>
<td>1.53</td>
<td>0.59</td>
<td>1.11</td>
<td>0.22</td>
</tr>
<tr>
<td>If I were single I would date a fat person.</td>
<td>2.68</td>
<td>1.15</td>
<td>0.43</td>
<td>0.22</td>
</tr>
<tr>
<td>Jokes about fat people are funny.</td>
<td>1.53</td>
<td>0.88</td>
<td>1.99</td>
<td>0.22</td>
</tr>
<tr>
<td>Most fat people buy too much junk food.</td>
<td>2.48</td>
<td>1.21</td>
<td>0.29</td>
<td>0.22</td>
</tr>
<tr>
<td>Fat people are physically unattractive.</td>
<td>2.43</td>
<td>0.97</td>
<td>0.75</td>
<td>0.22</td>
</tr>
<tr>
<td>Fat people shouldn't wear revealing clothing in public.</td>
<td>2.87</td>
<td>1.20</td>
<td>0.02</td>
<td>0.22</td>
</tr>
<tr>
<td>If someone in my family were fat, I'd be ashamed of him or her.</td>
<td>1.55</td>
<td>0.78</td>
<td>1.96</td>
<td>0.22</td>
</tr>
<tr>
<td>I can't stand to look at fat people.</td>
<td>1.41</td>
<td>0.63</td>
<td>1.86</td>
<td>0.22</td>
</tr>
<tr>
<td>If fat people don't get hired it's their own fault.</td>
<td>1.41</td>
<td>0.67</td>
<td>2.03</td>
<td>0.22</td>
</tr>
<tr>
<td>Fat people are disgusting.</td>
<td>1.23</td>
<td>0.42</td>
<td>1.23</td>
<td>0.22</td>
</tr>
<tr>
<td>Statement</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>If I have the choice, I'd rather not sit next to a fat person.</td>
<td>1.82</td>
<td>1.01</td>
<td>1.42</td>
<td>0.22</td>
</tr>
<tr>
<td>Fat people don't care about anything except eating.¹</td>
<td>1.27</td>
<td>0.59</td>
<td>3.23</td>
<td>0.22</td>
</tr>
<tr>
<td>I'd lose respect for a friend who started getting fat.¹</td>
<td>1.29</td>
<td>0.60</td>
<td>2.61</td>
<td>0.22</td>
</tr>
<tr>
<td>Most fat people are boring.¹</td>
<td>1.26</td>
<td>0.63</td>
<td>3.42</td>
<td>0.22</td>
</tr>
<tr>
<td>I can't believe someone of average weight would marry a fat person.²</td>
<td>1.35</td>
<td>0.62</td>
<td>2.20</td>
<td>0.22</td>
</tr>
<tr>
<td>Society is too tolerant of fat people.¹</td>
<td>1.37</td>
<td>0.62</td>
<td>2.53</td>
<td>0.22</td>
</tr>
<tr>
<td>When fat people exercise, they look ridiculous.¹</td>
<td>1.32</td>
<td>0.65</td>
<td>2.57</td>
<td>0.22</td>
</tr>
<tr>
<td>I hate it when fat people take up more room than they should in a theatre, or on a bus or plane.</td>
<td>2.06</td>
<td>1.16</td>
<td>0.78</td>
<td>0.22</td>
</tr>
<tr>
<td>Most fat people are lazy.³</td>
<td>1.31</td>
<td>0.56</td>
<td>2.22</td>
<td>0.22</td>
</tr>
<tr>
<td>Most fat people don't care about anyone but themselves.</td>
<td>1.18</td>
<td>0.39</td>
<td>1.61</td>
<td>0.22</td>
</tr>
<tr>
<td>Fat people are just as competent in their work as anyone.¹</td>
<td>1.36</td>
<td>0.76</td>
<td>3.15</td>
<td>0.22</td>
</tr>
<tr>
<td>If fat people really wanted to lose weight, they could.³</td>
<td>2.19</td>
<td>0.97</td>
<td>1.00</td>
<td>0.22</td>
</tr>
<tr>
<td>Being fat is sinful.¹</td>
<td>1.27</td>
<td>0.59</td>
<td>3.23</td>
<td>0.22</td>
</tr>
<tr>
<td>It's disgusting to see fat people eating.²</td>
<td>1.44</td>
<td>0.67</td>
<td>1.89</td>
<td>0.22</td>
</tr>
<tr>
<td>Fat people have no willpower.³</td>
<td>1.50</td>
<td>0.74</td>
<td>1.83</td>
<td>0.22</td>
</tr>
<tr>
<td>I prefer not to associate with fat people.¹</td>
<td>1.29</td>
<td>0.60</td>
<td>2.61</td>
<td>0.22</td>
</tr>
<tr>
<td>Fat people don't care about their appearance.</td>
<td>1.26</td>
<td>0.44</td>
<td>1.09</td>
<td>0.22</td>
</tr>
<tr>
<td>Most fat people are moody and hard to get along with.¹</td>
<td>1.21</td>
<td>0.41</td>
<td>1.41</td>
<td>0.22</td>
</tr>
<tr>
<td>Statement</td>
<td>Score</td>
<td>Significance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>-------</td>
<td>--------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If bad things happen to fat people, they deserve it.¹</td>
<td>1.20</td>
<td>0.56</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Most fat people don't keep their surroundings neat and clean.¹</td>
<td>1.40</td>
<td>0.70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Society should respect the rights of fat people.¹</td>
<td>1.45</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>It's hard not to stare at fat people because they are so unattractive.²</td>
<td>1.35</td>
<td>0.62</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If I owned a business, I would not hire fat people because of the way they look.</td>
<td>1.33</td>
<td>0.69</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I'd feel self-conscious being seen in public with a fat person.</td>
<td>1.41</td>
<td>0.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The idea that genetics cause people to be fat is just an excuse³</td>
<td>1.39</td>
<td>0.66</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I would not want to continue in a romantic relationship if my partner became fat.²</td>
<td>1.53</td>
<td>0.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The existence of organizations to lobby for the rights of fat people in our society is a good idea.</td>
<td>1.81</td>
<td>0.96</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I don’t understand how someone could be sexually attracted to a fat person.²</td>
<td>1.60</td>
<td>0.81</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If fat people know how bad they looked, they would lose weight.³</td>
<td>1.30</td>
<td>0.57</td>
<td></td>
<td></td>
</tr>
<tr>
<td>People who are fat have as much physical coordination as anyone².</td>
<td>2.65</td>
<td>1.26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fat people are unclean.¹</td>
<td>1.38</td>
<td>0.58</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fat people should be encouraged to accept themselves the way they are.²</td>
<td>2.18</td>
<td>1.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fat people will latch onto almost any excuse for being fat.³</td>
<td>1.49</td>
<td>0.75</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
It's hard to take fat people seriously.\textsuperscript{1} 1.29 0.56 2.33 0.22

Fat people do not necessarily eat more than other people.\textsuperscript{3} 2.29 1.14 0.75 0.22

Fat people obviously have a character flaw, otherwise they wouldn't become fat. 1.26 0.44 1.09 0.22

It makes me angry to hear anybody say insulting things about people because they are fat. 1.59 1.08 2.18 0.22

\textit{Note:} Superscript denotes which, if any, subscale to which the item belongs.
\textsuperscript{1}Social/Character Disparagement \textsuperscript{2}Physical/Romantic Unattractiveness \textsuperscript{3}Weight Control/Blame

A one-way between subjects Analysis of Variance (ANOVA) was conducted to compare the effect of Appalachian region (Southern, South Central, Central, North Central, and Northern) on the attitudes of social work educators toward fat individuals. The analysis indicated that there was not a significant difference at the $p < .05$ level ($F(4, 111) = .666, p = .617$) with respect to the total score. ANOVAs were also conducted to explore the same effect with each subscale and no significant differences were found; subscale 1 [$F(4, 111) = .837, p = .505$]; subscale 2 [$F(4, 111) = .529, p = .715$]; subscale 3 [$F(4, 111) = .251, p = .909$].

While the difference between regions is not statistically significant, it is important to note that the mean ($M = 1.69, SD = .31$) for social work educators in Southern Appalachia for the total AFAT score is higher than all other regions and is also outside of the total 95\% confidence interval [1.50, 1.66]. In addition, the same pattern for Southern Appalachia is repeated for subscale two: Physical/Romantic Attractiveness ($M = 2.14, SD = .38$), 95\% CI [1.90, 2.08]. Finally, this pattern is again repeated with the South Central Appalachia and subscale one: social/character disparagement ($M = 1.44, SD = .55$), 95\% CI [1.27, 1.49].
CI [1.90, 2.08]. Taken together, this indicates that social workers in the greater southern region of Appalachia report more negative attitudes toward fat individuals than the other Appalachian regions.

A one-way between subjects ANOVA was also conducted to compare the effect of Appalachian region (Southern, South Central, Central, North Central, and Northern) on the mean score of the individual items of the AFAT. The analysis indicated that there was a significant difference at the $p < .05$ level ($F(4, 108) = 2.75, p = .032$) with only one item “Fat people shouldn’t wear revealing clothing in public”. A post hoc comparison using the Tukey HSD test indicated that the mean score for the Northern Appalachian region ($M = 2.45, SD = 1.21$) is significantly lower ($p < .05$) than the mean scores of North Central Appalachia ($M = 3.30, SD 1.12$) and Central Appalachia ($M = 3.30; SD = 1.15$). Cohen’s effect size value ($d = .51$) suggested a large significance. Comparisons with South Central and Southern Appalachia were not significant. In other words, social work educators in Northern Appalachia reported having significantly less negative attitudes than North Central Appalachian and Central Appalachian educators.

Finally, a chi-square test of independence was performed to determine if there is a relationship between Appalachian region and response to the individual items of the AFAT. Only one item, “If bad things happen to fat people they deserve it”, presented evidence of a statistically significant relationship between Appalachian region and the response to this question, $X^2_{(12)} = 21.18, p = .048$. Although this item is mathematically significant, it cannot be correctly and meaningfully interpreted because 14 cells (70%) with expected counts less than five.
Universal Measure of Bias – FAT (UMB-FAT)

The UMB-FAT is a 7-point Likert ranging from 1 (strongly agree) to 7 (strongly disagree). To determine a composite score, each item is added (there are some items requiring reverse scoring). The higher the scores, the more negative attitudes are present. Descriptive scores for the UMB-FAT total present a range of scores from 1.00 to 4.35 with a mean score of 2.15 (SD = 0.06). This score mirrors the results of the AFAT in that both are indicative that social work educators in Appalachia have mostly positive attitudes toward fat individuals but do have a tendency of holding negative attitudes about fat people with respect to attractiveness (M = 3.70, SD = 1.47). This score and those of the other subscales can be found in Table 3.

Table 3.

Universal Measure of Bias- FAT (UMB-FAT) Total Score and Subscale Scores

\( N = 119 \)

<table>
<thead>
<tr>
<th>Total &amp; Subscale</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Score</td>
<td>1.00</td>
<td>4.35</td>
<td>2.15</td>
<td>0.06</td>
</tr>
<tr>
<td>Subscale 1: Adverse Judgement</td>
<td>1.00</td>
<td>5.00</td>
<td>1.59</td>
<td>0.06</td>
</tr>
<tr>
<td>Subscale 2: Social Distance</td>
<td>3.00</td>
<td>4.40</td>
<td>1.79</td>
<td>0.07</td>
</tr>
<tr>
<td>Subscale 3: Attraction</td>
<td>1.00</td>
<td>6.80</td>
<td>3.70</td>
<td>0.13</td>
</tr>
<tr>
<td>Subscale 4: Equal Rights</td>
<td>1.00</td>
<td>7.00</td>
<td>1.61</td>
<td>0.08</td>
</tr>
</tbody>
</table>

A one-way between subjects (ANOVA) was conducted to compare the effect of Appalachian region (Southern, South Central, Central, North Central, and Northern) on
the attitudes of social work educators toward fat individuals based on their responses to the UMB-FAT. The analysis indicated that there was not a significant difference at the p < .05 level (F(4, 112) = .250, p = .909) with respect to the total score. ANOVAs were also conducted to explore the same effect with each subscale and no significant differences were found; subscale 1: adverse judgement [F(4, 111) = .235, p = .918]; subscale 2: social distance [F(4, 112) = .372, p = .828]; subscale 3: attraction [F(4, 110) = .170, p = .953] and subscale 4: equal rights [F(4, 112) = 1.12, p = .349].

Even though the difference between regions is not statistically significant, it is important to note that the mean score (2.03, SD = 0.74) for social work educators in Central Appalachia for the total UMB-FAT score is lower than all other regions and is also outside of the total 95% confidence interval [2.04, 2.28]. Central Appalachia also repeats this pattern for three of the four subscales; subscale 1: adverse judgement (M =1.44, SD = 0.47), 95% CI [1.46, 1.74], subscale 3: attraction (M = 3.34, SD = 1.57, 95% CI [3.42, 3.97]), and subscale 4: equal rights (M=1.32, SD = 0.66, 95% CI [1.44, 1.79]. Interestingly, Central Appalachia had the highest mean with subscale 2: social distance (M = 2.04, SD = 1.28) and was above the total 95% confidence interval [1.64, 1.94]. This indicates that based on UMB-FAT scores, social work educators in Central Appalachia hold more positive attitudes than educators in the other Appalachian regions except in the area of social distance.

On the other hand, social work educators in North Central Appalachia had the highest mean score (M = 2.25, SD = 0.65) for the UMB-FAT Total and for the subscale of Equal Rights (M = 1.94, SD = 1.47) which means that social workers educators from that region hold more negative attitudes toward fat people than the other regions and are
less likely to feel that fat people deserve equal rights. The highest means for the other scales belong to the southern portions of Appalachia. More specifically, Southern Appalachia had the highest scores related to adverse judgment ($M = 1.72, SD = 0.98$) meaning social work educators from this region are more likely than their peers in other Appalachian regions to harshly judge fat people. Finally, South Central Appalachia had the highest scores related to attraction ($M 3.77, SD = 1.68$) which means that social work educators from this area in Appalachia are more likely than their peers to find fat people unattractive and undesirable as a partner.

A one-way between subjects ANOVA was also conducted to compare the effect of Appalachian region (Southern, South Central, Central, North Central, and Northern) on the mean score of the individual items of the UMB-FAT. The analysis indicated that there was not a significant difference at the $p < .05$ level for any of the individual items. In addition, a chi-square test of independence was performed to determine if there is a relationship between Appalachian region and response to the individual items of the UMB-FAT. Only one item, “I find fat people attractive”, presented evidence of a statistically significant relationship between Appalachian region and the response to this question ($X^2_{(20)} = 35.98, p = .015$). This could imply that social work educators from Northern Appalachia are more likely than their peers to find fat people unattractive. However, this interpretation should be taken with caution as we cannot trust the result of this analysis because 22 cells (73.3%) had expected counts of less than five.
Research Question 2: What are the controllability beliefs of social work educators in Appalachia about fat individuals?

The beliefs of social work educators concerning the controllability of fat was measured by the AFAT Subscale Three: Weight Control/Blame. The mean score for this subscale was 1.72 ($SD = .04$) which implies that social work educators in Appalachia do not perceive fatness as controllable (i.e. resulting from a lack of willpower or weight loss efforts). A one-way between subjects ANOVA was conducted to compare the effect of Appalachian region (Southern, South Central, Central, North Central, and Northern) on the controllability beliefs of social work educators about fat individuals. The analysis indicated that there was not a significant difference at the $p < .05$ level ($F(4, 111) = .251, p = .98$) with respect to the subscale score.

However, further analysis of the data revealed a trend related to the region with the highest mean scores. More specifically, as shown in Table 4, the greater Southern region of Appalachia (Southern Appalachia and South Central Appalachia) held the highest means on eight of the nine items in this subscale. This trend signifies that this region of Appalachia, when compared with the other regions, tends to hold more beliefs that a fat individual could control their body size and are therefore, responsible for their fatness.
Table 4.

**AFAT – Subscale Three: Weight Control/Blame Mean Scores by Appalachian Region**

*N* = 116

<table>
<thead>
<tr>
<th>Item</th>
<th>Appalachian Region</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFAT Subscale 3 Total</td>
<td>Southern</td>
<td>1.78</td>
<td>0.37</td>
</tr>
<tr>
<td></td>
<td>South Central</td>
<td>1.80</td>
<td>0.56</td>
</tr>
<tr>
<td></td>
<td>Central</td>
<td>1.71</td>
<td>0.87</td>
</tr>
<tr>
<td></td>
<td>North Central</td>
<td>1.68</td>
<td>0.36</td>
</tr>
<tr>
<td></td>
<td>Northern</td>
<td>1.69</td>
<td>0.49</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1.72</td>
<td>0.51</td>
</tr>
<tr>
<td>There is no excuse for being fat.</td>
<td>Southern</td>
<td>1.60</td>
<td>0.51</td>
</tr>
<tr>
<td></td>
<td>South Central</td>
<td>1.57</td>
<td>0.70</td>
</tr>
<tr>
<td></td>
<td>Central</td>
<td>1.60</td>
<td>0.96</td>
</tr>
<tr>
<td></td>
<td>North Central</td>
<td>1.60</td>
<td>0.50</td>
</tr>
<tr>
<td></td>
<td>Northern</td>
<td>1.47</td>
<td>0.50</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1.54</td>
<td>0.59</td>
</tr>
<tr>
<td>Most fat people buy too much junk food.</td>
<td>Southern</td>
<td>2.90</td>
<td>1.19</td>
</tr>
<tr>
<td></td>
<td>South Central</td>
<td>2.40</td>
<td>1.19</td>
</tr>
<tr>
<td></td>
<td>Central</td>
<td>2.40</td>
<td>1.42</td>
</tr>
<tr>
<td></td>
<td>North Central</td>
<td>2.47</td>
<td>1.03</td>
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<tr>
<td></td>
<td>Northern</td>
<td>2.46</td>
<td>1.28</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2.48</td>
<td>1.21</td>
</tr>
<tr>
<td>Most fat people are lazy.</td>
<td>Southern</td>
<td>1.60</td>
<td>0.96</td>
</tr>
<tr>
<td></td>
<td>South Central</td>
<td>1.46</td>
<td>0.70</td>
</tr>
<tr>
<td></td>
<td>Central</td>
<td>1.20</td>
<td>0.42</td>
</tr>
<tr>
<td></td>
<td>North Central</td>
<td>1.33</td>
<td>0.48</td>
</tr>
<tr>
<td></td>
<td>Northern</td>
<td>1.20</td>
<td>0.40</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1.31</td>
<td>0.56</td>
</tr>
<tr>
<td>If fat people really wanted to lose weight, they could.</td>
<td>Southern</td>
<td>2.20</td>
<td>0.63</td>
</tr>
<tr>
<td></td>
<td>South Central</td>
<td>2.23</td>
<td>0.95</td>
</tr>
<tr>
<td></td>
<td>Central</td>
<td>2.00</td>
<td>1.15</td>
</tr>
<tr>
<td></td>
<td>North Central</td>
<td>2.20</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Northern</td>
<td>2.18</td>
<td>1.01</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2.18</td>
<td>0.96</td>
</tr>
</tbody>
</table>
Fat people have no willpower. | Southern: 1.50, 0.97 | South Central: 1.61, 0.69 | Central: 1.60, 0.96 | North Central: 1.38, 0.49 | Northern: 1.48, 0.79 | Total: 1.50, 0.75

The idea that genetics causes people to be fat is just an excuse. | Southern: 1.20, 0.42 | South Central: 1.57, 0.85 | Central: 1.20, 0.42 | North Central: 1.33, 0.48 | Northern: 1.41, 0.70 | Total: 1.40, 0.67

If fat people knew how bad they looked they would lose weight. | Southern: 1.40, 0.51 | South Central: 1.53, 0.70 | Central: 1.50, 0.97 | North Central: 1.28, 0.46 | Northern: 1.22, 0.42 | Total: 1.34, 0.57

Most fat people will latch onto almost any excuse for being fat. | Southern: 1.70, 0.94 | South Central: 1.57, 0.70 | Central: 1.60, 0.96 | North Central: 1.30, 0.47 | Northern: 1.45, 0.79 | Total: 1.49, 0.75

Fat people do not necessarily eat more than other people. | Southern: 2.00, 0.81 | South Central: 2.26, 1.15 | Central: 2.30, 1.49 | North Central: 2.28, 1.05 | Northern: 2.31, 1.16 | Total: 2.26, 1.13

An ANOVA was also conducted to compare the effect of Appalachian region (Southern, South Central, Central, North Central, and Northern) on the controllability beliefs of social work educators about fat individuals through an examination of the individual items of subscale three of the AFAT which is focused on weight control/blame. The analysis indicated that there was not a significant difference at the p
< .05 level for any item. It is, however, particularly interesting that there were three items where all Appalachian regions had a higher mean score when compared with the remaining items. Recall that these are the same items referenced in the previous question. More specifically, the items “Most fat people buy too much junk food”, If fat people really wanted to lose weight they could”, and a reverse scored item “Fat people do not necessarily eat more than other people” had mean scores that surpassed or was dangerously close to surpassing the 2.50 mean score which would denote having a clear bias regarding controllability of fatness.

**Research Question 3: What are the beliefs of social work educators in Appalachia regarding equal rights for fat individuals?**

This question was examined utilizing the data from UMB-FAT subscale 4: Equal Rights. The mean score for this subscale was 1.61 ($SD = .08$) which provides evidence that social work educators in Appalachia try to understand the perspective of fat people and believe that special effort should be made to ensure that fat individual have the same rights and privileges as their thin(ner) counterparts. Social work educators in North Central Appalachia expressed stronger beliefs than the other regions that special effort should not be made to protect fat people and provide them with equal rights ($M = 1.94$, $SD = 1.47$). Further evidence is provided by this region having the highest mean scores on three out of five of the individual items that make up this subscale. See table 5 below. Table five also highlights that social work educators in Central Appalachia are less likely to believe that special effort should be made to protect fat individuals and ensure that they have equal rights ($M = 1.32$, $SD = 0.66$).
Table 5.

**UMB-FAT – Subscale Four: Equal Rights Mean Scores by Appalachian Region**

* N = 116

<table>
<thead>
<tr>
<th>Item</th>
<th>Appalachian Region</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>UMB-FAT Subscale 4 Total</td>
<td>Southern</td>
<td>1.47</td>
<td>0.42</td>
</tr>
<tr>
<td></td>
<td>South Central</td>
<td>1.46</td>
<td>0.54</td>
</tr>
<tr>
<td></td>
<td>Central</td>
<td>1.32</td>
<td>0.66</td>
</tr>
<tr>
<td></td>
<td>North Central</td>
<td>1.94</td>
<td>1.47</td>
</tr>
<tr>
<td></td>
<td>Northern</td>
<td>1.66</td>
<td>0.96</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1.62</td>
<td>0.95</td>
</tr>
<tr>
<td>Special effort should be taken to make sure that fat people have the same rights and privileges as other people.</td>
<td>Southern</td>
<td>1.45</td>
<td>0.52</td>
</tr>
<tr>
<td></td>
<td>South Central</td>
<td>1.61</td>
<td>1.02</td>
</tr>
<tr>
<td></td>
<td>Central</td>
<td>1.20</td>
<td>0.42</td>
</tr>
<tr>
<td></td>
<td>North Central</td>
<td>1.90</td>
<td>1.72</td>
</tr>
<tr>
<td></td>
<td>Northern</td>
<td>1.51</td>
<td>1.02</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1.57</td>
<td>1.11</td>
</tr>
<tr>
<td>Special effort should be taken to make sure that fat people have the same salaries as other people.</td>
<td>Southern</td>
<td>1.81</td>
<td>1.77</td>
</tr>
<tr>
<td></td>
<td>South Central</td>
<td>1.34</td>
<td>0.56</td>
</tr>
<tr>
<td></td>
<td>Central</td>
<td>1.20</td>
<td>0.42</td>
</tr>
<tr>
<td></td>
<td>North Central</td>
<td>1.80</td>
<td>1.56</td>
</tr>
<tr>
<td></td>
<td>Northern</td>
<td>1.65</td>
<td>1.19</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1.58</td>
<td>1.19</td>
</tr>
<tr>
<td>Special effort should be taken to make sure that fat people have the same educational opportunities as other people.</td>
<td>Southern</td>
<td>1.81</td>
<td>0.40</td>
</tr>
<tr>
<td></td>
<td>South Central</td>
<td>1.34</td>
<td>0.56</td>
</tr>
<tr>
<td></td>
<td>Central</td>
<td>1.20</td>
<td>0.42</td>
</tr>
<tr>
<td></td>
<td>North Central</td>
<td>1.80</td>
<td>1.56</td>
</tr>
<tr>
<td></td>
<td>Northern</td>
<td>1.59</td>
<td>1.20</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1.50</td>
<td>1.07</td>
</tr>
<tr>
<td>Special effort should be taken to make sure that fat people have the same housing opportunities as other people.</td>
<td>Southern</td>
<td>1.18</td>
<td>0.40</td>
</tr>
<tr>
<td></td>
<td>South Central</td>
<td>1.34</td>
<td>0.56</td>
</tr>
<tr>
<td></td>
<td>Central</td>
<td>1.20</td>
<td>0.42</td>
</tr>
<tr>
<td></td>
<td>North Central</td>
<td>1.80</td>
<td>1.56</td>
</tr>
<tr>
<td></td>
<td>Northern</td>
<td>1.71</td>
<td>1.29</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1.55</td>
<td>1.12</td>
</tr>
</tbody>
</table>
I try to understand the perspective of fat people.

<table>
<thead>
<tr>
<th>Region</th>
<th>Score</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southern</td>
<td>1.72</td>
<td>0.78</td>
</tr>
<tr>
<td>South Central</td>
<td>1.65</td>
<td>0.56</td>
</tr>
<tr>
<td>Central</td>
<td>1.80</td>
<td>1.87</td>
</tr>
<tr>
<td>North Central</td>
<td>2.38</td>
<td>1.46</td>
</tr>
<tr>
<td>Northern</td>
<td>1.87</td>
<td>0.88</td>
</tr>
<tr>
<td>Total</td>
<td>1.89</td>
<td>1.06</td>
</tr>
</tbody>
</table>

**Research Question 4: Do social work educators in Appalachia perceive issues related to fat as relevant to the social work profession?**

This question was explored through a researcher created scale, which is an 8-item Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Three items require reverse scoring and a composite score is calculated by adding the responses with a maximum score of 40. The higher the score the more the social work educator agrees that fat is a relevant social work issue.

As presented in Table 6, the composite mean score for this inventory ($M = 27.26$, $SD = 3.83$) implies that social work educators tend to believe that fat is an issue that is relevant to the profession. One interesting observation is that the lowest mean (3.46, $SD = 1.18$) was related to whether fat should be viewed as a diversity characteristic providing evidence that social work educators in Appalachia are less likely to perceive fat as a type of diversity. It is also noteworthy that the next lowest mean (4.01, $SD = 0.85$) was attached to the statement about whether social work educators should be addressing issues related to obesity/fat in social work courses. This is juxtaposed with the highest mean (4.58, $SD = 0.49$) being associated with the statement regarding whether there is a role for the social work profession in the “obesity epidemic”. This suggests that while educators feel as if obesity/fat is an issue worthy of attention for the profession, they are less convinced that they should be addressing obesity/fat in the courses they teach.
Table 6.

*Researcher Created Inventory of Whether Fat is Relevant to Social Work: Items, Mean, SD, & Skewness*

<table>
<thead>
<tr>
<th>Item</th>
<th>M</th>
<th>SD</th>
<th>Skewness Stat</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Score</td>
<td>27.26</td>
<td>3.83</td>
<td>-0.13</td>
<td>0.23</td>
</tr>
<tr>
<td>Obesity/fat is an important issue to the social work profession.</td>
<td>4.05</td>
<td>0.81</td>
<td>-1.64</td>
<td>0.22</td>
</tr>
<tr>
<td>Social work educators should be addressing issues related to obesity/fat in social work courses.</td>
<td>4.01</td>
<td>0.85</td>
<td>-1.68</td>
<td>0.22</td>
</tr>
<tr>
<td>Social work students should be exposed to skills and knowledge related to working to working with obese/fat clients.</td>
<td>4.18</td>
<td>0.60</td>
<td>-1.55</td>
<td>0.22</td>
</tr>
<tr>
<td>Obesity/fat is not a relevant social work issue</td>
<td>4.40</td>
<td>0.49</td>
<td>0.40</td>
<td>0.22</td>
</tr>
<tr>
<td>There is no role for the social work profession in the “obesity epidemic”.</td>
<td>4.58</td>
<td>0.49</td>
<td>-0.36</td>
<td>0.22</td>
</tr>
<tr>
<td>There are more important issues to address in social work other than those related to obesity/fat.</td>
<td>4.13</td>
<td>0.34</td>
<td>2.15</td>
<td>0.22</td>
</tr>
<tr>
<td>Obesity/fat should be viewed as a specific diversity characteristic</td>
<td>3.46</td>
<td>1.18</td>
<td>-0.68</td>
<td>0.26</td>
</tr>
</tbody>
</table>

It is also helpful to understand what percentage of educators disagreed with the statements on relevance. The data reveals that 7.7% of respondents disagreed that “obesity/fat is an important issue to the social work profession” and 8.6% disagreed that “social work educators should be addressing issues related to obesity/fat in social work courses. It is particularly telling that only 1.7% of educators disagreed with the statement
that “social work students should be exposed to skills and knowledge related to working with obese/fat clients”. In addition, all respondents agreed that there is a role for the profession in the “obesity” epidemic, and did not feel that there are necessarily more important issues to address than those related to “obesity”/fat. Finally, and perhaps most intriguing, 21% of social work educators in Appalachia disagreed with the statement that “obesity/fat should be viewed as a specific diversity characteristic”.

An ANOVA was conducted to determine if the Appalachian region (Southern, South Central, Central, North Central, and Northern) influenced whether social work educators in Appalachia see fat as a relevant issue to be addressed by the profession. The analysis indicated that there was no a significant difference at the $p < .05$ level for any item. A deeper examination of the scale’s data reveals that the highest mean scores for each item are clustered in the greater Central region of Appalachia (South Central, Central, and North Central) which indicates that social work educators in this area of Appalachia are more likely than their peers in other Appalachian regions to see fat and related issues as relevant to the social work profession. On the contrary, as highlighted in Table 7, the lowest mean scores were primarily located in the Southern region of Appalachia on five of the seven items. This means that social work educators in this region are less likely to see fat as a relevant issue.
Table 7.

*Researcher Created Inventory of Whether Fat is Relevant to Social Work: Mean Scores by Appalachian Region*

\[ N = 119 \]

<table>
<thead>
<tr>
<th>Item</th>
<th>Appalachian Region</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Score</td>
<td>Southern</td>
<td>27.77</td>
<td>4.14</td>
</tr>
<tr>
<td></td>
<td>South Central</td>
<td>26.95</td>
<td>3.74</td>
</tr>
<tr>
<td></td>
<td>Central</td>
<td>27.10</td>
<td>4.48</td>
</tr>
<tr>
<td></td>
<td>North Central</td>
<td>27.55</td>
<td>3.53</td>
</tr>
<tr>
<td></td>
<td>Northern</td>
<td>27.44</td>
<td>3.76</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>27.35</td>
<td>3.76</td>
</tr>
<tr>
<td>Obesity/fat is an important issue to the social work profession.</td>
<td>Southern</td>
<td>4.09</td>
<td>1.13</td>
</tr>
<tr>
<td></td>
<td>South Central</td>
<td>4.11</td>
<td>0.58</td>
</tr>
<tr>
<td></td>
<td>Central</td>
<td>3.90</td>
<td>1.10</td>
</tr>
<tr>
<td></td>
<td>North Central</td>
<td>4.19</td>
<td>0.40</td>
</tr>
<tr>
<td></td>
<td>Northern</td>
<td>4.04</td>
<td>0.81</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>4.04</td>
<td>0.81</td>
</tr>
<tr>
<td>Social work educators should be addressing issues related to obesity/fat in social work courses.</td>
<td>Southern</td>
<td>4.00</td>
<td>1.09</td>
</tr>
<tr>
<td></td>
<td>South Central</td>
<td>4.08</td>
<td>0.57</td>
</tr>
<tr>
<td></td>
<td>Central</td>
<td>4.10</td>
<td>0.87</td>
</tr>
<tr>
<td></td>
<td>North Central</td>
<td>4.04</td>
<td>0.80</td>
</tr>
<tr>
<td></td>
<td>Northern</td>
<td>4.02</td>
<td>0.87</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>4.04</td>
<td>0.81</td>
</tr>
<tr>
<td>Social work students should be exposed to skills and knowledge related to working with obese/fat clients.</td>
<td>Southern</td>
<td>4.20</td>
<td>0.42</td>
</tr>
<tr>
<td></td>
<td>South Central</td>
<td>4.20</td>
<td>0.40</td>
</tr>
<tr>
<td></td>
<td>Central</td>
<td>4.30</td>
<td>0.48</td>
</tr>
<tr>
<td></td>
<td>North Central</td>
<td>4.23</td>
<td>0.43</td>
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<td></td>
<td>Northern</td>
<td>4.20</td>
<td>0.64</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>4.21</td>
<td>0.52</td>
</tr>
<tr>
<td>Obesity/fat is not a relevant social work issue</td>
<td>Southern</td>
<td>4.36</td>
<td>0.50</td>
</tr>
<tr>
<td></td>
<td>South Central</td>
<td>4.30</td>
<td>0.47</td>
</tr>
<tr>
<td></td>
<td>Central</td>
<td>4.30</td>
<td>0.48</td>
</tr>
<tr>
<td></td>
<td>North Central</td>
<td>4.50</td>
<td>0.51</td>
</tr>
<tr>
<td></td>
<td>Northern</td>
<td>4.43</td>
<td>0.50</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>4.40</td>
<td>0.49</td>
</tr>
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</table>
There is no role for the social work profession in the “obesity epidemic”.

<table>
<thead>
<tr>
<th>Region</th>
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<th>Central</th>
<th>North Central</th>
<th>Northern</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4.54</td>
<td>4.46</td>
<td>4.50</td>
<td>4.71</td>
<td>4.61</td>
<td>4.58</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td>0.52</td>
</tr>
<tr>
<td></td>
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<td>0.52</td>
<td>0.46</td>
<td>0.49</td>
<td></td>
</tr>
</tbody>
</table>

There are more important issues to address in social work other than those related to obesity/fat.

<table>
<thead>
<tr>
<th>Region</th>
<th>Southern</th>
<th>South Central</th>
<th>Central</th>
<th>North Central</th>
<th>Northern</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4.20</td>
<td>4.23</td>
<td>4.00</td>
<td>4.09</td>
<td>4.12</td>
<td>4.13</td>
</tr>
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<td></td>
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<td></td>
<td>0.42</td>
</tr>
<tr>
<td></td>
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<td>0.42</td>
<td>0.00</td>
<td>0.30</td>
<td>0.33</td>
<td></td>
</tr>
</tbody>
</table>

Obesity/fat should be viewed as a specific diversity characteristic

<table>
<thead>
<tr>
<th>Region</th>
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<td>1.26</td>
<td>0.89</td>
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</table>

Research Question 5: Which CSWE competencies are social work educators in Appalachia using to prepare students to work with the fat population?

This curriculum question was captured through an inventory developed by the researcher by adapting professional practice behaviors from the 2008 and 2015 CSWE competencies to focus on working with the fat population. The participants were asked to only consider the courses where they teach about fat and then select all of the adapted behaviors they expect students to be able to competently display after completion of their course(s). Each adapted practice behavior is attached to a CSWE competency from the 2008 and 2015 versions of the Educational and Policy Accreditation Standards (EPAS). Table 8 illustrates which adapted practice behavior belongs to each competency, as well as the percentage of participants who answered “yes” with respect to each adapted practice behavior.
Table 8.

Council on Social Work Education (CSWE) Professional Competencies and Researcher Created Inventory of Adapted Practice Behavior by percentage of social work educators who utilize adapted practice behaviors.

*N = 119*

<table>
<thead>
<tr>
<th>2008/2015 Competency</th>
<th>Adapted Practice Behaviors</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify as a professional social worker and conduct oneself accordingly.</td>
<td>advocate for fat clients to have access to the services of social work which are specific to the unique needs of this population practice personal awareness of how they feel about fat and self-regulation to assure continual professional development with respect to body weight and its implications</td>
<td>15.1</td>
</tr>
<tr>
<td>Apply social work ethical principles to guide professional practice.</td>
<td>recognize personal values specifically related to fat and to manage them in a way that allows professional values to guide practice</td>
<td>20.2</td>
</tr>
<tr>
<td>Apply critical thinking to inform and communicate professional judgments.</td>
<td>distinguish, appraise, and integrate multiple sources of knowledge regarding various aspects of fat including research-based knowledge, and practice wisdom</td>
<td>19.3</td>
</tr>
<tr>
<td>Engage diversity and difference in practice.</td>
<td>recognize the extent to which a culture's structures and values may work to oppress, marginalize, and alienate fat people, as well as how they can also create or enhance privilege and power based on body weight recognize and communicate an understanding of how differences in body weight shape life experiences</td>
<td>25.2</td>
</tr>
<tr>
<td>Advance human rights and social and economic justice.</td>
<td>understand the forms and mechanisms of fat oppression and fat discrimination</td>
<td>15.1</td>
</tr>
</tbody>
</table>
recognize that fat discrimination is a social and economic justice issue

engage in activities that eliminate or reduce the consequences associated with anti-fat bias and fat discrimination

Engage in research-informed practice and practice-informed research.

use practice experience with fat clients to inform scientific inquiry and seek to research the consequences of fat discrimination, as well as approaches to eliminate or reduce fat discrimination

use research evidence to inform practice approaches related to fat discrimination and work with fat clients

Apply knowledge of human behavior and the social environment.

utilize conceptual frameworks to guide the process of assessment, intervention, and evaluation which are sensitive to the lived experiences of the fat population

critique and apply knowledge about the person and environment in the context of fat as a vulnerability

Engage in policy practice to advance social and economic well-being and to deliver effective social work services.

analyze, formulate, and advocate for policies that advance the social-well-being of and provide protection for the fat population

Respond to contexts that shape practice.

continuously discover, appraise, and attend to changing locales, populations, scientific and technological developments and emerging trends relevant to the fat population of Appalachia in order to provide relevant services to address unique needs

provide leadership in promoting sustainable changes in how services are delivered to fat clients and strive to improve the quality of social services provided to fat clients

119
Recognize and communicate an understanding of the intersectionality between living in Appalachia and membership in the fat community, as well as additional intersectionalities related to gender, race, sexual orientation, etc.

Engage, assess, intervene, and evaluate with individuals, families, groups, organizations, and communities - **Engagement**

- Substantively and affectively prepare for action with the fat population by creating a fat friendly physical environment (e.g., chairs without arms or extra wide seating) and utilization of weight neutral language.

Engage, assess, intervene, and evaluate with individuals, families, groups, organizations, and communities - **Assessment**

- Collect, organize, and interpret client data giving specific attention to challenges associated with or that could be associated with identification with the fat community.

- Assess client strengths and limitations related to weight and/or identification as a fat person.

- Develop mutually agreed-on intervention goals and objectives that can address any issues resulting from the consequences of fat discrimination.

- Select appropriate intervention strategies that address fat discrimination and its consequences on a micro, mezzo, and macro level.

Engage, assess, intervene, and evaluate with individuals, families, groups, organizations, and communities - **Intervention**

- Help fat clients resolve problems related to fat discrimination.

- Negotiate, mediate, and advocate for clients who are victims of fat discrimination.
As outlined in Table 8, the adapted practice behavior that social work educators in Appalachia most expected their students to master was to be able to “recognize the extent to which a culture's structures and values may work to oppress, marginalize, and alienate fat people, as well as how they can also create or enhance privilege and power based on body weight”, which belongs to the CSWE competency “Engage diversity and difference”. Approximately, ¼ (30) of the educators had expectations that this practice behavior would be mastered by students who completed their courses. The next practice behavior that was expected to be mastered was “practice personal awareness of how they feel about fat and self-regulation to assure continual professional development with respect to body weight and its implications” (21.0%) which is one of the behaviors attached to the CSWE competency, “Identify as a professional social worker and conduct one’s self accordingly”. The third practice behavior expected to be mastered was, “recognize personal values specifically related to fat and to manage them in a way that allows professional values to guide practice” (20.2%) and can be found under the competency, “Apply social work ethical principles to guide professional practice”.

On the other hand, the practice behaviors that social work educators in Appalachia least expected students to master as a result of completing their course(s) was “use practice experience with fat clients to inform scientific inquiry and seek to research the consequences of fat discrimination, as well as approaches to eliminate or reduce fat discrimination” (4.2%) from the competency, “Engage in research-informed practice and
practice-informed research” and “collect, organize, and interpret client data giving specific attention to challenges associated with or that could be associated with identification with the fat community” from the assessment aspect of the “Engage, assess, intervene, and evaluate with individuals, families, groups, organizations, and communities” competency. The next least expected practice behavior is “engage in activities that eliminate or reduce the consequences associated with anti-fat bias and fat discrimination” (5.0%) which is a practice behavior exemplifying the “Advance human rights and social and economic justice” competency. Finally, the third least expected practice behavior is “critically analyze, monitor, and evaluate interventions related to the elimination or reduction of fat discrimination and the consequences it has for the fat community” utilized by only 6.7% of social work educators in Appalachia and is an example of the evaluation aspect of the “Engage, assess, intervene, and evaluate with individuals, families, groups, organizations, and communities” competency.

An examination of the individual practice behaviors and associated percentages illustrated in Table 8 reveal an interesting pattern. The most utilized adapted practice behaviors tend to be those that focus on gaining knowledge rather than applying practice skills. This lead to further examination of the data by categorizing each adapted practice behavior into one of two broad categories: core knowledge and applied practice skills. The adapted practice behaviors which fall under the category of core knowledge are the ones which provide the epistemological behavior of social work with the purpose of allowing the professional to understand human behavior and all aspects of the human condition. The other category, applied practice skills, includes adapted practice behaviors that focus on the application of practice skills related to providing services
which fuse practice experience and core knowledge, such as assessment, intervention, planning, evaluation, and research. Table 9 presents how each adapted practice behavior was categorized.

Table 9.

*Categorization of Adapted Practice Behaviors*

<table>
<thead>
<tr>
<th>Core Knowledge</th>
<th>Applied Practice Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>practice personal awareness of how they feel about fat and self-regulation to assure continual professional development with respect to body weight and its implications</td>
<td>advocate for fat clients to have access to the services of social work which are specific to the unique needs of this population</td>
</tr>
<tr>
<td>recognize personal values specifically related to fat and to manage them in a way that allows professional values to guide practice</td>
<td>engage in activities that eliminate or reduce the consequences associated with anti-fat bias and fat discrimination</td>
</tr>
<tr>
<td>distinguish, appraise, and integrate multiple sources of knowledge regarding various aspects of fat including research-based knowledge, and practice wisdom</td>
<td>use practice experience with fat clients to inform scientific inquiry and seek to research the consequences of fat discrimination, as well as approaches to eliminate or reduce fat discrimination</td>
</tr>
<tr>
<td>recognize the extent to which a culture's structures and values may work to oppress, marginalize, and alienate fat people, as well as how they can also create or enhance privilege and power based on body weight.</td>
<td>use research evidence to inform practice approaches related to fat discrimination and work with fat clients</td>
</tr>
<tr>
<td>recognize and communicate an understanding of how differences in body weight shape life experiences</td>
<td>utilize conceptual frameworks to guide the process of assessment, intervention, and evaluation which are sensitive to the lived experiences of the fat population</td>
</tr>
</tbody>
</table>
understand the forms and mechanisms of fat oppression and fat discrimination

analyze, formulate, and advocate for policies that advance the social-well-being of and provide protection for the fat population

recognize that fat discrimination is a social and economic justice issue

continuously discover, appraise, and attend to changing locales, populations, scientific and technological developments and emerging trends relevant to the fat population of Appalachia in order to provide relevant services to address unique needs

critique and apply knowledge about the person and environment in the context of fat as a vulnerability

provide leadership in promoting sustainable changes in how services are delivered to fat clients and strive to improve the quality of social services provided to fat clients

recognize and communicate an understanding of the intersectionality between living in Appalachia and membership in the fat community, as well as additional intersectionalities related to gender, race, sexual orientation, etc

substantively and affectively prepare for action with the fat population by creating a fat friendly physical environment (ex: chairs without arms or extra wide seating) and utilization of weight neutral language

collect, organize, and interpret client data giving specific attention to challenges associated with or that could be associated with identification with the fat community

assess client strengths and limitations related to weight and/or identification as a fat person

develop mutually agreed-on intervention goals and objectives that can address any issues resulting from the consequences of fat discrimination

select appropriate intervention strategies that address fat discrimination and its consequences on a micro, mezzo, and macro level
help fat clients resolve problems related to fat discrimination

negotiate, mediate, and advocate for clients who are victims of fat discrimination

critically analyze, monitor, and evaluate interventions related to the elimination or reduction of fat discrimination and the consequences it has for the fat community

Once categorized, the analysis of numbers reveals that the previous pattern is retained (i.e. the highest percentages belong to items placed in the core knowledge category and the lowest scores belong to those items placed in the applied practice skills category). This alludes that social work educators in Appalachia tend to focus on providing theoretical knowledge, promoting self-awareness, helping students recognize fat discrimination and oppression, and intersectionality. This focus on items related to core knowledge also implies that applied practice skills are somewhat neglected in the curriculum. In other words, students are exposed to core knowledge and can recognize the oppression and discrimination but they are not equipped to provide services for and advocate on behalf of fat clients.

A one-way between subjects ANOVA was conducted to compare the effect of Appalachian region (Southern, South Central, Central, North Central, and Northern) on the individual adapted practice behaviors that social work educators in Appalachia are using to prepare students to work with the fat population. The analysis indicated that there was a significant difference at the p < .05 level (F(4, 112) = 2.63, p = .038) with only one adapted practice behavior, “understand the forms and mechanisms of fat oppression and fat discrimination”. A post hoc comparison using the Tukey HSD test
revealed that the social work educators in the Southern Appalachian region (45%) were significantly more likely to expect students in their courses to “understand the forms and mechanisms of fat oppression and fat discrimination” than those educators from South Central Appalachia (12%), North Central Appalachia (10%), and Northern Appalachia (10%). Cohen’s effect size value ($d = .1.69$) suggested a very large significance.

Comparison with Central Appalachia was not significant (20%).

An ANOVA was also used to determine if there was an effect of Appalachian region (Southern, South Central, Central, North Central, and Northern) on the use of adapted practice behaviors with respect to the two categories. The analysis did not reveal significant findings for either the core knowledge category at the $p < .05$ level ($F(4, 112) = .498, p = .737$) or the applied practice skills category at the $p < .05$ level ($F(4, 112) = .230, p = .921$). Nonetheless, the analysis does provide insight as to how many adapted practice behaviors social worker educators in each region utilized. With respect to the core knowledge category, social work educators in Central Appalachia, on average utilized 25.5% of the practice behaviors in this category. This region is followed by Southern Appalachia utilizing 22.2%, Northern Appalachia using 19.0%, North Central Appalachia utilizing 16.4%, and South Central Appalachia utilizing approximately 12.3% of the practice behaviors in this category. Central Appalachia also leads the regions in utilizing the most adapted practice behaviors in the applied practice skills category with 12.5%, followed by North Central Appalachia with 10.7% and Southern Appalachia with 10.2%. The last two regions, Northern and South Central Appalachia utilized 8.2% and 6.7% respectively.
Further analysis of each adapted practice behavior determined which region had the highest percentage of educators expecting their students to master the practice behaviors. This revealed that Central Appalachia had the highest percentage of social work educators utilizing 35% (nine) of the total adapted practice behaviors. North Central Appalachia was closely behind having the highest percentage of educators utilizing 32% (eight) of the practice behaviors. This was followed by Northern Appalachia with 24% (six), Southern Appalachia with 20% (five), and South Central Appalachia claimed none of the highest percentages. This is indicative that social work educators in the Central and North Central regions of Appalachia have a higher percentage of social work educators who expect students to master more practice behaviors because of completing their courses.

A similar examination of region and practice behavior categories highlights that Central Appalachia had the highest percentage of social work educators utilizing the adapted practice behaviors in the core knowledge category with 44% (four) of the nine behaviors in the category of core knowledge. This is followed by Southern Appalachia with 33% (three), Northern Appalachia with 22% (two), North Central with 11% (one), and South Central did not have any of this highest percentages. In the applied practice skills category, the Central region also plays a prominent role. In detail, North Central Appalachia had the highest percentage of social work educators utilizing practice behaviors in this category with 44% (seven) of the 16 behaviors, Central Appalachia claimed 38% (six), Northern Appalachia claimed 25% (four), Southern Appalachia claimed 6% (one) and as with the other category, South Central Appalachia did not have any of the highest percentages. Table 10 presents these patterns by outlining the
percentages of social work educators who address each practice behavior by category and Appalachian region.

Table 10.

*Researcher Created Inventory Adapted Practice Behaviors: Percentages of social work educators who address each adapted practice behavior by Appalachian Region and Category*

<table>
<thead>
<tr>
<th>Category</th>
<th>Adapted Competency</th>
<th>Appalachian Region</th>
<th>Percentage</th>
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<td>Core Knowledge</td>
<td>practice personal awareness of how they feel about fat and self-regulation to assure continual professional development with respect to body weight and its implications</td>
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<td></td>
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<td></td>
<td></td>
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<td></td>
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<td>recognize personal values specifically related to fat and to manage them in a way that allows professional values to guide practice</td>
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<tr>
<td></td>
<td></td>
<td>Southern</td>
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<td>South Central</td>
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<td>Northern</td>
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<td></td>
<td>distinguish, appraise, and integrate multiple sources of knowledge regarding various aspects of fat including research-based knowledge, and practice wisdom</td>
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<td>recognize the extent to which a culture's structures and values may work to oppress, marginalize, and alienate fat people, as well as how they can also create or enhance privilege and power based on body weight.</td>
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recognize and communicate an understanding of how differences in body weight shape life experiences

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understand the forms and mechanisms of fat oppression and fat discrimination

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recognize that fat discrimination is a social and economic justice issue

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<td>South Central</td>
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critique and apply knowledge about the person and environment in the context of fat as a vulnerability

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recognize and communicate an understanding of the intersectionality between living in Appalachia and membership in the fat community, as well as additional intersectionalities related to gender, race, sexual orientation, etc

<table>
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<tr>
<th>Region</th>
<th>Total</th>
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<td>Central</td>
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<td>North Central</td>
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<td>Northern</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
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</table>

**Applied Practice Skills**

advocate for fat clients to have access to the services of social work which are specific to the unique needs of this population

<table>
<thead>
<tr>
<th>Region</th>
<th>Total</th>
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<td>Southern</td>
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<tr>
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<td>Northern</td>
<td>12</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
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</tbody>
</table>
engage in activities that eliminate or reduce the consequences associated with anti-fat bias and fat discrimination

use practice experience with fat clients to inform scientific inquiry and seek to research the consequences of fat discrimination, as well as approaches to eliminate or reduce fat discrimination

use research evidence to inform practice approaches related to fat discrimination and work with fat clients

utilize conceptual frameworks to guide the process of assessment, intervention, and evaluation which are sensitive to the lived experiences of the fat population

analyze, formulate, and advocate for policies that advance the social-well-being of and provide protection for the fat population

continuously discover, appraise, and attend to changing locales, populations, scientific and technological developments and emerging trends relevant to the fat population of Appalachia in order to provide relevant services to address unique needs
provide leadership in promoting sustainable changes in how services are delivered to fat clients and strive to improve the quality of social services provided to fat clients

<table>
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<th>Southern</th>
<th>South Central</th>
<th>Central</th>
<th>North Central</th>
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substantively and affectively prepare for action with the fat population by creating a fat friendly physical environment (ex: chairs without arms or extra wide seating) and utilization of weight neutral language

<table>
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<th>South Central</th>
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collect, organize, and interpret client data giving specific attention to challenges associated with or that could be associated with identification with the fat community

<table>
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<tr>
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<th>Southern</th>
<th>South Central</th>
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assess client strengths and limitations related to weight and/or identification as a fat person

<table>
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<tr>
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<th>Central</th>
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develop mutually agreed-on intervention goals and objectives that can address any issues resulting from the consequences of fat discrimination

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<th>Southern</th>
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select appropriate intervention strategies that address fat discrimination and its consequences on a micro, mezzo, and macro level

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help fat clients resolve problems related to fat discrimination

<table>
<thead>
<tr>
<th>Region</th>
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<td>South Central</td>
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<td>North Central</td>
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<td>Northern</td>
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negotiate, mediate, and advocate for clients who are victims of fat discrimination

<table>
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<th>Region</th>
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<tr>
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<td>Northern</td>
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<tr>
<td>Total</td>
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</table>

critically analyze, monitor, and evaluate interventions related to the elimination or reduction of fat discrimination and the consequences it has for the fat community

<table>
<thead>
<tr>
<th>Region</th>
<th>Count</th>
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<tbody>
<tr>
<td>Southern</td>
<td>9</td>
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<td>South Central</td>
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<tr>
<td>Central</td>
<td>10</td>
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<tr>
<td>North Central</td>
<td>14</td>
</tr>
<tr>
<td>Northern</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>7</td>
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</table>

In addition, six participants also provided additional practice related behaviors or techniques that they teach as it relates to working with a fat client. While these supplemental responses appear to be curriculum topics rather than practice behaviors, they also follow the same pattern noted above. The first five responses are focused on core knowledge and is looking for explanations and recognition of the perceived problem(s):

- “ACES\(^1\) study (i.e., childhood trauma leads to obesity in adults)”
- “Childhood obesity as neglect”
- “Discuss the intersection of healthy food availability and cost and health and obesity-focused policy”
- “Food distribution nationally and internationally as release [sic] to quality of food. And the impact of sales tax on food”

---

\(^1\) Adverse Childhood Experiences Study
The sixth response is the only response which would fall into the category of applied practice skills.

- “The use of Johari’s window as a practice tool when helping clients to evaluate how they see themselves as opposed or in harmony with the way others see them”

**Research Question 6: Among social work educators in Appalachia who include fat in their curriculum, is the pedagogical approach focused on the biomedical weight-centered framework or a social justice framework?**

This curriculum question was captured through an inventory developed by the researcher by presenting common topics utilized to teach students about fat and related issues. Each participant who included fat in their course curriculum was asked to indicate which, if any, of the curriculum topics they utilized to teach fat in their courses. In order to examine this question, each curriculum topic was categorized as belonging to a social justice perspective or aligning with the biomedical perspective. Table 11 presents the topics and their categorization.
Table 11.

*Table 11. Categorization of Curriculum Topics*

<table>
<thead>
<tr>
<th>Social Justice</th>
<th>Biomedical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food deserts</td>
<td>Statistics</td>
</tr>
<tr>
<td>Food insecurity</td>
<td>Health consequences</td>
</tr>
<tr>
<td>Bias</td>
<td>Treatment options</td>
</tr>
<tr>
<td>Stereotypes</td>
<td>Fitness/Exercise</td>
</tr>
<tr>
<td>Discrimination</td>
<td>Beauty standards/Thin ideal</td>
</tr>
<tr>
<td>Poverty</td>
<td>Body Mass Index (BMI)</td>
</tr>
<tr>
<td>The lived experience of being fat</td>
<td>Eating disorders</td>
</tr>
<tr>
<td>Oppression/Alienation of obese/fat people</td>
<td>Body image issues</td>
</tr>
<tr>
<td>Stigma</td>
<td>Genetics</td>
</tr>
<tr>
<td>Fat Studies</td>
<td>Obesity paradox</td>
</tr>
<tr>
<td>Health disparities</td>
<td></td>
</tr>
<tr>
<td>Health At Every Size (HAES)</td>
<td></td>
</tr>
<tr>
<td>Policy/Law</td>
<td></td>
</tr>
<tr>
<td>Obesity/fat as a specific diversity characteristic</td>
<td></td>
</tr>
</tbody>
</table>

Table 12 details the percentage, in descending order, of participants who indicated that they utilized the topics in their courses. An assessment of this data, particularly focusing on the highest-ranking curriculum topics reveals that the top three topics are social justice oriented – poverty, food insecurity, and discrimination, which is what one would expect to see from a social justice oriented profession. The next two are
characterized by a focus on health and pathology and are aligned with the dominant biomedical perspective. It is particularly interesting that poverty and food insecurity are utilized by 33% and 30% of social work educators but the food deserts topic, which is often clustered with these topics in lecture/presentation is only utilized by less than half that many educators (14%). Likewise, 26% of social work educators utilize the topic of health consequences to teach about fat, but only 9% include the obesity paradox in their curricula. The utilization of both would provide a more balanced view of the relationship, or lack thereof, between fat and health. A review of those data also shows that the biomedical topics that are more technical are clustered near the bottom with only between 7-11% of social work educators using those topics. Finally, it is noteworthy to recognize that the last three topics, which are the least utilized, are social justice topics that are very specific to the study of fat and require a deeper understanding and appreciation of the topic. A more discussion about the specific utilization of these topics and possible reasons why will be included in chapter six.

Table 12.

*Researcher Created Inventory of possible fat related curriculum, assigned category, the and percentage of social work educators who include them in their courses*

<table>
<thead>
<tr>
<th>Curriculum Topic</th>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poverty</td>
<td>Social Justice</td>
<td>33.6</td>
</tr>
<tr>
<td>Food insecurity</td>
<td>Social Justice</td>
<td>30.3</td>
</tr>
<tr>
<td>Discrimination</td>
<td>Social Justice</td>
<td>27.7</td>
</tr>
<tr>
<td>Health consequences</td>
<td>Biomedical</td>
<td>26.9</td>
</tr>
<tr>
<td>Eating disorders</td>
<td>Biomedical</td>
<td>26.9</td>
</tr>
</tbody>
</table>
A one-way between subjects ANOVA was conducted to compare the effect of Appalachian region (Southern, South Central, Central, North Central, and Northern) on
the individual curriculum topics utilized to teach students about fat and related issues.

The analysis indicated that there were no significant relationships. Another ANOVA was used to determine if there was an effect of Appalachian region (Southern, South Central, Central, North Central, and Northern) on the use of curriculum topics with respect to category. Again, the analysis did not reveal a significant findings at the $p < .05$ level for either the social justice category ($F(4, 112) = .779, p = .541$) or the biomedical category ($F(4, 112) = .283, p = .888$). The analysis does supply information as to how many curriculum topics in each category that social worker educators in each region utilized.

With respect to the social justice category, social work educators in Central Appalachia on average utilized 22.5% of the curriculum topics in this category followed by Northern Appalachia utilizing 20.4%, North Central Appalachia using 16.6%, Southern Appalachia utilizing 15.1%, and South Central Appalachia utilizing approximately 10.5%. Social work educators in the Southern Appalachian region reported utilizing the most biomedical related curriculum by using approximately 20% of the topics in this category. The region was followed closely by Central Appalachia who reported utilizing 19% of the topics in this category. The Northern, South Central, and North Central regions of Appalachia reported using approximately 16.1%, 13.4%, and 12.3% respectively.

Additional analysis explored which region had the highest percentage of educators utilizing each curriculum topic. This examination revealed Central Appalachia had the highest percentage of social work educators utilizing (50%) (12) of the total curriculum topics, Southern Appalachia with 20.8% (five), Northern Appalachia with 16.6% (four), South Central with 8.3% (two), and North Central Appalachia with 4.1% (one). These numbers suggest that social work educators in Central Appalachia are, by far, exposing their students to more fat related curriculum topics than the other regions.
A similar examination of region and curriculum category shows that Central Appalachia had the highest percentages of social work educators utilizing 64.2% (nine) of the 14 topics in the social justice category. This is followed by the Southern and Northern regions with 14.2% (two for each) and the North Central region with 7.1% (one). South Central Appalachia did not have any of the highest percentages. In the biomedical category, which includes 10 curriculum topics, the Central and Southern regions had the highest percentages of social work educators utilizing 30% (three) of the topics in this category and the South Central and Northern regions each with 20% (two). North Central did not hold any of the highest percentages in the biomedical category. Table 13 presents these patterns by outlining the percentages of social work educators who reported utilizing the individual curriculum topics by category and Appalachian region.

Table 13.

*Researcher Created Inventory of Curriculum Topics: Percentages of social work educators who utilize each topic by Appalachian Region and Category*

$N = 119$

<table>
<thead>
<tr>
<th>Category</th>
<th>Curriculum Topic</th>
<th>Appalachian Region</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Justice</td>
<td>Food deserts</td>
<td>Southern</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>South Central</td>
<td>4</td>
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<tr>
<td></td>
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<td></td>
<td></td>
<td>Northern</td>
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<tr>
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<td>Food insecurity</td>
<td>Southern</td>
<td>27</td>
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<tr>
<td></td>
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<td>South Central</td>
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<td></td>
<td></td>
<td>North Central</td>
<td>33</td>
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<td></td>
<td></td>
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<tr>
<td>Category</td>
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</tr>
<tr>
<td>Fat bias</td>
<td>0</td>
<td>8</td>
<td>30</td>
</tr>
<tr>
<td>Stereotypes</td>
<td>18</td>
<td>12</td>
<td>30</td>
</tr>
<tr>
<td>Discrimination</td>
<td>45</td>
<td>12</td>
<td>30</td>
</tr>
<tr>
<td>Poverty</td>
<td>36</td>
<td>23</td>
<td>50</td>
</tr>
<tr>
<td>The lived experience of being obese/fat</td>
<td>0</td>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td>Oppression/Alienation of obese/fat people</td>
<td>27</td>
<td>8</td>
<td>40</td>
</tr>
<tr>
<td>Category</td>
<td>Southern</td>
<td>South Central</td>
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<td>----------------------------------------------</td>
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</tr>
<tr>
<td>Stigma</td>
<td>27</td>
<td>15</td>
<td>20</td>
</tr>
<tr>
<td>Health disparities</td>
<td>27</td>
<td>19</td>
<td>40</td>
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<tr>
<td>Fat Studies</td>
<td>0</td>
<td>4</td>
<td>10</td>
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<tr>
<td>Health At Every Size (HAES)</td>
<td>0</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Policy/Law</td>
<td>27</td>
<td>8</td>
<td>10</td>
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<tr>
<td>Obesity/Fat as a specific diversity characteristic</td>
<td>9</td>
<td>12</td>
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<td>Southern</td>
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<tr>
<td>Biomedical Statistics</td>
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<td></td>
<td></td>
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<td>Health consequences</td>
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<tr>
<td>Treatment options</td>
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<tr>
<td>Fitness/Exercise</td>
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<tr>
<td>Beauty standards/Thin ideal</td>
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<tr>
<td>Body Mass Index (BMI)</td>
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<tr>
<td><strong>Eating disorders</strong></td>
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<td><strong>Body image issues</strong></td>
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<td><strong>Genetics</strong></td>
<td>18</td>
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<td>20</td>
</tr>
<tr>
<td><strong>Obesity paradox</strong></td>
<td>9</td>
<td>12</td>
<td>0</td>
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</tbody>
</table>

Additionally, Participants were given the option to choose “other” and write in some other curriculum topics they utilize to teach about fat. Four participants also provided additional curriculum topics which they use to teach about fat. All four of the topics aligned with the biomedical approach as they focused on fatness as a pathology (dietary concerns involved in the stresses and practice of social work and obesity of children/neglect) or implied personal blame based on food choices (community gardening/community support agriculture and profits from marketing unhealthy foods).
Summary of Findings

This chapter provided an analysis and overview of the data gathered to explore whether social work educators in Appalachia have an anti-fat bias, if they include issues related to fat in their courses, and if so, do those curriculums align with the dominant biomedical discourse or a social justice oriented approach. To explore these issues, two established scales were utilized – the Anti-Fat Attitudes Test (AFAT) and the Universal Measure of Bias – FAT (UMB-FAT). In addition, the researcher created a scale and developed two inventories to capture important variables.

Six research questions were developed to address the overarching question and guide the process of exploration. Question one explored the attitudes of social work educators in Appalachia toward fat individuals. Data from this question indicate that social work educators in Appalachia hold mostly positive attitudes toward fat individuals. When negative attitudes were reported, the data revealed that they are likely related to physical attractiveness and romantic attraction. The data also show that social work educators from the greater southern area of Appalachian (Southern and South Central) hold the most anti-fat attitudes.

Question two examined the controllability beliefs of social work educators in Appalachia about fat individuals. Analysis of the data related to this question provided evidence that, in general, social work educators in Appalachia do not perceive fatness as controllable. Nevertheless, the data also revealed that there is still a tendency for social work educators from Appalachia to believe that the eating and dietary habits are related to the controllability of fatness. Just like the data in question one, social work educators
in the greater southern region of Appalachia are more likely than their peers in other Appalachian regions to hold beliefs that a fat person can control their body size.

The third question explored the beliefs held by social work educators in Appalachia regarding equal rights for fat people. Analysis of this data uncovered that social work educators do try to understand the perspective of fat people and feel that special effort should be made to ensure that fat individuals have equal rights. Breaking the pattern of the first two questions, social work educators from the North Central region of Appalachia are more likely than their peers from other Appalachian regions to feel that special effort should not be made to protect fat people and ensure equal rights and are also less likely to try to understand the perspective of a fat individual.

The next question investigated whether social work educators in Appalachia perceive issues related to fat as relevant to the social work profession. A review of these data provided evidence that social work educators, in general, believe that fat is an issue that is relevant to the profession. This data also uncovered a curious finding in that although social work educators do feel that fat and related issues are worthy of attention from the profession, they are less convinced that they should be addressing the topic(s) in the courses they teach. On par with the trend noted in the other questions, the Southern region of Appalachia is less likely to see fat as a relevant issue. On a similar note, educators from the greater region of Central Appalachia (South Central, Central, and North Central) are more likely than their peers from other Appalachian regions to see fat and related issues as relevant to the profession.

The fifth and sixth questions of this research are related to the areas where social work educators expect their students to be competent in working and on behalf of fat clients and whether the curriculum topics utilized to teach about fat are grounded in a
social justice perspective or a biomedical perspective. In detail, social work educators in Appalachia are seem to focus on helping students develop competencies that can be categorized as core knowledge such as theory, self-reflection/awareness, recognition of oppression and discrimination, and intersectionality rather than competencies from the applied practice skills category. This indicates that while students are exposed to foundational knowledge and can recognize oppression and discrimination they are not prepared to provide services for and advocate for fat clients. Social work educators in Central Appalachia were found to utilize more competencies from each category than the other Appalachian regions and, along with social work educators in North Central Appalachia, expect students to master more competencies by the completion of the courses.

The curriculum topics utilized by social work educators in Appalachia to teach about fat and related issues is led by topics with a social justice orientation – poverty, food insecurity, and discrimination. But is closely followed by topics of a biomedical perspective which are pathological and focused on health consequences. Social work educators in Central Appalachia are exposing their students to more curriculum topics and also led the regions in utilizing more social justice oriented curriculum topics. On the other hand, Southern Appalachia led the regions in utilizing curriculum topics focused on the dominant biomedical weight-centered perspective but was closely followed by Central Appalachia.
Chapter Five

Discussion

This research explored whether social work educators in Appalachia have an anti-fat bias, if they include issues related to fat in their courses, and if so, is curriculum inclusion adhering to the dominant biomedical discourse or taking a social justice oriented approach. Six research questions were developed to guide the study and collect data. They are:

1. What are the attitudes of social work educators in Appalachia toward fat individuals?
2. What are the controllability beliefs of social work educators in Appalachia about fat individuals?
3. What are the beliefs of social work educators in Appalachia regarding equal rights for fat individuals?
4. Do social work educators in Appalachia perceive issues related to fat as relevant to the social work profession?
5. Which CSWE competencies are social work educators in Appalachia using to prepare students to work with the fat population?
6. Among social work educators in Appalachia who include fat in their curriculum, is the pedagogical approach focused on the biomedical weight-centered framework or a social justice framework?

This chapter provides an interpretation of the data collected for each research question, implications of findings, limitations of the study, and areas for further exploration.
Findings and Interpretation

Presence of Anti-Fat Bias

Findings of this study indicated that social work educators in Appalachia hold mostly positive attitudes toward fat people but anti-fat bias was still present in the sample. This study also highlighted that the respondents ascribe to certain stereotypes about fat people, particularly those surrounding physical attractiveness and romantic attraction. These findings are not surprising given the prevalence of negative attitudes toward fat people in the general population (Andreyeva, Puhl, and Brownell, 2009; Sikorski et al., 2011) and among helping professionals such as physicians (Newell, 2016), nurses (Garcia, Amankwah, & Hernandz, 2016) nutritionist/dieticians (Edelstein, Silva, and Mancini, 2009), and mental health professionals (Fiester, 2012; Davis-Coelho, Waltz, & Davis-Coelho, 2000). In fact, these results align with the few studies that have focused on social workers as a professional group. McCardle (2008) found that practicing social workers held mostly positive attitudes toward fat individuals but noted that there were some social workers who did hold negative attitudes. In addition, a recent study conducted by Shinan-Altman explored anti-fat bias among medical social workers and found that 15% of them expressed negative attitudes toward fat patients. It is disconcerting that both studies found that negative attitudes led to negative practice behaviors.

It is also not surprising that respondents ascribe to negative stereotypes which impact attitudes about the physical attractiveness and romantic attraction of fat people. The fat body is considered deviant and unattractive. Saguy (2013) notes that modern society has a very “narrow understanding of beauty that excludes fat people” (pg. 54).
She also posits that acknowledging an attraction to a fat person can result in stigmatization. This is likely caused by the “proximity effect” noted by Hebel and Mannix (2003) which states that just being in the mere proximity of a fat person is all it takes to activate stigmatization. Therefore, it is not unreasonable to assume that people avoid and/or repress any desires feelings regarding a fat individual to evade the stigma. Social work is a profession that prides itself on battling stereotypes and other labels that feed oppression and discrimination, so it seems contrary to the profession for the social work educators to report ascribing to any stereotypes. However, the respondents may have felt that they could be more open and honest with respect to attitudes about attractiveness and attraction because they could possibly explain these attitudes as personal preferences (i.e. beauty preference and mate selection), rather than indicators of anti-fat bias. Being able to justify these attitudes as preferences would make reporting much easier as they would provide no indication of professionalism or ability to work with fat clients.

**Controllability Beliefs**

As noted in the literature review in chapter two, anti-fat bias, negative stereotyping, and stigmatization of fat is linked to attributions of controllability (Brownwell, Puhl, Schwartz, & Rudd, 2005; Sikorski et al., 2012). Therefore, it was important to explore the controllability beliefs of social work educators in Appalachia. The results from this study revealed that respondents do not perceive fatness as controllable which is expected since this population reported mostly positive attitudes toward fat individuals. It is worth mentioning that professional social work education and the profession’s code of ethics requires that social workers practice non-judgment and
sensitivity to difference. These professional expectations may have played an intermediate role in how the respondents reported their beliefs.

While the data shows that social work educators from Appalachia do not believe that fatness is controllable, they also uncovered a tendency to believe that eating and dietary habits are related to the controllability of fatness. This finding is consistent with other studies of helping professionals which have found that professionals with anti-fat bias are more likely to attribute fatness to behavioral causes (Puhl, Latner, King, & Luedicke, 2013, Davis, 1998; Hebl & Xu, 2001). Specific to social work, McCardle (2008) found that beliefs about the controllability of fatness was significantly related to weight bias and noted that these beliefs were particularly strong regarding overeating being the primary cause of fatness. Shinan-Altman (2016) completed a study that had similar results as she found that medical social workers with negative attitudes were more likely to believe that fatness could be controlled by the individual’s own behavior and through medical treatment.

The application of the addiction model to “obesity” which has become a popular explanation for fat(ness) may have also influenced this finding. More specifically, the approach holds that there are neurobiological and behavioral overlaps between addiction to drugs/alcohol and those who are fat (Fortuna, 2012; Criscitelli & Avena, 2016). Just as an addict is thought to be able to control his/her drug seeking behavior and usage, the fat person is believed to be able to control their dietary and eating habits. Congruent with the biomedical discourse regarding addiction, this means that both addicts and fat people are “addicted” because of bad behaviors (drug use/eating and diet) and poor life choices. This is another biomedical approach to fatness that places individual responsibility at the
center of the discourse, invites stigmatization, and ignores the complexity of the etiology of fatness.

These beliefs about the controllability of fatness indicate inadequate knowledge and competence in working with fat clients. For example, studies have shown there to be no differences in the eating habits or caloric intake among thin and fat individuals and there are many other aspects to consider such as genetics, set-point weight, and how these interact with the environment to create (or not create) fatness (Bacon, 2010; Lavie, 2014). Unfortunately, this knowledge is not widely disseminated because we live in a society where we are inundated with messages that “obesity is a dangerous epidemic” and that it can be prevented and cured through a decrease in calories and an increase in activity. Boero (2012) points out that public health has increasingly individualized fatness and focuses intervention on behavioral change implying that the individual is solely responsible for their fatness. Aided by the media, this message resulted in the creation of a very powerful diet industry which promises cures and quick fixes for the “obesity problem” which triggers consumers to spend approximately $60 billion per year to deflect fatness (Bacon, 2010). It is likely that until the discourse includes a more balanced and accurate representation of what the sciences have discovered about the etiology of fat, these beliefs about individual responsibility will persist. Therefore, it is imperative that social work educators and professionals become knowledgeable about the various complex, scientific factors that determine one’s the level of fatness.

**Beliefs about Equal Rights**

As previously stated in chapter one, weight is not a protected class. Thus, fat people are not protected from discrimination and have no legal options when they have
been treated differently and unfairly if they do not live in the state of Michigan or in one of the following cities: Washington, DC, San Francisco, CA, Santa Cruz, CA, Madison, WI, Urbana, IL, and Binghamton, NY. This is particularly detrimental to the Appalachian region because the area is home to some of the nation’s fattest citizens and yet there are no state or local laws to protect them which increases their vulnerability.

The current study showed that social work educators in Appalachia try to understand the perspective of fat people and believe that special effort should be made to ensure that fat individuals have the same rights and privileges as their thin(ner) counterparts. This is intriguing given that the literature provides no indication that the profession is working with and on behalf of fat individuals to guarantee equality. In fact, as previously discussed, the profession has had limited involvement with fat and related issues and when they are involved the response is generally a clinical one focused on changing the individual and/or individual’s behavior which implies fat is a pathology.

One possible explanation for the difference in what social work educators report and what is reported in the literature comes from the fact that social work, in trying to establish itself as a profession, has historically aligned itself, socially and politically, with the dominant biomedical perspective and neglected social justice issues, such as oppression and discrimination (Gil, 1998). Social justice movements were, and often still are, perceived as a threat to social order and are not conducive to the goal of achieving recognition as a legitimate profession. Therefore, social workers became agents of social control, served a normative function, and as Gill (1998) states, “came to identify as ‘therapists’ who help people adapt to existing conditions rather than as ‘agents of social change’” (pg. 77). This can be seen in social work’s involvement with eugenics and
with the gay and lesbian community. Considering such, it would not be unreasonable to question if the profession, at this point in time, is repeating this pattern with respect to their involvement with fat (i.e. change the fat person to adapt to the realities of injustice and oppression, rather than confront and reform). If the profession is repeating this pattern of alignment with the biomedical perspective, then there is hope that this perspective will change as scientific developments evolve and advocates fight; just as it did with the gay and lesbian community. This change will then lead to the profession being more involved in social justice issues related to fat.

Another possible explanation is that this reflects one of the most profound tensions in the social work profession; namely, the tension of person vs environment. This tension results from the conflict of desiring to focus intervention efforts on the person or on the environment and can be traced back to the early days of social work. While the tension likely began with social work pioneers Jane Addams and Mary Richmond, it wasn’t until much later (1950s) that this dichotomy was revived and addressed by Harriet Bartlett’s (1958) seminal work, “Working Definition of Social Work Practice” and Boehm’s (1958) work with social work curriculum. This dual focus debate has remained an active part of the evolution of profession through the works of Gordon (1962, 1983), Pincus and Minahan (1973), Bitensky (1978), Wakefield (1988a, b; 1996a, b; 2003), and Sallee (2003) to name a few. Essentially, it appears that while social workers are strongly opposed to social injustices such as the ones faced by the fat community, they usually are not educationally prepared to challenge the systemic roots of those injustices. In other words, it is a philosophical rejection but not one often practiced.
Relevance of Fat

The current study indicated that 92% of social work educators in Appalachia believe that fat is an issue that is relevant to the profession. This group of educators (100%) also expressed strong feelings that there is a role for the social work profession in the “obesity epidemic”. It is interesting to note that 98.2% of the respondents agreed that “social work students should be exposed to skills and knowledge related to working with obese/fat clients” whereas, 91.4% of respondents noted that they felt that “social work educators should be addressing issues related to obesity/fat in social work courses”.

While this is not a huge difference it is an important finding as it indicated that while this group of social work educators feel as if fat is an issue worthy of attention from the profession, there is a small group who are less committed to addressing fat and related issues in the courses they teach to prepare social work students to attend to the issue.

One possible reason for this discrepancy could be the resistance that is often encountered when the dominant discourse about fat is challenged. Cameron’s (2014) qualitative study with 26 faculty members who were known to challenge the leading dialog about fat found that 21 of the participants had experienced resistance from both the students in their courses and from the educational institutions where the participants were employed. Yet, this would only apply to those who choose to challenge the dominant discourse, leaving questions about why those who prefer that approach are reluctant. Perhaps their hesitation could be explained by how they perceive their own bodies. A little more than half of the respondents perceived themselves as either “overweight”, “obese”, or severely “obese”. This is important as research has shown that one’s body size impacts their perceived ability to teach about fat in terms of their credibility (Bacon,
2009; Guthman, 2009; Boling, 2011; Longhurst, 2012; Cameron, 2014; McPhail, Brady, & Gingras, 2016). While some academic research (Fisanik, 2007; Bacon, 2009; Brown, 2012; Cameron, 2014) calls upon the fat educator to use their non-normative body size as a pedagogical tool, this could be a daunting task because, according to Escalera (2009), fat stigma is a real threat for fat educators. This would be particularly true for those fat educators who choose to teach about fat and related issues as it adds another possible stigmatizing situation for the fat educator. Past research conducted by Myers and Rosen (1999) pointed out that the fat people in their study reported experiencing each of 50 different stigmatizing situations several times throughout their lives. Recent research by Seacat, Dougal, and Roy (2016) found that the fat women (N = 50) in their study reported experiencing a total of 1,077 stigmatizing situations which meant that each woman averaged experiencing three stigmatizing situations per day. Furthermore, the study found that the fatter a person, the more they reported experiencing stigmatizing situations and had to institute a variety of coping skills to deal with the consequences. This is an astonishing amount of stigma and is likely to have negative consequences for the educator, psychologically and physically (Puhl & Brownell, 2006). As Fisanik (2006) notes, “bodies do matter in academic culture, and fat academics remain susceptible to the fat-hating rhetoric that permeates American culture” (p. 237).

Another interesting finding with respect to the question of fat as relevant to the profession is that the lowest mean was related to whether fat should be viewed as a diversity characteristic. Specifically, approximately 21% of social work educators in Appalachia disagreed with this statement. This reflects Cameron’s (2014) finding that body size is relatively absent from the diversity discourse in higher education despite an
increasing focus on diversity inclusion. This could also reflect how the profession has not formally recognized natural variation in body fat/body size as a diversity characteristic nor has it included fatness as a recognized vulnerability despite a wealth of research regarding the discriminatory practices toward fat individuals. More specifically, when the NASW (2008) Code of Ethics references discrimination, cultural competence, and social diversity, it includes the following aspects of diversity: ethnicity, national origin, color, sex, sexual orientation, age, marital status, political belief, religion, or mental or physical disability. In 2001, the CSWE identified areas of oppression, discrimination, and diversity and included the following: age, class, color, culture, disability, ethnicity, family structure, gender, marital status, national origin, race, religion, sex, and sexual orientation. Neither of these important professional organizations recognize fat, weight, or body size as a diversity variable, therefore sending the message that these leading organizations do not perceive difference in body size as a characteristic that creates vulnerability and warrants legal protections and empowerment. In essence, the lived experience of being fat with its associated stigma, discrimination, and other harms is not viewed as conflicting with the profession’s commitment to social justice. Therefore, this would also make it is possible that the social work educators may not recognize their anti-fat bias in the same way as they do for other types of bias (e.g. gender, race, age, sexual orientation, religion).

The way that fat is defined and perceived may also contribute to the exclusion of fat as a type of diversity. One definition captures fat as an objective biological fact and explains that fat is a white or yellowish greasy substance that is responsible for forming adipose tissue in animals, including humans (Fruedenrich, 2000). Fat, as an adjective, is
more subjective and means that one has an excess of adipose tissue. This meaning of fat is the one that is most utilized and typically in a derogatory manner. Fat is also defined as a slang term for the “O” words by the medical profession (“obesity, “obese”, and “overweight”) which are the preferred terms in our society. Our preference for the biomedical lexicon of fat prevents us from perceiving fat in any other way and prohibits us from recognizing that fat can also be defined as a political identity. Borrowing a narrative from the gay rights movement, some fat people go from simply being fat to “coming out” as fat. This “coming out” means that the fat person rejects the negative stereotypes and stigma attached to fatness, promotes fat acceptance, and creates new meanings regarding their body and demands that they been seen and understood in different ways (Saguy & Ward, 2011; Murray, 2005). This act of liberation affirms that the fat person is part of a political identity group, centered on fat(ness), and that fat(ness) makes them vulnerable. If we do not become more comfortable with the word “fat” and expand our definition of what it means, fat may never be perceived as a naturally occurring diversity.

**Competencies/Adapted Practice Behaviors**

Using researcher adapted practice behaviors from the 2008 and 2015 CSWE competencies to focus on working with the fat population, the participants were asked to identify all the adapted behaviors from a pre-generated list that they expect students to be able to competently display after completion of their course(s). The study found that the adapted practice behavior that social work educators in Appalachia most expected their students to master was to “recognize the extent to which a culture's structures and values may work to oppress, marginalize, and alienate fat people, as well as how they can also
create or enhance privilege and power based on body weight”, which exemplifies the CSWE competency “Engage diversity and difference”. This is not a surprising finding given the social justice orientation of the profession. However, the behaviors students were least expected to master were: (1) “use practice experience with fat clients to inform scientific inquiry and seek to research the consequences of fat discrimination, as well as approaches to eliminate or reduce fat discrimination” (4.2%) from the competency, “Engage in research-informed practice and practice-informed research”; and (2) “collect, organize, and interpret client data giving specific attention to challenges associated with or that could be associated with identification with the fat community” (4.2%) from the assessment aspect of the “Engage, assess, intervene, and evaluate with individuals, families, groups, organizations, and communities” competency. As the percentages were reviewed, a pattern came to light that the practice behaviors that the educator’s most expected students to master were related to developing a core knowledge base and those least expected to master were practice based skills that require application. When the adapted practice behaviors were placed into either core knowledge or applied practice skills categories, the pattern became even more clear and revealed that social work educators in Appalachia who include fat and fat related issues in their curriculum tend to focus on providing core knowledge (theoretical knowledge, promoting self-awareness, helping students recognize fat discrimination and oppression, and intersectionality). This means that behaviors related to applied practice skills are neglected in the curricula of this group of educators. The result then, would be that social work programs in Appalachia are producing graduates who are exposed to core
knowledge and can recognize fat oppression and discrimination on a basic level but they are not equipped to provide services for and advocate on behalf of fat clients.

This finding mirrors the recent research of Mehrotra, Hudson, and Self (2017) who conducted a review of MSW syllabi related to diversity and social justice and found that although they claim to focus on knowledge, values, and skills, most of them only actually addressed knowledge. It also illustrates Gil’s (1998) assertion that the social work profession lacks adequate strategies to overcome injustice and oppression. In addition, this finding provides further evidence for this researcher’s previous conclusion that social work educators in Appalachia appear to be philosophically opposed to oppression and injustice but are not educationally prepared to challenge them. Similarly, recall that when relevance was explored, 98% of social work educators from Appalachia expressed agreement with the statement that “social work students should be exposed to skills and knowledge related to working with obese/fat clients”. In sum, there are discrepancies in the perception of what the educators believe that students should be exposed to and what the educators actually provide through their curriculum/courses. This does not imply that this group of educators intentionally disregard teaching knowledge and skills related to working with fat clients. On the contrary, the results of this research indicate that this inattention is likely because the educators themselves are ill-prepared to teach this content.

**Fat Related Curriculum Content**

Each participant who included fat in the curriculum of one of more courses was asked to indicate from a list which, if any, curriculum topics they utilized to teach fat in their courses. Each curriculum topic was categorized as belonging to a social justice
perspective or aligning with the biomedical perspective to determine how the topic was framed when presented to students. The top five topics appeared to present a somewhat balanced approach to teaching about fat and related issues as three of the five topics are social justice oriented topics and two came from a weight-centered biomedical perspective. However, one must be cautious in this interpretation. After a closer look at the specific topics of the top three curriculum areas - poverty, food insecurity, and discrimination – one must question if these topics are the most popular because they are easily associated and combined with other types of oppression and “isms”. In addition, it is intriguing that poverty and food insecurity are utilized by 33% and 30% of social work educators, respectively, but the food deserts topic, which is often clustered with these topics in lecture/presentation is only utilized by less than half that many educators (14%). This raises questions about whether the educators approached poverty and food insecurity from a biomedical perspective that is focused on changing the person rather than challenging the oppressive system or perhaps they do not understand the concept of food desert. For example, when speaking of the relationship between poverty and fat bias/discrimination, the educators could be focusing on how those living in poverty have diets that are rich in energy dense, cheap foods to make the most of their limited resources. This approach can have social justice leanings but it relies on fat stigma to be successful by placing the blame on the fat person for making poor dietary choices. Even the solutions which focus on making sure that “healthy” foods are affordable and available implies that fatness can be eradicated if people will just change their personal behavior (self-regulation, dieting, food choices). Everything told, while there is some
indication of social justice issues being addressed, the context of those issues is unknown and could have biomedical roots.

Another reason we must be careful with an interpretation that the curriculum topics seem somewhat balanced concerns the next two highest ranking topics—health consequences and eating disorders—which are focused on healthism and grounded in the dominant weight-centered biomedical perspective. The caution stems from the fact that 26% of social work educators utilize the topic of health consequences to teach about fat, but only 9% include the obesity paradox in their curriculum. Without addressing both theories of the relationship between fat and health, or lack thereof, there cannot be a balanced approach. Along a similar vein, the more complicated biomedical topics (treatment options, genetics, obesity paradox, and BMI), were ranked fairly low (7-11%) and probably reflects a lack of understanding and knowledge regarding the medically technical aspects of the topics. This provides additional evidence for this researcher’s previous conclusion that social work educators and professionals must gain knowledge regarding the different complex, scientific factors that determine one’s the level of fatness.

The curriculum findings also revealed that the topics social work educators in Appalachia were least likely to teach are the lived experience of being fat, the HAES model, and fat studies. These topics are very specific to the study of fat and unlike many of the other topics it would require the educator to seek additional knowledge to be prepared to teach these topics, be radical enough to challenge the dominant discourse, and prepared to fight the resistance from within the institution of education.
It is not surprising that there is little to no evidence that social work educators in Appalachia are challenging the biomedical perspective and engaging in a critical study of fat, or its stigma, oppression, and discrimination. In fact, aside from the philosophical ethical mandate, there is little incentive to do so. Unfortunately, there are plenty of challenges and reasons to avoid this path. For example, there are few pedagogical resources, displaying academic/research interest counter to the biomedical perspective can result in decreased employment marketability (Cameron, 2014), challenging the biomedical perspective or having a fat body in higher education can create fear for those going through the promotion and tenure process (Fisanik, 2006; 2007; Cameron, 2014; Escalara, 2009), and exposure to the criticisms of colleagues who try to invalidate any work that does not align with the dominate views of fatness (Cameron, 2014).

Finally, the influence of social work literature on social work educators and social work curriculum must be recognized. As previously noted, there is a dearth of literature regarding the profession’s involvement with fat. To further explore this scarcity, this researcher conducted a search for the terms “obesity” and “obese” in all journals with social work in the name using the Academic Search Complete database. Only 72 unduplicated articles were found between the years of 1975 and September 2017. The content of these articles reflects the curriculum findings of this study. In detail, only one article, which has already been cited multiple times in this study, addressed oppression of fat people. What’s more, the article by Lawrence, Hazlett, and Abel (2012) also specifically focused on the implications of fat oppression on social work education. There was only one article which addressed the Health At Every Size (HAES) model through describing an intervention designed by combining the HAES approach with
Acceptance and Commitment Therapy (ACT) (Berman, Morton, & Hegel, 2016). The current study noted that the HAES model was among the curriculum topics which were least likely to be included in social work curricula in Appalachia. This study also gave a small amount of attention to fat stigma and oppression when discussing how the treatment acknowledged and validated institutional size stigma and discrimination.

Most of the articles were focused on children and adolescents and how to decrease fatness among this population through behavioral interventions. A few discussed this population’s fatness as resulting from social injustices related to the environment (i.e. safe neighbors, access to recreation, availability of affordable, healthy food, urbanization, etc). A handful of studies focused on the social justice issues of poverty and racial disparity. Interspersed among the articles were discussions about the psychological pathologies associated with fatness and the overall pattern of behavior based treatments was evident. For example, in 1975, Flack and Greyer, believed that the traditional approach to working with fat women helped to sustain the idea that if one is fat, one is bad. As a counter, they developed a consciousness raising group to highlight what is was like to be fat in America, as well as to raise the self-esteem of fat women and lessen the likelihood of self-punishment for being fat. The authors described four goals tied to the group. The first two were dedicated to discovering what it was like to be fat in a thin-obsessed America and to enhancing self-esteem by providing a safe and accepting environment. However, the last two goals seem to run counter to the stated purpose of the consciousness raising group and are as follows:

(3) helping the women recognize that being fat is one of many choices that a person may legitimately make for herself, and (4) helping each member recognize
and accept the choice she has made about her size and the consequence inherent in her choice (p. 485).

The obvious message here is that one chooses to be fat and implies that it is completely under the control of the fat individual. Therefore, different choices (i.e. behavior modification) would provide the cure and all other possible causes are ignored and indicates that social work practice with fat clients during the 1970’s was predicated on the idea that being fat is a choice.

Scientific advancements since that time have provided us with a wealth of information regarding the complexity of fat(ness). Unfortunately, this is not reflected in the social work literature. In fact, few articles mentioned these biological advancements and those that did, only briefly gave mention and many blatantly dismissed this important component of fatness. For example, in Miller’s (2009) book review of *Obesity in Youth: Causes, Consequences, and Cures*, for the *Child and Adolescent Social Work Journal*, he says the following:

Chapter 1 provides the most technical discussion of the book and focuses on various biological and genetic influences, which are thought to contribute to weight problems in young people. Readers who are less familiar or less interested in the medical underpinnings of obesity may find it useful to skim this chapter (p. 561).

The last sentence of that passage explicitly gives the social work professional a pass on educating themselves about the more complex, biologically technical aspects of fatness. Miller (2009) further states that the first section of the book which is focused on exploring the risks/etiology of fatness is the one that social workers are likely least
interested in while asserting that the second and third sections, psychosocial, interpersonal, and intrapersonal effects of fatness and assessment, intervention, and prevention respectively, are the ones that social workers will find the most valuable. This easy dismissal of the complex biological etiologies of fat could offer an explanation as to why this study found that the curriculum topics related to the biomedical perspective were ranked low and helps to explain the presence of a lack of knowledge regarding those curriculum topics.

Further evidence of the lack of attention to the various and multifaceted causes of fatness can be found in a recent study by Melius (2015) who conducted a literature review to develop a comprehensive representation of the contribution of social work research in addressing fat(ness). Utilizing the socioecological model of health to categorize the literature’s discussions about risk factors for fatness, she found that of the 51 articles meeting her criteria, most of them (36) focused on individual causes of fatness, 15 of them emphasized community issues, and 12 concentrated on societal factors. It is of interest to note that the individual causes of fatness did not include any studies related to biology or genetics.

In her vetting of articles, Melius (2015) also found that social work researchers were significantly more likely to have their work focused on fat(ness) published in non-social work journals (69%), as opposed to only 31% being published in a social work journal. She further states that this creates a barrier for social workers who are seeking evidence-based practices to address fatness on all system levels. The same assumption can be made about social work education. As a profession, we rely on research to inform practice and practice to inform research and as educators we depend on this reciprocal
relationship to guide and drive our curriculum development and pedagogical approach. Neither of these are possible with respect to fat(ness) or working with or on behalf of a fat client if social work researchers are not conducting and publishing critical studies related to fat(ness) within social work specific journals. More specifically, this absence in the social work literature can influence whether the educator perceives fat as an issue worthy of curriculum inclusion and impacts the educator’s ability to gain the knowledge base and skill set necessary to teach the profession’s neophytes how to work with fat clients.

**Appalachia and Regional Differences**

Crandall and Reser (2005) found that culture matters when it comes to anti-fat attitudes citing values and attributions as the source of the differences. They found that the more an individual’s worldview promotes individualism, the more anti-fat bias one will hold. For example, they report that belief in a just world, support for capital punishment, belief in traditional sex roles in marriage, conservative politics, and Protestant work ethic are correlated with anti-fat bias. On the surface, it may seem as if the traditional culture of Appalachia, which is thought to embody many of those values and beliefs, would explain the presence of anti-fat bias among social work educators in the region. This would be a logical assumption if there was a definable Appalachian culture. The Appalachia known to society is an Appalachia created by local color authors of the nineteenth century (Eller, 2008; Lewis & Billings, 1997; Smith & Fisher, 2012). These writers were not Appalachian, were not experts, and most had limited, if any, experience in the region. The cultural idea they relayed was formed from their impression of a few people in a specific place and within a specific historical context.
Essentially, Central Appalachia during the turn of the century is cultural Appalachia. Unfortunately, this so-called culture of Appalachia was, and continues to be, applied to the entire region.

To complicate matters, it is difficult to define a region’s culture if we do not agree on the region’s geographic borders. Since the early 1900s researchers have used various geographic definitions of Appalachia, ranging from counties in only three states to 210 counties in nine states (Couto, 1999). Political motivations during the creation of the ARC and after its establishment have also altered the definition (Eller, 2008). Most recently, George Bush, Jr. signed an expansion of the region which resulted in the modern definition of Appalachia which includes 410 counties in the states of Mississippi, Alabama, Georgia, North and South Carolinas, Tennessee, Kentucky, West Virginia, Virginia, Maryland, Ohio, Pennsylvania, and New York (ARC, 2015). The region is then further divided into five sub-regions: North, North Central, Central, South Central and South.

Even if we could agree on geographic borders, these imaginary lines are unable define what it means to be Appalachian due to cultural diaspora. Out migration from Appalachia has been occurring since about 1910, but the largest migration occurred during the 1940s to the 1960s when the region lost more than four million residents to industrial cities in the north and mid-west (Urban Appalachian Community Coalition, n.d.a). This lead to the development of Appalachian enclaves in those cities, such as Hillbilly Heaven in uptown Chicago, Illinois and Over-The-Rind in Cincinnati, Ohio. These migrants were labeled Urban Appalachians and existing communities did not welcome their presence. They considered the Urban Appalachians to be lazy, incestuous,
and even developed a term for their dislike of the migrants known as the SAM (Southern Appalachian Migrant) problem (Urban Appalachian Community Coalition, n.da.; Guy 2010). The Urban Appalachians found themselves alienated, victims of discrimination, and even victims of violence by both fellow citizens and law enforcement (Urban Appalachian Community Coalition, n.d.a; Guy 2010; Urban Appalachian Council, n.d). Folks in the Cincinnati area noticed and responded to this by creating the Appalachian Committee of the Cincinnati Human Relations Commission and the Appalachian Identity Center, which were merged in 1974 to create Urban Appalachian Council (UAC). This agency engaged in advocacy work on behalf of the Appalachian minority and provided limited services to assist in obtaining an education and finding employment (Urban Appalachian Council, n.d.). Currently, the agency is known as the Urban Appalachian Community Coalition and “is an alliance of individuals and organizations committed to the well-being of Appalachian people, communities and cultural expression in the greater Cincinnati area” (Urban Appalachian Community Coalition, n.d.b, para. 1). Despite their good work, the coalition admits that there are still economic, educational, and social disparities in Appalachian neighborhoods which go unnoticed. So unnoticed, in fact, that the population is often referred to as “the second minority” or the “invisible minority” (Urban Appalachian Community Coalition, n.d.a). It is interesting to note that even though the Appalachian people left the geographic region, they still identify as Appalachian and continue to experience poverty, oppression, and uneven ground in an urban area outside of Appalachia resulting from their identification and presentation as an Appalachian. Perhaps we are focusing too much on Appalachia as a region when we should be focusing on Appalachian people.
On the other hand, despite being clumped into one monolithic region, Russo (2015) points out that there are many areas outside of the Central Appalachian region who do not self-identify as Appalachian. This was experienced in this study when several participants from the Northern and North Central regions contacted this researcher to say that they were not in Appalachia despite their school being clearly located within the ARC defined boundaries. Tredway (2014) states that many areas within the Appalachian region, as defined by the ARC, have few cultural commonalities and the less isolated parts of the region have more diversity and more cultural influences from outside groups. For example, the Northern part of the region is much more industrial and has higher educational attainment (Pollard & Jacobsen, 2011). The Southern region of Appalachia has few counties that are located in the mountains and studies have found that this area is more culturally aligned with the deep South (Tredway, 2014; Smith & Fisher, 2012). In addition, the Southern region has been an epicenter of growth for the past few decades, particularly in the metropolitan areas, and this region has more racial diversity, and boosts the largest gains in diversity than the other regions (Pollard & Jacobsen, 2011; Pollard, 2005).

If we assume that traditional Appalachian cultural values are responsible for the presence of anti-fat bias among social work educators in the region, then we would expect that Central Appalachia would hold the most anti-fat bias as it is the region that is referenced when discussing Appalachian culture. However, that was not the case with this research as the current study found that social work educators from the greater Southern region of Appalachia held more anti-fat bias. While, the difference was not mathematically significant there was enough of a difference in mean scores on the AFAT
and UMB-FAT to provide evidence that social work educators in the greater southern region of Appalachia hold more negative attitudes toward fat individuals, held more beliefs that fatness could be controlled and that fat people are responsible for their body size, and were less likely to see fat and related issues as relevant to the social work profession than the other Appalachian regions.

Crandall and Reser (2005) also noted that differences within subcultures affect stereotyping and prejudice processes, so the question becomes, what is so different about the greater southern region of Appalachia? One difference is that this region is home to Appalachia’s fattest citizens (CDC, 2015c; The State of Obesity, 2017a). This is also reflected by the respondent’s perception of their own body size. Specifically, the South Central region houses the largest percentage (69%) of social work educators who perceive their body size as either “overweight”, “obese”, or severely “obese”. In addition, 45% of social work educators in Southern Appalachia perceived their bodies in this manner compared with 50% of Central Appalachia, 57% of North Central Appalachia, and 45% of Northern Appalachia. This is significant because unlike other oppressed groups, the fat population does not show an intergroup bias but rather a devaluation of fat people (Crandall, 1994; Wang, Brownell, & Wadden, 2004; Latner, Stunkard, & Wilson, 2005; Schwartz, Vartanian, Nosek, & Brownell, 2006; Durso & Latner, 2008). This means that fat people often internalize the stigma that exists about fat and thus they hold the same anti-fat bias as their thinner peers and ascribe the same negative stereotypes. Furthermore, Vartanian and Novak (2011) adds to our understanding of internalization of the anti-fat bias and further stated that the extent to which a fat person endorses societal standards of attractiveness can also indicate
internalization. Considering such, it is important to recall that the greater southern region of Appalachia showed more bias on subscales of the AFAT and UMB-FAT related to physical attractiveness and romantic attraction, social/character disparagement, and adverse judgement. Combined, these findings could explain the difference. More specifically, by having a higher number of social work educators who believe that they are “overweight”, “obese” or severely “obese” who may have internalized the very anti-fat bias that they have endured, they report more anti-fat bias than their peers in other Appalachian regions.

Another possible explanation stems from the public health campaigns designed to battle the “obesity epidemic”. Citizens of the U. S. have been inundated with public health messages aimed at reducing obesity statistics through both national and state level campaigns. These campaigns have been particularly aggressive in the areas with the highest rates of fatness; specifically, the Southern United States, which has nine of the eleven fattest states (The State of Obesity, 2017b). Of the four fattest states, three of them are in Appalachia (Mississippi, Alabama, and West Virginia) where they are, either all or in part, geographically situated in the greater southern region of Appalachia (The State of Obesity, 2017b; ARC, 2015). Unfortunately, research has found that these campaigns increase stigmatization and incite negative attitudes toward fat people (Puhl, Luedicke, & Peterson, 2013; Abu-Odeh, 2014). In fact, Abu-Odeh (2014) asserts that public health professionals and campaigns have come to rely on stigma to do their work. In the context of the current study, it is possible that social work educators in the greater Southern region of Appalachia have had more exposure to public health messages or exposure to more aggressive campaigns which promote the dominant biomedical
discourse (i.e. fat is bad; health consequences) and utilize stigma to change people. This exposure could have influenced the level of anti-fat bias they expressed by inciting more negative attitudes toward fat people through impacting their beliefs about controllability of fatness. Additionally, being inundated with messages of a biomedical nature may have also resulted in social work educators from the southern region seeing fat as only a medical issue.

The tendency to see fat as only a medical issue was likely spurred by the 2013 decision of the American Medical Association (AMA) to classify “obesity” as a disease despite recommendations of the AMA’s Council on Science and Public Health to the contrary. The Council warned against this decision because “obesity” didn’t meet the definition of a medical disease and the measure used to determine “obesity”, the BMI, was flawed (Pollack, 2013). The medical disease perspective is further exacerbated by the correlation made between “obesity” and Type 2 diabetes and heart disease and the fact that the South and Appalachia have the highest rates of both diseases (The State of Obesity, 2016; Centers for Disease Control, 2017). Additional evidence of the disease connection can be found in research conducted by Park, Schaller, and Crandall (2007). The authors found that fat(ness) is associated with disease related concepts and that people who are fearful of pathogen transmission have more negative attitudes toward fat people due to the activation of a behavioral immune system (as if fat is an infectious disease). The authors were unable to explain this correlation through confounding variables.

This medicalization of fat(ness) could explain why the educators in greater Southern region of Appalachia are less likely to perceive fat as relevant to the social work
profession, i.e. it is a medical problem and therefore belongs to the medical field. Furthermore, this may also help explain why the social workers in the greater Southern region of Appalachia led the way in utilizing the most curriculum topics related to the biomedical discourse about fatness, utilized the least social justice oriented topics, and why this region has the highest percentage of social work educators utilizing curriculum topics aligned with the biomedical weight-centered approaches.

Another interesting regional difference revealed in the current study is related to the competencies used to prepare students to work with fat individuals. More specifically, there is a statistically significant regional difference with respect to the adapted practice behavior, “Understand the forms and mechanisms of oppression and fat discrimination” which would fall under the competency “Advance human rights and social and economic justice”. In detail, social work educators in Southern Appalachia were found to be far more likely to expect their students to display this practice behavior than educators in South Central, North Central, and Northern Appalachia. This seems counter to other findings in this study as a commitment to this adapted practice behavior denotes a passion regarding the social justice aspects associated with fat(ness). However, it may be aligned and reflective of the participant’s perception of their own body size. Specifically, the South Central region houses the largest percentage (62%) of social work educators who perceive their body size as either “overweight”, “obese”, or severely “obese” and 45% of social work educators in Southern Appalachia have the same perceptions about their bodies. As previously stated found that severely fat people reported having experienced each of 50 different stigmatizing situations multiple times throughout their lives and that as one’s body weight increases, the more they are exposed
to stigmatizing experiences and discrimination (Meyer and Rosen, 1999; Puhl, Andreyeva, & Brownell, 2008). One study found that 10% of “overweight” women, 20% of “obese” women, and 45% of very “obese” women reported discrimination compared to 3% of “overweight” men, 6% of “obese” men, and 28% of very “obese” men (Puhl, Andreyeva, & Brownell, 2008). This indicates that women experience more discrimination than men and begin experiencing discrimination at a lower weight than men. This is an important distinction for the current study because 92% of the participants reported identifying as a woman. When placed in the context of the current study, the fact that the greater southern region of Appalachia has high percentages of social work educators who identify as one of the “O” words and are primarily women, it is highly probable that they have experienced being in a stigmatizing situation and/or weight discrimination. In turn, these experiences may serve as a motivation for ensuring that their students “understand the forms and mechanisms of oppression and fat discrimination”.

The current study also provided some interesting insight regarding how Central Appalachia is different from the other regions. One difference is that Central Appalachia has the highest percentage of social workers utilizing adapted practice behaviors from both the knowledge related competencies and applied practice skills competencies by utilizing 25.5% and 12.5% of the behaviors respectively. Central Appalachia also had the highest percentage of social workers utilizing 35% of the overall adapted practice behaviors. This finding suggests that this group of social work educators are more committed to ensuring that students leave their courses with at least some degree of competency in working with and on behalf of fat clients.
Another regional difference which calls attention to Central Appalachia is that social work educators of this region utilized the most curriculum topics in the social justice category. In addition, they also utilized the most curriculum topics (50% of those presented) and had the highest percentage of social work educators utilizing social justice curriculum topics. As previously noted, the greater region of Southern Appalachia led the regions in utilizing curriculum topics focused on the dominant biomedical weight-centered perspective but Central Appalachia followed closely behind. This implies that social work educators in this region, much like the region’s geographic position in the Appalachian Mountain range, take a more “middle of the road” balanced approach to preparing students for competent practice with fat clients by exposing them to both biomedical and social justice issues related to fat.

This more balanced approach may have roots in the reality that people from Central Appalachia are accustomed to using both a social justice perspective and a biomedical perspective when considering disease etiology and/or health outcomes. More specifically, for many years the citizens of Central Appalachia have had to contend with the detrimental effects to their health caused by injustices associated with coal mining, such as slurry ponds, processing plants and the heavy toxic dust which impact the environment through air and water pollution. More recently, the focus of injustices associated with mining has been mountain top removal (MTR), which is a type of strip mining used in Central Appalachia that extracts coal from the top of the mountain by removing layers of rock to reach the coal seams. For more than a decade, research with MTR has been proven to contribute to significantly higher rates of respiratory diseases, cardiovascular diseases, birth defects, and cancer in the areas of Central Appalachia
where it is utilized and it is also associated with a higher mortality rate (Appalachian Voices, 2017). However, a breakthrough occurred in 2014 when it was finally established that there was a direct link, not simply a correlation, between lung cancer and the toxic dust generated from MTR mining (Appalachian Voices, 2017). Similar connections have been found with other respiratory illnesses, even after controlling for smoking and non-industry pollutants (Appalachian Voices, 2017). Per Appalachian Voices (2017) the leading cause of death in the coal mining areas of Appalachia is cardiovascular disease and the incidence of heart disease increases with the amount of coal produced in those communities. Even after controlling for poverty and other socioeconomic risks the incidence is 42% higher than the national rate (PDA, Inc., 2017). When these conditions are combined with the reality of the healthcare disparities in Appalachia, especially those related to access to care, it is easy to see how a strong social justice perspective is present in this area. In addition, while the citizens of Central Appalachia are among the least educated in our nation, that does not mean that they do not understand and appreciate the biomedical nature of disease/health. On the contrary, the very existence of folk remedies among the Appalachian people implies at least some understanding of the biological processes of the body. In sum, the context of the Central Appalachian region is one that promotes a balanced perspective of disease/health. If the social work educators teaching in institutions located in Central Appalachia are utilizing a curriculum informed by their institution’s context, then a balance approach is expected.

In addition to teaching a more balanced perspective of fat(ness) social work educators in the greater central region of Appalachia are more likely than their Appalachian peers to see fat as relevant to the social work profession and to believe that special effort should be taken to ensure that fat people have equal
rights. It is intriguing that just a few hundred miles to the north, educators in the North Central region expressed the strongest beliefs of all other regions that special effort should not be utilized to ensure that fat people have equality. While these differences are not statistically significant they do feature differences among the regions and begs one question why the regions are so different.

One could make an educated guess that differences emanating from Central Appalachia exist because the social work educators teaching there are more attuned to issues related to social justice as they are living amid it. The residents of Central Appalachia may understand oppression, uneven development, and how to fight for equal rights as they have long been involved in grassroots movements to fight for labor issues, environmental issues, economic parity, alleviation of poverty, and other social justice issues impacting their home and lives. However, one could also make the same assumptions about social work educators in the Southern region as they live amid the birthplace of the Civil Rights Movement and the region is also home to the most diverse population of the entire Appalachian region.

It is possible that the regional differences in this study are an artifact of sample size and/or composition of the sample. The differences among the regions could also be the result of significant qualitative differences between institutions that were not captured by this study. Obermiller and Maloney (2016), when talking about the many conceptualizations of Appalachia, capture this idea perfectly with the statement “…none are unique in an anthropological sense and all of them are deeply contextualized by variables such as social class, geography, and degree of urbanization” (pg. 3). The
findings of this study draws attention to the fact that context and “place matters in the pursuit of social justice because the inequality and power relations that produce it are spatial” (Smith & Fisher, 2012, pg. 270).

**Implications of Findings**

The findings of this study suggest that there are many opportunities to enhance social work education in Appalachia and beyond. One opportunity involves the self-reflexivity of individual educators. This research found that social work educators in Appalachia had mostly positive attitudes toward fat individuals, but there was an undeniable presence of anti-fat bias among the sample, albeit small and statistically insignificant. This is of concern because social work educators carry the responsibility of modeling respect for all humans, regardless of characteristics like size, and are charged to teach the importance of transformative change to enhance the lives of all we serve. Furthermore, research has shown that students are quick to notice when their role models make negative comments about fat patients/clients (Phelan et al, 2015; Puhl, Luedicke, & Grilo, 2013; Wear, Aultman, Varley, & Zarconi, 2006) and often don’t even consider this unprofessional or inappropriate behavior (Wear, Aultman, Varley, & Zarconi, 2006). As part of their professional training, students are expected to be open to and to engage in self-awareness to bring biases into consciousness so that they can be modified, or at the very least monitored, to prevent harm to those they will eventually serve. They are also taught that self-awareness and personal development are life-long processes. It is not unreasonable to expect the professional educators who are guiding them to do the same.

In addition, engaging in an exploration of their biases, social work educators also need to conduct an honest assessment about their knowledge base regarding fat and
related issues. The findings of this study indicated that while most social work educators in Appalachia did not believe fatness was controllable they did hold to myths about eating and dietary patterns as strongly related. This indicates that the educators may hold inaccuracies and myths regarding the etiology of fat(ness), which not only impacts the level of anti-fat bias they report but also presents the danger of disseminating erroneous information to those they train. Social work educators must ask themselves how their perceptions and their experiences with fat(ness) guide how they teach, or don’t teach, about fat and related issues.

Another opportunity for enhancement would result from a deep self-reflexivity as a profession, specifically with respect to the characteristics we recognize as a type of diversity which has the potential to lead to unequal treatment. According to Jani, Ortiz, Pierce, and Sowbel (2011) the profession has reconceptualized how it defines diversity many times throughout the years and this evolution has guided how the profession practices. In their historical review of CSWE EPAS the authors note that these changes have led professional social work education to a place where social work programs are mandated to produce students who can competently practice without discriminating against clients based on some personal characteristic or identity, such as age, gender, culture, sexual orientation, etc. Unfortunately, social work lags in size acceptance. Despite there being plethora of research, which is cited elsewhere in this document, outlining the discrimination, marginalization, oppression, and alienation faced by fat individuals, the CSWE nor the NASW recognize fat as a vulnerability. This failure to do so makes the profession complicit with fat oppression and marginalization and inadvertently sends the message that the fat population is not a victim of social injustices.
and therefore, not worthy of protection. This is not to imply that this is an intentional or malicious act. On the contrary, this is an act that likely results from the aforementioned lack of research/literature regarding fat(ness) in the social work literature.

Recognizing fat as a diversity that creates a vulnerability has the potential to change the narrative of the social justice fight related to fatness. The recognition would lead to educators and professionals recognizing their anti-fat bias in the same way that they recognize biases attached to traditional diversity characteristics and ultimately lead to stronger, more competent professionals. Recognition would also mean that CSWE accredited schools of social work would include the recognition of anti-fat bias and its reduction strategies, size acceptance, and HAES into their diversity and social justice curricula. This effect would snowball into a reduction of anti-fat bias among students and produce graduates who are competent to work with and on behalf of fat clients.

This analysis should also require social work education, as an institution, to assess the other ways that it may have acted as an agent of social control (by perhaps adhering to the biomedical approach) and helped to create and sustain the oppression and inequality of the fat population. This should also include an exploration of how we train young, aspiring professionals in terms of curriculum content, pedagogy, and how fat students perceive the role of social work education and the profession as it relates to social control and social justice, as well as how these perceptions impact the provision of education.

The profession and its educational process will also need to explore ways to implement anti-bias reduction programs for those who are already practicing and for professional educators. In addition, the profession will need to develop educational
programs to ensure that both groups are adequately prepared to work with fat clients and teach others to work with fat clients. Professional development activities, continuing education courses, conferences or conference session tracks, and other educational ventures dedicated to increasing competence of working with fat clients provide opportunities to reach large numbers of social workers using a variety of pedagogical approaches and can be very effective.

Just as individuals can exhibit anti-fat bias and participate in oppressing the fat population, a social work program can do the same. Consequently, a final opportunity for enhancement would result from individual social work programs in Appalachia engaging in a program level analysis. The regional differences revealed in this study provide evidence that programs should assess whether they are responding to the context of their specific institution. As previously stated, place and context matter because they are important parts of the modern discourse of inequality and vulnerability. This is so important because each sub-region in Appalachia presents with different degrees and kinds of vulnerabilities, resources, histories, oppression, social justice movements, and diversity. Hence, there should be an examination of whether the program and its faculty members are giving special attention to the issue of intersectionality, as the Appalachian identity/label, along with other aspects of life in Appalachia, such as low socioeconomic status, can and does compound vulnerability and oppression. The programs should also examine how the use and misuse of the Appalachian identity and/or culture can promote fat oppression and inequality in the region.

In addition, individual programs should conduct a review to determine if, and how, they may have been complicit with fat oppression in both their explicit and implicit
curriculum, and ask these same questions about their home institution. The detailed review of the explicit curriculum should be conducted with the goal of ensuring that the content and competencies are being addressed do not neglect practice skills, particularly strategies to combat social and economic injustices related to fat. This should not be limited to ways of improving access to services and resources but should include strategies to create multilevel transformative change by challenging power dynamics and structural aspects of anti-fat bias. Finally, programs should examine whether their implicit curriculum practices non-discrimination based on size across faculty, staff, and students, models respect size as a diversity, and promotes size acceptance.

**Limitations of the Current Study**

There are several limitations of this study that warrant acknowledgement. First, this exploratory study surveyed social work educators teaching in social work programs located within the geographical boundaries of the Appalachian region as defined by the ARC. Therefore, the findings may not generalizable to other social work educators. For example, the sample was 92% female and 84% white, meaning that there was little diversity in the sample. Specifically, the findings may have been influenced by the fact that 92% of the sample are females and females are disproportionately impacted by their fatness in multiple areas of life as compared to men and thin(ner) women (Fikkan & Rothblum, 2012). Similarly, the sample is overwhelmingly white and the experience of ethic/racial minorities with respect of fat(ness) is markedly different from their white peers (Himmelstein, Puhl, & Quinn, in press). In addition, it is possible that the beliefs
and attitudes of social work educators in Appalachia demonstrate different beliefs and attitudes than social workers outside of Appalachia.

Another example is the 23% response rate of the study. Caution must be taken when interpreting the results of the study as the somewhat low response rate means that one cannot be sure that the respondents in this study represent all social work educators in Appalachia. It is also possible that the somewhat low response rate may mean that only those with a strong interest in the role of social work education in the “obesity” epidemic, which was evidenced by this researcher receiving emails from respondents expressing gratitude for conducting the research. On a similar note, the low response rate may also have developed from the potential respondents perceived lack of identification with the Appalachian region. For instance, this researcher received several emails from educators from the North Central and Northern region of Appalachia disputing that their school was located within the Appalachian region. The anonymous nature of the research may have also contributed to the less than optimal response rate as potential participants as it may have resulted in fewer feelings of obligation to respond.

Another limitation of this study is that it relied on the use of explicit measures and did not measure implicit attitudes. Explicit measures rely on self-report. As such, it is possible that social work educators who have extensive training and experience, as well as a strong commitment to the social justice values of the profession, were not completely honest with some of the anti-fat feelings and attitudes they may have held because they run counter to the values and beliefs of the profession. In other words, social desirability may have resulted in a response bias.
In addition, this study also utilized the respondent’s perception of their body size. While it is common for researchers to rely on an individual’s perception of their body size, it is possible that the respondent’s perception is not an accurate representation of their body size. This impacts the descriptive statistics but it also impacts explanations of some of the findings.

**Implications for Future Research**

Given that this study is an exploratory study and, to this author’s knowledge, the first to explore anti-fat bias among social work educators in Appalachia, it should serve as a starting point for future studies to delve deeper into the findings presented by this research. Perhaps the most important future study would be to repeat this study with a nationally representative sample of social work educators. Along the same line, to avoid social desirability response bias, it would also be a good idea for future studies to utilize implicit measures, such as the Weight Implicit Associations Test (IAT), to discern the presence of anti-fat bias among social work educators in Appalachia and across the nation. This is important as previous studies have found that there are differences between explicit and implicit reports of anti-fat bias among healthcare professionals (Teachman & Brownell, 2001).

Given that the current study, McCardle’s (2008) study, and Shinan-Altman’s (2016) study have indicated that there is a presence of anti-fat bias among social workers, future studies should explore and determine the effectiveness of anti-bias reduction strategies with social work educators and social workers practicing in the field. This research should also be extended to social work students to adequately address this issue before students enter the field. Given that previous studies have found anti-fat bias reduction strategies have had mixed-results (Puhl & Heuer, 2009), it is important that this
research explore established and new, creative types of strategies to determine what will effectively work with this focused population.

Considering that this study found that practice skills related to working with fat clients are neglected in the curriculum, it would be important to conduct research to determine the etiology of this neglect. Qualitative studies with social work educators would provide information that quantitative studies cannot tease out and would be a good place to start. This would allow for a deeper understanding of the findings of the current study and a more comprehensive understanding of the challenges and barriers that are preventing presentation of this important part of professional social work practice. Along the same lines, objective examinations, as opposed to self-report, of what is actually being taught in social work courses related to fat, would be important. This would help determine if the material is focused on the dominant biomedical approach or a social justice perspective. A content analysis of social work syllabi would accomplish this. Likewise, it would also be useful to conduct a similar analysis of relevant social work textbooks to determine the nature of the fat related content. This would provide information about whether classroom materials and resources may contribute to the curriculum issues identified by this study. An additional path for future research should be to explore pedagogical approaches to teaching about fat and related issues to ensure that students leave professional training programs with the ability to competently work with and on behalf of fat clients.

Furthermore, it would be beneficial to explore what factors predict curriculum choices regarding fat related content. Additional research is also needed to explore the role of controllability beliefs in the presence of anti-fat bias and whether
social work educators perceive fat is relevant. Further exploration regarding the role of beliefs about equal rights in curriculum choices/presentation of fat would also provide insight regarding how the attitudes and beliefs of social work educators impact curriculum choices and framing of fat and related content.

Finally, this study was the first study of anti-fat bias to explore place and context and the findings support the need for further research. Specifically, additional research is needed to explore how the place and context of a social work program can impact the presence of anti-fat bias and the framing of fat in the social work curriculum, in both explicit and implicit curricula.

These suggestions, while not exhaustive, provide a spring board for the many possible areas of research associated with this topic. The implementation of these suggestions will help build a foundation of knowledge regarding anti-fat bias among social work educators and how it impacts the educational process.

**Conclusion**

The current study is one of only three studies regarding anti-fat bias among social work professionals as a unique professional group and to this researcher’s knowledge, the only study to date to examine anti-fat bias among social work educators. The findings demonstrate that there is some need for concern regarding the presence of anti-fat attitudes and beliefs among social work educators in Appalachia, as well as concern about the framing of fat and related issues within the social work curriculum. These findings should provide the profession and its educational institution with the encouragement and motivation necessary to change the profession’s narrative regarding
its role in fat oppression, or at the very least redirect it, from one of complicity to one of social justice warrior.
Appendix A

Survey Instrument

Dear Social Work Educator:

You have been invited to take part in a research study about social work education. More specifically, the study seeks to examine the role of social work education in the “obesity epidemic” and in preparing students to work with obese/fat clients. As a social work educator you have unique insight related to how your courses and the curriculum in your program addresses this topic. Although you will not get personal benefit from taking part in this research study, your responses may help us to understand more about the role of social work education in the “obesity epidemic” and in preparing social work students to work with obese/fat clients.

The person in charge of this study is Genesia Kilgore-Bowing, a PhD candidate at the University of Kentucky College of Social Work. She is being guided in this research by Dr. Kay Hoffman. There may be other people on the dissertation committee assisting at different times during this study.

You have a choice about whether to complete the survey, but if you do participate you are free to skip any questions or to leave the study (i.e., stop completing the survey) at any time. If you choose not to volunteer or choose to leave the study, you will not lose any rights or benefits to which you are otherwise entitled. However, if you do choose to participate in the survey, you will be given an opportunity to enter a drawing to win one (1) of four (4) $25 Amazon gift cards. Your responses are anonymous to the researcher so once the survey is complete you will be directed to follow a web link that will take you away from the survey. Your individual responses will not affect your chances of winning a gift card. When the survey closes, the researcher will compile all submitted names and will utilize a random name picker to select four (4) names to determine the winners of the gift cards. As an added measure to protect participant anonymity, the names of the gift card winners will not be released. Instead, the winners will be contacted directly.

The survey will take approximately 15-20 minutes to complete. There are no known risks to participating in this study and all of your responses to the survey are anonymous which means no names will appear or be used on research documents, or be used in presentations or publications. The researcher will not know that any of the information you provided came from you, nor even whether you participated in the study.

Please be aware, while we make every effort to safeguard your data once received from SurveyMonkey, given the nature of online surveys, as with anything involving the Internet, we can never guarantee the confidentiality of the data while still on SurveyMonkey’s servers, or while en route to either them or us. It is also possible the raw data collected for research purposes may be used for marketing or reporting purposes by SurveyMonkey after the research is concluded, depending on Terms of Service and Privacy Policies.

If you have any questions about the study, please feel free to ask; my contact information is given below, as is my advisor’s. If you have complaints, suggestions, or questions about your rights as a research volunteer, contact the staff in the University of Kentucky Office of Research Integrity at 859-257-9428 or toll free at 1-866-409-9428.
Thank you in advance for your assistance with this important project. To ensure that your responses are included please complete the survey by February 10, 2017.

Sincerely,

Genesis Kilgore-Bowling, Principle Investigator
University of Kentucky College of Social Work
gilkg2@uky.edu
606-218-5011

Dr. Kay Hoffman
University of Kentucky College of Social Work
kay.hoffman@uky.edu
859-257-3351
Thank you for participating. Your responses are important to the success of this study.

1. What is your age?

2. Please indicate the gender with which you most identify.

3. Which description best describes your race/ethnicity?

4. Please select the way you perceive your body size.
   - Underweight
   - Normal weight
   - Overweight
   - Obese
   - Severely obese
5. Please indicate the highest level of education you have completed.

☐ Masters  ☐ Doctorate

☐ Please Specify (ex: MSW, MSSW, MA, PhD, DSW, EdD)

6. At which level(s) do you have teaching responsibilities?

☐

7. Please indicate how many years of teaching experience you have completed.

☐

8. Which rank best applies to your academic status?

☐

9. Using the map and legend below, please identify the location of your institution within the Appalachian Region.

☐ Southern Appalachia  ☐ Central Appalachia  ☐ Northern Appalachia

☐ South Central Appalachia  ☐ North Central Appalachia

Subregions of Appalachia

Map by: Appalachian Regional Commission, November 2009.
10. Are you currently practicing social work in an Appalachian area or have you ever practiced social work in an Appalachian area?

☐ yes
☐ no

11. Using the map and legend below, please identify the region(s) of Appalachia where you are currently practicing or have ever practiced social work.

☐ Southern Appalachia  ☐ Central Appalachia  ☐ Northern Appalachia
☐ South Central Appalachia  ☐ North Central Appalachia

Subregions of Appalachia

12. What is the total number of years that you have lived in Appalachia? Please include non-continuous years as well.
13. Are you a native of Appalachia (i.e. born and/or raised in Appalachia)?

- [ ] yes
- [ ] no

14. Using the map and legend below, please identify the region(s) of Appalachia where you were born and/or raised.

- [ ] Southern Appalachia
- [ ] Central Appalachia
- [ ] Northern Appalachia
- [ ] South Central Appalachia
- [ ] North Central Appalachia

Subregions of Appalachia

Map by Appalachian Regional Commission, November 2009.
15. Do you include issues related to obesity and/or fat in the courses you teach?

- [ ] yes
- [ ] no

16. When I teach about obesity/fat in my courses, I discuss the following: (Select all that applies)

- [ ] Food deserts
- [ ] Food insecurity
- [ ] Bias
- [ ] Stereotypes
- [ ] Discrimination
- [ ] Statistics
- [ ] Health Consequences
- [ ] Treatment Options
- [ ] Fitness/Exercise
- [ ] Beauty standards/Thin ideal
- [ ] Body Mass Index (BMI)
- [ ] Poverty
- [ ] Eating Disorders
- [ ] Body image issues
- [ ] The lived experience of being obese/fat
- [ ] Oppression/Alienation of obese/fat people
- [ ] Stigma
- [ ] Genetics
- [ ] Fat Studies
- [ ] Health At Every Size (HAES)
- [ ] Policy/Law
- [ ] Health Disparities
- [ ] "obesity" paradox
- [ ] Obesity/fat as a specific diversity characteristic

Other (please specify):
17. The following list contains practice behaviors which have been adapted from the 2008 & 2015 competency domains to address practice with the fat population. Please consider ONLY the courses that you teach which specifically include issues related to obesity/fat and then choose the fat adapted practice behaviors that you expect students completing your course to competently display. Please select all that apply.

- advocate for fat clients to have access to the services of social work which are specific to the unique needs of this population
- practice personal awareness of how they feel about fat and self-regulation to assure continual professional development with respect to body weight and its implications
- recognize personal values specifically related to fat and to manage them in a way that allows professional values to guide practice.
- distinguish, appraise, and integrate multiple sources of knowledge regarding various aspects of fat including research-based knowledge, and practice wisdom
- recognize the extent to which a culture's structures and values may work to oppress, marginalize, and alienate fat people, as well as how they can also create or enhance privilege and power based on body weight.
- recognize and communicate an understanding of how differences in body weight shape life experiences.
- understand the forms and mechanisms of fat oppression and fat discrimination.
- recognize that fat discrimination is a social and economic justice issue.
- engage in activities that eliminate or reduce the consequences associated with anti-fat bias and fat discrimination.
- use practice experience with fat clients to inform scientific inquiry and seek to research the consequences of fat discrimination, as well as approaches to eliminate or reduce fat discrimination.
- use research evidence to inform practice approaches related to fat discrimination and work with fat clients.
- utilize conceptual framework to guide the process of assessment, intervention, and evaluation which are sensitive to the lived experiences of the fat population.
- critique and apply knowledge about the person and environment in the context of fat as a vulnerability.

- analyze, formulate, and advocate for policies that advance the social-well being of and provide protection for the fat population.
- continuously discover, appraise, and attend to changing locates, populations, scientific and technological developments and emerging trends relevant to the fat population of Appalachia in order to provide relevant services to address unique needs.
- provide leadership in promoting sustainable changes in how services are delivered to fat clients and strive to improve the quality of social services provided to fat clients.
- recognize and communicate an understanding of the intersectionality between living in Appalachia and membership in the fat community, as well as additional intersectionalities related to gender, race, sexual orientation, etc.
- substantively and affectively prepare for action with the fat population by creating a fat friendly physical environment (ex: chairs without arms or extra wide seating) and utilization of weight neutral language.
- collect, organize, and interpret client data giving specific attention to challenges associated with or that could be associated with identification with the fat community.
- assess client strengths and limitations related to weight and/or identification as a fat person.
- develop mutually agreed-on intervention goals and objectives that can address any issues resulting from the consequences of fat discrimination.
- select appropriate intervention strategies that address fat discrimination and its consequences on a micro, mezzo, and macro level.
- help fat clients resolve problems related to fat discrimination.
- negotiate, mediate, and advocate for clients who are victims of fat discrimination.
- critically analyze, monitor, and evaluate interventions related to the elimination or reduction of fat discrimination and the consequences it has for the fat community.

- Other (please specify other practice related behaviors or techniques that you teach as it relates to working with a fat client)
18. Please rate how much you personally agree or disagree with the following statements:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obesity/Fat is an important issue to the social work profession.</td>
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<tr>
<td>Social work educators should be addressing issues related to obesity/fat in social work courses.</td>
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<tr>
<td>Social work students should be exposed to skills and knowledge related to working with obese/flat clients.</td>
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<tr>
<td>Obesity/flat is not a relevant social work issue.</td>
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<tr>
<td>There is no role for the social work profession in the “obesity epidemic”.</td>
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<tr>
<td>There are more important issues to address in social work other than those related to obesity/flat.</td>
<td></td>
<td></td>
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<tr>
<td>Obesity/flat should be viewed as a specific diversity characteristic.</td>
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</tbody>
</table>
Thank you for your participation. If you would like to be entered into the drawing for one of the (4) four $25 Amazon cards, please open this link.
Appendix B

Institutional Review Board Exempt Approval Letter

EXEMPTION CERTIFICATION

MEMO: Genesia Kilgore-Bowling, Social Work
PO Box 196
Hellier, KY 41534
PI phone #: (606)754-5777

FROM: Institutional Review Board
  c/o Office of Research Integrity

SUBJECT: Exemption Certification for Protocol No. 16-0972-X4B

DATE: December 7, 2016

On December 5, 2016, it was determined that your project entitled, The Impact of Attitudes and Beliefs About Fat on Social Work Education in Appalachia: An Exploratory Study, meets federal criteria to qualify as an exempt study.

Because the study has been certified as exempt, you will not be required to complete continuation or final review reports. However, it is your responsibility to notify the IRB prior to making any changes to the study. Please note that changes made to an exempt protocol may disqualify it from exempt status and may require an expedited or full review.

The Office of Research Integrity will hold your exemption application for six years. Before the end of the sixth year, you will be notified that your file will be closed and the application destroyed. If your project is still ongoing, you will need to contact the Office of Research Integrity upon receipt of that letter and follow the instructions for completing a new exemption application. It is, therefore, important that you keep your address current with the Office of Research Integrity.

For information describing investigator responsibilities after obtaining IRB approval, download and read the document "PI Guidance to Responsibilities, Qualifications, Records and Documentation of Human Subjects Research" from the Office of Research Integrity's IRB Survival Handbook web page [http://www.research.uky.edu/ori/IRB-Survival-Handbook.html#PIresponsibilities]. Additional information regarding IRB review, federal regulations, and institutional policies may be found through ORI's web site [http://www.research.uky.edu/ori]. If you have questions, need additional information, or would like a paper copy of the above mentioned document, contact the Office of Research Integrity at (859) 257-9428.

Appendix C

Email Invitation

Dear [insert title and last name]

   I hope that this email finds you doing well. My name is Genesia Kilgore-Bowling and I am the Director of the Social Work Program at the University of Pikeville located in Eastern Kentucky, in the heart of Central Appalachia. I am currently working on research for my dissertation through the University Of Kentucky College Of Social Work under the guidance of my advisor, Dr. Kay Hoffman. The focus of my study is to explore the role of social work education in Appalachia in the “obesity epidemic” and in preparing social work students to work with obese clients. Given that Appalachia is one of the heaviest regions of our country and home to the two states with the highest obesity rates, it is important that we understand social work education’s role in addressing problems associated with obesity.

   As such, I am emailing you to ask you for your participation. Your role as a social work educator teaching in a program located in Appalachia is crucial to the purpose of this study. The survey should take approximately 15-20 minutes of your time and can be accessed through this link: [insert survey link].

   To ensure that your responses are included please complete the survey by ___________. I will send electronic reminders to assist you in meeting the deadline.

   Thank you for considering my invitation. I am happy to answer any questions you may have and happy to share the results of research upon request. Please feel free to contact me using the information below.

   With respect and gratitude,

Genesia Kilgore-Bowling, PhD Candidate
University of Kentucky College of Social Work
Glkilg2@uky.edu
606-218-5011
References


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doi:10.1016/j.ypmed.2016.07.009


Does the perspective save social work from incoherence? Social Service Review, 70, 183-213.


VITA

Genesia Lynn Kilgore-Bowing, MSW, CSW
Place of Birth: Pikeville, Kentucky

Education

Master of Social Work
University of Kentucky
2003

B.A., Psychology & Communication; Area of Concentration in Human Services
Pikeville College
2000

Licensure

Certified Social Worker, KY
License # KY-4643
2004 – Present

TEACHING EXPERIENCE

Associate Professor of Social Work/ Social Work Program Director
University of Pikeville, Pikeville KY –
August 2017 – Present

Assistant Professor of Social Work/Social Work Program Director
University of Pikeville, Pikeville, KY
August 2011 – 2017

Assistant Professor of Social Work/Social Work Program Director
Pikeville College, Pikeville, KY
August 2007 – 2011

Interim Instructor of Psychology
Pikeville College, Pikeville, KY
August 2006 – 2011

Adjunct/Graduate Teaching Assistant
University of Kentucky, Lexington, KY
August 2004-2010
**Professional Experience**

Research Assistant  
University of Kentucky College of Social Work  
Lexington, KY  
2006

Volunteer Consultant  
Hospice of Pike County and Hospice of Big Sandy  
Pikeville, KY  
2005 – 2010

Volunteer Consultant to Coordinator of the Area of Concentration in Human Services  
Pikeville College, Social Work Program Committee  
Pikeville, KY  
2005 - 2007

Hospice Social Worker  
Hospice of Pike County  
Pikeville, KY  
01/2002 – 05/2002  
04/2005 – 09/2005

Outpatient Therapist, Children and Adults,  
Mountain Comprehensive Care Center  
Pikeville, KY  
07/2001 – 11/2001

Interim Juvenile Service Worker  
Kentucky Department of Juvenile Justice  
Pikeville, KY  
01/2001 – 08/2001

Volunteer counseling group co-leader with statute mandated sex offenders  
Kentucky Department of Corrections, Mental Health Division  
Pikeville, KY  
Spring and Summer 2000

**Professional Awards**

Kentucky Citizens Review Panel, Eastern Mountain Region, Member of the Year - 2009

William Wade and Helen Record Walker Teaching Excellence Award - Pikeville College, 2007-2008 academic year.
Dorothy A. Miller Professorship Scholarship – University of Kentucky – 2006

Professional presentations

“Faculty Use of The Holler: The Flipped Classroom and other Teaching and Learning Applications” – University of Pikeville Professional Development Workshop, Pikeville, KY – Invited Presentation – Fall 2016

“An Incremental Approach to the Development of Interprofessional Education Programs” – BPD Annual Meeting, Dallas, TX – Peer Reviewed Presentation – Spring 2016

“An Incremental Approach to Interprofessional Education: From Case Study to Simulation” – Council on Social Work Education Annual Program Meeting, Denver, CO – Peer Reviewed Presentation – Fall 2015

“Interprofessional Education: Expectations, Egos, and Experiences” – Appalachian College Association- Peer Reviewed Presentation, Kingsport, TN – Fall 2015

“The NASW Code of Ethics and The Kentucky Code of Ethical Conduct” – University of Pikeville – Continuing Education Unit (3 hours) – Spring 2015

“Field Instructor Training” – co-presenter, University of Pikeville – Continuing Education Unit (3 hours) Spring 2015

“Interprofessional Education: Expectations, Egos, and Experiences” – Council on Social Work Education Annual Program Meeting, Tampa, FL – Peer Reviewed Presentation – Fall 2014

“Diversity and Cultural Competence” – Judi’s Place for Kids Diversity Committee Training – Invited Presentation, Summer 2014

“LGBTQ Sensitivity Training” – Judi’s Place for Kids Staff Training – Invited Presentation, Summer 2014

“Appalachian Culture and Values – How it impacts social services” – Elon University Study Away Students, Human Services Program, January 2013.

“Field Instructor Orientation” – co-presenter, University of Pikeville, Fall 2010, 2011, 2012
**Professional publications**

DOI: 10.1080/21604851.2012.762502

**Professional, academic, community-related, and scientific memberships and leadership positions**

Founding Faculty Sponsor of Phi Omega, the University of Pikeville’s chapter of Phi Alpha, a national honor society in Social Work

Faculty Sponsor – Student Social Work Association, Pikeville College/University of Pikeville, 2007 - present

Founding Member of Pikeville College’s Psi Chi Organization, a national honorary psychology society – Lifetime member and Faculty Co-Sponsor

Council on Social Work Education

Baccalaureate Program Directors (BPD) Social Work

Kentucky Association of Social Work Educators

- President 2017 - Present
- Vice President 2016-2017
- Member at large 2014-2016

Member of Board of Directors – Artist Collaborative Theater, 2010 – Present

Member of Board of Directors – Judi’s Place for Kids (formerly the Big Sandy Area Child Advocacy Center), 2007 – present

- Vice President – 2015-2016; 2016-2017
- Executive Committee – 2015-2016; 2016-2017
- Finance Committee – 2015
- Fundraising Committee, 2009 – 2011
- Recruitment Committee, 2007 - 2014
Chair – Faculty Executive Committee, University of Pikeville, 2015-2016

Social Science Division Elected Representative - Faculty Executive Committee, University of Pikeville, 2014-2015

Member – Search Committee for Universities First Provost, University of Pikeville, 2016.

Chairperson - Social Work Committee, University of Pikeville, 2008 – present

Founding Member – Interprofessional Education (IPE) Committee, University of Pikeville, 2013 - Present

Member – Admissions, Retention, and Scholarship Committee, University of Pikeville, 2012- 2014


Member – Instructional Resources Committee, University of Pikeville, 2016-2017, 2010 – 2011

Member – Psychology Professor Search Committee, 2009 & 2010

Member – Diversity Committee, Pikeville College, 2007 - 2012

Member – Student Affairs Committee, Pikeville College/University of Pikeville, 2007 – 2009

Member of Board of Directors – Pike County Safe Place, 2010

Member of Kentucky Citizens Review Panel - Eastern Mountain Region, 2007 – 2011
Chairperson, 2008 - 2010