Intergenerational Variation in Cultural Models of Body Size in Puerto Rico

by

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ABSTRACT

Culture informs ideas about healthy and acceptable body types. Through globalization the U.S.-European body model has become increasingly significant in local contexts, influencing local body models. While Puerto Ricans have historically valued plump bodies – a biocultural legacy of a historically food scarce environment – this dissertation investigated shifts in these ideals across generations to a stronger preference for thinness.

A sample of 23 intergenerational family triads of women, and one close male relative or friend per woman, were administered quantitative questionnaires.

Ethnographic interviews were conducted with a sub-sample of women from 16 triads and 1 quintet. Questions about weight history and body sizes were used to address cultural changes in body models. Findings indicate the general trend for all generations has been a reduction in the spectrum of acceptable bodies to an almost singular idealized thin body. Female weight gain during puberty and influence of media produced varied responses across age groups. Overall, Puerto Ricans find it acceptable to gain weight with ageing, during a divorce, and postpartum. Thin bodies are associated with beauty and health, but healthy women that do not resemble the thin ideal, submit themselves to dangerous weight loss practices to achieve self and social acceptance. Further research and direct interventions need to be conducted to alter perceptions that conflate beauty with health in order to address the 'normative discontent' women of all ages experience.

Weight discrimination and concern with being overweight were evident in Puerto Rican everyday life, indicated by the role of media and acculturation in this study. Antifat attitudes were stronger for individuals that identified closely with United States

culture. Exposure to drama and personal transformation television programs are associated with increased body image dissatisfaction, and increased exposure to variety shows and celebrity news shows is associated with increased anti-fat attitudes and body dissatisfaction. In sum, the positive valuation of fat in the Puerto Rican cultural body size model in the 1970s has shifted toward a negative valuation of fat and a preference for thin body size.

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Chapter 1: Introduction

The body is a conspicuous and omnipresent research subject. Life is experienced primarily through one's body, even when one is not consciously processing all the physical and psychological stimuli associated with these constant interactions. Individual experiences vary widely and are contextualized in specific sociocultural norms. A person who may be considered chubby in the United States (U.S.) can travel to rural Puerto Rico and receive comments that he or she is thin. This common experience highlights the cultural construction of ideals and norms associated with body sizes and shapes. Body size ideals can be compared across cultures, as well as within one culture over time.

Excess body weight in some societies is representative of positive traits, such as health and prosperity (Brewis, 2003; Brown and Konner, 1987; Popenoe, 2004; Sobo, 1997). In others it is a sign of moral failing and illness (Crandall et al., 2001; Quinn and Crocker, 1999). In mainstream European and U.S. society being overweight (body mass index (BMI ≥ 25)) and obese (BMI ≥ 30) are perceived as socially unacceptable and as serious medical issues, which promotes a preference for thin bodies (Cordell and Ronai, 1999; Garner et al., 1980; Rothblum, 1990). Preference for thinness and revulsion against fat has been dated back to 1890-1910 in Europe and the U.S. (Hesse-Biber, 2007; Stearns, 2002). The intensification of dieting occurred after World War II and is often cited as the origin of the devaluing of plumpness in Europe and the U.S., though the origin of the phenomenon dates further back in time (Seid, 1989; Stearns, 2002). The turn away from plumpness, which began at the turn of the 20th century has a historical foundation in Christian societies, especially in Puritan groups, with the revulsion against appetite and high regard for self-control which dates to Medieval times (Stearns, 2002;

Stunkard et al., 1998; Townend, 2009). The thin body preference is being disseminated and incorporated globally through modernization and globalization, which necessitates the study of recent changes of local body size ideal in other societies (Becker et al., 2002; Brewis et al., 1998; Tauzin, 2007).

The primary objective of this dissertation project is to examine change in body size ideals, both through time and across age groups for Puerto Ricans. In the 1970s, Massara conducted a study that measured the cultural body size ideals of Puerto Ricans. The study reports that Puerto Ricans were a population that preferred female bodies with excess weight, which signified being well maintained as social individuals. She was motivated to uncover the etiology of the high rates of being overweight and obesity in that particular population, which she found was due to cultural preference for plumper bodies (Massara, 1989). Furthermore, the island-dwelling Puerto Rican population presents an ideal study scenario due to its acculturation process. This complex process makes it necessary to account for cultural resistance as well as assimilation in the realm of body size. An additional element that this study takes into account is the access and exposure to U.S. media within the local context. This study is different from studies that examine media exposure impact on body image for Latinos in the U.S. (Pompper and Koenig; Schooler 2008; Rubin, Fitts and Becker 2003; Franko et al. 2012). The intergenerational approach of this study is more readily adaptable to families that live on the island, due to closeness and frequency of contact. One group of participants in Massara's study were recent Puerto Rican migrants to the U.S., and her results for Puerto Ricans on the island and on the mainland were very similar (Massara, 1989, p. 130,p. 156). There are few studies on island residents that take into account the variable of U.S.

acculturation on the island, and investigate obesity through the use of qualitative methods (Walters Pacheco et al. 2007).

Baseline Study: Puerto Ricans in the 1970s

Emily Massara studied Puerto Ricans that were recent migrants to Philadelphia, and to a lesser extent, Puerto Ricans on the island. Her research examined gender roles in the household, food preferences, eating patterns, and cultural perceptions about overweight and obese bodies (Massara, 1989). She conducted this research between 1976 and 1978. She included women and men of three age groups (18-25 years of age, 26-40 years of age, and over 41 years of age) (Massara, 1989, p. 53). Her methods included participant observation, quantitative surveys, food diaries, and photo elicitation related to varying body sizes for men and women. She also conducted in-depth life histories of nine women she classified as 'heavy' (Massara, 1989). Massara reports, "The convergence in responses between male/female, and Philadelphia migrant/Puerto Rican samples indicates that these weight classifications and cultural definition of obesity are widely shared." (Massara, 1989, p. 130). This highlights that the sample of Philadelphia migrants shared perceptions with the sample from the island. Considering that the cultural norms presented in Massara's study reflected island norms I decided to conduct my research exclusively in Puerto Rico.

One of the key findings of the 1970s study was that the participants stated a "fear of 'thinness', due to its connotations of malnutrition and chronic, often fatal health complications" (Massara, 1989, p. 139). This perception contextualizes the preference and positive connotations associated with 'heaviness' (meaning overweight). Massara explains that "the expression, "How plump!" (*Qué gordita*!) is one which suggests

shapeliness and health and is used in a highly complimentary manner" (Massara, 1989, p. 145). Other key findings of Massara's study was that women, especially those between 26 and 39 years of age, were expected to gain weight, which was a sign of being 'problem-free' and tranquil (Massara, 1989). Women who were not necessarily 'problem-free' would also overeat due to stress and anxiety, but their weight gain would mask their problems since they were embodying the preferred body size. Both the preference for plump women and acts of overeating to conceal problems in the household led to increased prevalence of overweight and obesity in the Puerto Rican community Massara studied.

It is a rare opportunity to have a detailed study to serve as a baseline to assess change in cultural norms and ideals over time. This dissertation builds on Massara's research by asking some of the same questions, and using some of the same techniques to assess body size norms. The findings of this dissertation, which are produced using a different sampling strategy and an intergenerational focus that Massara's research did not include, can be compared to the key results from 30 years ago. Variation regarding body size ideals due to change over time and to generational differences provides insight into the variables and mechanisms that influence culture change.

Culture and Change: The Case of Body Size Ideals

There are multiple definitions for the concept of culture, and in this study I use the definition proposed by Sperber and Hirschfeld (2004). They define culture as an emergent system based on shared cognitions that are shaped by interactions with the social and the physical environments (Sperber and Hirschfeld, 2004). These ideas are grouped into systemic patterns for each domain of importance in the everyday lives of

people, and are expressed in people's behaviors and interactions (D'Andrade, 1987, 2001; Weller, 2007). Individuals simultaneously extract and contribute to the pool of cultural knowledge, thus it can be expected that one will find variations within cultural groups (Pelto and Pelto, 1975). Ross (2004) argues that detailed studies of the processes involved in individual meaning-making in the context of historical, social and physical aspects are necessary. To study similarities and differences in cultural patterns it is imperative to explore the context in which individual cognitions form, investigate the kind of knowledge involved, and the origins of that knowledge.

A primary pursuit of the social sciences in the past decades, particularly in anthropology, was to uncover the unique social structure or cultural pattern that represented a cultural group (Pelto and Pelto, 1975). This has changed with the wide array of methods available to measure inter- and intra-cultural agreement, such as the Cultural Consensus Analysis and residual agreement analysis (Boster, 1987; Garro, 1986; Weller, 1987). Social scientists now understand that multiple cultural models can exist in a single group (Hruschka et al. 2008). Our interest as researchers focuses on the variation of these models and variables that influence patterns of agreement (Atran et al., 2005; Ross, 2004).

One of the inevitable questions that arise in studies of cultural and social change is the issue of stability. Sperber and Hirschfeld (2004) explain how ecological conditions and religious, educational and political institutions influence the stabilization and evolution of cultural representations. This is related to the broader processes that influence cultural domain ideas, such as media and acculturation, which are examined as explanatory variables for culture change or stability in body size ideals.

Significance of the Present Study

In recent decades, studies about body weight, shape and size have focused on the role these elements play in the obesity epidemic. The discourse surrounding body weight has been strongly marked by issues of physiological health, specifically on how excess weight takes a toll on the health of both individuals and populations. This dialogue was established some 30 years ago in the U.S., and in recent years has become a worldwide issue, expressed in as references to the 'expanding global waistline'. The increase in the prevalence of overweight in non-industrialized countries has been met with great concern for the consequences on overall population health. The focus on health remains primarily on physiological health, such as increased risks of heart disease, type-2 diabetes, stroke, and certain types of cancer. Less attention has been placed on the sociocultural perceptions of overweight and obese bodies, and how those bodies are interpreted in local contexts. My research examines the sociocultural construction of body size in a society that is part of a developed nation, yet is not part of its mainstream culture.

Another significant contribution of my study is that it includes three generations. It combines individual and age group information to compose a broad picture of body size models. Most of the intergenerational studies conducted on body image and body size typically include only two generations (usually mother-daughter). This research included men and women of three age groups; the women were part of family intergenerational triads. This generational aspect has been tangentially mentioned in previous literature (Anderson-Fye, 2004; Clarke and Griffin, 2007; Nichter, 2000; Reel et al., 2008). In my review of the available literature I did not come across a three-generation study about body image. This study provides insights into individual body

experiences at different life stages and of differing trajectories of body weight. The proposed study combines this generational perspective with individual body histories in an innovative novel approach for studying change through time.

Ethnicity arises as an explanatory variable in many studies about body size models for groups in the U.S., yet intra-group variation is not widely addressed. Puerto Ricans typically identify ethnically as one group, Puerto Rican or *Boricua*. This research moves beyond ethnicity to a more refined study of variables that contribute to diversity in body size models. By focusing on the type of information that constitutes body norms, this study allows for better understanding of the origin of cultural knowledge and culture transmission. Ross (2004) argues that detailed studies of the processes involved in individual meaning making in the context of historical, social and physical aspects are needed. The proposed research addresses these elements in order to study similarities and differences in cultural patterns. The study examines how concepts of body size spread across age groups and within families, specifically how existing models aid in interpreting the information that shapes individuals' body ideas.

This dissertation research also highlights the lived experiences of people of varying body sizes. The narratives surrounding weight history and experiences transcend the statistics and offer a human voice to these stories. It makes it possible to understand how striving to achieve a specific weight on a scale affects individuals, especially women.

Global Health

Global health is an interdisciplinary approach that combines public health, epidemiology, and social sciences to address issues of health. The 'global' in global

health implies a variety of concepts, including 'worldwide' or 'transcending national boundaries' (Bozorgmehr, 2010). In light of the social justice implication of the term, the concept of global can also indicate "links between the social determinants of health anywhere in the world" (Bozorgmehr, 2010, p. 4). This interdisciplinary field has been defined in multiple ways, some of which overlap with public health and international health. Koplan et al. (2009) proposed the following definition:

Global health is an area for study, research, and practice that places a priority on improving health and achieving equity in health for all people worldwide. Global health emphasizes transnational health issues, determinants, and solutions; involves many disciplines within and beyond the health sciences and promotes inter-disciplinary collaboration; and is a synthesis of population-based prevention with individual-level clinical care. (Koplan et al., 2009, p. 1995)

Research is this field, especially from a social science perspective, comprises studies that examine health inequalities, distribution of health resources (including science and technology), "social identities related to health and biology, development and local consequences of global health policy, organization of health services and the anthropogenic transformation of the biosphere of health" (Janes and Corbett, 2009, p. 169). Janes and Corbett (2009) highlight the role of anthropology within global health, and state that the objective of the interdisciplinary field of global health is to reduce global health inequalities and aid in the development of sustainable and healthy cultural, political, and economic systems.

The discussion of global health usually invokes memories of media clips about the flu pandemic, the AIDS epidemic, and examples of other infectious diseases (Cohen, 2006; Garrett, 2007). Non-communicable diseases are not the first things that come to mind, yet they too are part of the global health perspective. Of late, the phrase 'global obesity epidemic' highlights the role that global health plays in the struggle against excess weight. The health consequences of being overweight and obese are part of the global health agenda (Beaglehole et al., 2011; McMichael and Beaglehole, 2000; Popkin, 2011), and with this agenda come body image disorders and weight bias, which need to be addressed as part of the global health agenda.

It is rare to conceive of body image dissatisfaction, eating disorders, and weight discrimination as issues that are concerns at a global level. The phenomenon of globalization, commonly defined as the process of international integration developing from exchanges of knowledge, worldviews, and products (Appadurai, 1996; Giddens, 1990; Robertson, 1992), has exported European-U.S. concepts, making it necessary to examine how they are incorporated in other cultures. The cultural variation of body ideals in societies across the globe is affected by integrating specific cultural norms -preference for a thin body and discrimination against fat bodies. The possibility of cultural homogenization or hybridization (García Canclini, 1997) regarding body size norms merits detailed research, especially before some of those contrasting body norms are completely replaced. Additionally, the possible development of the negative consequences of the European-U.S. preference for thinness also requires study. The global health approach is well-positioned to address body size models because it is anchored in a cross-cultural, global perspective, and serves as a framework to study social identities in relation to health.

General Overview of the Dissertation

This document is divided into seven chapters. The first chapter is an introduction to the research question, offers a review of the research study used as baseline, and explains the significance of the dissertation. Chapter two offers a revision of the theoretical approaches used to study body size models. It also includes a review of the literature on studies of body image and body size from a generational, ethnic, media, and gender perspective. Chapter two also includes the hypotheses that structure the dissertation. Chapter three focuses on the research setting of Puerto Rico, and the methodology used to address the hypotheses. The research setting includes information about the political history, recent demographic data, and body image studies of Puerto Rico. The research design section includes the sampling strategy (intergenerational triads), general materials for data collection, and data analyses. Chapters four, five and six present and discuss the results of the research, and include an in-depth explanation of the methods used for the specific data analyzed in each of these three chapters. Chapter four focuses on the information that comprises the Puerto Rican body size models, and explains the use of cultural consensus theory and method to obtain this data. Chapter five examines women's body ideals both through time, and within the context of the intergenerational triads. It is based on the narratives collected using semi-structured interviews, and the subsequent text analysis of the narratives. Chapter six addresses the relationship of media and acculturation to body dissatisfaction and anti-fat sentiments. This chapter assesses the variables of media and acculturation as drivers of cultural change. The final chapter offers a brief general discussion of the key finding, limitations

of the research, potential areas of further research, and a conclusion addressing the question of culture change in body size norms.

Important Terminology

Throughout this document I refer to body size models, and I begin by defining and clarifying certain reoccurring themes and terminology. The construction of body size models has various components. I highlight two of these components: (1) preference for a particular type of body size, and (2) ideas related to the non-preferred body size. Both of these components of the body size models represent averages of a spectrum. There are innumerable body sizes, and they can take on many different forms, yet to be able to operationalize and study this as a variable I refer to the average body of that spectrum. That average body can be described as 'not too skinny and not too fat', which in body image scales is usually represented by the middle figure (see Contour Drawing Rating Scale in Appendix A for example). There are a variety of preferred body sizes, and of them it is the thin-body ideal and fat-body ideal that contrast highly. The second component of the body size models is the ideas associated with the opposite of the preferred body size. In a culture that idealizes thin bodies it is important to account for what individuals generally think about fat bodies. This does not mean that body size models exist as strict dualities; they always exist within a spectrum, which varies intraculturally and interculturally.

The body size model widely reported in the literature, the mainstream U.S. model, purports preference for thinness and a negative attitude towards fat (Ahern et al., 2011; Goodman, 2002; Hesse-Biber, 2007; LeBesco, 2004; Wiseman et al., 1992). In contrast there are body size models that show a preference for fat bodies and view thin female

bodies negatively (Popenoe, 2004; Sobo, 1993). Cultures that have been reported to value fat positively I refer to as fat positive. These cultural groups ascribe positive connotations to fat bodies (Becker, 1995; Massara, 1989; Popenoe, 2004; Sobo, 1993), such as wealth, beauty, being cared for, nurturing others, and having good social relationships. There are other cultural groups that do not ascribe either positive or negative meanings to fat bodies (Anderson-Fye, 2004). In these cases a fat body is not the only or better representation of good social qualities, but it is not representative of bad or negative connotations either. In this spectrum of the valuation of fat there is also the more extreme fat negative category. These are cultural groups that attribute negative meanings to fat bodies, such as being lazy, unhealthy, and ugly, dirty, irresponsible, and stupid (Puhl and Heuer, 2009; Ritenbaugh, 1991; Schwartz and Brownell, 2004). Throughout the dissertation I refer to individuals and groups as falling at a certain point on the spectrum of fat valuation, either in the categories of fat negative, fat neutral, and/or fat positive. The interest in classifying groups in how they view and think about fat bodies emerges from the need to make comparisons between them, and also to understand how those views about fat have shifted with the phenomenon of globalization.

Chapter 2: Socio-Cultural Construction of Body Size

Socio-cultural interest in the body has historically focused on the differences between and comparisons across cultures, especially from anthropology and more recently from psychology. One of the major drivers of social scientific inquiry rests precisely on understanding human variation. Body size has gained considerable attention because of its rapid shift in populations worldwide. Among humans, body size is a trait that influences almost all aspects of individual and social life. This chapter is divided into sections that serve as the background for creating the research study.

The field of global health is inherently interdisciplinary; it requires the combination of varying theories and methodologies to generate a model to address complex research questions. In this chapter I present relevant literature from various fields to serve as the basis for the research questions. The overarching theme of this dissertation is culture change over time. In the first section of this chapter I offer a brief explanation of the process of examining culture change. This foundation needs to be framed within an explanatory model or theory; therefore the three main theoretical approaches that informed this research study are reviewed. These approaches vary regarding the variables studied in the construction and transmission of body norms, which in this study are gender, media and intergenerational variation. These variables related specifically to body size are summarized and reviewed. One of the main purposes of global health is to address concerns of culture as related to health. Since the concept of excess weight has been heavily medicalized globally I included a brief section analyzing the proposed links between physical and mental health to body size, this situates the research study's implications for health policy. The broad conceptual framework is that

culture encases body norms, and these are themselves shaped by acculturation, media, age and gender, and it is necessary to start be addressing the study of culture.

Body Image and Schema

The body is a primary site where culture, norms, and identity are inscribed, and expressed. Hence variation and change in body norms and perceptions can be tied to and understood in relation to wider social, ecological, and cultural transformation. Cognitive sciences provide a good framework for conceptualizing body size ideals and for analyzing intracultural variation. Altabe and Thompson (1996) explain that body image is a mental representation of information that has consequences for how individuals process messages they receive, a type of schema. Gallagher and Cole (1995) distinguish between body image and body schema, with the primary difference argued to be that body schema is directly related to neurological aspects of body perception in space and somewhat unconscious element. He explains that body image is intentional in the sense that "It is either a conscious representation of the body or a set of beliefs about the body" (Gallagher and Cole, 1995, p. 228). Body image is a subjective concept in which "the body is experienced as an owned body, one that belongs to the experiencing subject" (Gallagher and Cole, 1995, p. 228). Cash and Pruzinsky (1990) define body image as a person's subjective experience of his or her condition of embodiment. This definition is widely used in the literature. In this paper I specifically investigate body size, referring to weight and shape, which is one of the main topics in the body image literature (Cash and Roy 1999). Body image can therefore be treated as a cognitive phenomenon, and is approached using cognitive theories.

Theoretical Approaches

Research on body size in most sciences has increasingly been framed in the terms of obesity, possibly because it was a rare body form until recently in human history. The research endeavor in this area has been interdisciplinary and ranges from history, psychology to kinesiology and nutrition. This section of the chapter briefly discusses various approaches to studying body size, such as objectification, cross-cultural and biocultural theories. These approaches are not mutually exclusive, and in most studies are employed simultaneously.

Objectification theory. Objectification theory can be used to examine body image, and all of its ramifications. This theory, which originates mainly from the field of psychology (McKinley, 2006), enables researchers to examine the phenomenon of viewing the body as an object. Objectification is the practice of people viewing bodies, primarily female bodies, as objects; objects that need to be watched over, corrected and modeled to conform to acceptable social norms (Harper and Tiggemann, 2008; Pacquette and Raine, 2004). This theory has mainly been used to explain female bodily-lived experiences, but it can be argued that men are not completely exempt of objectification. However, the acceptable social norms produced by the objectification gaze are often "unachievable for most (people) and are continually changing" (Paquette and Raine, 2004, p. 1050). This leads people, mostly women, to perceive their bodies as flawed and in constant need of correction. Fredrickson and Roberts (1997) use objectification theory to explain and frame the female specific internalization of cultural practice of objectification and their constant need to monitor their bodies' appearance. They state that the objectified patterns of experience contribute to women's mental health risks, such as anxiety, depression and even eating disorder. The theoretical framework of objectification addresses the source for mental health risk change for many women as they transition into different life stages (Fredrickson and Roberts, 1997, p. 196).

Objectification of the female body, by the self and others, starts at an early age (Grogan and Wainwright, 1996) and was previously thought to decrease over the course of a lifetime (with advanced age) (Fredrickson and Roberts, 1997). Researchers report that self-objectification is a phenomenon that is carried across the life span and well into old age for women (Johnston et al., 2004; Tiggemann and Lynch, 2001). This drive for thinness and its reasons remains to be studied for senior Latin Americans in the local cultural context, rather than within European or U.S. culture.

This framework can be hypothesized to exist in Puerto Rican society based on Massara's research. Massara emphasized in her work that female bodies were subject to social control and that their size, plump or skinny, promoted correction of situations that were embodied in those sizes. McKinley and Hyde (1996) described the phenomenon of objectified body consciousness as a consciousness that generates from the sociocultural perception of women as outside observers to themselves. Objectified body consciousness consists of three major elements: (1) body surveillance: viewing the body as an outside observer, (2) body shame: feeling one is a bad person if body standards are not met, (3) appearance control beliefs: believing that with enough effort one can control one's appearance (McKinley, 1999; McKinley and Hyde, 1996).

Media plays a central role in perpetuating the objectifying gaze. Fredrickson and Roberts (1997) explain that in the sociocultural context, media is a premier instrument that reinforces and perpetuates an objectifying gaze through its representation of social

interactions. In this study objectification theory is used to frame the role of media in shaping body ideals, and also to examine women's perceptions of their and others' bodies. Sociocultural approaches to examining body image offer theoretical frameworks that address body dissatisfaction, arguing that the thin ideal is produced and strengthened by social institutions; one of the most pervasive is mass media (Bordo, 2003; Groesz et al., 2002; Harper and Tiggemann, 2008; Schooler, 2008). The role of social institutions in shaping body norms can also be examined by contrasting different cultural perceptions of the body, using mainly a cross-cultural approach.

Cross-cultural approach. Cross-cultural approaches to studying body size have highlighted the issue of whether obesity is a culture-bound illness, given that in many societies elevated BMI, particularly for women, is valued and not medicalized. These studies usually obviate the physiological impacts of excess body weight and mainly focus on psychological health.

The medical literature largely shows that being overweight (BMI 18.5≤29.9) or obese (BMI≥30) are risk factors for hypertension, type-2 diabetes mellitus, hypercholesterolemia, coronary heart disease, and gallbladder disease (Must et al., 1999; Pi-Sunyer, 2002; Wyatt et al., 2006). The relationship between excess body weight and these illnesses is referred to as the adiposity hypothesis (Muennig et al., 2008). A minority of scientists, however, claims that too little evidence supports this hypothesis due to possible confounding effects between BMI, co-morbidities and psychological health. Instead, these researchers hypothesize that people classified as overweight or obese are more prone to certain diseases due to stress stemming from their shared experiences of facing weight discrimination (Austin, 1999; Campos et al., 2006;

Muennig, 2008). Muennig and colleagues (2008) argue that chronic stress induced by stigmatization can be responsible for obesity-related morbidities, such as diabetes and hypertension (Muennig, 2008; Muennig et al., 2008). These authors hypothesize that individuals classified as being overweight or obese living in an environment where elevated BMI is not stigmatized are protected from the psychological and physiological consequences of weight discrimination. Muennig and Bench (2009) tested this hypothesis with a rural population in the Dominican Republic where fat is not stigmatized, and their results indicate that that blood pressure and BMI were positively correlated ($R^2 = 0.24$, p = 0.01) while, self-rated health and BMI were not correlated. This suggests that BMI and blood pressure, a correlation indicative of possible ill health, are associated regardless of fat stigma (Muennig and Bench, 2009), but that the lack of stigma may increase self-perception of good health. This calls for closer examination of cultural significance of body size to enable the untangling of variables that influence healthy body image schemas.

Cultural meanings of body size. Cross-cultural studies allow us to examine the role of culture in fat stigmatization and the construction of body size attributes. In societies that hold the individual as the main social unit, fat stigmatization is stronger than in societies termed to be collectivist, in which the broader social group is the main social unit (Crandall et al., 2001). The social ideology in individualist societies place high value on personal responsibilities, and if someone is judged as responsible for a particular outcome, especially a negative one, that person meets blame, stigmatization and social rejection (Crandall et al., 2001; Crandall and Martinez, 1996). A recent study with mostly Caucasian female undergraduates in the U.S. examined the relationship between anti-fat

attitudes and pro-thin attitudes (Carels and Musher-Eizenman, 2010). The researchers report that individuals who judge others based on physical appearance and individuals who view obesity as controllable by the individual demonstrate greater anti-fat bias and a stronger preference for thin bodies. The results also indicate that attitudes that contribute to anti-fat bias are the same that contribute to pro-thin bias, especially in the domain of personality attributes (Carels and Musher-Eizenman, 2010).

Crandall et al. (2001) studied anti-fat attitudes in six culturally diverse countries, categorized by social ideology of individualism or collectivism. The countries studied classified as individualist were: the United States of America, Australia and Poland, and the collectivist countries were: Venezuela, Turkey and India. The authors hypothesized that fat prejudice was dependent on attributions of responsibility and a negative cultural value for fat. Samples of university students in each country were administered the Anti-Fat Attitudes questionnaire (Crandall, 1994), a survey on cultural value of fatness, and attributions of control over weight. The results indicate people with both a negative value for fatness and a tendency to hold people responsible had more anti-fat attitudes, and these results were more evident in individualist cultures (Crandall et al., 2001).

The Protestant ethic ideology, which is seen as a core value in U.S. culture, emphasizes that individual hard work leads to success. Being unsuccessful is caused by moral failings and lack of self-discipline, in which case people get what they deserve (Quinn and Crocker, 1999). This social ideology applies strongly to body size, of all conditions deemed to be undesirable, weight is the one that stands out as, in most cases, being under personal control (Puhl et al., 2008). This even holds true in light of scientific evidence stating that the genetic component is an important factor in determining an

individual's body size (Stunkard et al., 1986). The thin body represents the control over food intake and desires related to food (Bordo, 2003). This social ideology is heightened in environments that are rich in food. In obesogenic environments, food, especially those that are processed, high-sugar, high-fat, and low-fiber are readily accessible, and physical activity is not sufficient to counteract elevated energy intakes (Swinburn et al., 1999). In this setting, maintaining a slender figure is considered a difficult task and is highly prestigious for women (Brown and Konner, 1987; Lev-Ran, 2001). In societies where food scarcity is common, such as in parts of sub-Saharan Africa, excess weight is viewed as a sign of prestige and wealth because without wealth, excess weight is not a readily achievable state (Popenoe, 2004; Powdermaker, 1960). The attraction to thinness in European-U.S. mainstream culture can be viewed as a product of the food-rich environment and the embodied moral standards.

Changes in social ideology have the potential of affecting body size ideals. The assimilation of preference for a thinner body does not necessarily have to be accompanied by a change in etiological explanations of body size. A good example of this shift is the case of Samoa, recognized historically for valuing fat bodies, yet more current research shows that women and men prefer thinner bodies than previously reported, but they do not stigmatize fat (Brewis et al., 1998).

In Jamaica, a society at the collectivist end of the social ideology spectrum, based on Elisa Sobo's (1997) study on social relations, reproduction and the body in rural areas, large, plump bodies signal nurturance and successful social relationships. A plump body is associated with reproductive capacities, the ability to give life through having the adequate fluids. In this case the thin body is representative of antisocial, non-procreative

inclinations (Sobo, 1997). For the Azawagh Arabs fat female bodies signify wealth and beauty (Popenoe, 2004). Fattening is representative of family wealth, and in a food scarce environment the ability to amass food as a resource is embodied in women. Popenoe explains that feeding is not ritualized nor widely talked about because it is symbolic of sexual desires and these should not be openly expressed.

Mauritanians had a similar female fattening practice as the Azawagh Arabs. Fattening young girls served various purposes; it helped girls resemble adult corpulence and reach menarche at an earlier age and therefore be marriageable at a young age. It also expressed the wealth of a family through the overfeeding of the females in a geography in which scarcity is endemic (the Saharan-Sahelin zone). This practice has changed in the past decade, but mostly in the urban areas (Tauzin, 2007). The government views obesity as a disease and is starting campaigns to promote weight reduction among women (Hasan, 2008). This is interesting because in Mauritania the rates of chronic disease, like type-2 diabetes, are very low even with a high portion of the population having an elevated BMI (Ducorps et al., 1996). Researchers have also found that younger women of the aristocracy born in the 1980s in urban centers prefer slender bodies to plump ones. Tauzin (2007) argues that modernization, increased contact with European-U.S. media, and an increase in age for marriage (from age of menarche to 16-20 years of age) are the factors that account for change in body ideals. Furthermore, the introduction of female education that later translated into increased female independence, was the antithesis of fattening of young girls to symbolize their immobility, especially because it meant they no longer remained at home (Tauzin, 2007). To use mass media as the sole explanatory

variable in this case would obfuscate the complicated history and trajectory of the female body figure in the Mauritanian context (Tauzin, 2007).

The European-U.S. thin body ideal is exported to different societies, yet the way it is incorporated locally varies. In Belize Anderson-Fye's (2004) study with young girls demonstrated that they identified "Coca-Cola bottle" body shape as the important factor in determining beauty, regardless of actual body weight. Participation in beauty pageants, which is frequent, shows that varying body sizes are considered beautiful, with more importance placed on adornment and body shape than weight. Anderson-Fye (2003) explains that the ethnopsychology of "never leaving yourself" (example: by eating when hungry or sleeping when tired) serves as a buffer against development of body image and eating disorders. The few cases that presented possible body image and eating disorders were of girls that mostly worked in the tourism industry catering to U.S. tourists, and they were upwardly mobile. The author reported an increase in use of diet pills by adult women (35-50 years of age); some were mothers of the study subjects. Health professionals reported that the use of these drugs were for health reasons, that if women wanted to lose weight it was related to health issues and might form part of the "never leave yourself' ethnopsychology. This begs the question of how weight loss behaviors of mothers affect young girls' body size and dieting models.

Most body image studies focus on young women, though many scholars have reiterated the importance of studying senior women's body perceptions. Women, who are more senior, most who are mothers, communicate and model their ideas and behaviors about the body and eating to the next generation. Álvarez Rayón et al. (2007) examined the presence and extent of body image dissatisfaction, thin ideal internalization, and pre-

disposition to eating disorders among a sample of urban adult Mexican women (34-46 years) of lower SES. This is one of the few studies that focus on adult women in a Latin American context. They surveyed thin body internalization, body image satisfaction, BMI, and eating disorder symptoms. They found that the majority of women in the sample had internalized the thin body ideal, but there was little prevalence of body image dissatisfaction (Álvarez Rayón et al., 2007). Most of the women in the sample were either classified as overweight or obese, and none were underweight. The vast majority of the participants desired to be thinner, but all had accurate weight perceptions. This is different to findings among Caucasian women in the U.S. (Fitzgibbon et al., 2000) and teenage girls in Australia (Tiggemann and Pickering, 1996). Those women have been reported to overestimate their weight even when they are either of normal weight or even underweight. This thin ideal idealization has also been reported for Mexican teenage girls (Gómez and Acosta, 2002).

Gómez and Acosta (2002) studied teenage girls cross-culturally by comparing Mexican teens and Spanish teens. The participants from Mexico and Spain were matched cases to control for SES and education. They argue that better understanding of the differences among European-U.S. cultures regarding body image satisfaction and eating disorders is needed because they don't all share the same level of eating disorders among women. They found that Mexican girls were the most dissatisfied with their body, and Spanish girls were somewhat satisfied with their bodies, and also detected a strongly shared thin-body ideal among the Mexican girls. The authors explain that transculturation and ideological trespass can occur without crossing borders. This forms part of economic and ideological globalization, which is reinforced by the geographic closeness of U.S.

and Mexico. The Mexican population was in more contact with U.S. culture, which is the leading country in its cult for thinness (Gómez and Acosta, 2002). They found that nationality was the best predictor of body dissatisfaction, even beyond gender.

A similar study was conducted in Spain, with both Latin American and Spanish teen girls (Rodríguez and Cruz, 2008) living in Spain. Body image dissatisfaction was examined in relationship to BMI, and sociocultural factors influencing thin ideal internalization. The results indicate that Latin American girls had internalized the thin body ideal more strongly than Spanish girls (Rodríguez and Cruz, 2008). Internalization of the thin ideal and BMI were independently associated to body image satisfaction positively. Both samples demonstrated concern with body image, but Latin American girls were less satisfied with their bodies than Spanish girls (Rodríguez and Cruz, 2008). One limitation of this study is that the authors did not measure acculturation, which could be a mediating variable. The Latin American girls ranged in residence time in Spain from 3 months to 13 years, acculturative stress impacts body image, as has been documented with Mexican women in the U.S. (Cachelin et al., 2006; Pompper and Koenig, 2004). What is clear from this study and others is that body image dissatisfaction and thin body ideals are not endemic to the U.S., but rather epidemic and wide spread in Latin America.

García Fernández and Azofeifa Elmer (2007) studied the relationship between BMI and sociocultural factors (television consumption and romantic relationships) with body image satisfaction among Costa Rican teenage girls. They found that BMI and body image satisfaction were positively correlated. They did not collect information on the type of television programming being consumed by the participants, just amount of time. The authors argue that this population has internalized the thin body ideal. They do not

contextualize the results in the cultural and historical setting of Costa Rica, and do not mention if these results are something new, if they indicate a change from previous body ideals in this society.

Teenage girls' body image has also been studied in Fiji. Anne Becker's examined the embodiment of Fijian cultural ideals; she reports that the self is embodied in the collective, the cultivation of social relationships, not of the individual self (Becker, 1994, 1995). This shifted generationally with the advent of television in Fiji; girls began self-disparaging with the prolonged exposure to European-U.S. television programming (Becker et al., 2002; Becker, 2004). As a result of this some girls began to restrict their diet in order to achieve a specific body (Becker et al., 2002). Young Fijian girls were in the crossfire of media messages valuing thinness and cultural messages valuing heavier set bodies and unrestricted diets (Becker et al., 2002). The Fijian girls expressed awareness of intergenerational tensions surrounding their adoption of Western customs, specifically concerning expectations about the appropriate amount of food to eat (Becker et al., 2002). Becker (2004) focuses on young women because of their vulnerability to media imagery, and in these studies the impact of European-U.S. media exposure on senior women is not explored.

Williams et al. (2006) studied the source and nature of body image messages perceived by Fijian and Australian adolescent girls. They explain that the media, the family and peer environment are sources of body image messages. For indigenous Fijian girls media and peer messages conflict with those originating in the family environment (Williams et al., 2006). The results also suggest variation in body ideals within the Fijian sample, and inter-family differences in the commitment to traditional Fijian values and

on the perceived benefits of maintaining a large or thin body size exist (Williams et al., 2006). The health implications of bodies with excess weigh has penetrated into Fijian traditional values and that even if the families espouse a fat positive ideal it is thinner than what an accepted body size was historically in Fiji. This study highlights the need to study change in body size models in cultures that have been argued to value fat bodies, particularly the change between generational body size models and how these models interact. This cross-cultural approach is not limited to populations in different countries, but can include different ethnic groups within a same country.

Ethnicity and body ideals: African Americans. Body size ideals have been studied in the U.S., looking at Caucasians, and also at the variation by ethnicity within the U.S. These studies have primarily focused on African Americans, who have been represented in the literature as lacking fat stigma and valuing body types that have excess weight, especially compared to Caucasians (Kronenfeld et al., 2010; Flynn and Fitzgibbon, 1996; Nichter, 2000; Parker et al., 1995; Rucker and Cash, 1992). Mimi Nichter (2000) in her work with girls in middle school in Arizona analyzed the differences between Caucasian, African American and Latina ideas about body and dieting. African American girls reported concern with adornment and emphasizing their positive qualities, phrased as "work what you've got", rather than focus on achieving a particular body weight. Rucker and Cash (1992) studied body image perceptions among Caucasian and African American college female students. They stress that African American women do not idealize fatness, but that their perceptions and attitudes are less fat phobic and less pursuant of extreme thinness than their Caucasian counterparts. They suggest that media messages are geared toward a Caucasian audience and this has served

to protect African Americans from internalizing the mainstream thin body ideal (Rucker and Cash, 1992).

Lack of internalization of thin standards of beauty can put those individuals or ethnic groups, at lower risk of eating disorders, but at the same time it can heighten their risk for obesity and its associated risks of mortality and morbidity (Flynn and Fitzgibbon, 1998; Pulvers et al., 2004). Researchers in public health have been grappling with high prevalence of obesity in African American communities and have studied how cultural perceptions of body size negatively affect campaigns for weight reduction (Flynn and Fitzgibbon, 1996). French and Story (1997) report that Caucasian and African American girls demonstrate a strong relationship between body image dissatisfaction and dieting, purging, and binge eating. This study suggests that the cultural factors that buffer against eating disorders might be changing and ethnic minorities might be at increasing risk for eating disorders. Furthermore, body models by ethnicity also present variation, and this diversity in ideals should be further investigated (Falconer and Neville, 2000; Rucker and Cash, 1992; Snook and Hall, 2002).

A good example of intercultural or within group variation was the study conducted by Falconer and Neville (2000) on body image satisfaction in African American college women. They examined the relationship between BMI, body image and satisfaction with specific body parts. The results indicate that higher BMI is associated with higher body image dissatisfaction (Falconer and Neville, 2000). They also report that women of higher BMI were more likely to report greater satisfaction with specific aspects of their bodies (Falconer and Neville, 2000). This finding provides support to the previous research indicating that African American culture places a higher value on large buttocks

and hips, and heavier women can still maintain satisfaction with distinct body areas. In the case of African Americans in the U.S. it is evident that affinity to a particular culture shapes individual body models, and this type of acculturation is an important factor when studying the variables that influence body norms.

Poran (2006) emphasizes the concept of mainstream acculturation in her on the misrepresentation of African American female body ideals. She examined body image and media influence through focus groups of African American college students (sample of 15). Previous studies argue that these women are protected from body image dissatisfaction mainly because African American men prefer heavier women than Caucasian men (Greenberg and LaPorte, 1996). They were also protected from media messages since African American viewers do not compare themselves socially to Caucasian TV characters, and the lack of African American female TV characters creates a void of body role models (Molloy and Herzberger, 1998). Molloy and Herzberger (1998) describe this as a "racist paradox", African American women do not identify with the Caucasian women onscreen or on fashion show runways and many actively disidentify with them and therefore are protected from the effects of negative self-comparisons.

Poran (2006) found that African American women feel pressures to be thin based on the preferences of men of diverse ethnicities (African American, Caucasian, Latinos), they do compete with other African American females in the realms of beauty and they have a strong sense of being misrepresented by media images of thin African American women (Poran, 2006). She emphasizes the need to use qualitative methods to study body

image issues, since purely quantitative measurements alone can misrepresent the reality of women's feeling about their body image.

A study conducted with middle class, middle age Caucasian, African American and Mexican-American women found that African American participants were significantly heavier than other women, but found no differences in self-esteem related to body image (Snooks and Hall, 2002). The women in this study demonstrated similar level of body satisfaction and self-esteem in relation to BMI, countering arguments that African American and Latina women hold a heavier body image ideal (Snook and Hall, 2002). The authors emphasize that socioeconomic differences could be more important than ethnic background in explaining body image models. Reel et al. (2008) also argue that African American women between 20 and 80 years of age have similar body image dissatisfaction and engage in body modeling regimes, as do Caucasian women. Age group and SES compartmentalize the literature on African American women, yet the body image ideals tend to be generalized. There is a multiplicity of body size models among African Americans, and this wider spectrum serves to buffer against body dissatisfaction and eating disorders for some women of this ethnic group.

Ethnicity and body ideals: Latinos in the U.S. Body size models of Latinos in the U.S. have been studied to a lesser extent than African Americans. In many studies Latinos fall between Caucasian and African American ideals and body weight (Altabe, 1998; Rubin et al., 2003). Aggregating all Latinos into an apparently homogenous group is problematic and does not address the possible diversity among differing Latino groups. Various studies on Hispanic women and body image have put forth mixed results. Harris and Koehler (1992) found that Hispanic women were less concerned with weight than

Caucasian women. Another study reported that Hispanic women did not report body dissatisfaction until they were overweight, versus Caucasian women who reported body dissatisfaction below the overweight criterion (Fitzgibbon et al., 2000). Nichter (2000) in her research with teens in the U.S. found no significant difference between body ideals between Caucasian and Hispanic girls. Altabe (1998) did not find differences between Caucasian and Hispanic college women in body image satisfaction. From these findings it can be inferred that Hispanic women tend to assimilate Caucasian body norms mainly, and not African American body norms. Cachelin et al. (2006) studied the effects of acculturation on body image and size perceptions on Mexican-American women. They found that women who were more acculturated with European-U.S. culture showed greater preference for thinner body figures. Franko and Herrera (1997) conducted research of Guatemalan-American college women and found that higher acculturation levels were associated with increased body dissatisfaction and fear of fat. Lopez et al. (1995) also found that non-Latina Caucasian women, Latinas born in the United States, and Latinas who immigrated to the U.S. at age 16 or younger had similar body image ideals, contrary to Latinas who immigrated at age 17 or older who selected a larger ideal body size.

Biocultural approach. The biocultural approach combines cultural, biological and political economy ideas in order to study human conditions. McElroy (1990) defines biocultural studies as research on questions of human biology and medical ecology that specifically include social, cultural, or behavioral variables in the research design. Biocultural researchers (McElroy, 1990; Ulijaszek and Lofink, 2006) have highlighted the importance of adaptation in biocultural studies. Anthropologists have focused on a

wide array of adaptation strategies, including genetic change, physiological and developmental adjustments, and cultural responses (McElroy, 1990). The strategies people or groups employ to deal with environmental stressors tend to be classified as either adaptive or maladaptive. Gremillion (2005) has criticized biocultural approaches to body size in that these studies have to move beyond adaptation. For example, a group that perceives fat women as beautiful is indicative of an adaptation perspective (e.g., such women are highly valued because they are considered to be quite fertile). In contrast, a political economic view might value fat women because of the inference that such women must have considerable wealth to procure sufficient food to sustain their girth.

A major critique of biocultural studies is the need to operationalize, define and address culture as a variable (Dressler, 2005; Dufour, 2006; McElroy, 1990). McElroy (1990) highlights the fact that the concept of culture varies widely in anthropology. Some biocultural scholars describe culture as an adaptive mechanism that is separate from genetic processes, and others use the concept of culture as an organizational variable, providing useful categories of human groups for comparative purposes (McElroy 1990). Dressler (2005) states that within the biocultural approach culture is a process through which shared and distributed knowledge delineates a space in which individuals act upon that knowledge. Dufour (2006) does not explicitly define culture, but alludes to the difficulty of operationalizing the concept and the importance of operationalizing social variables.

McElroy (1990) describes two types of biocultural studies. Integrative studies, which combine environment, culture and biology as components of the research question, study design and execution of the research. She notes that this is a difficult model to

adhere to. The second model is the segmented biocultural model, in which culture, biology and environment need not all intersect. In this model, the researcher seeks associations between biological data and other discrete categories of data, but the main focus is on biology. Brewis (2003) used an integrative biocultural approach to studying childhood obesity in Mexico. She found that cultural ideas of fat children being healthy, feeding as parental caring and lack of weight stigma were the variables that were creating micro niches that fostered excess weight for boys more than girls. It is difficult to address body size and not consider the biological reality of the body, especially pertaining to shared genotypes within families.

Variables that Shape Body Ideals

Gender and body image. It is widely cited in the literature that body image issues, such as dissatisfaction and eating disorders, disproportionately affect women more than men (Knauss et al., 2007; Pliner et al.,1990; Wertheim et al., 2009; Wiseman et al., 1992). Wertheim et al. (2009) highlight that this trend has changed over the years, with an increase in male body dissatisfaction, including desiring to gain weight in muscle. Desire for thinness is greater in pre-adolescent, adolescent, young adult and adult women (Wertheim et al., 2009). Anorexia and bulimia affect both men and women, however women are disproportionately affected. Of individuals with anorexia, 95% are female, and of those with bulimia, 90% are female (Smolak and Murnen, 2004; Molloy and Herzberger, 1998). Females are 1 to 3 times more likely to be diagnosed with anorexia nervosa, bulimia nervosa, and binge eating disorder; and males are 3 times more likely to exhibit sub-threshold binge eating disorder and are roughly equal to females in regard to the number of cases of any binge eating (Hudson et al., 2007).

Women who belief that weight is under personal control are at risk of developing low self-esteem, body image dissatisfaction and to incur in unhealthy weight loss behaviors (Crocker and Garcia, 2005; Tiggemann and Rothblum, 1997). Social pressures to conform to the thin ideal historically have been greater for women than for men (Bordo, 2003; Grogan, 2008; McLaren and Khu, 2004). The sociocultural construction of the female body as an object has naturalized the definition and evaluation of women in terms of appearance (McKinley, 1999). Both women and men are evaluated on their body weight and shape, yet these issues have special meaning for women in multiple cultural contexts.

Media influence on body ideals. It has been argued that mass media serves as an acculturative agent, especially for immigrants, and even for individuals in their own cultures, to assimilate with mainstream culture (Becker, 2004; Schooler, 2008). In European-U.S. contexts mass media has been identified as one of the factors influencing body image satisfaction and body ideals, especially for teenage girls (Cusumano and Thompson, 1997; Nichter, 2000; Tiggemann and Pickering, 1996). In other contexts, European-U.S. media is one of the mechanisms through which local body size models are being replaced with the thin body ideal (Grogan, 2008; Thompson and Heinberg, 1999). Exposure of mass media in conjunction with consumption of European-U.S. foods is argued to impact local body ideals (Anderson-Fye, 2004; Becker et al., 2007; Popkin 2003). Previously in this chapter Becker's work in Fiji (Becker et al., 2002; Becker, 2004) is cited as illustrating the effects of acculturation on traditional body ideals. She documented the positive relationship between increased television exposure and the shift toward a thinner body ideal leading to disordered eating of Fijian teenage girls. The

impact of European-U.S. (also referred to as Western) media is not necessarily uniform across cultural groups. Anderson-Fye's (2004) research with Belizean girls showed that the girls were not indiscriminately adopting European-U.S. body ideals and behaviors. Bordo (2003) argues that media is not necessarily the source generating thin body ideals, but rather media is the channel for expressing cultural norms. The media serves to reproduce the cultural ideals and at the same time is generates them.

The impact of media, print and visual, on body image has been mostly reported for populations in the U.S. and Australia (Thompson and Heinberg, 1999; Tiggemann and Pickering, 1996). This literature has focused on adolescents because it is a sensitive time of change and development of their identity (Tiggemann and Pennington, 1990; Winham and Hampl, 2008). Also many studies use samples of college undergraduates due to convenience and also because of the concern with body image at this life stage as well (Pompper and Koenig, 2004). There are few studies documenting the impact of media on senior women's body image, even fewer that have studied media, acculturation and body image for senior women.

In one of the few studies that studied an adult population, Green and Pritchard (2003) examined body image dissatisfaction among men and women between 19 and 68 years of age. The variables included as predictors of body image dissatisfaction were: age, gender, media influence, family and peer influence, and self-esteem. The results indicate that women were more dissatisfied than men, and media influence was a predictor for body dissatisfaction for women, but not for men. This implies that greater exposure and consumption of media impacts body image satisfaction in a negative way. Increased family pressure to lose weight predicted increased body dissatisfaction for both

men and women. The results also indicate that low self-esteem predicted increased body dissatisfaction for both men and women.

Hargreaves and Tiggemann (2002, 2003) studied the effect of television commercials on teenagers' mood and body dissatisfaction in an Australian sample. Researchers showed participants 20 appearance related (contained female actors that epitomized social ideal of thinness and attractiveness) and 20 non-appearance related television commercials and afterwards conducted measured mood, body dissatisfaction and appearance schema activation. They measured level of appearance schema as an individual variable to better explore why some people are more affected by media images than others. The results indicate that appearance commercials led to increased schema activation, anger and body dissatisfaction and decreased confidence in girls. For both males and females viewing appearance related commercials led to increased appearance schema activation. Hargreaves and Tiggemann (2002) argue that the findings of the study lend support to the self-schema theory, and schema activation as the underlying process by which the media can increase body dissatisfaction.

In the same line of research Thompson and colleagues (Cusumano and Thompson, 1997; Thompson and Heinberg, 1999) have examined variables that might explain interpersonal differences regarding the impact of media on body image.

Thompson and Heinberg (1999) argue that one specific individual variable, internalization of social pressures regarding dominant standards of attractiveness, moderates or mediates the effects of the media on women's body satisfaction and eating disorders. Media is framed as a function of sociocultural factors, because it portrays the cultural body ideals (Bordo, 2003).

Thompson and Heinberg (1999) define mass media as modes of communication that generate messages designed for very large, heterogeneous, and anonymous audiences with the goal of maximizing profit. In a study by Cusumano and Thompson (1997) print media was found to promote the thin ideal, especially magazines aimed at teen and adult women. They measured media exposure, awareness of societal ideals and internalization of thin body ideals as related to body image dissatisfaction, eating disorders and self-esteem in a sample of college undergraduates of various ethnicities. Internalization of social standards of appearance was the best predictor of body image dissatisfaction (Cusumano and Thompson, 1997). Nichter (2000) reports similar results from her research with teens in the U.S. Caucasian and Latina girls legitimated the ideal girl as the models found in fashion magazines aimed at teenage girls, describing the ideal teenage girl as being 5'7", 100 pounds, and size five with long blonde hair and blue eyes.

Tiggemann and Pickering (1996) studied the role of television on teenage girls' body dissatisfaction and drive for thinness. They frame their study within sociocultural theory on body image satisfaction, which explains that current societal standards for beauty exceedingly emphasize the desirability of thinness (Hargreaves and Tiggemann, 2002; Tiggemann and Pickering, 1996). They gave the participants a list of the TV programs showed the previous week on Australian TV and the participants circled which programs they watched. From this survey the researchers calculated time spent watching TV and classified the shows watched. The mean BMI for the girls was under 20, yet the participants perceived themselves as somewhat overweight, they were dissatisfied with their weight, and had high Drive for Thinness scores (Tiggemann and Pickering, 1996). The amount of television watched did not correlate with either body dissatisfaction or

drive for thinness, but rather category (content) of program did correlate with these variables. Amount of time spent watching soap operas and movies were positively correlated with body dissatisfaction, and watching sports was negatively correlated with body dissatisfaction. Watching music videos was positively the only predictor for drive for thinness. The results of this study support and are consistent with the sociocultural model, whereby body dissatisfaction emerges as a function of the sociocultural ideal of thinness. Tiggemann and Pickering (1996) emphasize that correlation does not mean causation. For example, an alternative explanation might be that those women most dissatisfied with their bodies or desiring to be thinner are more interested in particular types of television (soap operas, movies). One limitation of this study is that there was little variability in the BMIs of the participants.

A study focused on the impact of thin models and less-thin models on female mood, body anxiety and food intake weight satisfaction was conducted with women in the Netherlands (Anschutz et al., 2009). The thin models were from a Nivea shower gel commercial with traditional thin models, and the less thin models were from a Dove shower gel commercial that presenting averaged or slightly over sized women from Dove's "Real Beauty" campaign. The results indicate that women had more negative mood and ate less after exposure to commercials using less thin models than after exposure to commercials using thin models. The researchers argue that these findings imply that using less thin models in commercials explicitly referring to the thin ideal does not make women feel better.

Individuals do not necessarily internalize and imitate views and behaviors represented in the media. In the U.S. Winham and Hampl (2008) studied how teenagers

perceive and are influenced by television characters. They studied the influence of television characters on perceptions and behaviors such as food habits, clothing, weight and body image. The researchers used the top ten highest rated TV shows for 12 to 17 year olds in metro-Phoenix, Arizona as determined by Nielsen Media Research ratings. The researchers developed an online questionnaire that asked about favorite TV shows, amount of TV watched, attributes of TV character, behaviors and the perceived influence of these characters on individual behavior. The results of the study indicate that high school students do not indiscriminately model behaviors demonstrated in TV programs, but they incorporate views and behaviors that fit with their particular reality. This was most noticeable for importance of attractiveness in romantic partner, but not so much for clothing styles and eating habits. The majority of the participants (roughly a little more than half) felt that TV characters serve as role models for body weight. They found that amount of television watched, show genre, gender and age none were correlated to perceiving TV characters as body weight role models (Winham and Hampl, 2008). The participants also responded that TV characters did not influence the way they felt about their own weight, but most answered that other people were influenced by it. They report that amount of TV watched and type of program watched were related to importance of attractiveness for both boys and girls. Girls that watched relationship dramas and boys that watched sports and reality shows had higher scores in importance of attractiveness. No relationship between hours of TV watched and BMI was found in this sample. Individuals classified as overweight did not acknowledge the possibility that the thinbody ideal represented in the media influenced them personally; the authors mention that

this is possible due to their cognitive reality in which the majority of people around them have are overweight (Winham and Hampl, 2008).

Schooler et al. (2004) researched ethnicity of viewers and ethnicity of cast of television program as variables that might moderate or affect the influence of television on body image. They studied the influence of Caucasian and African American television programs on African American and Caucasian college women's body satisfaction. Ethnicity was measured and a variable for African Americans was created that classified participants as having high ethnic identity or lower ethnic identity. The results indicate that for African American women viewing of U.S. mainstream television program did not affect their body image satisfaction; viewing of African American programs was related to higher satisfaction with the self. Among African Americans and Caucasians higher BMI was associated with lower body image satisfaction. Caucasian participants were more influenced by mainstream programs; this predicted poorer body image, while viewing African American programs was unrelated to body image. African American women that had strong ethnic identities had healthier body image. For African American women that had weak ethnic identity viewing African American television programs resulted in strengthening and improving their self-image. These findings support theories of social comparisons that state that people compare themselves to like others, to those who are more similar on relevant attributes (Crocker and Major, 1989; Schooler et al., 2004). This highlights the need to deepen our understanding and research on the effect media content can have on body image. For Latinas it is necessary to study how telenovelas, and Spanish-language television programs influence body image (Schooler, 2008). Among Latinas, particularly of different specific countries of origin, results are

not as dichotomous as those of Caucasians and African Americans. Schooler (2008) addresses this precise issue in her longitudinal study of body image satisfaction and media exposure of Latina teenagers.

In this study the majority of the teens were of Dominican and Puerto Rican descent. It also presented a novel approach in body image studies because it incorporates African American oriented television programming, mainstream television and Spanishlanguage television. It is one of the few longitudinal studies, which shed light on acculturation through time. In her study Schooler (2008) measured body satisfaction, acculturation (mainly based on language) and exposure or consumption of mainstream, African American-oriented and Spanish-language television. The results of the study indicate that frequent viewing of mainstream television was associated with decreased body satisfaction across adolescence, and that frequent viewing of African Americanoriented television was associated with greater body satisfaction, particularly among more acculturated girls. Schooler explains that Latinos have the potential to acculturate not only to mainstream Caucasian culture, but also to African American culture. The results suggest that acculturation to mainstream U.S. culture may lead to increased body dissatisfaction by promoting more frequent viewing of mainstream television and more engagement with the dominant thin body ideal represented in this type of TV programming (Schooler, 2008). Spanish-language television was not associated with body image development, and this may be due to not having finely distinguished the amount of *telenovelas* watched (Schooler, 2008).

For Latino teens that reside in communities that are historically, culturally, or regionally proximate to African American communities, African American-oriented

media may be especially important (Schooler, 2008). Schooler openly acknowledges the limitations and challenges of "Latino" as a category. She explains that the use of the panethnic label Latino has been accepted in academic and political spheres referring individuals of Spanish-speaking descent, but this term is contested because it aggregates people of different race, nationality, language use, immigrant status, among others. She also explains that racially, Latinos can identify with African Americans culture because of racial or phenotypic similarities. Latinos/as represent a wide spectrum of races and ethnicities, for example Puerto Ricans self-classify in various racial categories, for example: black, Caucasian, *indio* (Indian), and *trigueño* (olive skinned) (Duany, 2002; Gravlee, 2005). This study also stresses the diversity among the Latino community and body ideals with it.

Pompper and Koenig (2004) studied the perceptions of body ideals and print media of Latinas of two generations. This study focused on Latinas in the U.S. (mainly of Puerto Rican, Cuban and Colombian ethnicity) from two different generations and their perceptions of body ideals in magazines. They studied 17 females categorized to belong to Generation X (18-35 years of age) and 10 women of the Baby Boomer generation (36 and older). All the women were of middle class and level of acculturation was not measured. The study addressed questions of how Hispanic women regard magazine standards of ideal body image, how these perceptions change over time, and what role language and culture play in setting standards their perceptions of ideal body image. Participants of both age groups agreed that women portrayed in magazines set society's standard for ideal body image, but senior women rationalized that the ideal was impractical. Younger women identified sexual desirability as the main reason to be, thin

and predicted that women become less concerned with weight and more comfortable with body size as they age, because they already have their partner and children. Baby Boomer's emphasized the health and personal well-being as the main reason to maintain a thin body. These older women also attributed the attitude shift to aging, and maturity, which they associated with investing time into family, career and personal growth. Women of both generations held a thin body ideal.

Age and Body Image

Studies in body image and youth indicate that girls as young as eight and nine years of age demonstrate dissatisfaction with their body image, particularly with body weight, in European-U.S. contexts (Grogan and Wainwright, 1996; Hill et al., 1992; Tiggemann and Pennington, 1990). This suggests that body dissatisfaction can begin before adolescence, which is usually seen as the life stage in which this is most marked. Moreover, the results propose that body dissatisfaction is the normal experience of girls in European and U.S. cultures (Tiggemann and Pennington, 1990). Adolescence, as explained by Becker (2004) is viewed as the most vulnerable time for body dissatisfaction and for eating disorders that might accompany it. Carruth and Goldberg (1990) argue that female body image concern is at its peak in this life stage due to the physical changes in shape that place girls far from a slender body ideal. Nichter's (2000) work with pre-adolescent and adolescent girls supports this argument. Adolescence has been conceptualized as a time of change, self-consciousness and identity search (Tiggemann and Pennington, 1990).

Research on body image has mainly focused on college women, because they are a convenient sample and because concerns of eating disorders in young women (Grogan,

2008; Molloy and Herzberger, 1998). However, there are several studies that have included senior women. Pliner et al. (1990) in their research found that women over 60 years of age were just as concerned as adolescents and young adults about body weight and physical appearance. Tiggemann (2004) summarizes the findings of aging and body image in European-U.S. settings by stating that with age women remain equally dissatisfied with their bodies, but it matters less to them. It is uncertain if this is the same case in other cultural groups. The degree of body dissatisfaction has been argued to remain the same throughout the life span and not necessarily to increase or decrease with age. If the cultural ideal female body is based on a youthful, slim body type then it would be expected that senior women, who increasingly with age, move further from that ideal to grow increasingly dissatisfied with their bodies (Grogan, 2008). Yet the findings of studies that have sampled women of various age groups indicate that this is not the case. Grogan and colleagues in a sample of women 16-63 years of age found similar level of dissatisfaction, even the areas of the body that presented cause for concern did not differ in relation to the age of the interviewees (Grogan, 2008). They reported dissatisfaction with stomach, hips and thighs, irrespective of age. Most were motivated to lose weight and represented the same thin, tall, firm breast body ideal. The main motivator for women of all ages was being able to get into their favorite clothes.

Lamb et al. (1993) studied figure preferences of two generations and found that senior women have a different, heavier, ideal body size based on a more realistic, agerelated body ideal. Grogan (2008) suggests that people tend to choose age appropriate role models for body weight and therefore the expectation would be that body dissatisfaction would not increase with age, since people would not compare themselves

to youthful role models. One of the limitations that appear in cross-sectional studies is that a cohort effect may be the source of the differences, not just age. Grogan (2008) explains that different age groups also differ in terms of their experience of cultural pressures on body image. People that were between 50-60 years of age during the 1990s, lived through the era of Marilyn Monroe and Jayne Mansfield, when a heavier, fuller body was idealized (Bordo, 2003; Grogan, 2008). Results from these cross-sectional studies say more about historical changes in body ideals and stereotypes of beauty than about age difference in body weight ideals. Various researchers emphasize the need of longitudinal studies where body image is studied in the same group over a period of several decades would help to answer this question (Cachelin et al., 2006; Grogan, 2008).

Intergenerational Body Size

The intergenerational approach can serve to examine the process of change in populations that have undergone rapid social, economic and cultural transitions by comparing living members of different generations (Ross, 2002). In body size studies some researchers have concentrated on differences across ages, but not within families and others have studied mother-daughter interactions. These are two aspects about intergenerational studies of body size that need not be exclusive. Research on senior women's body image was lacking in the literature until recently, and not much attention has been given to changing body image perceptions with age (Calogero et al., 2007). It is hypothesized that senior women who have already internalized the importance of a thin body recognize that focus on appearance is vain late in life and can frame appearance concerns in health discourse (Calogero et al., 2007). This hypothesis suggests that the senior women for fear of seeming vain do not express reasons of beauty and sexual

desirability that they legitimately hold for desiring and striving for a thin body. The literature on body image and media has focused mainly on teens and young adults, so not much is known on the influence of media on senior women's body ideals. One of the issues is life stages and what is expected on women at different life stages. Calogero et al. (2007) argue that older women have already fulfilled their role as object of desire and in later life stages move into a stage of nurturer, which creates different expectations and body ideals. In a European-U.S. context the evidence supports a single thin body ideal throughout life (Tiggemann, 2004), but different frameworks for justifying it. Senior women may be as susceptible to media, but maybe they are more susceptible to health messages rather than those about beauty and sexual desirability.

Few studies have examined change in body ideals over the life span, though some studies have researched body ideals during specific life stages. Fox and Yamaguchi (1997) studied body image satisfaction during pregnancy and report that women of recommended weight before pregnancy were more dissatisfied with their bodies during pregnancy than women that previous to pregnancy were overweight. Baker et al. (1999) found that eating behaviors and body satisfaction can shift with particular stages, especially one as transient as pregnancy. Life course theory can help address change over an individual's life course. Life course theory explains that key experiences and exposure to social situations structure the life of an individual, which in turn reflects these experiences (Elder, 1998; Vespa, 2009). Time, human agency and linked (i.e. interdependent) lives are some of the most important elements of life course theory (Bronfenbrenner, 1999; Elder and O'Rand, 1995). These factors help to identify mechanisms that influence the course and substance of peoples' lives (Kohli, 2007). For

example, Massara's study showed a clear difference in body size images among Puerto Rican women where weight gain after marriage is a positive quality. Popenoe (2004) in her study of the fat valuing Azawagh Arabs also found marked life stage body ideal differences, older women were not socially expected to continue feeding practices, but were in charge of shaping younger female bodies.

Reel et al. (2008) attempted to examine body image differences between age groups and between Caucasians and African Americans. Their total sample were four women between 20-39 years of age, six women between 40-59 years of age, and four women over 60 years of age (all were samples were composed of 50% African Americans and 50% Caucasians). They found that African American and Caucasian women of all ages engage in self-monitoring of their bodies, and use strategies to change the shape of their bodies, such as exercise and diet restriction. They concluded that women across age and ethnic categories are vulnerable to body dissatisfaction and disordered eating behaviors. This study is one of the few to compare body image ideas and behaviors across age groups.

The other studies of body image within families have mostly concentrated on mother-daughter dyads in the U.S. The samples of these studies are usually Caucasian females in college at the undergraduate level (Cooley et al., 2008; McKinley, 1999). McKinley (1999) found that mothers of college undergrads engaged in less surveillance and had less body shame than their daughters. A life history perspective can be helpful in analyzing the results, younger women's body image might be important in establishing relationships and advancing in professional success (McKinley, 1999). Senior women mostly have established long-term relationships, in which case body appearance is not as

important, and the main tasks associated with this age are geared towards contributing to future generations. The relationships between daughters' body experience and mothers' is hypothesized to be bidirectional (McKinley, 1999; Nichter, 2000). Social networks are reported to influence our ideas, but the position one holds in particular network, such as the family, can place an individual in the position to more influence by others' messages than people in different positions. An example of this are gender differences within families, for example in Nichter's work in Arizona she found that fathers, mainly in Caucasian families, had a strong influence in how the women in the family viewed their bodies (Nichter, 2000). Cooley et al. (2008) analyzed the influence of mother-daughter closeness, media influence and mothers' perceptions of daughters' body image. They found that mothers' disapproval and negative feedback regarding daughters' body shape were predictive of eating pathologies. The authors conclude that a daughter's perceptions of how her mother feels and acts regarding diet and appearance are a way to operationalize how they influence them. This highlights the need to better understand the role family dynamics have in creating or reproducing unhealthy behaviors and generating psychosocial stress.

The mother-daughter relationship has been studied for women in their pre-teens, teens, and young adults. Clarke and Griffin (2007) studied mothers' influence on their daughters at an older age (50-70 years of age). They report women's body image perceptions were influenced by mother approval and mothers' attitudes towards their body. The authors conclude that maternal influence on body image extends across the life course.

Other studies have researched African American young girls and their mothers due to the high rates of obesity in this sector of the U.S. population. These studies have mostly found that mothers' are accepting of overweight and do not desire for their daughters to lose weight. Simultaneously young girls that were non-obese, non-overweight wanted to gain some weight (Flynn and Fitzgibbon, 1996). This is hypothesized to be because mothers' are the role models and most of the mothers were overweight in the sample. Young girls might be modeling their parents' body shape, at least when they are pre-adolescents and adolescents, which have been the groups studied by researchers (Flynn and Fitzgibbon, 1996; Katz et al., 2004; Parker et al., 1995).

Research on generational triads of women is lacking (grandmother/mother - mother/daughter - daughter/granddaughter). The inclusion of grandmothers is helpful because it allows for the examination of the legacy of familiar body models if they exist and how they transmitted (Franko et al., 2012). In settings where grandmothers are coparenting it is relevant to examine a generational triad. Grandparents frequently form part of multigenerational households in Latino cultural groups and they are authoritative figures in families (Burnette, 1999; Marin and Triandis, 1985). Herein is the relevance of conducting investigations that include family members from multiple generations.

Body Size and Health

This section describes how body size has been linked to disease and ill health. Body size can affect both physical and psychological health, and this has been widely studied in European and U.S. society (Puhl and Heuer, 2009). The relationship between physical health and elevated BMI is equivocal and contested (Saguy and Riley, 2005; Seidell et al., 2001). The main focus of public health and biomedical studies has been on

the negative outcomes of overweight and obesity (i.e. medically overweight and obese) with little attention to the cultural construction of disease. Understanding health and medicine from a cultural standpoint led Cheryl Ritenbaugh (1982) to question the construction of obesity (BMI \geq 30) and overweight (BMI \geq 25) as culture-bound syndromes.

Physical health. The construction of disease categories is a cultural endeavor and must be recognized as such to account for the interaction between cultural perceptions from scientific findings. In European-U.S. contexts the socially negative connotations of fat bodies preceded the identification and creation of biomedical categories of overweight and obese (Sobal, 1995). This has served to conflate the social perceptions of excess weight with the biomedical ideas. Some researchers (Campos et al., 2006; Stearns, 2002) state that scientists are not aware of how culture shapes the focus and interpretation of scientific investigations. Evans (2003) and Austin (1999) argue that studies about body size and health rarely take into consideration how the cultural aspect of body weight and size affects the perspective of the researcher. These researchers express that the obesity epidemic discourse and outcry is essentially moral panic stemming from cultural perceptions of obesity and overweight as negative body conditions. This highlights the moral roots of fat stigmatization.

At the same time, there is solid scientific evidence that biologically morbid obesity (BMI \geq 35) is associated with increased morbidity and mortality, as is underweight (BMI <18.5) (Durazo-Arvizu et al., 1998). Being overweight and being obese have been identified as risk factors for negative health outcomes, such as heart disease, type-2 diabetes and high blood pressure (Kim and Popkin, 2006; Must et al.,

1999; Wyatt et al., 2006). The rest of the BMI spectrum shows variation depending on the individual and the environment (Flegal et al., 2005). To question the relationships between BMI and morbidity and mortality is not to dismiss the body of literature that supports this finding. It is meant to highlight what we do not know about that relationship and how this blanket approach to excess weight as extremely dangerous and negative is creating a different health problem, a mental-health problem.

Mental health. In societies where being overweight or obese are stigmatized, individuals with these conditions suffer weight discrimination. This has been termed by some researchers as the last acceptable form of discrimination in the 21st century, especially because it is understood to be a condition that can be changed (Puhl and Heuer, 2009). This differs from other stigmatized conditions such as skin color and gender that are not controllable by the individual (Puhl et al. 2008). Weight discrimination (i.e., fat stigma) has been associated with low self-esteem, depression and increased stress (Crocker and Garcia, 2005; Klaczynski et al., 2004). Puhl and Brownell (2003) define weight prejudice as the combination of the pattern of rejection of fat persons and a social ideology of placing blame. Weight discrimination has been reported to exist within families (Crandall, 1995), and in diverse social contexts, such as at work and health care settings (Puhl and Heuer, 2009). Crandall (1995) examined weight bias in the family context and found that heavy weight daughters (BMI \geq 22.61 versus BMI \leq 21.21), but not sons, received less financial support than thinner daughters. Women who received their financial support mainly from their parents were thinner than those who received their funds mainly from other sources. The researcher used data on parental education level, parental incomes, ethnic category, family size and the number of children

competing for college funds, and found that none of these variables can fully account for the differential treatment of heavier daughters. Parental attitudes about weight being an individual and controllable condition mediate the association between college support and daughters' weight (Crandall, 1995). These findings highlight the need of assessing body ideals within families, since the family unit is important in transmitting body norms, and has concrete consequences in individual lived experiences.

Some studies have been conducted on the association between adiposity and depression (Chen et al., 2007; Stunkard et al., 2003). The links between excess body weight and depression are unclear (Atlantis and Ball, 2008). Being overweight or obese in a society that stigmatizes fat can cause an individual to become depressed (Puhl and Brownell, 2006). An alternative hypothesized pathway to link excess body weight and depression is that depression can be a risk factor for gaining excess weight (Blaine, 2008). Schwartz et al. (2004) report that use of anti-depressants, anti-psychotic and mood stabilizers are associated with weight gain. Another association between mental health and excess weight is found in the relationship between chronic stress and brain processes that cue our body to obtain glucose (Dallman et al., 2005). The brain, small intestine, and other organs and body systems have mechanisms that prompt food consumption. This mechanism is affected by social factors, particularly by chronic stress. Chronic stress causes a failure in the brain-signal process and causes the eating signal to be constantly on, demanding energy frequently (Peters and Langemann, 2009).

It is important to point out that not all overweight and obese individuals experience life in the same manner (i.e., not all overweight and obese people are depressed). Body image accounts for the subjective nature of people's perceptions of

their bodies and how they experience life. The link between BMI and depression is mediated by the individual's environment, including social support and life experiences (Annis et al., 2004; Nichter, 2000). There are important socio-ecological variables that affect individual life courses (Elder, 1998), such as family, culture and institutions within the individual's environment (Bronfenbrenner, 1999). For example, Annis et al. (2004) found that overweight women with more frequent experiences of weight stigmatization during childhood, adolescence, and adulthood were more likely to report depressive symptoms and poorer body image. The link between depression and excessive weight might not be weight itself, but interpersonal mistreatment due to weight or an individual's own self-imposed sense of guilt and shame that stems from overweight or obesity (Puhl and Heuer, 2009).

If depression were caused by excess weight as a biological reaction we would expect a similar biological response across cultural groups. Cross-cultural studies of body size and its consequences indicate otherwise. Muennig's (2008) research findings suggest that chronic stress caused by fat stigma can lead to the same chronic illnesses as being overweight or obese because of physiological reactions that occur in the body. One of the his hypotheses argues that if perceived weight stigma is responsible for some of the obesity-related morbidity and mortality, differences in body size preferences by social class, age, ethnicity and gender should translate into differences in morbidity and mortality. So far, advances in biology and psychology are insufficient for teasing apart the interactions between SES and health. Part of the research in this area has been on the differences that exist by ethnic groups in body size models and morbidity (Averett and Korenman, 1999). Averett and Korenman (1999) studied the differences between African

Americans and Caucasians regarding the socio-economic consequences of obesity, such as income and job attainment. The results indicate that among Caucasian women obese women had lower probability of marriage and lower earnings of husbands, among those who marry, accounting for the majority of the income differences between these women and those of recommended weight (BMI $18.5 \le 25$). They also found that African American women's self-esteem was less affected by obesity than for Caucasian women, offering cultural differences as a possible buffer against consequences of fat stigma (Averett and Korenman, 1999).

Some studies have also reported that perceived body size is more influential in determining health and self-esteem than actual body weight (Atlantis and Ball, 2008; Muennig et al., 2008). Biological markers of health are problematic in studying perceptions of body size since body weight is a confounder in many of them. Muennig et al. (2008) used data from the Behavioral Risk Factor Surveillance System (BRFSS) to analyze the relationship between body image satisfaction and self-reported health, operationalized in terms of reported physically and mentally unhealthy days per month. The results indicate that people with higher body image dissatisfaction reported more unhealthy days per month, regardless of BMI (Muennig et al., 2008). They found that a desire to lose weight was more predictive of unhealthy days among women than men and among Caucasians than among African Americans or Latinos (Muennig et al., 2008). These findings suggest that one of the biggest problems of the obesity epidemic is partly driven by cultural constructions of body image norms. The sociocultural constructions of body norms have a direct impact on how different bodies are assigned attributes and are

medicalized. This link between culture and health is further explored in this dissertation study.

Summary

The globalization of the European-U.S. thin body ideal and the way it is adopted locally has psychological and social repercussions for women worldwide. Research has been conducted in mainly dominant U.S. and European societies. In these settings fat stigma is a historical legacy, which makes it difficult to tease apart the cultural components from the physiological ramifications of excess weight. Studies with populations that have held different cultural models can help social and behavioral scientists to better understand the impact of these body size models on people's psyche and body. In the following chapter the research setting is described and the design of the study is explained.

Chapter 3: Research Setting and Design

Research Setting: Puerto Rico

In this chapter the research setting, including some relevant previous anthropological work in Puerto Rico, historical background and body image, conducted in the region is described. It is divided into sections that are relevant to the research objectives of this study. The political history and the most recent demographic information are explained as well.

Political history of Puerto Rico. The Taino Indians, an Amerindian Arawak group, populated Puerto Rico, until the Spanish colonization of the island in 1493 (Scarano, 1993). The vestiges of the Spanish rule and colonization are widely evident today. The language, religion, cuisine, and family structure of the Spanish are some of these cultural features. African slaves were brought to the island for work in the sugar cane industry in the seventeenth century (Mintz, 1974). Less African slaves were brought to Puerto Rico compared to the Dominican Republic, Haiti and Jamaica. The intermarriage among descendants of Tainos, Spaniards and Africans occurred widely and the creole population formed a large part of the islands inhabitants by the middle of the seventeenth century (Caro Costas, 1983). This cultural hybridity is the basis of the modern Puerto Rican identity (Duany, 2002; Godreau, 2000).

Puerto Rico was a Spanish colony from 1493 until 1898 when it became a U.S. colony. It was part of the treasures the U.S. won with the end of the Spanish-American War. The U.S. ruled directly until 1948 when an internal government was elected. In 1952 a constitution was written and approved (Morales Carrión, 1983). From that year to the present day Puerto Rico is an *Estado Libre Asociado*, a type of commonwealth.

Puerto Ricans were given U.S. citizenship in 1917, which made them eligible to serve in the armed forces and subjects to military drafts. Puerto Ricans have no representation in U.S. government and cannot vote for the U.S. president. The political status of the island is a major element in ideologies of political parties and social-political organizations. It is the source of many debates and struggles among Puerto Ricans.

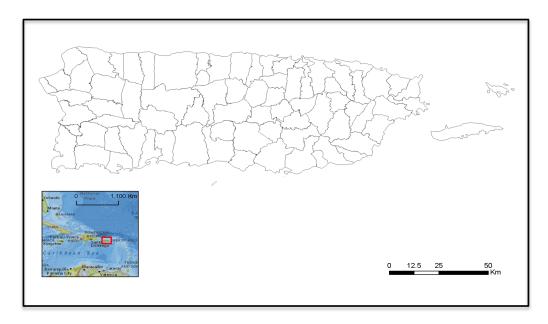


Figure 3.1 Map of Puerto Rico.

In the 1940s the island had an economy based on commercial agriculture. Life on the island had been characterized by low life expectancy, high infant mortality rates, and high morbidity due to infectious diseases, especially malaria, dengue and diarrheal diseases (Rivera-Batiz and Santiago, 1996). The high levels of infection and of infant mortality made excess weight a sign of possible survival. This was particularly held for infants and young children. It was customary to give children cod liver oil and *ponche* (a mix of *malta* (a fermented non-alcoholic drink) with raw eggs) to fatten them up (Higgins, 2000; Massara, 1989, p. 166).

In the 1950s the island's economy shifted rapidly to manufacturing and to a service-based economy. This rapid transition left many people without work and without food. The U.S. government opted for giving nutritional assistance in the form of food stamps (Pico, 2006; Rivera-Batiz and Santiago, 1996). This public policy brought with it food imports from the U.S. and supermarket stores that carried highly processed foods (Pico, 2006; Rivera-Batiz and Santiago, 1996). In 1952 television arrived and it featured almost exclusively U.S. programming (Davila, 1998). Consumption of junk food, associated with U.S. diet, and television are argued to impact local body image issues (Anderson-Fye, 2004; Becker, 2004; Popkin, 2003). These changes, ranging from demographics, food systems and media, are hypothesized to have affected the body size models.

Acculturation was already underway on the island in the 1930s and 1940s; waves of mass migration to the U.S. mainland in the 1950s heightened this effect. Puerto Ricans mainly moved to the northeast of the U.S. for work in manufacturing and non-skilled jobs. Return migration of the Puerto Rican Diaspora since then has increased contact with U.S. culture (Aranda, 2007; Pico, 2006). In the midst of this acculturation process national movements to reaffirm local identity also surfaced on the island and on the mainland. The construction of identity for Puerto Ricans has been a central theme much throughout history. Waldron (2012) explains that the preoccupation with history and identity is evident in Puerto Rican letters dating back hundreds of years. The imposition of language, history and with it identity by colonial powers on the island have generated resistance to these external definitions in the Puerto Rican cultural sphere (Waldron, 2012). Colonial pressures by the U.S. in its hundred plus years of invasion have included

"forced instruction of English in schools as well as incarceration, torture and execution of some of its leading dissent voices" (Waldron, 2012).

On the island Puerto Ricans have reinvented their national identity focusing on language, local music and holding traditional festivities. On the mainland the Nuyorican movement in the 1960s and 1970s gave 2nd and 3rd generations of Puerto Ricans a new voice that separated them from "Americans". The flag also became a primary symbol of national pride and identity (Duany, 2002). The term Nuyorican is used to identify a Puerto Rican who was born and/or raised in the U.S. Islanders also use the term derogatorily to express that Puerto Ricans that do not live on the island are less Puerto Rican than islanders (Duany, 2006). This has recently expanded into terms such as "Florrirican", "Orlando-rican" and "Diaspo-rican" (Duany, 2006). Since Massara's study conducted in the 1970s, identity politics and acculturation have changed and it is necessary to re-asses this model. Massara's Puerto Rican body model was greatly explained by variables of gender roles, economy and demography; therefore it is necessary to review changes in these areas to understand change in body ideals.

Relevant demographics. Puerto Rico has 3,725,789 inhabitants (United States Bureau of the Census, 2011). Approximately 24.2% of the population is under 18 years of age, 7% is between 20-24 years of age, 13.2% are between 25-34 years of age, 19.6% are between 35-49 years, 18.3% are between 50-64 years and 14.5% is 65 years or older (United States Bureau of the Census, 2011). The 99% of the total sample of the 2010 U.S. Federal Census in Puerto Rico identified as Latino. The Behavioral Risk Factor Surveillance Survey (BRFSS) data collected by the Centers for Disease Control (CDC) for the year 2011 for Puerto Rico suggests that approximately more than half of the adult

population can be classified as overweight or obese (see Table 3.1). Few underweight status cases were recorded and are not sufficient for statistical analyses (CDC, 2012). The BRFSS data can be interpreted as representative of the general population. Some 71.1% of men and 61.7% of women in Puerto Rico can be classified as overweight or obese (CDC, 2012).

Table 3.1

BMI for Adult Puerto Rican Population in 2011

		BMI	BMI	BMI	
		$18.5 \le 24.9 \text{ kg/m}^2$	$25 \le 29.9 \text{ kg/m}^2$	\geq 30 kg/m ²	
Males	Percent	27.2	44.1	27.0	
	Confidence Interval	25.0-29.3	41.7-46.4	24.8-29.1	
	N	624	1117	606	
Females	Percent	36.3	35.9	25.8	
	Confidence Interval	34.4-38.2	34.1-37.8	24.1-27.4	
	N	1383	1490	1018	

Data from the CDC (2012)

According to the U.S. Census Bureau the per capita income in 2010 was \$10,658 (+/-67) (United States Bureau of the Census, 2011). Approximately 45.3% (+/-0.3) of the population of Puerto Rico was determined to be under the poverty line in 2010. Puerto Rico ranks below the poorest state, Mississippi. The main industries in the economy of Puerto Rico are the services industry, primarily tourism, and manufacturing industry, specifically production of pharmaceuticals, electronics and apparel (Bosworth and Collins, 2006).

Various authors mention and openly state that there are different socioeconomic statuses in Puerto Rico (Dietz, 1989; Mintz, 1966; Rivera-Batiz and Santiago, 1996). An issue that frequently arises when studying and assessing socioeconomic status (SES) is that there are diverse ways to assess SES. In the literature researchers rarely explicitly state measurements of SES, and their operationalization is not explained. There is little consensus on the conceptualization and measurement of SES (Sobal and Stunkard, 1989). Indicators that are used either individually or in combination are income, education and sometimes occupation. No single index has been used and I did not find any official reports on the division of socioeconomic class in Puerto Rico. This led to including a self-ascribed SES option on the survey protocol for my dissertation research. Since the family is a source for rooting individual SES this was also examined in the study.

Puerto Rican family. Some studies have focused on the shifts in the structure in Puerto Rican families (Colón Warren, 2006; Morales del Valle, 1998). Morales del Valle (1998) explains that since the 1960s significant changes have occurred in the size and the structure of the Puerto Rican household. The changes in fecundity and mortality patterns, as well as marriage and divorce rates are partly responsible for this shift. The biggest change has been the decrease in family households (two or more individuals that are blood related), from a 92% in 1960 to 84% in 1990, while non-family households (one or more individuals that are not blood related) increased from 7.9% in 1960 to 16% in 1990. Morales del Valle (1998) argues that this is mainly due to the increase in female headed households in which only the women is present. These types of households have a higher probability of being poor and of receiving some type of government aid.

In a study conducted in 1958 by Fernandez-Marina et al. traditional Puerto Rican family values were assessed with regards to change towards U.S. family values. The authors used a Mexican family traditions questionnaire and modified for use in Puerto Rico. The main ideas included in the survey were on the topics of the father as the main parental figure and the subordinate position of the mother (Fernandez-Marina et al., 1958). The hypothesis was that Puerto Rican traditional family values would be more similar to Mexican values than to U.S. family values, despite the rapid social change and direct contact with the U.S. culture for more than 60 years at that point. The results supported the hypothesis suggested by the researchers, with the exception of Puerto Rican women tending to resist the subordinate role more than Mexican women. The authors conclude that Puerto Rican family beliefs were in the process of change toward more U.S. beliefs, particularly in the undermining of the father's traditional authority in the family.

The Puerto Rican family, even in light of change, retained some of its features, both within Puerto Rico and with Puerto Rican communities on the mainland. Puerto Rican *familism* is one of the family concepts describe by Rogler and Cooney (1984) as important and persistent. Familism is described as a traditional Puerto Rican concept that places value on family unity; it supports family integrity and shapes the conduct of the family members (García-Preto, 2005; Rogler and Cooney, 1984; Zayas and Palleja, 1988). It also implies that family members feel an obligation to relatives and duty to help them in times of need. Massara (1989) in her study with Puerto Ricans in Philadelphia alludes to this concept, but does not explicitly name it familism. Familism is what lends social support to the members of a family, both nuclear and extended, and it has been

found to endure in Puerto Rican families living in the U.S. (Zayas and Palleja, 1988). Researchers in health and social work have found that including a family component to health interventions with Puerto Rican individuals increases the chance of compliance and success (Zayas and Palleja, 1988).

García-Preto (2005) argues that although extended families are still prevalent in Puerto Rico they are not as vital to the support system. Traditionally Puerto Rican families have been patriarchal, a structure in which men hold the majority of the weight in decision-making (García-Preto, 2005). The traditional gender roles of the male head of household providing for the family and the female taking care of the home and family have changed. This is also a shift from when Massara conducted her study with Puerto Ricans (1989). Massara argues that women were expected to gain weight after marriage as a sign of care and good provision by their husbands. The impact of the shift in gender roles on body ideals has yet to be assessed. García-Preto (2005) gives an overview of Puerto Rican families. Traditionally Puerto Ricans married young and had many offspring, though this varies by socioeconomic status, there is a general trend of having less children and having them later in life. She explains that it is not uncommon for daughters to take their widowed mothers to live with them and grandmothers serve as additional caregivers. Sánchez Salgado (2008) and Colón Warren (2006) also share this last observation. According to the U.S. Census of 2000, approximately 28% of families that have children younger than 18 years of age co-lived with grandparents (United States Bureau of the Census, 2001). Colón Warren (2006) argues that most likely grandmothers in these scenarios are partly responsible for their grandchildren. Changes in family structure, economy and demography can aid us in understanding cultural change in

general. To specifically understand changes in body norms it is necessary to review studies of body image and weight in Puerto Rico.

Identity and culture. Anthropological research in Puerto Rico dates back to the 1940s. Sydney W. Mintz, a prolific and widely recognized anthropologist, contributed a paper on Puerto Rican culture to a publication on the status of Puerto Rico (1966). Mintz defines culture as a concept applicable to all products of the human species that are the result of social learning, communicated through the use of a symbol system, and not rooted in the purely physiological character of man as a species (Mintz, 1966, p. 342). He explains that when speaking of "Puerto Rican culture", or any other culture, he refers to those features of human behavior in each society that can be regarded as commonly accepted or agreed upon. He also recognizes the existence of intracultural variation by mentioning that the lack of absolute uniformity does not mean that the terms by which people act lack definition or predictability (Mintz, 1966, p. 343). Mintz touches upon the ever-present debate of what constitutes "Puerto Rican culture". He argues that it is not that Puerto Ricans speak Spanish, are mostly Catholic, eat rice and beans and drink sweetened black coffee. The criticisms of the use of the culture concept as a political instrument in Puerto Rico are highlighted in this article. Mintz emphasizes the existence of Puerto Rican culture as well as the differences in cultural elements due to social class. For example, he mentions that Puerto Ricans speak Spanish, though nuances in vocabulary and pronunciation exist in the Spanish spoken by laborers and that spoken by intellectuals and politicians. The same goes for Puerto Rican food, the coffee brands of the lower class and upper class are different, though both groups drink their coffee in the same manner (black with sugar). Other general cultural features he mentions are: Puerto

Rican patterns of social relationships (*compadrazgo*), relationships between parents and children, and gender roles. He points out that all Puerto Ricans do not uniformly share these features. The common cultural features can be regarded as differentiated according to social position in the total system. Mintz keenly identifies that the concept of Puerto Rican identity and Puerto Rican culture have not been clearly defined and therefore the debates surrounding these topics remained ambiguous at the time of this essay, and continue to be a contested nowadays (Davila, 1997a; Duany, 2002).

In his 1966 article Mintz reviews the articles and works that up to that date treated the subject of Puerto Rican identity and culture. In summary, authors on this topic treat Puerto Ricans as a homogenous group, which negates the reality of Puerto Rico. "Puerto Rico has never been an entirely homogenous society in terms of physical type, ethnic identity, or social and economic position; from its beginning as a New World colony of Spain, the island has always had a stratified and heterogeneous social structure." Arlene Davila (1997a) more recently conducted research on the topic of Puerto Rican cultural politics and identity. In this anthropological work Davila aims to identify the debates on national identity on the island, from Spanish speaking to definitions of government sanctioned cultural projects she explores the multiplicity of features that are part of Puerto Rican culture and how individuals define national identity according to their needs (Davila, 1997a, 1997b). Jorge Duany's (2002, 2006) work on Puerto Rican national identity of Puerto Ricans on the island and in the U.S. has also shed light on the existing debates regarding identity. One of the major issues to arise in national identity is the inclusion/exclusion of Puerto Ricans from the U.S. This brings us back to the question

Mintz in 1966 was addressing, and which remains unanswered, as to what makes a person Puerto Rican.

Research on acculturation of island dwelling Puerto Ricans is lacking in the literature. There is research on the development of a biculturality scale for Puerto Ricans. Cortés et al. (1994) developed an acculturation scale for Puerto Ricans living in the U.S. It is a scale that measures the involvement of individuals in both U.S. and in Puerto Rican culture, one not excluding the other. This biculturality scale was developed based on information on how Puerto Ricans had changed in coming to New York obtained through focus groups. The topic of nuestra manera de ser (our way of being) provoked discussions of what it means to be Puerto Rican, how this changes as a result of exposure to U.S. culture and the characteristics of U.S. culture. Two ten-item scales representing the degree of involvement with Puerto Rican (10-items) and with U.S. culture (10-item) were created based on the information of the focus groups. The respondents choose from a 4-point Likert scale of strength (from (1) not at all - (4) very much). Two of the questions asked about food frequency (food type that the respondent likes to consume). A factor analysis yielded two factors, involvement in U.S. culture and involvement in Puerto Rican culture. Though the scores for reliability and validity were lower than those of other acculturation scales, this scale offers an opportunity to assess biculturality versus the exclusion of one culture for another (Cortés et al., 1994). Additionally this scale is not mainly based on language use, which brings an innovative assessment in culture measures. This scale was used in a study of Puerto Rican drug users both in Puerto Rico and in the U.S. (Cortés et al., 2003).

For the purpose of analysis these two food items were excluded, due to difficulty of participants in answering those two questions, and the complexity of mixing the ordinal and continuous measures. Cortés et al. (2003) encountered a similar situation with their use of the scale they created with a sample of Puerto Ricans. They excluded the use of the food items from the scale in their study of Puerto Rican substance abusers in Puerto Rico and in New York (Cortés et al. 2003). I validated the use of the scale to assess acculturation to U.S. culture within Puerto Rico. The results indicate that involvement in U.S. culture and involvement in Puerto Rican culture is independent, thus confirming that these elements should be independently assessed (Cortés et al., 2003). The results of the study have implications for the frequent questions of whether Puerto Ricans in Puerto Rico undergo acculturation as a result of the colonial relationship between the island and the U.S. (Gutmann, 1999). This colonial relationship has had extensive implications in the acculturation processes, ranging from imposition of the English language, however not fully accomplished, (Pico 2006), types media accessible in Puerto Rico (Davila, 1998), and the social construction of Puerto Rican identity regarding proximity to U.S. identity (Duany, 2002). Furthermore the return migration patterns have also increased contact with U.S. culture (Rivera-Batiz and Santiago, 1996). Cortés et al. (2003) argue that based on the findings of the study it can be said that Puerto Ricans residing on the island do not undergo acculturation to the same level, as compared with their compatriots residing in the U.S.

Body image and obesity in Puerto Rico. Puerto Ricans on the U.S. mainland have been the focus of some obesity studies. Himmelgreen et al. (2004) studied the effect of acculturation measured by proxies of length of residence in the U.S., language use and

country of birth on Puerto Rican women's BMI. They found that the length of stay and English proficiency were positively correlated with BMI (Himmelgreen et al., 2004).

Less research has been conducted using acculturation scales specific to the Puerto Rican context.

Obesity and overweight have been identified as great health risks in Puerto Rico (Salgado et al., 2004). According to the Behavioral Risk Factor Surveillance System (BRFSS) survey (CDC, 2012) approximately 66.1% of the population in Puerto Rico is classified as overweight or obese. Walters Pacheco et al. (2007) reviewed the definition, approaches to studying obesity (including biological, psychological, and environmental factors), and causes for obesity. Based on the BRFSS data from 1996 to 2002 Walters Pacheco et al. (2007) explain that in Puerto Rico obesity increases between 18 and 44 years of age, and between 55 and 64 years of age. The authors explain the biological consequences of obesity, and the psychological consequences based on stigma of obesity. Weight discrimination can affect a persons' mental health through pathways such as anxiety and depression, which impact everyday life (Walters Pacheco et al., 2007). Cultural factors play a role in the cause of obesity, especially in a post-industrial society. Walters Pacheco et al. (2007) argue that consumption in excess in everyday life in Puerto Rico is evident given that individuals respond to advertising and market forces coupled with our idealization of the thin body. The authors from the previous studied mentioned identify only two approaches for addressing the issue of obesity in Puerto Rico, both from an epidemiological perspective, one being the BRFSS phone survey and the other a local study on the health of the municipalities in Puerto Rico by the Puerto Rico Health Department. Future research on obesity in Puerto Rico should include qualitative

methods and should be tailored to the Puerto Rican context (Walters Pacheco et al., 2007). The authors specifically call for research on the social construction of obesity throughout time, impact of advertisement on eating habits, perceptions of body size in Puerto Rican society and social stigma of overweight and obese people in Puerto Rico (Walters Pacheco et al., 2007).

In her doctoral dissertation Walters Pacheco (2007) addresses some of these questions using quantitative and qualitative methods. She specifically asked how Puerto Rican adults define obesity, what criteria they use to identify an obese person, and their perceptions of obese people. As part of the work she analyzed the socio-demographic characteristics of the participants in relation to their perceptions of obese people. Of the sample of 200 individuals, 66% were overweight or obese, yet only 4% perceived themselves as obese (Walters Pacheco, 2007). The author highlights that obesity is an everyday issue in Puerto Rico, yet it is placed in a framework of "the other". The "other" is obese, I am not obese is the base of these framework, rendering obesity invisible due to its normalness. The participants defined obesity as a function of height and weight following pre-established standards, and they highlighted personal responsibility of obese individuals (Walters Pacheco, 2007). The results also indicate that people in Puerto Rico are aware of other ways to think of obesity, such as exercise, childhood obesity and behavioral issues of obese people. Moreover, the issue of personal responsibility over body size and weight was widespread in the results. Walters Pacheco (2007) found that obesity is viewed as a medical and public health issue, and it is also viewed as preventable. Participants were ambiguous as to the aesthetic value of the obese body, many expressed that the obese body could be attractive to some people, but most stated

that it was not the case with them (Walters Pacheco, 2007). The author argues that since 66% of the sample was overweight or obese they were resistant to express negativity about the obese body. They know that they do not fit the social beauty standards, but to heavily criticize fatness would be to criticize their own body size. The results also indicate a moderate social stigma tied to obesity, obese individuals were thought to be lazy, physically inactive and to watch a lot of television (Walters Pacheco, 2007). Walters Pacheco argues that the idea of personal responsibility over body size has been communicated through mass media and it has been legitimized through the new perception of public health framed within individualism. This differs from the reports by Massara of wide acceptance of overweight and obese individuals.

The majority of research surrounding body size and body satisfaction in Puerto Rico originates in the field of social and clinical psychology. Many masters' theses and doctoral dissertations from the University of Puerto Rico psychology department have addressed the subject of eating disorders and issues surrounding the body (Galindo Portillo, 2007; Lebrón, 2003; Reyes, 1997; Rosario Nieves, 2006; Santos, 1996; Ureña de la Rosa, 2002). One of these investigations is the analysis of a narrative of an obese Puerto Rican male in a clinical setting (Maysonet Guzmán and Toro Alfonso, 2007). In this study the authors examine the biological reality of the physical body in relation to the social standards of body size and the negative psychological consequences this mismatch has on the subject. The authors conclude that weight discrimination in Puerto Rican society is evident and that the body is constructed based on the relationship individuals' have with others and with society (Maysonet Guzmán and Toro Alfonso, 2007). The findings of this study emphasize the current reality of the body in Puerto Rican culture.

The authors argue that in Puerto Rican Culture, body weight, body image and physical appearance are seen as measures of success, both for men and women, and this makes the body the life project (Maysonet Guzmán and Toro Alfonso, 2007).

Research on body image dissatisfaction, eating disorders and psychological consequences of these has been more prevalent in Puerto Rico than research on obesity. Calaf et al. (2005) studied body image dissatisfaction of teenage girls in Puerto Rico. They developed a questionnaire to measure body dissatisfaction and behavioral aspects related to body image, such as restraint eating. This instrument, the *Inventario de Imagen* Corporal para Féminas Adolescentes (IICFA acronym in Spanish), included common vocabulary and situations relevant to Puerto Rican teens. The authors express that though many questionnaires exist that measure body image satisfaction, none is specific to the Puerto Rican context. The 50-item questionnaire uses a 5-point Likert frequency scale to respond. It was found to be reliable, with a Cronbach's alpha of 0.83 and the internal consistency was adequate, Spearman-Brown correlation coefficient of r=0.79 (Calaf et al., 2005). The total score of the instrument indicates level of body dissatisfaction, the higher the score the more dissatisfied the respondent. Body image studies in Puerto Rico have mostly focused on eating disorders. Philippi and Lora (1999) studied the prevalence of bulimia in middle and high school students. Approximately 10% to 30% of the teens in the sample demonstrated bulimic behaviors (Philippi and Lora, 1999). Another study with teenagers found that 8.61% of their sample suffered from bulimia, they are mostly female teens (Santos, 1996). In a study with female college undergraduates Lebrón and Reyes (1993) found that 3.8% demonstrated bulimic symptoms. The studies reviewed

above in combination with the preliminary study conducted in Puerto Rico in 2009 form the foundation for my research hypothesis of change in body ideals in Puerto Rico.

Pilot study (June-July 2009). In June and July 2009 under the direction of Dr. Brewis, I collaborated in conducting a pilot study focusing on cultural models about body size and health with eleven different cultural groups in different countries, including Puerto Rico. We used cultural consensus theory and analysis to determine the existence of cultural models surrounding six domains related to body weight and health. We found clear agreement amongst Puerto Ricans on specific themes regarding obesity. Our results suggest that there is a trend of valuing thin bodies and framing big and overweight bodies as unhealthy in Puerto Rico. This is a clear departure from Massara's findings. No differences between age groups and cultural competency scores were statistically detected, which is suggestive of a shift in cultural model of body norms for all age groups. Further investigation is needed, however, especially qualitative research to understand local body norms in more detail and age differences in cultural models.

From a global health perspective it is critical to understand the variables that influence the change in the cultural body ideal to a European-U.S. thin positive, fat negative ideal. This dissertation research explores the cultural transmission of body ideals, and the variables that explain the change in body ideals through time and across generations. To examine the different variables included in this research the study was designed to include a variety of approaches, including ethnography and quantitative surveys.

Research Design

The purpose of this research was to study culture change through time. In this section the sampling strategy is thoroughly explained, which is an integral part of studying culture change across generations. Also the research design focusing on the elements that were keystones to examining change throughout individuals' lifetimes is explained. The methods include semi-structured interviews, cultural consensus questionnaires, body image scales and questionnaires. Both qualitative and quantitative methodologies were employed in a comprehensive approach to examine body size norms. Before beginning the first phase of data collection the scales and questionnaires were pretested using cognitive interviews (Collins, 2003; Nápoles-Springer et al., 2006). This preliminary fieldwork also included participant observation as a major methodology to aid in composing the final research protocol. A major component of fieldwork consisted of an ethnographic study of body size, which was based on semi-structured interviews with female participants. The other component was the administration of quantitative structured surveys to the female participants, and to close males for each woman. A detailed explanation of the sampling strategy, and the methods employed for this research study are presented below.

Sampling. A purposive sample of 53 women, who belonged to intergenerational triads, was recruited for the structured and semi-structured interview protocols. The sample size was large enough that it allowed me to conduct an in-depth study and to have strong internal validity, though it limits generalizability of the research results (Nyamongo, 2002). This sample size is also sufficient for an ethnographic study (Guest et al., 2006). The target recruits were the women of the middle generation of the triad,

particularly women that were between 40-50 years of age. This allowed the study of changes in body size norms by focusing on women who were between 9 and 14 years of age during the period of Massara's landmark study of PR body image (1976-1978). This target group was chosen because it has been reported that children as young as 8 years old in U.S.-European cultures are aware of body size norms (Grogan, 2008; Grogan and Wainwright, 1996; Tiggemann and Pennington, 1990). Although evidence of this in non-U.S.-European settings is lacking, the age ranges were based on the existing information in the literature because it offers some parameters. Moreover, including participants within these age groups allowed for comparison with the baseline study. Massara's study included women and men of three age groups (18-25 years of age, 26-40 years of age, and over 41 years of age). Since it is not possible to interview the same participants from that study it was ideal to include participants that were the same age as those in the baseline study. The three generations also added value to the research because since Massara's research in the late 1970s three generations have passed.

Additional criteria for participant eligibility were: for target women to have living mothers and daughters (over 15 years of age), identify ethnically as Puerto Rican, and reside in P.R. at the time of the study. The target recruits of the intermediary generation were middle-class women to control for socioeconomic status (SES) as a confounding variable. Middle SES is defined as having a yearly income between \$30,000-\$80,000 (Toro, 2009), having more than 12 years of education and having a skilled occupation (Toro –Morn, 1995). All consent forms, questionnaires, interview guides, and recruitment materials were translated and back-translated, and were approved by the Institutional Review Board of Arizona State University.

A total of 53 women (n=17 senior generation, n=18 middle generation, and n=18 younger generation) were interviewed using the structured surveys, and the ethnographic interviews. This resulted in 16 complete triads, and an additional quintet (1 grandmother, 2 daughters, and 2 granddaughters of the same age). The quintet was included in the final data analyses because it conforms to the major purpose of the study. The participants and individuals mentioned in the narratives (even if they were not participants) were given pseudonyms for the purpose of the transcription and data analyses. Each of the family triads and the quintet were assigned a unique letter for their pseudonyms. For example: Adela (grandmother), Aileen (mother), and Aura (granddaughter). This is helpful to track the family relationships.

Various strategies were used to recruit participants. One of those was posting information about the study and recruitment on the social network site of Facebook; this initiated the first recruits who then suggested other participants. Three triads were recruited using this method, and these seed respondents offered contact information for other potential participants. This sampling strategy is a combination of snowball and respondent driven sampling (Giles and Hancock, 2010). Although women with mother and daughters are not a particular hidden population, the age range parameters and additional participant criteria made it a difficult population to recruit via probability sampling (Heckathorn, 2011). Therefore it was treated as a somewhat hidden population.

Potential participants were also recruited at the University of Puerto Rico
Mayaguez Campus with the help of field informants. Potential recruits were given flyers
for the study and their contact information was obtained, when possible. This led to four
additional triads for the sample. Also it was particularly helpful because the women in

college were likely to have mothers that fell in the middle generation age range. The respondent driven sampling strategy was used to contact additional potential participants offered by other participants. The sampling strategy used makes it highly likely that most participants know each other, and though social network information was not collected, it was possible to identify which participants knew each other. From the total of 53 women interviewed there were two separate groups of women that knew each other. One network consisted of nine women that knew each other, and another network of 14 women that knew each other. No particular pattern in the results emerged, and therefore there are no indications that these networks influenced the research results. The remaining 30 women were not recruited through other study participants, and apparently did not know the other participants. The other participants were obtained through personal contact through various field informants.

The 53 females interviewed identified at least three men that were close to them (e.g. spouses, boyfriends, fathers, brothers, friends, or neighbors). The man identified as the closest by the female participant was recruited, and if that person refused the next closest male was contacted to participate. This generated a total sample of 53 male participants. The men were only given the structured survey protocol. In a second session of fieldwork an additional 17 women (n=5 senior, n=6 middle age, n=6 young) and 16 men (n=8 senior, n=4 middle age, n=4 young) were given the structured surveys protocol. This made for a total sample size of N=139 (n=70 women, n=69 men) for the surveys, and n=53 women for the ethnographic interviews. The study was not limited geographically because the parameters of the sampling frame for capturing intergenerational variation would have been extremely difficult to conduct in just a few

towns. Also if it had been geographically limited it would not be as representative of the reality of Puerto Rican families that usually live spread out through the archipelago's 78 municipalities. The participants resided in 25 different towns throughout Puerto Rico. The majority of the subjects lived in towns on the west (n=67) and the north (n=51) of the main island. The rest were scattered between the northwest (n=7), southwest (n=5), south (n=7) and east (n=2) part of the main island of the Puerto Rican archipelago (see map in Figure 3.2).

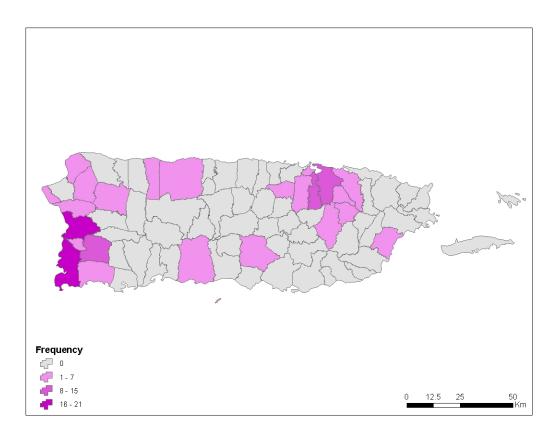


Figure 3.2 Participants by municipality of residence.

Ethnography of body size norms. Participant observation was used to generate adequate rapport, develop experiential knowledge and to contextualize data from the

interviews (Johnson et al., 2006; Spradley, 1980). This method was used with field informants, as well as with some of the participants' families. It mainly took place in the individual homes before or after the interviews, and also in social gatherings where at least one of the three women and other family members were present. Comments and social interactions that alluded to body size and weight were recorded in field notes.

The interviews focused on body size experiences, and a major focus was placed on life stages. Women were asked about body size at different life stages, such as childhood, high school, and marriage among others. They were asked about ideas related to the ideal body throughout their life. This strategy was used to track body ideals through time. Once all 53 interviews were collected the dates and body ideals were grouped by decades. This helped to create a general ideal bodies timeline. Additionally women built a similar body timeline for themselves by talking about their body at different times and stages in their lives. This approach addressed change in body ideals throughout an individual's lifetime, and as aggregate data it gives insight to the shift in body ideals in Puerto Rico from the 1950s to 2011.

The final semi-structured interview guide consisted of approximately 63 questions that included personal weight history and different ages, family eating patterns, and experience with weight teasing and discrimination. The quantitative surveys were administered to the participants on the same day of the semi-structured interview. In most cases the surveys were given to each participant before the interview, in situations in which various participants were present. This order varied in order to effectively interview all the subjects. All the questionnaires and instruments used in this study can be found in Appendix A.

Questionnaires and scales. All the scales and questionnaires were translated to Spanish, back translated to English, and pre-tested (piloted) before creating the final survey protocol. The surveys were piloted using the cognitive interview method with four females and one male. The cognitive interview technique originates from social and cognitive psychology, and its purpose it to allow researchers to "explore the processes by which respondents answer survey questions, and the factors which influence the answers they provide" (Collins, 2003, p. 231). Pre-testing questionnaires, and their respective questions, enables researchers to examine "whether respondents understand the question concept or task, if they do so in a consistent way, and in a way the researcher intended" (Collins, 2003, p. 231). This method consists of asking respondents to talk through their thought process of answering each question of a survey. The researcher takes profuse notes on each item and then goes back to adjust the questions to reflect the operationalized concept. The female informants ranged from 21-60 years of age, and the male was 27 years old. These informants were not included in the formal data collection phases of the study. Results from the process of the cognitive interviews made it possible to determine if the scales were culturally appropriate, in some cases tailor them, and in other cases decide which surveys to include in the research protocol.

The biculturality scale developed by Cortés et al. (1994) to assess degree of acculturation to U.S. culture was used. The Contour Drawing Rating Scale created by Thompson and Gray (1995) was used to measure body discrepancy, the difference between the current body figure and the ideal body figure. This figure scale has been used successfully with adolescent and young adults (Ahern et al., 2008; Furnham et al., 2002), and in cross-cultural studies (Swami et al., 2010).



Figure 3.3 Conducting interview with a grandmother, and close male relative completing the survey protocol. (taken on April 24, 2011).



Figure 3.4 Participant answering the cultural consensus survey (taken on July 14, 2011).

Two different Anti-Fat Attitudes surveys were pre-tested. The Anti-Fat Attitudes questionnaires (Crandall, 1994) and the Anti-Fat Attitudes Scale (Morrison and O'Connor, 1999) assess the degree of fat-positive/fat-negative ideas individuals hold. The AFA (Crandall, 1994) confused the study informants, due to the 9-point agreement scale, and it was considered long because it had 13 items. It also included questions about feelings toward other fat individuals, and questions about the respondent's own fat. This can be confusing in measuring anti-fat attitudes, since a person can be have strong ideas about not desiring to be fat themselves, but they may not be have anti-fat ideas for other people's weight (Morrison and O'Connor, 1999). The AFAS (Morrison and O'Connor, 1999) was determined to be easier to answer, based on having a 5-point agreement scale, and having only five questions total. This scale does not include anti-fat measure toward the self, just for towards others.

Media exposure was assessed using an inventory of the visual and print media consumed and frequency of consumption (Tiggemann and Pickering, 1996). The participants were asked about types of print and visual media they consume (Becker et al., 2002), and frequency of media consumption. The magazines and television shows were categorized by genre. The details of the media inventory are described in Chapter 6 of this dissertation.

Another survey in the study protocol was a cultural consensus questionnaire. This questionnaire was constructed specifically for this study. The details on the cultural consensus survey creation and administration are further described in Chapter 4 of this dissertation. Socio-demographic covariates such as years of education, occupation, age, country of birth, place of residence, sex, self-reported skin color (Gravlee et al., 2005) and income were collected for all participants. Additional to these co-variates other variables were collected, including: ever lived in U.S., if so years lived in U.S., selfidentified ethnicity, occupation, fathers occupation, mother occupation, how many children and their sexes, self-identified SES, self-rated health and self-reported height and weight. It is acknowledged that self-reported height and weight tend to be biased towards over-reporting height and under-reporting weight (Engstrom et al., 2010; Ezzati et al., 2006; Gillum and Sempos, 2005; Gorber et al., 2007; Rowland, 1990). Though this bias exists, it is still an accepted measure to approximate BMI and classify individuals regarding BMI categories. It is one of the most inexpensive and non-invasive measurement to assess BMI. This investigation was strongly centered on self-perceptions and individual experiences; therefore I recognize the limitation using the calculated BMI

based on self-reported measurements and use it to generally describe the study sample. Specific information on data analyses is presented in the relevant chapters.

Questionnaires pre-tested and not included in final protocol. Various questionnaires were intended to be included in the research protocol, but after the pretesting they were determined to best left out of the final interview protocol. The Body Satisfaction Questionnaire (BSQ) (Cooper et al., 1987) was pre-tested for purposes of further examining body satisfaction. This questionnaire, which has been translated, tested and validated in Mexico (Alvarez-Rayón et al., 2007) and with Latinas in the U.S. (Akan and Grilo, 1995), made the survey protocol much longer than what was reasonable to ask a voluntary participant to fill out. Therefore it was not included in the final protocol for data collection. The AFA (Crandall, 1994) questionnaire explained above was not included due to length and confusion with the broad agreement scale.

The Cuestionario de Influencias sobre el Modelo Estético Corporal

(Questionnaire on Influences on the Aesthetic Body Model) used to measure
internalization of body ideals was piloted (CIMEC; Toro et al., 1994). The intention was
to use this questionnaire because it is in Spanish, and it has been successfully used in
diverse Latin American contexts (Alvarez Rayón et al., 2007; Rodríguez and Cruz, 2008;
Vazquez et al., 2000). This questionnaire has 40 items, which made it very time
consuming for participants to answer. It was piloted and the informants complained that it
was too long, and not quick to answer. It was therefore not included in the final survey
protocol used to collect data. The question about thin-body ideal internalization is still an
important factor in the constructions of body ideals. Seven questions from the CIMEC
were reworded and included in a 10-question section in the final survey protocol. To

explore and assess the presence of eating disorders among the sample the EAT-26 questionnaire was going to be employed (Garner et al., 1982). This questionnaire has been used widely in different cultural contexts, and it has been translated to Spanish and used in Puerto Rico (Reyes et al., 2010). This questionnaire was piloted, and informants explained that it added too much paper work to the survey protocol, and it was extremely personal. Based on this information it was not included in the final survey protocol used to collect data. The surveys and interview guides that were included in the final research protocol are discussed in more detail in chapters 4, 5, and 6, along with the results obtained from the study.

Research Hypotheses

The review above offers the background and foundation for the research question and hypotheses. The objective of this dissertation is to examine culture change, transmission, and variation of body ideals in Puerto Rico. An intergenerational approach is used to study the mechanisms and processes that influence change in body ideals. This approach sheds light on the changes over time throughout people's life course, and from one generation to the next. Puerto Ricans are a social group that has been reported to value plump bodies, particularly regarding specific life stages (Massara, 1989). This research addresses how concepts of body size have changed from the 1970s to the present in Puerto Rico.

The specific research hypotheses guiding the study are addressed in Chapter five and six of this dissertation. In Chapter five the following hypotheses are examined:

Hypothesis (1): If body size models are constructed by life stage expectations and roles, then it is expected that cultural and/or biological life stages (e.g. adolescence, pregnancy)

to correspond to different body size norms.

Hypothesis (2): If women of all ages idealize thinness and the explanations vary with age, then it is expected that young women to draw on beauty and sexual desirability to explain the thin body ideal and senior women to draw on health to explain the thin body ideal. Hypothesis (3): If intergenerational differences exist in body norms, then it is expected that senior women to be less concerned with their body size and more accepting of overweight bodies than younger women.

Chapter six addresses the other three hypotheses of this dissertation, which include: Hypothesis (4): If acculturation level influences the social context of body size norms, then people that are highly acculturated within the U.S. culture are expected to have more thin positive and more anti-fat body size ideals.

Hypothesis (5): If media exposure influences the creation of body size norms, then individuals who are exposed to more print and visual media are expected to have more thin positive and more fat negative body norms than those exposed to less media. Hypothesis (6): If type of media influences body norms differently, then individuals who watch more drama programs, movies and *telenovelas* (Latin soap operas) are expected to have higher body discrepancy (difference between ideal body figure and current body figure) and anti-fat scores than those exposed less to these types of media.

Chapter 4: Deciphering Cultural Body Size Model(s)

The sociocultural constructions of the female body as an object have naturalized the definition and evaluation of women in terms of appearance (McKinley, 1999, 2006). Female bodies are conceptualized as objects to be watched (Crawford et al., 2009; Germov and Williams, 1999). This valuation based on appearance has centered mainly on body shape and weight (Braziel and LeBesco, 2001; Rodin et al., 1985; Wiseman et al., 1992). Body image studies have examined a wide array of topics, from deconstructing and understanding anorexia (Bordo, 2003) to the size acceptance movement and recent frameworks challenging the thin-body ideal (Honeycutt, 1999; LeBesco, 2004; McKinley, 2004). Culture shapes body norms, with different cultural ideals on body weight and shape ranging from preference for fat or plump bodies to preference for a thin body (see Gremillion, 2005 and Brewis, 2011 for complete reviews). Shared beliefs about acceptable bodies, and behaviors related to achieving these socially sanctioned ideals are the basis for cultural models about the body.

Most studies on body image have focused either solely on Caucasian females or on the comparison of Caucasian and other ethnic minority women from industrialized countries (Flynn and Fitzgibbon, 1996; Franko and Herrera, 1997; Kronenfeld et al., 2010; Lopez et al., 1995). There are however a series of broad ethnographic studies that have examined, either directly or indirectly, body image in different societies spanning the globe. The sub-Saharan Azawagh people idealize fat female bodies (Popenoe, 2004), the Fijians value big bodies (Becker, 1995), and female body ideals are relatively fat neutral in Belize's San Andres society (Anderson-Fye, 2004). Some of the Caribbean body ideals that have been reported suggest a positive valuation of fat. This is the case of

populations in Jamaica (Sobo, 1993), the Dominican Republic (Muennig and Bench, 2009), among Afro-Caribbean youth in Trinidad (Simeon et al., 2003), and in Puerto Rico (Massara, 1989). Changes in body ideals have occurred in many of the societies that have been historically reported to value fat, or that do not tend to stigmatize it. This has been documented in Fiji (Becker et al., 2007; Becker, 2004), and in Samoa (Brewis et al. 1998). An emergence of fat stigma, though not necessarily indicating preference for thinness, has been suggested to be spreading throughout the globe (Brewis et al., 2011).

The thin-body ideal is widely accepted as the cultural standard in industrialized countries (Brown and Slaughter, 2011; Pacquette and Raine, 2004; Thompson and Stice, 2001). The pressure to achieve and maintain a thin body is a common concern in societies that idealize thin bodies (Caqueo-Urizar et al., 2011; Cash and Roy, 1999; Germov and Williams, 1999; Nichter, 2000). This strong focus on the thin-body has been accompanied with anti-fat sentiments and stigmatization of bodies with excess weight (Crandall, 1994; Farrell, 2011; Puhl and Heuer, 2009; Schwartz and Brownell, 2004). Incorporating this ideal in other cultural contexts has the potential of also aiding the spread of disorders that characterize body image in industrialized societies, such as body image dissatisfaction, eating disorders, low self-esteem and depression.

The fear of fat, though founded on some health concerns, is mostly centered in attractiveness and moral ideals (Dalley and Buunk, 2009; Stearns, 2002; Williamson, 1998). Being overweight and obese has been identified as a risk factor for negative health outcomes, such as heart disease, type 2 diabetes and high blood pressure (Kim and Popkin, 2006; Must et al., 1999; Wyatt et al., 2006). Some scholars argue that these negative consequences of being overweight have to be re-evaluated and that a wider

healthy weight spectrum needs to be investigated (Campos et al., 2006; Muennig, 2008; Gaesser, 2003). Muennig et al. (2008) argue that stigmatization of fat and the stress this produces must be analyzed as possible causative factors for negative health consequences. The fixation on achieving a thin body is associated with unhealthy and at times risky practices of weight loss (Grigg et al., 1996; Putterman and Linden, 2004; Striegel-Moore, 1997). Stigmatization of overweight and obesity can lead to eating disorders, depression and other negative psychological problems (Luppino et al., 2010; Scott et al., 2008). Body size ideals play a role in the healthy-weight schema, because they set the cultural standard to aspire to, regardless of biomedical weight categories (Massara, 1980).

Puerto Ricans have been reported and cited as a population that perceives fat female bodies as a positive attribute, both on the island and in the diaspora (Massara, 1989, p. 130, p. 156). A previous study on body size norms in Puerto Rico can be used to examine change over time, which makes this a powerful study. Emily Massara conducted the previous research, which serves as a baseline for this study, in the late 1970s with Puerto Ricans in Philadelphia and in Puerto Rico. She conducted participant observation and semi-structured interviews with women she determined were "heavy" (Massara, 1989). She also used acculturation proxies such as language and length of stay for those living in the mainland U.S., and figure rating scales.

Thirty years after Massara conducted her research; body size remains a salient topic for Puerto Ricans. Weight management, weight loss, diets, exercises and the importance of achieving a thin body are some of the topics related to body size that are constantly portrayed in local media (Rodriguez-Andino, 2010; Rosario-Nieves, 2009;

Walters Pacheco et al., 2007). In Puerto Rico, as in other cultures, the importance of socially sanctioned body size has consequences for emotional health. It has been reported in Puerto Rico that overweight individuals who feel uncomfortable in their own bodies are burdened by this constant discontent, which can lead to depression (Maysonet Guzman and Toro Alfonso, 2007). A cross-cultural study that examined how different ethnic groups (including Puerto Ricans) conceptualized and stigmatized fat suggests that Puerto Ricans share similar fat stigma ideas as people in the U.S. (Brewis et al., 2011).

Understanding change in body ideals, particularly the shift towards the thin-body/anti-fat ideal can help to uncover the cause of the spread of eating disorders and other practices related to body dissatisfaction that currently occur in Puerto Rico (Calaf et al., 2005; Reyes et al., 2010). I based some of the questions and surveys on Massara's methodology to assess change over time. The objective of my research was to broadly assess change in cultural body norms based on the conclusions Massara put forth of positive valuation of weight gain after marriage and of general fat acceptance among Puerto Ricans.

To assess culture change, an intergenerational approach was employed. Intergenerational triads of women composed of grandmothers, mothers, and granddaughters were the target sample of this study. The mothers were between 40 and 51 years of age, this means that they would have been between 7 and 18 years of age when Massara conducted her study in 1978-1979. This group was targeted based on reports that girls between ages of seven and ten years of age already understand and incorporate body image ideas. The idea is that if these women were able to interpret and internalize body images in the late 1970s then culture change can be measured based on

assuming they shared some of the ideas Massara found in her study, such as positive valuation of plumpness. This was complemented with the grandmothers' participation, because they were young women in the 1970s and can recall some of the body ideals of those decades, and discuss current ideals.

Cultural consensus analysis was used to measure and compare agreement by age groups. This theory was developed in the mid-1980s to address the challenge of describing shared patterns of thought and behavior for a cultural group, while also identifying the diversity among them in beliefs and behaviors (Hruschka and Maupin, 2012). Cultural ideas can be extracted by way of asking a sample of people the same question, and examining the responses for similarities and variation based on variables such as age, gender, residency, etc. (Romney et al., 1986; Weller, 2007).

The body is a very visible and concrete subject, yet it is one that can be riddled with taboos. Studying the body, and more importantly the fat body, necessitates the use of methods that can assess cultural beliefs in a non-intimidating. In this case cultural consensus theory and methodology serve this purpose, especially in this setting where the questionnaire was mostly self-administered. The qualitative interview data were used to contextualize the quantitative cultural consensus data, and provide the holistic view of the Puerto Rican body size model(s).

Methods

Participants. The sample consisted of 139 individuals; 70 women and 69 men. The sample size for cultural consensus depends on the level of agreement and the number of items. The subgroups of this study ranged from 87 to 97 participants, which is well within the suggested sample sizes based on accuracy and competency scores (see table 6

in Romney et al., 1986). Socio-demographic information for the sample by age groups is presented in Table 4.1. All participants identified ethnically as Puerto Rican, at the time of the study were residing on the island, and the majority (77%) identified as being of middle socioeconomic status. The young women and men reported the annual household income mainly based on their parents income.

Table 4.1
Socio-Demographic Description of Study Sample

	Senior Women (n=23)	Middle Age Women (n=22)	Young Women (n=25)	Senior Men (n=22)	Middle Age Men (n=20)	Young Men (n=27)
Approximate Age	69.9	46 (3.7)	20.6 (4.4)	69.8 (11.2)	45.4 (3.6) ^a	23.3 (4.9)
(years)	(8.5)		` ′	· · · · ·	. ,	
Age range	54 - 86	40 - 51	16 - 36	53 - 90	39 - 51	17 - 36
Occupation Status						
Work Full-time	8.7%	59.1%	4%	31.8%	85%	29.6%
Work Part-Time	8.7%	18.2%	16%	13.6%	5%	18.5%
Unemployed	_	4.5%	4%	_		_
Student			76%			51.9%
Housewife	47.8%	18.2%				
Retired	34.8%			50%		
Number of	3	2		3	2	
children♦	3	2	_	3	2	_
Level of education						
1-6 years	17.4%		_	_		_
7-11 years	13%	9.1%	24%	4.5%		7.4%
High School	47.8%	27.3%	60%	36.4%	40%	66.7%
Bachelor Degree	17.4%	36.4%	12%	31.8%	30%	18.5%
Graduate Degree	4.3%	27.3%	4%	18.2%	30%	7.4%
Annual Household Income						
≤\$11,999	30.4%	9.1%	8%	18.2%		7.4%
\$12,000 - \$24,999	21.7%	13.6%	24%	27.3%	10%	18.5%
\$25,000 - \$49,999	17.4%	27.3%	28%	9.1%	20%	22.2%
\$50,000 - \$99,999	13%	22.7%	20%	27.3%	45%	14.8%
\geq \$100,000	13%	27.3%	20%	13.6%	25%	25.9%
BMI	$(5.9)^{a}$	25.2 (3.9)	22.9 (4.2)	26.5 (3.1)	30.4 (6.1)	25.1 (5.3)
Underweight (BMI ≤ 18.49)	_	4.5%	8%	_		7.4%
Healthy Weight (BMI 18.5–24.99)	39.1%	54.5%	68%	36.4%	20%	51.9%
Overweight (BMI 25–29.99)	26.1%	22.7%	16%	50%	35%	22.2%
Obese (BMI \geq 30)	30.4%	18.2%	8%	13.6%	45%	18.5%
Diabetic	34.8%			27.3%	15%	

a. missing 1

[◆] Mode (measure of central tendency)

Materials. A cultural consensus questionnaire was developed to examine body size models, and assess agreement between informants (Romney et al., 1986; Weller, 2007). The questionnaire was created based on popular proverbs or *refranes*, information from existing literature on body image, and participant observation data. The questionnaire consisted of 70 questions that were answered with either 'true' or 'false'. Cognitive interviews with seven field informants were performed to pre-test the questionnaire. The survey was carefully constructed to balance positive and negative items (Weller, 2007), The data were coded as follows: true = 1, false = 0. The statements were classified into six different domains. The domains, all related to body size, were: (1) life stage weight (13 statements), (2) body size health (10 statements), (3) weight loss/gain (10 statements), (4) weight in the family (8 statements), (5) preference for skinny or fat (24 statements), and (6) body size and media (5 statements).

The participants, both men and women, were administered an anti-fat attitudes scale (AFAS; Morrison and O'Connor, 1999), and a Contour Drawing Figure Scale (CDFS; Thompson and Gray, 1995). Of the total 70 women given the quantitative surveys, 53 were also interviewed using a semi-structured interview guide about their individual weight history, ideal bodies, and general body experiences.

Procedure. The participants were interviewed in either public spaces or in their homes. Most participants (116 out of 139) were interviewed or administered the questionnaires (in the case of men) in homes, either their own or that of a relative or close friend. The rest were interviewed in: workplace (5 participants), mall (4 participants), restaurant (12 participants) and at the university campus (2 participants). All the women (n=70) were given the questionnaires by the interviewer, 35 men filled out the

questionnaires in the absence of the interviewer, and 34 answered them in the presence of the interviewer.

Analysis. Cultural consensus analysis was using UCINET 6.365 (Borgatti et al., 2002). This analysis gives the estimated competence for each participant, the answer key based on the modal response for each statement, and a respondent-by-respondent agreement matrix. A binomial test was used to identify the statements that indicate a significant deviation from chance, meaning that they differ from having almost equal amount of 'true' and 'false' responses. This statistical test analyzed whether the responses represented a strong cultural belief, or if no particular cultural preference was present (Weller, 2007, p. 341-342).

Residual agreement is the amount of participant agreement that remains after the predicted agreement (calculated by multiplying two participants' competence estimates) is subtracted from the observed agreement (the average agreement across items). This measure explains the degree to which participants agree beyond the consensus (what everyone agrees upon), and makes it possible to directly test whether participants in specific groups, in this case age groups, agree more with each other than with member of the other group. When there is more agreement with-in the group then residual agreement is significantly higher than between a group residual agreement (tested by a one-way ANOVA), and this is evidence for the existence of a sub-model (Maupin et al., 2011).

To investigate agreement patterns residual agreement analysis was used (Ross, 2004). The sample was divided into age groups based on the participants' date of birth: senior (53-90 years of age), middle age (39-51 years of age), and young (15-36 years of age). A total of 6 groups were paired into 4 comparison sets and analyzed for distribution

of agreement by age and gender (see Table 4.2). To further corroborate that variation in estimated competencies is not due to chance the cutoff for each of the four CCM datasets was calculated in R statistical package using the syntax and guidelines set by Hruschka and Maupin (2012). This procedure uses the estimated competencies, sample size, number of statements in the questionnaire and number of 'yes' or 'true' answers in the answer key to calculate a standard deviation cutoff at 95% confidence interval (Hruschka and Maupin, 2012). The cutoff is then compared to the standard deviation of the estimated competencies, and if it is larger than the cutoff then variation is not due to chance.

The modal responses to the statements of each subgroup were compared to determine on which beliefs they differed. This was done to examine the domains that elicited different modal responses by subgroup, and examine factors that generate variation in cognition (Maupin et al., 2011). The statements that had different modal responses were examined for statistical significance using Fisher's exact test.

Table 4.2

Four Paired Sets for Residual Agreement Analysis

Groups compared					
Men (n=69)	\longleftrightarrow	Women (n=70)			
Seniors (n=45)	\longleftrightarrow	Middle Age (n=42)			
Middle Age (n=42)	\longleftrightarrow	Young (n=52)			
Seniors (n=45)	\longleftrightarrow	Young (n=52)			

Results

Puerto Rican cultural consensus: General CCM. I refer to the entire sample (N=139) cultural consensus model as the general CCM. The general CCM indicates a high level of agreement among all participants across all 70 statements. The largest eigenvalue was 49.2 for the first score, and the second largest factor was 5.9, and there were no negative competencies. These results indicate that a cultural consensus model exists. The average factor score or cultural competency score was .58 (lowest = .10, highest = .78). This indicates that overall all individuals, male and female, from the three different age groups shared cultural norms about body size. The results of the binomial test for the general CCM indicated that 54 of the total 70 cultural consensus statements had a statistically significant greater proportion of answers (either true or false). See Table B1 in Appendix B.

Agreement patterns by gender. The general CCM was analyzed for patterns of agreement using the residual agreement analysis to compare men and women. The result of this analysis indicates that there are no significant differences in agreement between women and men. For this reason further analysis was conducted comparing age groups and not comparing groups based on gender.

Agreement patterns by age groups. The patterns of agreement regarding body size norms are hypothesized to differ by age group based on life stage experiences and historical context, with seniors declaring less anti-fat and less thin-positive perceptions than the middle age and young age groups. CCM were conducted for: (1) all

participants¹, (2) each age group individually², and (3) each pair of age groups³. There was consensus for each permutation. Formal CCM for each age group, independent of the others, estimate that each group represents good cultural consensus model following the three to one eigenvalue ratio, and lack of negative competence scores, and having average competencies between .50 and .80 (Weller, 2007). Variation across groups is based on individual competence estimates, and differences between these competence estimates can be reflective of real variation on knowledge on a cultural domain, or they can be reflective of differences due to guessing or chance (Hruschka and Maupin, 2012). To address this issue of differences in competence versus differences due to guessing the cultural consensus models were verified calculating cutoffs for standard deviations of competence scores (Hruschka and Maupin, 2012). The threshold of the standard deviation was calculated using the R syntax available in Hrushcka and Maupin (2012). All the standard deviations of the CCMs were larger than the calculate standard deviation threshold⁴.

Senior and middle age. This CCM of seniors and middle age group resulted in 43 'true' answers (out of 70 statements in the survey). These statements were further analyzed to determine which statement and domains seniors and middle age groups'

.

¹ All participants CCM: Average competence estimate= 0.58. Eigenvalue ratio: 8.33

² Seniors CCM: Average competence estimate = 0.53. Eigenvalue ratio: 5.92 Middle Age CCM: Average competence estimate = 0.64. Eigenvalue ratio: 9.18 Young CCM: Average competence estimate = 0.58. Eigenvalue ratio: 7.56

Seniors - Middle age CCM (n=87): Average competence estimate = 0.58. Eigenvalue ratio: 8.24. Middle age – Young CCM (n=94): Average competence estimate = 0.60. Eigenvalue ratio: 8.69 Seniors – Young CCM (n=97): Average competence estimate = 0.55. Eigenvalue ratio: 7.57

⁴ CCM standard deviation compared to threshold standard deviation (comparison that establishes significant variation)

Seniors – Middle age CCM: sd = 0.15, 95% cutoff sd = 0.13 Middle age – Young CCM: sd = 0.12, 95% cutoff sd = 0.11 Seniors – Young CCM: sd = 0.15, 95% cutoff sd = 0.11

responses varied. Results of the residual agreement analysis for senior and middle age groups indicate that these two samples constitute subgroups, meaning that they agree more with their own group than across age groups⁵.

The individual senior CCM and middle age CCM answer keys were compared using a fisher's exact test. Many of the statements that were significantly different statistically had the same modal responses for both age groups. This was indicative of differences in relative frequencies in answering true or false for the statement by age group, which indicates that degree of agreement for a certain statement can vary by age group. There are certain cultural ideas that though broadly held, are held more strongly by certain age groups than others. There were only two statements for which seniors and middle age modal response differed significantly, at the p < .05 level. They differed on the belief that protein shakes are a good weight gain method, for which seniors answered 'false' and middle age answered 'true'. The other statement with opposing modal responses was the belief that male actors/hosts presented on television have the ideal body, seniors answered 'true'.

Middle age and young. The results of the residual agreement analysis indicate that the groups of middle age and young each agreed more with their own age group than with across groups⁶. These two age groups differed significantly in modal responses for three statements (see Table 4.3).

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⁵ Seniors – Middle age One-way ANOVA results: Seniors compared to Middle age, [F(1,88)=18.59, p < .001], Middle age compare to Seniors, [F(1,82)=7.15, p = .009]

⁶ Seniors – Middle age One-way ANOVA results: Middle age compared to Young [F (1,88)=6.67, p =.012], Young compared to Middle age [F (1,102)=13.743, p < .001].

Table 4.3

Fisher's Exact Test for Statements with Different Modal Responses, Middle Age and Young (n=94)

Domains	Statements	Percent answered 'True'		Answer Key		Sig.
		Middle Age (n=42)	Young (n=52)	Middle Age	Young	value (1-tailed)
Life Stage Weight	Most fat girls (5-10 years of age) are happy.	38.10%	57.70%	False	True	.046*
Body size	Television actresses and hosts have the ideal body.	71.40%	46.20%	True	False	.012*
and Media	The body of the women of the "bombón de Así" (published in Primera Hora) is the ideal body.	66.70%	40.40%	True	False	.010*

^{*}Significant at the p < .05 level

Senior and young. When senior and young age groups were compared their agreement patterns indicated that they each agreed more with their own age group than across groups⁷. The seniors and young age groups differed significantly in modal responses for three statements (see Table 4.4).

⁷ Seniors – Young One-way ANOVA results: Seniors compared to Young [F (1,88)=14.584, p<.001], Young compared to Seniors [F (1,102)=14.478, p<.001].

Table 4.4

Fisher's Exact Test for Statements with Different Modal Responses, Middle Age and Young (n=97)

Domains	Statements		Percent answered 'True'		Answer Key	
		Senior (n=45)	Young (n=52)	Senior	Young	(1- tailed)
Life Stage and	Usually when people say that a baby is "fat" it has a positive connotation.	46.7%	71.2%	False	True	.012*
Weight	I find it acceptable for girls to gain weight during puberty.	28.9%	57.7%	False	True	.004*
Media and Weight	Television actresses and hosts have the ideal body.	66.7%	46.2%	True	False	.034*

^{*}Significant at the p < .05 level

Discussion

The cultural consensus analysis for the entire sample (*N*=139) indicates that there is strong consensus on body size ideals for men and women of different ages in Puerto Rico. The results of the residual agreement analysis by paired sets indicate that each age group agreed more strongly with their own sample age group than with individuals from different age groups. Gender did not prove to be relevant variable in distribution of ideals about body size for women compared to men.

General body size model. The results of the cultural consensus analysis indicate that there are core ideas around which the Puerto Rican body size model is anchored. These ideas were greatly shared among men and women of all three age groups. Below I discuss each domain and the main statements from the survey that were of high consensus or demonstrated variation. Some variations exist regarding specific body size perceptions among age groups.

Domain 1: Life stage weight. The domain of life stage weight revealed that the fat or chubby babies are seen positively, that it is accepted that women gain weight after having babies, and that people gain weight with age. When female participants were asked if there were situations that made it acceptable or tolerable for women to gain weight most answered pregnancy and old age. This is evidenced by the response Elena, a slender 40 something mother, gave: "embarazo y ya cuando están mayores" [pregnancy and when they are older]. Beatriz, a large and lively grandmother, also explained that women gain weight "después de los 50 años. Por lo general, es rara la que rebaja, casi siempre las aumentan" [after age 50. Generally, it is rare for someone to lose weight, they almost always gain weight]. Not only were there exemplars from the grandmothers' and mothers' interviews, but also granddaughters' expressed this same idea of weight gain with age. Lymarie, a college student whose grandmother (Lisandra) is vocal about her dislike for weight management at her 70 years of age, explained that:

"Pues, yo, es que yo pienso que cuando uno ya es mayor, pues a uno ya no, o sea ya cuando uno es vie...ya mayor que sé yo, 60 y pico, es como que quieres disfrutarte la vida, no quieres hacer ejercicios y no quieres para dieta yo digo. Cuando yo tenga esa edad yo quiero ser feliz, comiendo lo que me de la gana." [Well, I think that when you are a senior, I mean when you're ol...senior I mean, 60 something, it's like you want to enjoy life, you don't want to exercise and you don't want to diet. When I get to be that age I want to be happy, eating whatever I want.]

Puerto Rican women are concerned with losing weight before their wedding, and it is generally perceived that people undergoing separation or divorce tend to gain weight during the process due to emotional stress. It is not acceptable for men to gain weight after marriage or after having children. One of the most important questions as it pertains to previously studied and reported as salient for Puerto Ricans was the acceptance of

women gaining weight after marriage. This statement garnered varied responses, and was almost evenly split between 'true' and 'false'. It did not have a clear culturally correct response either for the general CCM or for any age group. This indicates that the idea that women could and should gain weight after getting married has changed, and is not a widely held belief. Chubby babies are generally accepted but there was not a clear norm on chubby or fat children or for girls gaining weight during puberty.

Domain 2: Body size health. The responses to statements on body size health indicate that generally people believe that being overweight and obese lead to poor health (diabetes, high blood pressure, heart problems). This was related to believing that fat people develop health problems because of their overeating and that "como el pez, muere por la boca" [like a fish, they die through their mouth]. Losing a lot of weight is also related to ill health, especially when it occurs in a short period of time. Women from the three age groups expressed this belief. Katia, a 40-something mother that at the time of the study was struggling to lose weight, recalled that when she went down to a clothes size 3 peoples reaction to her weight loss what that "...que parecía que estaba enferma." ["...that I looked sick"]. Leticia, another mother in the study, described a similar experience. When asked about ever having lost a lot of weight she explained that she lost weight in a seven-month period through the Weight Watchers program. She explained that the reaction of her family and friends was that "...parecía enferma porque llegué a 115 libras y a la verdad que me salieron arrugas y me veía bien flaca y me veía mal, y todo el mundo me lo decía." [...I looked sick because I got to be 115 pounds and I got wrinkles and I looked very thin and I looked bad, and everyone would tell me"]. Some granddaughters also described similar experiences regarding how being too thin was

perceived as sickly. Aura, a tall slender granddaughter, explained that people see her and usually comment: "Estas bien flaca. ¿Qué te pasa? ¿Estas enferma?" [You are very thin. What is wrong with you? Are you sick?].

The terms overweight and obese were regarded to be specific of medical jargon and not widely used colloquially. In the interview data the terms commonly used were *gorda/o* [fat], *gordita/o* [diminutive of fat, meaning a little bit fat or used to ameliorate the harshness of calling someone *gordo/a*], and *llenita/o* [literally meaning full, it is used to refer to someone who is a little bit overweight].

A popular Puerto Rican proverb states that "barriga llena, corazón contento" [a full belly, a content heart], and it is commonly used to refer to eating when one is hungry. Even though it is a widely used proverb, the majority of the participants identified it as false. The consensus was that people should not eat whatever they want whenever they want to; regardless of the popular proverb there was no socially sanctioned free pass to consume whatever foods a person desires. Genetic predisposition toward being overweight and obese did not garner strong cultural responses. This suggests that excess body weight and obesity are seen as weight problems that are mainly personal responsibilities instead of biological consequences.

This sociocultural belief was best expressed by Nancy, as she explained how a family friend that is obese is discriminated against, and how they have tried to help him. Nancy told me her family has tried to get the friend into the gym and to adopt an exercise routine and a healthier diet, but that "...él no quiere hacer nada por él" [...he does not want to do something for himself]. She expanded on this issue of will power by explaining that her friend cheats, he "...él es obeso porque él es compulsivo en el comer.

El no come frente de ti, pero cuando llega a su casa vacía la nevera. A la hora que sea."

[...he is obese because he is a compulsive eater. He does not eat in front of you, but when he gets home he empties the refrigerator. No matter what time it is]. After detailing how they try to help the friend lose weight she ended her account by stating that "Pues, cuando nosotros lo ayudamos él bajó. Porque rapidito esas personas (obesas) bajan así (chasqueando los dedos), 40 libras. Pero eventualmente él no tiene esa fuerza de voluntad de él seguir." [Well, when we helped him he lost weight. Because people like that (obese) lose weight like that (snapping her fingers), 40 pounds. But eventually he does not have the will power to follow through].

Domain 3: Weight loss/gain. Puerto Ricans are generally well versed on general nutrition and exercise information, and had consensus on most weight management beliefs. The best way to lose weight was identified as having a balanced diet and exercising. Lack of exercise was generally accepted as contributing to weight gain. Gladys, a very lively grandmother, who explained that she still walks in the mornings for exercise, exemplified this general belief. She explained that the problem with the current obesity epidemic is that people are not exercising. It was interesting that she raised the issue of where you can actually work out, she explained that "detrás de mi casa hay un cuartel de la policía y yo hago ejercicio allí" [there is a police station behind my house, and I exercise there (meaning the area close to the police station)].

A similar idea was described by one of the mothers in the study, Carla, who expressed concern regarding lack of exercise due to sedentary indoor activities, such as video games. Her concern was centered on the issue of sedentary lifestyles leading to weight gain and ill health. She explained that "Es sedentarismo total. Y como el ejercicio

lo hace el que está jugando en la pantalla pues, como que no lo necesito" [It is total sedentarism. And since the character on the screen is the one exercising then the one playing does not need to actually do it]. This type of expression was echoed time again, especially regarding exercise for young children and seniors.

Public health and nutritional recommendations, such as not eating foods that are very high in fat and high in sugar, were correctly identified, and are also combined with more commercial weight loss methods. Weight loss pills were not recognized as a good way to lose weight, and neither were *fajas*. *Fajas* are similar to girdles, but they are of plastic or neoprene material, they are used to increase sweating and shape the flesh during physical activities.

Protein shakes, foods high in carbohydrates, cake, candy, chocolates and junk food were identified as foods that contribute to weight gain. The acknowledgement of the recommendations by health professionals for weight management reflects the popularity that weight management has achieved in Puerto Rican society. Weight loss and gain are popular topics because of the social relevance of body size, particularly achieving and maintaining a thin body.

Domain 4: Weight in the family. Linked to weight management information is the role of family in diet and exercise patterns. The statement that asked if girls learn about diet and exercise from their mothers was widely believed to be true. This was evidenced by stories of family diet plans. Monica who gave a vivid example of this in her description of family diets offered one such story:

Monica: "... es que la hacíamos en casa todas, con mis hermanas y mi mamá. ...mi mamá la preparaba, eso no durábamos ni tres días. Pero como éramos todas mujeres, hacíamos todas esas loqueras." [...we all did it in our house, my

sisters and my mom. ...my mom would prepare everything, we didn't last even three days. But since we were all women we would do all that craziness.] Isa: "¿Y tu hermano?" [And your brother?]

Monica: "No, mi hermano no. No, el no participaba de nada de eso. Todas las mujeres y no durábamos nunca más de tres días. Mami: "pero vamos a hacer tal dieta pa yo rebajar". Entonces, "ay, yo también" y hacia todo..." [No, not my brother. He did not participate in any of that. All the women and we would not last more than three days. Mami would say: "but lets do this diet to lose weight", and then I would say "ok, me too" and I would do all that.]

The participants recognize parents as the main source from which children learn food and eating habits, as well as physical activity patterns. This was evident between the mothers and daughters, especially reported by younger daughters that would diet and/or exercise with their mothers.

Parents are considered to be responsible for their children being overweight, and it is generally believed that fat children have fat parents. It was accepted that it is common for friends and family to comment on one's weight, especially if they have not seen the person in a long period of time.

Domain 5: Preference for skinny or fat. The domain of preference for skinny or fat bodies is the most revealing about the idealization of thin bodies. Respondents concurred with the statements establishing that older and younger men prefer thin women and not chubby women, and also with the statement that it is easier for a skinny woman than a fat woman to find a partner. A preference for thin curvaceous female bodies was evident from the positive responses to statements such as: 'the majority of older and young men prefer thin women' and "most men like women with curves more than skinny women". For men the thin body model is not as strictly held, though it was agreed that women pay attention to male body shape there is not a specific cultural norm regarding

men having to be slender. This was emphasized by the lack of consensus for the general CCM on the idea that it is easier for thin men than for fat men to find a partner, yet for women this statement had very clear consensus. It was also believed that it is more acceptable for a man to be overweight than for a woman. Most people responded that telling a woman or a man that they are chubby (*gordita*) was negative. The previous research focused on Puerto Rican body size reported that the term '*gordita*' had a positive connotation (Massara, 1989). "The expression, "How plump!" (*¡Qué gordita!*) is one which suggests shapeliness and health and is used in a highly complimentary manner" (Massara, 1989, p. 145). The findings of this current study evidence the change in cultural valuation of large or plump body size and of the term *gordita*.

In general calling someone fat (*gordo*) is negative, and furthermore it was identified that fat people are made fun of in public places, such as restaurants, at the beach or at the mall. Discrimination based on weight was also recognized to occur in school and in the workplace. Fat is not seen as a positive attribute, and this was emphasized by the consensus on the statement that fat people are not satisfied with their bodies, though it was not directly tied to self-esteem. The notion that fat people are jolly and in many cases self-confident generally was noticeable in the interviews, as well as the importance of being happy with who you are. It is culturally agreed or accepted that it is more important to be happy than to be skinny. It is accepted that you can change your weight and shape, but simultaneously it is culturally appropriate to participate in the discourse of being content with your personality regardless of your looks.

This discourse of acceptance and contentment is derived from the harsh reality that managing and obtaining a thin body is difficult and requires many resources.

Lisandra, a sassy 70-year-old grandmother, made it all clear when she explained that it should not be acceptable to gain weight, but that it is inevitable. This resignation of the inevitable extra pounds did not equal being happy with, or minimally not being bothered by, the extra pounds. Lisandra was one of the most outspoken grandmothers I interviewed, and she made it clear from the beginning of the interview that she would not step on a scale or share her weight, even if this meant that my results would be incomplete. This illustrates how the discourse about accepting yourself with the excess weight does not mean that individuals were actually internalizing it. What was expressed as acceptance was really signifying tolerance. Acceptance implies a level of internalization and of being at ease, when tolerance is more appropriate because it expresses the relegation and inescapability of your own body. She explained that gaining weight was painful because she could not find nice things to wear because of her size but that in the end it just does not matter enough to actually do something about it:

"Porque ahora yo te estoy hablando de esta época mía, pero en su momento uno no las pasa muy bien. En el sentido de pues, volvemos a lo mismo de la ropa, de esto, de lo otro y ay yo quisiera ponerme esto y no me lo puedo poner, tu sabes. Pero ya a estas alturas no. Ya a estas alturas, tu olvídate de eso." [Now I am talking to you about my generation, but during those times you don't have it easy. In the sense that, back to the clothes issue, I would like to wear this but I can't put it on. But at this point in my life no. At this point you forget about those things].

Lisandra also explained that at her age of 70 she was not willing to suffer through a diet, "...70 años, que me puede quedar, para yo ponerme a dieta a sufrir, porque uno sufre...ay no" [...70 years, I can stay, for me to go on a diet to suffer, because you suffer...no]. This portrays the resignation of ones body as it is. After struggling with maintaining a certain weight and desiring to be thin many women reported giving up the struggle but not necesaily being happy with the outcome, though many explained that it is

important to be happy with yourself as you are, which con la boca es un mamey [it is easier said than done]. Nancy, a lively, slightly overweight mother, explained that when she was young it would lower her self-esteem and make her feel bad about herself when people commented things like: "Ah mira estás gordita" [You are chubby]. She said she would try to fix herself up, "... cambiar de look, que aunque no pueda bajar las libritas pero trato de que sé yo, hacerse uno las uñas, maquillarse para verse mejor, para subirse el auto-estima de uno." [...change her look, even if you can't lose the pounds but you try to get your nails done, put makeup on to look better, to lift your self-esteem]. She struggled with weight loss for many years and explained that "lamentablemente encuentro que bajar de peso para mi no es fácil, no ha sido fácil, me quedo ahí. Ahora mismo estoy caminando, me siento bien, pero sinceramente no es fácil." [Unfortunately, I find that losing weight for me is not easy, it hasn't been easy, I stay there. Right now I'm walking, I feel good, but honestly it is not easy]. The examples of Lisandra and Nancy illustrate the negative feeling of not achieving their desired and socially accepted weight, but also their tolerance of this seemingly unavoidable reality.

Related to this topic of social pressure the results of the general CCM indicate strong consensus on the existence of social pressure to maintain a thin body size in Puerto Rico. Though people concur about pressure to be thin, they mostly answered that being thin is not one of the most important things for Puerto Ricans. This seems contradictory, but the general idea is that being thin is a positive thing, but that it is not the most pressing issue Puerto Ricans have. Some participants even responded vocally that that having a job, managing to survive, and being healthy, were some of the most important things prioritized over concerns about how you look.

Domain 6: Body size and media. Media (televised, movies, printed press, ads, and the internet) are widely believed to influence social beauty standards (Groesz et al., 2002; Harper and Tiggemann, 2008). Most people held this to be true especially for female actresses and female television personalities, but not for male actors. This is also linked to women desiring to have centerfold model bodies. It was widely accepted that women desire to have the bodies of centerfold models (specifically *Bombón de Así* models). This idealization of the thin and curvaceous body was highlighted by the almost unanimous norm that it is important that women have curves and not just be skinny.

The general cultural body size model indicates a preference for thin bodies and a negative valuation of fat. Further analyses of anti-fat attitudes are presented in Chapter 6. This change in body ideals has the potential of generating greater stigmatization of fat and therefore creating more social pressure for overweight individuals in Puerto Rican society. Fat stigmatization and preference for thin bodies has been associated with low self-esteem, depression, eating disorders, and social stigma of overweight individuals. These possible repercussions of the adoption of the anti-fat/pro-thin ideal require further research.

Intergenerational agreement patterns. The patterns of agreement examined by comparing age groups demonstrated that two or three statements anchored differences between age groups. In this case study of Puerto Rican body size beliefs the entire sample demonstrated high level of consensus, yet the degree to which each age group agreed on statements varied. This explains how the agreement pattern did not have many statements for which groups differed in modal responses. An important aspect of cultural consensus is that though quantifying agreement on cultural beliefs allows us to better understand

general cultural perceptions, the ethnographic narratives contextualizes these numbers and what they represent.

In the case of seniors compared to the middle age group the degree of consensus on the domain of life stage weight and the domain of preference for skinny or fat was different for each group. The statement of the body size and media domain that garnered different responses from seniors and middle age sample was: 'Television actors and hosts have the ideal body'. The middle age group response to male body ideals in the media can also represent their critique about media and body ideals in general. Nancy stated that "Eso es lo que pues, uno se deja llevar por los anuncios. Por tanta...ponen esta única modelito que tu te crees que te vas a ver así" [That is it, you are led on by the advertisements. Because of a lot of...they put this unique little (skinny) model that you think that you are going to look like that]. Leticia, a mother and enthusiast of weight management programs, also expressed this perception of mass media in general presenting thin bodies as ideal. Leticia stated that "Yo no sé si es que ahora tienen más cosas por televisión. Tienen más revistas que las que había antes, y todo. Y ahora te dicen que lo ideal es estar flaco..." [I don't know if it is that now they have more things because of television. They have more magazines than there were before, and everything. And now they tell you that the ideal is to be thin...]. The rejection of the middle age group of thinness as the singular ideal is contrasted by the interpretation of the seniors as to television male actors having a unique thin body or that there are multiple ideals which are represented on TV. Further research on the actual content of television shows that are frequently watched and/or highly rated regarding actors/actresses presented is needed to understand why they may or may not be culturally ideal bodies.

The other statement that seniors and middle age individuals differed on was the consumption of protein shakes as a good method for gaining weight. Seniors disagreed with this statement, and this is most likely due to the lack of experience with protein products for weight gain for this age group. Protein products, such as shakes and powders, are associated with bulking up to develop muscles, especially for athletic training or for men who work out to obtain larger muscles. Sol, a slender mother of two boys and one girl, had experience with protein shakes because her eldest son uses them for training, "El come como un troglodita, te corre seis millas, hace pesas, hace videos. O sea hace ejercicios "heavy", se compra los potes aquí en GNC de las batidas." [He eats like a troglodyte, he runs six miles, lifts weights, works out to videos. In other words he exercises a lot, he buys the jar for the shakes here at GNC]. This situation seemed removed from the majority of seniors lives' and that would account for the different perceptions by age group.

The middle age and young group also demonstrated variation in degree of agreement, for certain statements, though the modal responses were the same. In those cases, which occurred for three statements, the middle age group has higher agreement within group than young people. This pattern regarding consensus on those beliefs explains why the young and middle age sample though showing little variation in terms of modal responses are actually subgroups regarding agreement. There were three statements that had significantly different modal responses for each age group. The statement "Most fat girls (5-10 years of age) are happy" belonging to the domain of life stage weight was answered mostly as 'false' by middle age individuals and 'true' by young people. Some of the participants in the young sample expressed that girls at that

age are happy because they are not aware of the bias against fatness. However, there were various anecdotes by young female participants about bullying kids that were overweight in elementary school (see Chapter 5). This statement did not demonstrate strong consensus by the young participants, with only 57% answering 'true'. The middle age groups' response to this statement implies that middle age people recognize the lower self-esteem and health issues surrounding fat bodies and that they affect children, particularly girls, at those early ages. Patricia, a mother, expressed this in her response to stages in which it is acceptable for children to be fat:

"Sí, yo entiendo que a veces tu ves niños que tienen 2 años, o 4 y están demasiado sobrepeso, y eso los afecta. Afecta la salud. Yo pienso que si desde chiquito te pones gordo vas a seguir engordando y después mientras más adulto, más dificil para rebajar. Sufre consecuencias de salud." [Yes, I understand that sometimes you see a 2 or 4 years old kid and they are too overweight, that affects them. I think that if since you are little you become fat you will continue to gain weight and then the more adult you are the harder it is lose weight. You suffer health consequences.]

This concern about dragging childhood overweight into adulthood frames middle age, mothers and fathers mostly, individuals' disagreement with fat girls being happy.

The two other statements with significant differences between young and middle age participants belonged to the domain of body size and media. The statement on television actresses/hosts having the ideal body was rejected by young individuals, but held as true by the middle age sample. This statement was also significantly different between young participants and seniors, with seniors agreeing with the statement, just like the middle age group compared to the young. This is interesting, because it subverts the premise of media mainly influencing young people more so than senior subjects. This perplexing inversion of media also occurs with the statement that expresses that the local

centerfold models (from *El Bombón de Así*) represent the ideal bodies. Young people rejected this belief, and middle age individuals agreed with it.

The "Bombón de Así" is a centerfold published in the second most popular newspaper in Puerto Rico (see Figure 4.1). It shows a young Puerto Rican woman in a bikini posing in what can be categorized as a provocative manner. This centerfold can be found in auto shops across the island, adorning the walls and even offices of many male dominated work places. One of my field informants, Crisitina who was 24 at the time, explained that her father would put the centerfold on the refrigerator door and say that he wanted his wife to look like that. Based on experiences in the field I was not as surprised to find that most middle age participants agreed with the centerfold body being an ideal body, but it does bring attention to the body size norm that is dominated by a curvaceous and relative slender body.



Figure 4.1 Bombón de Así exemplars (http://www.primerahora.com/indexbombon/).

Younger people communicate a certain level of media literacy regarding body norms, and overall being more critical of media. This does not translate into being critical

of body shape in general, but rather that they are more critical of mass media in general. This can also be explained by the notion of individuality and denying the influence media has over individual perceptions. This finding is similar to the findings of Winham and Hampl (2008) in their study of TV influence over behavior and ideals of teenagers in the U.S. In that study teenagers responded that TV characters did not influence the way they felt about their own weight, but most answered that they thought other people were influenced by television (Winham and Hampl, 2008). Nichter (2000) reported similar findings in her study on teenage body image, with girls explaining that they are unique and not influenced by media around them. This marked rejection of media influence seems to be an explicit manner of asserting individuality and critical thinking, and is apparently marked only in young people in this research. To say that television actresses do not have ideal bodies and that female pinup models' are not ideal bodies does not translate directly into young people holding fat positive or big-bodied females as ideal. Niurka, Nancy's slender daughter, synthesized this, in her statement about media and messages about body ideals and self-acceptance.

"Pues, en esta generación pienso que el medio, los medios, la televisión, las revistas, deberían concentrarse en como mantener una figura saludable en vez de decirnos como atraer al sexo opuesto o al mismo sexo dependiendo de la orientación sexual. Y pienso que hay que enseñárselo desde chiquita a las nenas. Que tu te ves bien como estas. Que si comes mucho, que si se te ve algo por aquí o por acá, aun así a las flaquitas también, que lo que importa de ti es lo que tu hagas de ti misma. Lo que tu vayas a hacer en un futuro cercano. Pienso que si cuando crezcas quieres ser más llenita o más gordita, que depende de ti. Que no dependa de lo que la sociedad te diga y que las personas te digan. Que te sientas cómoda contigo misma. Yo pienso que el modelaje, como recientemente, no sé si has escuchado, de esta modelo que murió anoréxica y que cambiaron todas las reglas del modelaje por completo, por causa de ella. Yo pienso de que no debe ser solo por ella, sino por todas esas muchachas que piensan que ser flaca es lo mejor del mundo. Y siendo yo flaca, pero verdaderamente no, yo he visto mujeres flacas con tacones así y maquillaje. El concepto de la belleza no debe de ser así,

punto. Debería ser tu sintiéndote bien contigo misma. Que siendo tu atraigas al hombre, siendo tu belleza natural, y tu personalidad, lo que tu hagas de ti misma en el futuro. Eso de ser gordita o ser delgada, que no te dañe la existencia. Eso." [Well, in this generation I think that the media, television, magazines, should concentrate on how to maintain a healthy figure instead of telling us how to attract the opposite sex or the same sex depending on sexual orientation. And I think that it has to be taught from a young age to girls. That you look good as you are. That if you eat too much, if something is showing here or there, even for skinny girls, that what matters about you is what you make of yourself. What you do in the near future. I think that if when you grow up you want to be chubbier or fatter, that depends only on you. That you feel comfortable with yourself. I think that models, like recently, I don't know if you've heard, of the model that died being anorexic and that they changed all the rules of runway modeling completely. because of her. I think that not just because of her, but because of all those girls that think that being thin is best thing in the world. I am thin, but not really, I have seen thin women on high heels and with makeup. The concept of beauty should not be like that, period. It should be feeling good about yourself. That by being yourself you attract a man, with your natural beauty and your personality, what you make of yourself in the future. That thing about being chubby or thin, it shouldn't ruin your existence.]

Seniors and young age groups had significantly opposing modal responses for three of the 70 of the questionnaire statements. Two of these statements belong to the domain of life stage weight. One such statement was the positive connotation of saying that a baby is fat, for which seniors mainly responses 'false' and young people 'true'. This result is shocking, since the baseline of valuing fat is expected among the senior age group, it diverges from the expectation that senior individuals would value fat during infancy, especially based on Massara's baseline study (Massara, 1989, p. 145, p. 185, p. 214). The seniors' disagreement can reflect changing beliefs about fat during childhood, especially in light of the strong public health campaign against childhood obesity and overweight. This change in perceptions was expressed by Ester, Edaliz's grandmother, who explained that:

"Fíjate, casi siempre cuando son más pequeños, y sobretodo en la cultura puertorriqueña que tenemos la tendencia de que los bebes hermosos son los son

gorditos y no necesariamente son los más saludables." [Almost always, when they are younger, overall in Puerto Rican culture we have the tendency to see beautiful babies as chubby babies, but they are not necessarily the healthiest].

This change in beliefs about fat children is evident for seniors, but what surprises is the acceptance of the positive view of babies being fat or chubby by young people. In some cases the young individuals' expressed agreement with this cultural belief, precisely identifying it as culture, not necessarily because they hold it true as individuals. Rosanna, a college student, stated that chubby babies were positive because "porque es bello y hermoso ver un bebe que se vea gordito, porque la mayoría de las personas le dan un sinónimo de saludable" [because it's beautiful and lovely, because most people find synonymous to healthy.]. Note that Rosanna's explanation is that of the perceived cultural norm, but she does not state that she agrees with it. The same was described by another young participant, Odette, who explained that "Yo sé que aquí la gente piensa que un bebé, o por ejemplo, la gente más humilde tal vez se, que siempre es que los nenes tienen que estar gorditos, sí no están gorditos no están saludables." [I know that here (in P.R.) people, maybe people that are more humble (meaning poor), think that children have to be chubby, if they are not chubby they are not healthy]. Ester, a grandmother echoed this assumed cultural truth when she explained that "...en la cultura puertorriqueña tenemos la tendencia de que los bebes hermosos son los son gorditos y no necesariamente son los más saludables" [...in Puerto Rican culture we have the tendency (to perceive) that the most precious babies are the chubby one, and they are not necessarily the healthiest]. This idea about chubby babies being healthy was reiterated participants in the middle age category. Dafne, a very healthy conscious mother,

explained that "...que el nene que está colora'ito y está gordito, está saludable" [...if the baby is chubby and rosy, he is healthy...].

It is possible that the agreement of young participants with this statement brings together both personal truths about fat babies being positive and cultural truths that can differ at the personal level, but it is viewed as the cultural norm. The other interesting aspect of this statement is that even if it perceived as the cultural norm, the divergence of the seniors in their disagreement with it demonstrates that it is shifting. Change would be expected to emerge from young people and slowly overthrow the older cultural truth, but in this case the senior people seem to be driving that change.

The other life stage weight related statement with opposing responses by age group was the acceptance of girls gaining weight during puberty. Seniors' rejected this statement, and young people mostly agreed with it. This can be a function of the temporal proximity to that particular life stage for young participants versus senior participants. It can also be due to the increased education about weight gain during biological developmental stages of children and adolescents. The general notion that teenage and pre-teenage girls gain weight due to biological reasons resonated more with young participants than with seniors. Women gain weight during puberty due to the development of secondary sexual characteristics (Abraham et al., 2009; Nichter, 2000). The seniors' modal response reflects the individual responsibility discourse tied to weight loss and weight gain.

Body Size Model(s): Conclusion

The general Puerto Rican body size model exhibits a preference for thin, curvaceous female bodies, a negative perception of fat bodies and tolerance of weight

gain with age, divorce and childbearing. There are explicit body size norms that are culturally established in Puerto Rico. The intergenerational variations are based on particular differences with weight gain during childhood and puberty, and on body size represented in mass media. Differences reflect generational agreement patterns, but the age groups generally adhere to the pro-thin/fat-neutral or fat-negative model.

One of the most interesting findings was that young people have a mix of the senior and middle age body model. Their eclectic body size model reflects their exposure to their multiple beliefs and ideas about body size, and also their own experiences with school bullying based on weight, attractiveness for the other sex, their closeness to the discourse of acceptance regardless of physical conditions, and media influence. The young generation, both men and women, expressed a need to accept people how they are and not pressure them about weight. This generation, which has had lived in an excess food environment, verbalized experiencing bullying based on weight. Their concern for weight gain and loss is marked by this apparent acceptance of all body sizes. It is possible to generate this discourse of body size acceptance only in a scenario in which certain sizes are discriminated against. It is necessary to untangle what seems to be a fat accepting perception from young people based on the social pressure and idealization of thinness. If fat were a neutral concept and fat bodies were accepted or not seen negatively then a fat acceptance discourse need not develop, because it would be accepted *de facto*. Potentially young people have had more exposure to the thin body ideal through media exposure as this seems to be the ideal that was already in place while they were growing up. More young women expressed having issues regarding weight management and acceptance.

The young participants put forth an eclectic body size model, which includes factors from the senior and middle age models. Subgroups were evident and clearly defined for all age groups, and no significant difference was demonstrated by gender. The results from the statement analysis demonstrated that generational variation and change in body size does not follow a linear pattern. Senior age groups are not more fat positive and less thin idealizing than middle and young age groups. Culture change in this domain has occurred for individuals of all ages, and reflects that there are multiple body size models for different life stages.

Chapter 5: Intergenerational Female Body Experiences

Family is one of the primary agents of socialization and transmission of cultural norms. This includes the cultural models of body size, which are learned and shaped within the familial context (Clarke and Griffin, 2007; Nichter, 2000; Rieves and Cash, 1996). Body image concerns, weight concern and dieting are among the topics that are shared and mutually shaped by mothers and daughters (Cooley et al., 2008; Wertheim et al., 2002). To address the development of positive body image and size acceptance it is important to study how ideas about body weight and size are produced within families, and how they impact female body image (Clarke and Griffin, 2007; Franko et al., 2012). Including the family as an aspect of the production of body image ideals makes it possible to identify attitudes and behaviors that shape female body ideals from an early age. Most studies on family transmission of body image have focused on motherdaughter relationship (Keery et al., 2006; Ogden and Steward, 2000; Ogle and Damhorst, 2003). Clarke and Griffin (2007) conducted in-depth interviews with older women (50-70 years of age) on their perceptions and ideas about body image that they learned from their mothers. They emphasized the need to conduct investigations that address "how body image meanings and messages are constructed and negotiated across more than two generations of women (i.e. between daughters, mothers and grandmothers)" (Clarke and Griffin, 2007, p. 716). This is precisely the purpose of this dissertation project, to address intergenerational body models among Puerto Rican females. In addition to gaining knowledge of the creation of body image norms, it also allows us to include women of different ages in this research study.

Recent studies conducted in different Latin American settings, such as Mexico (Álvarez-Rayón et al., 2007), Costa Rica (García Fernández et al., 2007) and Chile (Caqueo-Urizar et al., 2011), have reported that young and middle age Latina women are increasingly idealizing thinness. Female and male adolescents (between 12 and 19 years of age) from six Latin American capitals in the countries of Argentina, Guatemala, Cuba, Peru, Panama, and Chile, are reported to prefer thin-bodies (McArthur et al., 2005). The question of how Latina women of more advanced age (beyond 50 years of age) have dealt with or adopted the thin-body ideal remains to be studied. Few studies have focused on middle age and senior Latina women, but some studies do exist for Caucasian women (Tiggemann, 2004) and some for women of diverse ethnicities in the U.S. (Fitzgibbon et al., 2000). The few studies that have examined senior women's body ideals report that they remain attentive to their body image, mostly preferring a thin body, but frame this ideal in the context of health rather than as an issue of beauty (Clarke, 2002; Grogan, 2008; Pliner et al., 1990; Tiggemann, 2004).

Family Environment and Body Norms

The intergenerational approach helps to bridge this gap in knowledge on female body ideals at different ages, and also helps to address the importance of family in the Latin American context (Franko et al., 2012). The importance of family and family values such as respect and familism (this concept is explained in Chapter 3) in Latino families has been well documented (Sabogal et al., 1987; Villanueva et al., 2008), and particularly so for Puerto Rican families (Andrés-Hyman et al., 2006; García-Preto, 2005; Zayas and Palleja, 1988). Incorporating cultural and family context to body image studies informs prevention and treatment, and helps to understand the convergence of factors that

can affect the development of body dissatisfaction, eating disorders, and obesity (Franko et al., 2012; Diaz et al., 2007).

Research Hypotheses (1-3)

The three main hypotheses that guided this portion of the research were based around life stages and the preference for a thin body ideal. These hypotheses were constructed based on body image literature and on Massara's report of preference for fat female bodies were preferred at certain life stages, such as marriage (Massara, 1989).

Hypothesis (1): If body size models are constructed by life stage expectations and roles, then it is expected that cultural and/or biological life stages (e.g. adolescence, pregnancy) to correspond to different body size norms.

Hypothesis (2): If women of all ages idealize thinness and the explanations vary with age, then it is expected that young women to draw on beauty and sexual desirability to explain the thin body ideal and senior women to draw on health to explain the thin body ideal.

Hypothesis (3): If intergenerational differences exist in body norms, then it is expected that senior women to be less concerned with their body size and more accepting of overweight bodies than younger women.

Methods

Materials. Participant observations were conducted throughout the study. I took detailed notes on body image related topics based on conversations and everyday interaction with key informants. Participants were administered an anti-fat attitudes scale (AFAS; Morrison and O'Connor, 1999), a contour drawing rating scale (CDRS; Thompson and Gray, 1995), and a sociodemographic questionnaire. The interview guide

included open-ended questions on childhood history, weight history by life stage, cultural terms used to talk about different body sizes, the meanings of the terms, attributes of different body sizes, health issues related to weight, discrimination based on body size, and descriptions of ideal bodies. This interview guide was the basis of the semi-structured interviews that were performed with each of the 53 female participants, following the methods of Massara (1989) and Honeycutt (1999).

The ethnographic interviews were used to elicit narratives about women's body experience and perceptions (Paquette and Raine, 2004). Women of different generations within the same family were interviewed. The purposive sample was composed of 53 women that belonged to an intergenerational triad (mothers/grandmothersmothers/daughters-daughters/granddaughters). The interviews were audio-recorded with the participants consent and later transcribed in the original language, Spanish. The analyses were also conducted with the transcripts in Spanish; there was no need for translation for the purposes of this research. Some of the participants were hesitant to talk about their body and weight, this resulted to be a sensitive issue, though they became more comfortable talking about it as the interview started with the most general and nonthreatening questions. The participants were asked to describe the perceived ideal body/bodies, this included descriptions of the ideal or mentioning a celebrity that represented the ideal, at different life stages throughout their lives. This information was used to create a timeline of ideal bodies. The timeline includes the celebrities and public figures that were frequently mentioned, and some of the exemplars of the body descriptions for decades ranging from the 1940s to 2011. The designs of semi-structured interviews allow for minimum control over participants' responses, and the interview

protocol is the same for all respondents thus it allows for comparison across informants (Bernard, 2006). Participant self-reported height and weight was also recorded and later used to calculate BMI. The complete interview was pre-tested using cognitive interviews with four key female informants, who were not included in the total sample of 53.

Analysis. The data from the semi-structured interviews, in the form of texts, was analyzed to describe the cultural models of body size. The data was coded in three stages. In the first stage, topics that are present in the instruments and questions (e.g. being overweight or obese) were coded. This is a deductive approach to analyzing the data (Bernard and Ryan, 2010). The second coding stage examined salient themes from the interview data gathered, using an inductive exploratory scheme (Ryan and Bernard, 2003). The third stage of metacoding (Ryan and Bernard, 2003) was used to search for overarching themes between a priori themes and new ones. The results allow us to identify statements and themes related to body norms and body size attitudes. Text analysis software (i.e. MAXQDA software) was used as a tool for analyzing the data. I coded all the text, a second coder (who was fluent in Puerto Rican Spanish) coded 25 segments of the data and this was used to measure intercoder reliability. The coding scheme had to be minimally revised after the initial coding done by both coders to finetune the codes and eliminate redundant themes. Cohen's kappa was the measurement used to assess reliability of coding, and for the two coders, 25 segments and four major codes the result was a kappa of .636, p < .01. This kappa represents a substantial level of reliability (Bernard and Ryan, 2010).

Results

Socio-demographic and survey data. The participants of this qualitative section of the research were categorized as grandmothers (i.e. seniors, ages 61-86), mothers (i.e. middle age, ages 40-51), and granddaughters (i.e. young, ages 16-28). These age groups correspond to the intergenerational triads and were labeled to represent their rank in the triad. The 53 women that participated in this research self-identified as belonging to middle socioeconomic status (SES), ranging from lower middle to upper middle class. Table 5.1 contains the socio-demographic and body mass index (BMI) data for each age group. The participants were also asked about their ideal weight and if they were trying to lose weight at the time of the study. The biggest differences across age groups were work status, education level and annual income. These differences are explained by the differences in life stages of women by age groups. Grandmothers were mostly housewives or retired, and without a college education; their annual incomes were lower than the mothers and granddaughters. The granddaughters were mostly students, therefore their education level was lower than the mothers' age group, and their annual income was higher than the grandmothers because they mostly report their parents' income as their own because they are still dependents of their families. Overall, the majority of women, 58.5% of the total n=53, reported that they were trying to lose weight at the time of the study. The grandmothers were the only group of participants who were not actively trying to lose weight. The participants reported their current weight, and their ideal weight. The ideal weight was subtracted from the current weight to determine their desire for weight gain or weight loss. The majority of women across all ages expressed the desire to lose weight.

Table 5.1

Socio-Demographic and BMI Information Female Participants (n=53)

	Grandmothers	Mothers	Granddaughters
	(n=17)	(n=18)	(n=18)
Approximate Age (years)	72.29 (8.05)	46.5 (3.58)	20.39 (3.22)
Occupation Status			
Work Full-time	5.9%	61.1%	_
Work Part-Time	5.9%	22.2%	22.2%
Unemployed	_	5.6%	5.6%
Student	_	_	72.2%
Housewife	47.1%	11.1%	_
Retired	41.2%	_	_
Number of children◆	3	2	_
Level of education			
1-6 years	23.5%	_	_
7-11 years	5.9%	11.1%	22.2%
High School	47.1%	22.2%	55.6%
Bachelor Degree	17.6%	38.9%	16.7%
Graduate Degree	5.9%	27.8%	5.6%
Annual Household Income			
≤\$11,999	35.3%	11.1%	11.1%
\$12,000 - \$24,999	11.8%	11.1%	16.7%
\$25,000 - \$49,999	23.5%	22.2%	22.2%
\$50,000 - \$99,999	17.6%	22.2%	27.8%
≥ \$100,000	11.8%	33.3%	22.2%
BMI	27.12 (6.05)	24.81 (4.03)	22.08 (3.64)
Underweight (BMI ≤ 18.49)	_	5.6%	11.1%
Healthy Weight (BMI 18.5–24.99)	41.2%	55.6%	72.2%
Overweight (BMI 25–29.99)	35.3%	22.2%	16.7%
Obese (BMI \geq 30)	17.6%	16.7%	_
Trying to lose weight (in 2011)	41.2%	77.8%	55.6%
Desire to gain weight	12.5%	5.6%	27.8%
Maintain current weight	25%	5.6%	5.6%
Desire to lose weight	62.5%	88.9%	66.7%

[♦] Mode (measure of central tendency)

Hypothesis 1: Body size norms by life stages. This hypothesis states that: If body size models are constructed by life stage expectations and roles, then it is expected that cultural and/or biological life stages (e.g. adolescence, pregnancy) to correspond to different body size norms. The narratives generated from the semi-structured interviews with the 53 women were coded for life stages, biological and cultural, that were

associated to specific body norms. This mainly took the form of thinness as a positive or negative body size, and fatness or plumpness as a positive or negative body size. The code was present 545 times in the 53 transcriptions. The life stages that were asked about in the interview and for which body norms were elicited included: newborn, early childhood (zero to five years of age), elementary school, middle school, the *quinceañero* (similar to a sweet 16 but at 15 years of age, typical marking of the Latina coming of age), high school, college, marriage, first pregnancy, divorce or separation, first job, 30-40 years of age, 41-50 years of age, and being 60 years or older. Additional to these life stages participants talked about other life situations that can be referred to as life stages for the purpose of analysis, which were: retirement, moving to the U.S. and P.R., and class reunions.

The interview data suggest that newborn babies should be fat, because skinny babies are suggestive of ill health. The results of the cultural consensus analysis for the entire sample agree with this finding. The majority of the participants (male and female) find that chubby babies are viewed positively. Middle school body ideals for girls tended to be regarded as slightly fat positive, particularly because girls that were plump would go through *desarrollo* (i.e. puberty) at that age. Women identified that teenage boys preferred plumper girls that had breasts, wide hips and large buttocks, but that they could not be fat (mostly referring to fat as rolls and/or protruding belly). Katia, a petite mother who was struggling with losing weight, explained that when she was in middle school girls that had already hit puberty were viewed as ideal.

Katia: A pues en mi época era que fueran, fijate, que fueran llenitas. Que tuvieran senos y como que, no flacas. Eran las más que, a las más que...yo tenía una amiga, que esto, yo no era señorita todavía, deja ver, eso era como a los 14. Yo

fui a los 14. Ya ella era desarrollada, entonces ella era la que estaba bien buena. A mi me decían, aborto, antropófago, me decían esto, que le decían a ella cosas lindas. Y yo era flaca...Que ella era llenita, no era flaca. Porque ella era llenita y de piernas gordas y pues tenía busto. [Well in my times it was that they were, well you see, that they were plump. That they had breasts and like not thin. They were the most, that ones that....I had a friend, I wasn't a señorita (hadn't reached puberty yet) yet, that was around 14. I was at 14. She was already developed, and then she was the good-looking one. They called me an abortion, an anthropophagus, they called me that, and they called her pretty things. And I was skinny...She was plump, not thin. Because she was plump and had thick legs and had breasts.]

This was similar to what Carla, a slender and very attractive mother, called gaining unas *libritas* [some pounds]. Carla expressed that pre-adolescent and young teenage girls were considered attractive when they "...empezaban a desarrollar unas curvas, pero nunca estaban gorditas. Pero si que se empezaban como quien dice a definir, a coger unas libritas" [...started developing their curves, but were never fat. But that they started, like to get defined, to gain a few pounds]. A grandmother recalled that when she was in middle school the desired female body was the one that had "cinturita de avispa y bombón" [a wasp waist], the cinched waist representing the wider hips product of secondary sexual characteristics of puberty. She also added that most attractive girls were "...más bien gorditas, no era la gente flaca, flaca" [rather plump, it was not thin, thin people]. This trend of developed girls, with breasts and wide hips, was also evident in the anecdotes of the granddaughters. Aura, a tall and slender 20 year old explained that in middle school the ideal female body was girls that were thin but that they had breasts. This was echoed by fellow 20 something college student Fabiola, who expressed that the preferred body when she was in her early teens was the girls that were "...más, más adelantadas" [more, more developed], that they had breasts but were not overweight. It is interesting that the cultural consensus results suggested that most participants did not

consider that it was acceptable for girls to gain weight during puberty. The way most women talked about weight during this particular life stage involved "desarrollo" [development] and they did not necessarily think of it as weight gain, though that it was developing breasts and other secondary sexual characteristics.

Some women, approximately 10 of the total 53, described puberty as a stage in which girls gain weight due to physiological changes. Patricia, a thin mother, gave a good exemplar of this perception by expressing that "...uno aumenta de peso cuando uno es teenager, en pasar de ser niña a ser adolescente" [...one gains weight when you are a teenager, passing from being a girl to being an adolescent]. This stage was identified as one in which it was acceptable to gain some weight, but not to be overweight and many participants were explicit about weight management at that stage so girls would not stay overweight. Patricia also added that "Siempre y cuando no sea un aumento de peso excesivo, pero sí, es normal" [As long as it is not an excessive amount of weight gain then yes, it is normal]. The majority of the participants stressed that it is important to not gain weight and maintain a slender body in youth, both to counteract gaining weight with old age and to remain attractive. Aileen, a 46 year old mother, explained in a matter of fact manner that "Bueno, quizás cuando tú eres joven y estas en la búsqueda de ese chico ideal es inaceptable que estés sobre peso. Por lo menos en mi época, tú sabes, era como que hello?!" [Well, when you are young and you are on the search of that ideal guy it is not acceptable to be overweight. At least in my times, you know, it was like hello?!]. This sentiment was echoed by most mothers and grandmothers, the granddaughters did not explicitly mention weight as a factor in searching for a boyfriend or husband.

Pregnancy was unique in the sense that weight gain was not seen as bad or good, but as natural and part of the pregnancy. All women mentioned that weight gain during pregnancy was inevitable and acceptable. Many women expressed that they gained weight with pregnancy. In many cases their bodies had changed after that and it was not easy to lose the post baby weight after their last child. Even though most mothers and grandmothers explained this phenomenon of post pregnant body, many of them pointed out that it is important to lose weight after the pregnancy and get back to pre-pregnancy weight. Nancy, a lively mother of two slender daughters, responded that pregnancy was a life stage that was marked by weight gain.

Nancy: Bueno cuando se casan que quedan embarazadas. Pues su aumento normal no debe de ser mucho. Yo pasé por esa experiencia, uno debe de verdad...porque cuando tu quedas encinta tu te comes el mundo. Entonces tu lo que te estas haciendo es un daño. En caso de que se hace bien difícil volver, y uno quiere volver a su peso, verse bien. No quedarte gooorda. Uno quiere verse bien, ponerte tus cositas. Toda edad tienen sus etapas, pero si se pueden mantener no deben de aumentar. Deben de cuidarse. Si no hay de otra, pues. [Well when you get married and get pregnant. Well there is normal weight gain, it should not be too much. I went through that experience, you really...because when you are pregnant you eat the world. Then what you are doing is harming yourself. In the sense that it is very hard to return, and you want to return to your weight (prebaby weight), look good. You don't want to stay faaaaat. You want to look good, wear your things. Every age has its stages, but if they can maintain themselves, they shouldn't gain. They should take care of themselves. If there is no other way, oh well.]

Weight gain during pregnancy cannot be framed as preferring fat, because the weight gain is not on purpose to reach a specific type of body. A similar perception emerged with weight and old age.

Participants explained that when people get older, *con los años* [with age], they unavoidably gain weight, and it is not within the person's control. Grandmothers were keen to talk about this subject and framed it in different ways. Some explained that

weight gain could be due to change in activity patterns once they no longer were raising their own children and/or retired from work. Other women explained that with old age they felt like they did not have to care about what they ate, and that they were done dieting. Lisandra, a 70 year old grandmother, stated that "...a esta edad ya para que?, si ya, imaginate tu, 70 años, que me puede quedar? Para yo ponerme a dieta a sufrir, porque uno sufre" [...at this age for what? Already, you can imagine, 70 years old, what do I have left? For me to go on a diet to suffer, because you suffer]. The idea of giving up on dieting yet remaining attentive about one's weight was not framed as liberation; it sounded more like a sad resignation. Recognizing that control is out of their hands and though they would like it to be different they are now ready to admit defeat. It does not entail conquering the body dissatisfaction demons that have plagued them for much of their adult lives, they remain dissatisfied and the importance of it diminishes. Like Tiggemann and Lynch (2001) report, "the level of dissatisfaction with the body remains constant, the importance of the body decreases as women get older."

Other situations related to advanced age and weight gain were health problems that caused less mobility or metabolism changes. Olga, a slender and youthful mother, explained that the only time it is acceptable to gain weight is with age. She stated that: "El tema ese de que cuando uno entra en la menopausia y el metabolismo se pone más lento y uno va a engordar, pues mira sí eso esta médicamente probado pues supongo que hay que aceptarlo" [The topic of when you enter menopause and the metabolism gets slower and you gain weight, well look if that is medically proven well I suppose that you have to accept it].

All of these weight gain issues, whether related to health or related to less social

pressure, were markedly framed in a thin-positive context. Granddaughters explained that when you are older you gain weight, this is acceptable because your body changes, mothers explained that with advanced age changes in metabolism make it harder to lose weight, and grandmothers mentioned that they would like to be thinner even though they knew it was difficult at their age. The grandmothers that were underweight throughout their life and had gained weight in their golden years were the only ones to apparently accept their weight gain and be at ease with it. The grandmothers that had struggled to achieve and maintain a thin body throughout their adult lives were mostly uncomfortable with weight gain. Lisandra, a 70-year-old grandmother, who was very animated and extroverted, explained that at 70 years of age she wasn't going to worry about her weight, but when asked to report her current weight she refused. This illustrates that though weight gain is considered normal with advanced age it is still a sensitive issue that conjures up negative feelings.

The remainder of the life stages that were directly asked about and those that emerged from the interviews were marked by a strong preference for a thin-body. Massara's research in the 1970s concluded that weight gain was a sign of being well taken care of, especially in the cases of newlyweds. Women gained weight and this signified that they were provided for by their husbands (Massara, 1989). This notion of weight gain due to marriage did not emerge as a shared notion in the results of my current study. Women talked about weight gain with marriage due to getting pregnant quickly after marriage. This weight gain is related to pregnancy not to marriage per se. Of the 17 grandmothers two of them explained that they gained weight after they got married because they had access to more resources. Gladis narrated that her family was extremely

poor and they did not have enough food when they were growing up, therefore when she married an army sergeant she was able to have more access to food. Her daughter, Gina, explained that her father would boast about having fattened up her mother ("...papá dice que la engordó" [dad said he fattened her]) when they married.

Gina: Bueno, lo que vo recuerde, mi mamá, mi papá hablaba de que mi mamá era una mujer bien flaca. Que él la engordo. Tú sabes que los hombres dicen "Yo la engorde porque ella no pesaba ni 100 libras cuando me casé". Pero yo entiendo que en el caso de mamá, tal vez era carencia. Sabes porque mamá, este, pues viene de una familia de 9 hermanos. Este, pobres, bastantes pobres y entonces ella se va a estudiar a la universidad, pues con muchas necesidades. Y ella pues me cuenta que si ella no llegaba a tiempo a casa de sus tíos a comer, la dejaban sin comer. Ves, era un poco cruel, un trato cruel. Porque yo creo que ella era flaca por carencia... [Well, what I remember is that my mother, my father talked about my mother being a very skinny woman. That he fattened her. You know that men say "I fattened her because she did not weigh 100 pounds when we married". But I understand that in my mother's case, maybe it was due to scarcity. You know because my mother, well she comes from a family of 9 siblings. Well, poor, considerably poor and then she went to study at the university, well with many needs. And she tells me that if she did not get to her uncle's house in time for dinner, they would leave her without food. You see, it was somewhat cruel, a cruel treatment. I think she was skinny due to scarcity...].

Josefina, the petite grandmother of the study's only family quintet (one grandmother, 2 mothers, 2 granddaughters all from the same family), had a similar experience. She explained that she grew up poor with her grandparents and she never finished school because she had to work. She gained weight when she married because her husband helped her to learn to eat a wider variety of foods. Josefina explained that she gained 10 pounds (she went from 100 to 120 pounds) as soon as she married because of changing her eating habits.

Josefina: Yo no sé porque no comía mucho yo, siempre comía poco, yo no era de mucho comer nunca. Es más, que antes no comía que mi esposo me decía: "tu no comes casi nada". Yo comía arroz blanco, yo no comía habichuela. Cuando muchacha ni nada de eso. No tomaba leche casi nada, que éste fue el que dijo "mira, toma leche" y él me llevaba leche pa que yo y que tomara cuando yo era

muy joven. [I don't know because I didn't eat much, I always ate little, I was not one to eat a lot ever. Actually, before I didn't eat that my husband would say, "you barely eat anything". I ate white rice I did not eat beans. When I was young (I ate) none of that. I didn't drink almost any milk that he was the one that told me "look, drink milk" and he would bring me milk for me to drink that when I was young.]

These two examples are the ones that most resemble experiences narrated by Massara's participants in the 1970s. What struck me of these two grandmothers is that both were vocal about managing their weight, exercising and the importance of not being overweight. This is a striking difference between these women and Massara's participants, and it points to the change in cultural norms that regard excess weight negatively. Gladis actually commented that her husband, though he boasted about fattening her, would also ask her to watch her weight and that she should exercise so as to not to get too fat. Josefina explained that she exercised by walking and watched what she ate to not gain too much weight. This was reiterated by both her daughters, one of which struggles with weight management and commented that her mother constantly tells her to lose weight.

Most women, who strongly identified that thin bodies as ideal, also explained that the thin ideal could be too thin. In the U.S. there is a widely accepted notion that 'one can never be too thin nor too rich' (Cash and Roy, 1999). This belief implies that there is no limit to how thin a person can be, because being thinner is always better. Currently in Puerto Rico there is such as a thing as being too thin. Beliefs and anecdotes of how thin was a bad characteristic were coded in the transcriptions. The thin negative code emerged from the narratives as participants repeatedly mentioned that girls and women that are too skinny (*demasiado flaca*) are not viewed as beautiful and can actually be perceived as

malnourished or sick. Some participants identified the first two figures of the skinniest figure of the CDRS scale to be representative of being "too thin" (see figure 5.1). When asked about people's reaction when she had lost a lot of weight, Katia (Josefina's daughter that struggles with her weight) answered that most people told her that "que parecía que estaba enferma" [she appeared to be sick]. This experience was shared with other women that had either been thin as children or had experienced noticeable weight reduction.

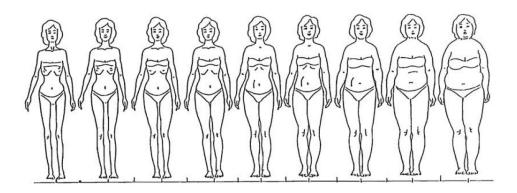


Figure 5.1 Contour Drawing Rating Scale.

Aura, a beautiful and thin granddaughter, expressed that she has always been thin and that most people think she is sick because she is very thin. This can be associated to being thin and lacking large breasts and buttocks. There was one intergenerational triad that narrated being teased as young girls because of their seemingly underweight bodies. Both the grandmother and mother were called 'skeleton' as young girls, and the granddaughter reported that they called her 'toothpick'. The grandmother, Vilma, explained that when she was young she was skinny because "no nos alimentábamos bien" [we did not eat well], meaning that they did not have enough to eat, and this resulted in her being teased. The triad of Pilar, Patricia and Perla shared a similar

experience. All were skinnier than their peers in school, and got teased for it. Perla, the energetic granddaughter, was teased for being skinny but was also envied by most girls her age due to her body size. Having a thin body naturally, not as a result of dieting, made Perla ineligible to participate in the common teen girl 'fat talk' at school and with her friends.

Perla: Sí. Las amigas de mi salón comparan lo "gordas" (entre comillas) que están y me ven a mi y es como que "go away", tu no vengas a tratarte de compararte con nada porque...[Yes. My friends from my classroom compare how "fat" they are and then they see me and it's like, "go away", you cannot even try to come here and compare yourself with anyone...].

The negative connotation of being too thin is a remnant of the previous plump or fat positive body model in which thin bodies were either associated with scarce resources and malnutrition, or with the ideal female body similar to that of Marilyn Monroe and Iris Chacón (Massara, 1989). This remnant of the fat positive model has been adopted into the thin-body ideal and results in a hybrid global/local body model. This model idealizes a slender female body, and perceives bodies on either extreme of thinness or fatness as negative.

The meaning of thin has changed throughout the years. When a grandmother talked about thinness in the 1950s, this is not necessarily the same as thinness in 2011. Taking into account that subjective perceptions of thinness exist, the interview data still suggests that fat female bodies are not preferred during the majority of a person's life span. Being too thin and being too overweight were both referred to and talked about in negative ways. These ideals were similar across age groups. The experiences of mothers and granddaughters with weight were more similar than those of the grandmothers. This was evident in the anecdotes of bullying due to weight in schools, which for the

grandmothers were not very common. A good exemplar of this was Barbara's anecdote about how both skinny and chubby kids were teased when she was in school: "Si, de ser gordito si. Y de ser flaco también. Se burlaban de mi por ser flaca y de una nena que estudiaba conmigo por ser gordita." [Yes, for being chubby yes. And for being skinny also. They teased me for being skinny and a girl that studied with me for being chubby].

The only life stage for which fat is mostly positive is newborn babies. Puberty marked the only other stage for which a slight preference towards plump girls was identified, as long as plump included large breasts and butt. Advanced age (approximately starting at 60 years of age) is recognized as the life stage in which it is inevitable to gain weight, yet the ideal is not to be fat or plump. All other life stages, including marriage, are marked by the preference for a slender female body.

Hypothesis 2: Thin ideal - health or beauty by age group. Hypothesis 2 states: If women of all ages idealize thinness and the explanations vary with age, then it is expected that young women to draw on beauty and sexual desirability to explain the thin body ideal and senior women to draw on health to explain the thin body ideal. The body size model that emerges from the qualitative narratives suggests that there is a dominant preference for a thin female body, not too thin but certainly not plump. The preference for the thin body encompasses a wide range of justifications; the two most common are aesthetics and health. The narratives were coded for reasons of beauty and reasons of health put forth by the participants as to why it is important and idealized to have a thin body. The code for health was recorded 45 times, and the code for beauty was recorded 49 times in a total of 53 interviews. The code for health was present in the narratives of 27 women, nine were grandmothers, 10 were mothers and eight were granddaughters.

The code for beauty was present in 29 narratives, eight were grandmothers, 10 were mothers and 11 were granddaughters. In total there were 39 different participants of the total 53 that reported these two codes in relation to body size.

The grandmothers mentioned health more frequently than beauty as a reason in the drive for thinness. A closer examination of the coded segments revealed that six of the grandmothers mentioned both health and beauty as reasons for preferring a thin body. Only four grandmothers uniquely mentioned health, and only two mentioned beauty as the sole reason. This pattern shows that health and beauty are not mutually exclusive justifications for preferring thinness. Table 5.2 summarizes the numbers of times grandmothers, mothers and granddaughters coded for beauty, health or both as basis for idealizing thinness.

Table 5.2

Codes of Beauty and Health per Age Group (Percent)

	Grandmothers (<i>n</i> =17)	Mothers (n=18)	Granddaughters (<i>n</i> =18)
Beauty	47.06%	55.56%	61.11%
Health	52.94%	55.56%	44.44%

The data suggest that there is not an explicit pattern of grandmothers' responses regarding health as the primary reason to have a thin body compared to mothers and granddaughters. The inverse of this, which would be that granddaughters responded more frequently that beauty was the reason for preferring a thin body compared to their mothers and grandmothers is somewhat apparent, but does not represent a strong pattern. A chi square test was conducted to analyze if there were statistical differences in coding for beauty or health by age group. The results indicate that for a sample of *N*=53 there is

no statistically significant difference between age groups for stating beauty as a reason for preferring a thin body, $X^2 = .71$, p=.70, nor for stating health as the reason for preferring a thin body, $X^2 = .49$, p=.79. The most important result is that responding that both beauty and health were reasons for desiring a thin body was frequent across all age groups.

Health concerns related to body weight most frequently mentioned were heart disease, reduced physical mobility and diabetes. In most instances when health concerns were tied to body weight participants just plainly stated that it was not healthy to be overweight, but rarely did they go into details of why it is not healthy. This resonates with the public health discourse that has flooded mainstream media in the U.S. and in P.R. in recent years. Adela, an 86 year old grandmother who suffered from severe type-2 diabetes, stated that it was no longer good to be overweight "por la salud" [because of health]. At the time of the study Adela was almost completely blind due to her diabetes, yet when we met for the interview she very happily ordered french fries and a beer. Later that year Adela's diabetes aggravated her existing health problems and she died. At the wake her family happily remembered her love for food, for cooking, and a picture of her with a cold beer in hand was placed on her casket. I describe Adela and her mention of health because she is a good representation of the inconsistencies and contradictions of the cultural bodily experience. Many participants talked about their health and their knowledge of the evils of junk food, yet I was served giant glasses of Coca-Cola in cups purchased at Burger King. This did not evoke feelings of contradiction for most people, and it reminded me of the fact that knowledge does not translate into cultural beliefs or

behavioral changes. This is after all the experiential side of fieldwork that informs and enriches ethnographies.

Health is incorporated into the everyday talk regarding weight and food, yet few details about the relationship between these factors have penetrated popular Puerto Rican culture. Beatriz, Vilma, Josefina, Lisandra, Marta and Selma, all grandmothers, explained that it was important to lose weight or maintain a healthy weight because of health.

Beatriz stated that it was not good to have excess weight "Porque nos hemos dado cuenta que no es saludable. Y eso está científicamente y médicamente comprobado" [Because we have noticed that it is not healthy. And that is scientifically and medically proven]. Ester was one of the only women that went into details about health and weight. Her brother-in-law died of a heart attack, and her father suffered from type-2 diabetes. He went blind and had to have some toes amputated as consequences of badly managed diabetes. She explained that her idea of health is not just weight, but also your body chemistry.

Ester: Yo soy feliz como yo soy. Sé, que uno debe de mantenerse, tu sabes, en una, no es... fijate no es tanto la obesidad sino mas bien los niveles de las químicas de la sangre. El colesterol, el azúcar, ese tipo de cosas. Porque eso no tiene que ver con la obesidad. Tú sabes, no necesariamente tiene que ver. Tú sabes, porque hay personas que son delgadas y tienen unas químicas bien elevadas. Sin embargo hay unos gruesos que no lo tienen así, o sea, que es cuestión como tú te sientas. Tú tienes que ser feliz como, hasta donde tú te sientas feliz. Si te sientes incómodo pues ya, un stop. [I am happy as I am. I know you should maintain yourself, you know, in you, it's not like...look it's not so much obesity rather it is the chemistry levels in your blood. Cholesterol, sugar, that type of thing. Because that has nothing to do with obesity. You know, not necessarily does it have something to do with it. You know, because there are people that are thin and they have really high chemistry. However there are some heavy people that don't have it like that, I mean, it's a matter of how you feel. You have to be happy like, up to the point that you feel happy. If you feel uncomfortable well already, a stop.]

Ester's explanation regarding weight, cholesterol and sugar levels was wrapped up with this discourse of "self-acceptance". I place the concept in quotations because the way people talk about self-acceptance really signifies self-tolerance. It is similar to suggesting that people will never have the ideal body, so they might as well give up and learn to live with their body. It does not imply being content and comfortable in their body and celebrating the diversity of body shapes and sizes, but simply learning to live in your skin even if it feels uncomfortable most of the time. Her communication demonstrated that she has sophisticated knowledge about health issues and this is coupled with the idea that people should be happy and that everyone knows their own boundaries. I explain this further in the chapter because it was a recurring theme.

Selma, who was excited to participate in the research because of her self confessed life long struggle with weight, was one of the participants that mentioned heart disease. In various moments during the interview Selma paused to explain that excess weight and weight loss were her expertise based on her personal experience. Since she was a little girl she was concerned with her weight and tried to lose weight by eating small portions. She told me that Puerto Rican mothers reward children with food, and that she never did that so her daughters and grandchildren would not associate food and indulgence positively. Her brother died of a heart attack in his middle age and that experience shocked her into dieting for a long time.

Selma: "Había engordado tanto con la cortisona cuando mi hermano se murió de repente en Francia, del corazón. El también tenía problemas de peso, subía y bajaba, porque mi mamá siempre fue gruesa, pero una gordura como la que yo tenía, ella era dura. Y fuerte y caminaba mucho y todo. O sea que, y la gordura mía era más o menos esa. Entonces cuando mi hermano se murió, a mi me estaba dando muchísima taquicardia. Fui donde el cardiólogo...encontraron que tenía una arteria tapada... Y yo rebajé 45 libras, porque tenía tal pánico del ataque al

corazón que venía que rebajé 45 libras y así estuve muchos, muchos años..." [I had gained so much weight from the cortisone when my brother suddenly died in France, from a heart attack. He also had weight problems, he would gain and then lose weight, because my mother was always heavy, but heaviness like mine, she was hard. And strong and she walked a lot and everything. Then when my brother died I was getting a lot of tachycardia. I went to the cardiologist...they found I had a clogged artery. ... And I lost 45 pounds, because I had such panic from the heart attack that would occur that I lost 45 pounds and that is how I was for many, many years...]

Selma's experience was not unique, but she was one of the few people to express a clear body size consciousness since she was a young child. She was also one of the participants that offered both health and beauty as reasons for preferring a thin body. Selma framed conforming to body size aesthetics as an effect of 'feeling good about yourself', If you meet the cultural standards of body size, in this case a thin body, then you can wear clothes that are meant to fit the thin-body and as a consequence feel good about yourself. This concept perpetuates the thin-body ideal by establishing that if you have the ideal body then you will feel good about yourself. This sentiment was present in most interviews. Tania, another grandmother, explained that having excess weight makes you fatigue easily and have less mobility, and she also explained that she liked to look good.

Tania: ... a veces uno se siente incómodo pues porque al uno estar gordo, si uno se pone algo, que a uno le gustaría que, que notaran, cuando uno está gordo no hay nada que le quede bonito a uno. No hay nada que le quede bonito. Y pues, a veces que los comentarios, porque a veces, por ejemplo mi pareja, él me dice "chuchin"..." te ves bonita pero si estuvieras más flaca te quedaba más bonito". [... sometimes you feel uncomfortable because when you are fat, if you put on something, you would want, that they notice you, when you are fat there is nothing that fits you or looks pretty. There is nothing that fits and that looks pretty. And then, sometimes the comments, because sometimes for example my partner, he calls me "chuchin"... "you look pretty but if you were thinner it would look prettier"].

This exemplar sheds light on the reality of some senior women who still like to maintain a thinner body size because they want to look pretty or/and they want to feel attractive for

their partners. This reminds us that health and beauty are not mutually exclusive, and that senior women fit within the social body norms of thin bodies equating with beautiful bodies. Their age does not exclude them from surveillance and objectification.

The same number of grandmothers and mothers reported health and beauty as reasons for the thin ideal. Gina, a mother of two college-aged daughters, explained that for health reasons it is important not to be overweight, and that there is pressure for women because they want to look good for their husbands. She mentioned that even if the pressure was not explicit it was omnipresent.

Gina: Por más que uno diga que, aunque yo sé que mi esposo me quiere, porque obviamente él está claro de porque estamos juntos, no? Este, pero siempre, tú sabes que le gustaría que tal vez tú fueras flaca, vamos a ponerlo de esa manera. [No matter how many times you tell yourself, even though I know why my husband loves me, because obviously he is clear of why we are together, no? Then, but always, you know that he would like it if maybe you were thin, lets put it that way.]

Gina was one of the few participants to acknowledge that weight per se does not indicate health status, she stated that "No siempre gordura es no salud" [Fatness is not always equal to not being healthy]. Curiously, having this information does not exclude her from feeling the social pressure to have a thin body, or the shame she expressed about having excess weight. Barbara, mother of two teenage daughters, described the medical and health benefits of not having excess weight, while simultaneously expressing that the pressure for thinness was driven more by beauty than by health. She based this conclusion on her perception of how the obsession for a thin body drives women to dangerous behaviors, regardless of health consequences.

Barbara: Ah como no, en resumen yo te diría, si pides mi opinión, que antes el sobrepeso, el estar gordito era algo de la sociedad y significaba buena salud. Hoy en día estar flaco significa tener buena salud aunque eso te conlleve a la

anorexia, aunque eso te conlleve a pérdida de cabello, aunque eso te conlleve a uso de medicamentos prohibidos, aunque te perjudiquen, porque. Porque el bombardeo que le tienen a veces no está bien enfocado. Vistes. [Ah why not, in summary I would say, if you ask my opinion, that before overweight, being chubby was a social thing and it meant good health. Nowadays being thin means being healthy even if that leads to anorexia, even if that leads to hair loss, even if that leads to use of prohibited medicines, even if it hurts you, because. Because of the bombardment that they have is sometimes is not well focused. You see].

After reading through the numerous pages of narratives I kept re-reading this statement. It seems to encompass all the issues that were raised by the research and it tells of the conflation of health and beauty. This conflation can erroneously lead to risky weight management practices because under the guise of health, all weight reduction strategies are game. This sentiment was evident in many, if not all, of the narratives. Barbara phrased it in a way that encapsulates the general notion of the thin body ideal in Puerto Rico.

The granddaughters mentioned beauty more frequently as the reason for preferring thin body sizes, than grandmother and mothers. This slight trend was not statistically significant, yet it is indicative that a trend may be present but requires further research. In several of the segments in which aesthetics were mentioned the granddaughters were explaining their mother's, grandmother's and father's reasons for losing weight or dieting. This sheds some light on the number of mentions, and it brings to light that they were not merely talking about the pressure they personally feel for maintaining a thin body. Aura, the skinny media studies student who is Adela's granddaughter, explained that her stepfather wanted to lose weight for both aesthetics and health reasons, "porque igual se siente insatisfecho con su cuerpo además de que se lo han dicho un montón los médicos de que si no baja de peso va a morir rápido" [because

the same, he feels dissatisfied with his body, additionally many doctors have told him that if he doesn't lose weight he'll die soon]. Delma, whose mother is a health professional and in her interview confessed to having obsessed about her weight and her daughter's, mentioned both health and beauty for maintaining a thin body. She was very adamant, as were the great majority of the participants, that children should not be overweight because of their health. Delma, who maintained a slender body size, mentioned that she had never gained a lot of weight and that it was a miracle she was not anorexic as a result of her mother's obsession with weight management. When asked why she thought maintaining a thin body was important for her mother she stated that it was to "verse bien...que la ropa le quedara bien, ese tipo de cosas" [to look good...that clothes fit her well, that type of thing]. These exemplars summarize and illustrate the combination of beauty and health concerns voiced to justify the thin-body ideal as the dominant Puerto Rican female body standard.

The body norms were somewhat homogenous across the intergenerational triads. This made it difficult to tease out similarities across age groups compared to within families. What became evident is that family members shared the same framework for talking about body size norms. Those that felt strongly that women had to be happy regardless of weight and social pressure, such as Tania, Tamar and Taysha, shared these ideas. Beatriz, Barbara and Brenda clearly shared the idea that society should accept people as they are and not discriminate based on weight, but that it is important not to be obese because of negative health consequences. The self-described fat phobic family of Selma, Sol and Sara made good on their description and were the few openly 'fat hating' participants. These anti-fat attitudes were anchored on Selma's struggle with weight and

preference for a thin body that she successfully communicated to her daughter and granddaughter. The triad of Vilma, Vanesa and Vilmarie who all had petite bodies and were thin in their youth shared ideas about how being a little overweight was not negative. Their shared body size makes it so their lived experiences are also more similar, and these in turn shape how they think about body ideals.

Hypothesis 3: Intergenerational variation. The third hypothesis that guided this portion of this investigation is: If intergenerational differences exist in body norms, then it is expected that senior women to be less concerned with their body size and more accepting of overweight bodies than younger women. To examine this hypothesis the narratives were coded for weight concern. For acceptance of overweight bodies there was no relevant mention that would allow differentiating between individuals that were accepting and those that weren't. A few participants mentioned acceptance of overweight and obese individuals, but only two of the 53 women openly stated that they were not accepting of overweight bodies. The majority of the participants were politically correct in steering clear of stating or demonstrating prejudice of weight. Social desirability bias was difficult to avoid due to the research topic being so visual and constantly present. In certain interviews participants were uncomfortable saying negative things about other people's body sizes. This occurred in the presence as well as in the absence of overweight individuals. It was difficult to address the portion of body size acceptance in the interview section of the study. I address this section of the hypothesis in Chapter 6 using a quantitative instrument than can serve as a proxy for this measure (the Anti-Fat Attitudes Scale).

Weight concern was coded in 33 separate narratives a total of 66 times. There were 13 grandmothers that mentioned weight concerns, 12 mothers and eight granddaughters. Overall the majority of women expressed some concern with managing their weight, especially losing weight or at least not gaining more weight. In some cases the grandmothers explained that they were concerned, but not to the point that it drove them to take drastic actions to lose weight. Tania plainly stated that she was overweight because she likes candies and sweets, and "...como me gustan los dulces pues, me los como." [since I like them I eat them]. Lisandra gave a peculiar explanation of the pressure or lack thereof to lose weight. She explained that she used to diet using Slimfast shakes for breakfast and for dinner a few years ago, but that now she does not care so she only drinks one Slimfast shake for dinner. This was peculiar because though she is explicitly stating that she does not care about her weight, her action of drinking a diet shake to replace eating dinner is indicative that she is managing her weight to a certain extent. This type of comment was frequent in the narratives of the grandmothers. This was expressed mostly as being fat and happy, happy referring to their lack of concern about social body size standards. In many occasions in which participants used this combination of adjectives to describe themselves they also talked about managing their weight in order to not get fatter. Reina, a tall and medium built grandmother, explained that she does not want to gain more weight, "...cuando yo llego a las 156 libras pues ya yo me veo que la ropa no me está sirviendo, que ya debo de hacer algo y yo lo hago" [when I reach the 156 pounds well then I see that clothes don't fit me, that I should do something and I do it]. The awareness that grandmothers demonstrated regarding managing their weight reflected a realistic approach, in the sense that though they did not have high expectations of losing a lot of weight or returning to what they weighed when they were young adults. Marta, a grandmother that takes care of her 3 grandchildren, expressed that though she knew that 130 pounds was ideal, she knew it was not realistic.

Marta: ...el peso ideal para mí pero no era el real. No era el real porque yo nunca..., en ese peso de 130 yo lo que estuve fue poco tiempo. Que después empecé a aumentar y estaba en 138, 140 que era el que el cuerpo..., nunca llegaba a rebajar tanto. [...the ideal weight for me is not real. It was not real because I never... at that weight of 130 I weighed that for very little time. I then started to gain weight and I was in 138, 140 it was the one the body... I never lost a lot of weight.]

Isa: Ok... pero que le gustó estar en ese peso a pesar de que reconoce que...[Ok...but you liked being at the weight even though you recognize that...] Marta: ¿A quién no? Claro, ay fabuloso. Todo me caía bien, todo se veía bien, estaba feliz, contenta, no tenía problema ninguno, pero... no hay mas nada. [Who doesn't? Sure, fabulous. Everything was good on me, everything looked good, I was happy, content, I had no problems, but...that is that.]

This more practical perception of weight management was also the product of previous cycles of weight gain and loss throughout their lives. Mothers also revealed this cycle of yo-yo dieting as a past, and in a few cases current, phenomenon. Some of the mothers also acknowledged that efforts to obtain a celebrity type ideal body were unrealistic.

The vast majority of mothers expressed some level of weight management, mostly portion control and exercising. Weight loss pills were mentioned when asked about weight loss strategies, though most women recognized they are not a good way to lose weight. The use of diet pills was recognized by some women to be a quick fix, not for lasting weight loss effects. Various women shared their personal anecdotes about using diet pills, one of which was Gretchen, a young woman in her early 20s. She was of medium built, and she described her use of diet pills that she got from a friend whose mother gave them to her.

Gretchen: "...llegue a usar pastillas." [...I used pills]

Isa: "¿Cómo cuales?" [Which pills?]

Gretchen: "Eh, bah, no me acuerdo. Este, yo se que la, mi mejor amiga el papá es doctor y ella, a ella le hicieron un trauma. Y estaba sobrepeso, y la mamá era bien superficial y la tenía usando pastillas para rebajar. Que estaba igual que yo, que tampoco era una persona, sabes, bien grande. Y pues ella me las daba, yo las usaba y a veces me funcionaban y a veces no. Algunas era buenas, algunas eran malas." [I don't remember. My best friend's father is a doctor and they traumatized her. She was overweight, and her mother, who was very superficial, had her taking pills to lose weight. She was the same as me, she wasn't big you know, not very big. So she gave me the pills, I would use them and sometimes they would work and sometimes they wouldn't. Some were good, some were bad"

Tamar, a mother in her 40s, also mentioned that she used diet pills because she would lose weight quickly with this method.

"Pues yo rebajé mucho, mucho, cuando tomé las 'heritage', unas pastillas...que descontinuaron lamentablemente. Rebajé mucho, rebajé 30 libras, y pesaba, cuando yo empecé en la dieta pesaba 168, y yo llegué a pesar 138. Cuando yo me casé pesaba 145, o sea, llegué a pesar menos que cuando me casé. Y las amistades estaban, pues, fascinadas. Mi madre por poco me mata porque pensaba que me veía enferma. Me dijo que hasta las nalgas se me habían desaparecido y se me habían escurrido." [I lost a lot , a lot of weight when I took the pills called 'heritage', which were discontinued unfortunately. I lost 30 pounds, when I started the diet I weighed 168 pounds and I got to weight 138, and when I got married I weighed 145, so I got to weight less than when I got married. My friends were fascinated. My mother nearly killed me because she thought I looked sick. She told me that even my butt had disappeared, that it had gotten drained.]

In this case Tamar considered herself overweight and used the pills to achieve a slimmer figure. Monica, a very slender mother in her 40s, explained that she used diet pills for maintaining her weight when she was younger. She explained that before turning 30 she would use diet pills even though she was never was "...gorda, nunca, pero siempre me gustó ser flaca. Pero nunca fui gorda." [fat, never, but I always liked being thin. But I was never was fat].

A recurrent theme related to hypothesis 1 was the issue of weight loss becoming

increasingly difficult with increase in age. Elena expressed it best when she explained that "...no quiero, sabes, no quiero ponerme gorda para después tener que pasar el trabajo. Porque yo sé que es más difícil. Y estoy jugando, mi máximo es 135, pues bajar a 130, 135 para jugar" [I don't want, you know, I don't want to get fat to then have to go through the trouble. Because I know it is harder. And I've got some wiggle room, my max is 135 (pounds), to then go down to 130, 135 to titter there]. This was the case for many mothers, although most of them weighed more than 135 pounds they still expressed desire to maintain their current weight or lose a few pounds. Most women explained that they were manteniéndose and cuidándose, meaning they were taking care not to gain and keeping their current weight. They did frame this vigilance over their weight as something that should not stress them out. Mothers seemed more relaxed about managing their weight than granddaughters, and some even explained that younger women that do not have a husband should maintain a thin body. This difference is most likely due to life stage, particularly related to health. Women in the mother age group have not yet begun to suffer common chronic conditions, such as heart disease and diabetes that senior women have. Also most mothers were still raising their children and working, and the grandmothers were mostly retired. This can translate into more time to be concerned about their health and weight, as well as consuming more media in which these topics are constantly addressed. The relaxed attitude to weight management was adequately expressed by Mónica, who came from a family that scrutinized each other's weight.

Mónica: Ahora hago ejercicio más por naturaleza... por lo menos media hora cuatro veces a la semana... O sea, nada de morirme ni anotarme en un gimnasio... Ahora me levanto, corro media hora, me baño me visto y me voy a trabajar. Ya es como que lo hago sin matarme. [Now I exercise more naturally...at least half an hour four times a week... I mean, nothing to die for nor

do I sign up in a gym...Now I get up, run half an hour, I shower, dress up and go to work. Now it's like I do it without killing myself.]

The yo-yo dieting was evident for many women, one of the best examples because of her clear explanation of her weight gain cycles, was Leticia. She went on different diets, mostly portion control and restrained eating, but when she wanted to lose a lot of weight she joined the Weight Watchers program. She gained the weight she had lost when she moved to countries that did not have the program. The weight gain and loss cycle was also apparent in the group of the granddaughters. Keila, who was traumatized about her recent weight gain of 20 pounds, described the various occasions that she has dieted and exercised to lose weight. She would exercise for a week or so, lose a few pounds, and then stop. She would gain the weight, commit to another diet or routine, carry it out for a few days, lose some weight, gain it back and so the cycle went on. Though the granddaughters were not extremely vocal in expressing their concern with achieving or keeping the thin body they did express that there was a lot of pressure to be thin.

Many granddaughters identified that their mothers and grandmothers wanted them to be thin for health reasons, and also so they would feel good about themselves. When participants of this group mentioned health, it was not followed with further explanation or specifics on how their health would be affected. It was amazing to hear this issue of pressuring daughters to lose weight or to not gain weight so they can feel good about themselves. Odette, whose grandmother Ofelia and mother Olga were very tall and slender, explained that her mother constantly pressured her to lose weight. In the process of the interview, which Odette expressed made her reflect about her issues with weight

management, she came to the realization that she was never praised for her body, even when she weighed less than her current 180 pounds (she is 5'6'').

Odette: Pero mami como que ahora mismo se pasa "Estoy preocupada por ti", como que, "Quiero que te veas bien, mira a ver vente a hacer ejercicio conmigo". Mami cuando me veía bien todavía "está gorda", le decía. Y ella "no, no puedes pensar así (que estas bien en ese peso), después te vas a dejar ponerte". "Mami no voy a ponerme gorda". [But my mom right now she keeps going on "I'm concerned about you", like, "I want you to look good, come on exercise with me". Mom, when I looked good, still said, "she's fat", she would say. And she would say, "no, no you can't think like that (that you are okay at that weight), then you are going to let yourself go". "Mom I'm not going to get fat"].

This exemplar highlights the existing contradiction between the idea of being happy with how you are, or tolerating yourself, and the pressure to lose weigh to 'feel good about yourself'. Odette recognized that the pressure from her family was potentially hurting her, yet she also stated that her ideal weight was 135 pounds. Some mothers expressed that their suffering and struggle with overweight were the reason for their constant pressure so their daughters and granddaughters would not be overweight. The idea is not to change the way we think about overweight and size acceptance but rather for all to fit the mold in order to avoid social fat stigma. If we pan out of the individual stories it is possible to see the bigger picture of general concern about not being overweight, pressure to be thin and the omnipresent self-loathing that emerges from the body panopticon. There were two particular cases that highlight the control over female bodies within families. Marta, a lively grandmother, explained how weight was "una cruz" (a cross, a burden for her). Her husband was obsessed that women in his household, meaning Marta and her daughters, had to be thin. He bullied Marta so much about her weight that she would refuse to eat at the table with her husband as to avoid criticism and comments from him. This carried over to her daughters, such as Mónica,

who laughed it off as it being normal male behavior. Another of Marta's daughters however resisted the imposition and cult of thinness on behalf of her father and her female family members. This resistance, even if not a conscious choice, demonstrates that women are not just passive subjects. Marta however explained that her martyrdom was to be married to a man that constantly pressured her to be thin and that made her feel bad about her body for more than 40 years. This is not necessarily the product of solely the thin-body ideal, but rather reflects the patriarchal, *machista* Puerto Rican society. A few women mentioned their husbands as the reason why they want to lose weight or not gain more weight, but it was not a clear trend overall. Other women explained that their husbands wouldn't say anything, some because they were fatter than their wives, and others because they love them for whom they are, not how they look.

Rita, a dramatic mother of two teenagers, was the other extreme case of body weight used to pressure and abuse. Her husband would supervise her weight, and use any small weight gain she had as a threat to abandon her. His constant bullying made her gain more weight and affected her health. In this case the psychological abuse took the shape of weight control. These two cases highlight the relevance of the thin-body ideal in Puerto Rico, and their use as mechanisms of control that can be countered with resistance to this ideal.

Ideal body timeline. Participants were asked about body size ideals in general throughout their lives. One of the easiest ways to elicit this was having them mention celebrities, local or international actresses or TV personalities, whose body represented the ideal body. These descriptions and lists of celebrities resulted in a type of ideal body timeline. Table 5.3 summarizes the exemplars of physical descriptions of the ideal bodies

and the list of examples. In some occasions the exemplars seem contradictory with some highlighting the preference for thin bodies and others for plump bodies. There is a plurality of ideal bodies, but they range from the thin body to the plump (*gordita*) body, with few mentions of overweight or obesity as ideals. Many grandmothers did not recall body ideals for the 1940s and 1950s. One of the grandmothers who offered many examples of actresses that were perceived as beauty ideals explained that although these celebrities were ideal there



Figure 5.2 Iris Chacón.

was no obvious effort on behalf of Puerto Rican women to emulate their bodies. It is not until the 1970s that local figures, such as Iris Chacón and Marisol Malaret, show up as ideal bodies. The case of Iris Chacón is important to explain because it is tied to the

plump body ideal that existed in the 1970s up to the late 1980s. Iris Chacón (see Figure 5.2) was known as the 'vedette or pinup girl of the Americas', and was famous for her wide hips and large buttocks. Participants frequently mentioned her as an ideal body, and they also pointed out that she was ideal though she was not thin, but rather plump. The immense popularity of Iris Chacón has even been construed as an element of cultural differentiation from the colonizers. A Puerto Rican literary scholar, Edgardo Rodríguez Juliá, explained that Iris Chacón's butt was an icon of Puerto Rican eroticism (Rodríguez Juliá, 1986). In that same essay, titled "*Una Noche con Iris Chacón*" [A Night with Iris Chacón], he explains that the importance of wide hips and large butt is essentially Puerto Rican, and this inclination differentiates the colonized from the colonizers (in this case people from the U.S.).



Figure 5.3 Cover of Rodríguez Juliá's book "Una Noche con Iris Chacón".

The plump bodies described as ideal by the participants were usually described within the parameters of not being fat, but not being too thin. This was a common way to describe even the thin bodies for which participants usually clarified that they could not be too thin or look unhealthy.

The 2000-2011 descriptions however include ideals of thinness that, as described by the participants, edge on anorexic. After the 1990s there are more Latinas mentioned as having ideal bodies, with Jennifer López being the other top mention. Jennifer López, while obviously slender, is recognized for her thick legs and large buttocks. Rodríguez Juliá argued in his 1985 essay that the adoption of the dérrière as part of U.S. sexual culture is a sign of transcultural contamination (Rodríguez Juliá, 1986). The Wall Street Journal featured a front page story about Iris Chacón in 1983, titled A Onetime Choirgirl Rules as Sex Goddess on Puerto Rican TV (Nazario, 1983). Appearances on U.S. TV shows of variety and daytime talk shows also helped in the process of "transcultural contamination" (Rodríguez Juliá, 1986). What Rodríguez Juliá refers to as transcultural contamination is what in anthropology is considered diffusion, but his literary explanation implies that cultural diffusion tainted or polluted mainstream U.S. culture with the appearance of what could be considered vulgar glorification of a woman's large behind. This assumption portrays the inclusion of a diversity of body shapes, but slenderness and flablessness are highly regarded as ideals. Though more Latinas were mentioned as having ideal bodies in the 2000-2011 this was also the same decade that narrowed to a singular thin-body ideal. Culturally diverse celebrities do not translate into diversity of body ideals. The difference that may result is the type of thin-body that is idealized. The data collected indicates that females with flat stomachs and wide hips and

large buttocks are a current Puerto Rican ideal. The increase in Puerto Rican and Latin American celebrities can help Latinas identify with these women and find it easier to idealize them due to skin color, body shape and hair type. They are still slender women and they do not widen the spectrum of acceptable body weight compared to their Caucasian counterparts. Additionally the increased mention of Latina celebrities is most likely due to an increase of these women in crossover media (Latino and Caucasian media) and their general popularity. One of the curios cases is that of Shakira, mentioned by mothers and granddaughters alike in various occasions. Shakira, a Colombian singer, changed her image radically to crossover to U.S. media. She went from black hair, average weight to being blonde and a strong focus on her well-toned midriff. She is a Latina whose image imitates that of Caucasian models and singers. This change in image was acknowledged by the singer in her duo with Puerto Rican rapper Calle 13 in their duet 'Gordita'. In that song Calle 13 sings that he liked Shakira better when she was "más gordita, con el pelito negrito y la cara redondita" [more plump, with black hair and a round face].

It is important not to confuse the Latin American pride for a celebration of diversity in terms of body image. This is also the case of Zuleyka Rivera, the 2006 Miss Universe from Puerto Rico, who was celebrated for having won the beauty pageant and not having obvious European facial features. Though there were four previous Miss Universe winners from Puerto Rico Zuleyka Rivera was the first to have darker skin and hair, and she was tall and thin like all the other contestants. These cases exemplify that Latin American ideals conform to the thin-body ideal and can be a source for promoting it because Latina women can identify closer with these celebrities. Just as grandmothers

and mothers in their youth identified with Iris Chacón, because she was a local celebrity that they could relate to, the granddaughters and some mothers now identify with Latina celebrities.

Table 5.3

Timeline of Ideal Bodies

	Exemplars	Examples of Public Figures			
	1940-1950				
0	Thin women	<u></u>			
0	Those with a 'belly dancer' waist				
	1950-1960				
0	Plump, not obese but not thin	Marilyn Mannaa Aya Candnar			
0	Plump, even obese people	Marilyn Monroe, Ava Gardner			
0	Tight and small waist, they would use	Rita Hayworth, Betty Grable Elizabeth Taylor, Debbie Reynolds			
	fajas [girdles] for that. There were no	Ingrid Bergman, Grace Kelly			
	fat people	Gina Lollobrigida, Sophia Loren			
0	Skinny women, weighing 115 pounds	Oma Londongida, Sopina Loren			
	1960-1970				
0	Plump "la gordita", even fat	Marilyn Monroe, Grace Kelly			
0	Women with hips, curves	Anita Ekberg, Elizabeth Taylor			
0	Slender, not thin but not fat	Natalie Wood			
1970-1980					
0	Thin is always better, thin girls always				
	looked prettier	Po Daraelz Forreh Fawaat			
0	Tall and curvaceous women	Bo Dereck, Farrah Fawcet Iris Chacón, Marisol Malaret			
0	Plump, with breasts, not skinny	mis Chacon, Marison Mararet			
0	Average, not super skinny but not fat				
	1980-1990				
0	Thin and curvaceous, curvaceous, but				
	not plump	Linda Carter (Wonder Woman)			
0	Curvaceous, but not extremely skinny,	Bo Derek, Raquel Welch			
	and with big breasts	Bridget Barton, Madonna			
0	Average, not too thin, but not fat.	Whitney Houston, Iris Chacón			
0	Weighing between 103-105 pounds	Ednita Nazario			
0	Women with wide hips and big buttocks				
	1990-2000				
0	Thin, and aware of weighing 120				
	pounds				
0	Thin and curvaceous, most people did	Madonna, Jennifer López			
	not like plump women				
0	Not fat and not thin, maybe plump				
	2000-2011				
0	Thin (slender), with a flat stomach (no	Beyonce, Brittney Spears			
	rolls of fat "chichos"), curvaceous, large	Pamela Anderson			
	breasts, big buttocks, and having a	Victoria's Secret models			
	toned body, no flabbiness. Preferably	Cameron Diaz, Eva Mendes			
	with straight hair, and/or blonde hair	Kim Kardashian, Jennifer López			
0	Stick figure	Maripily, Shakira			
0	Very thin, that they look like they don't	Thalia, Zuleyka Rivera			
	eat	mana, Zaioyka Kivora			

Table 5.4 has a count of the type of body ideal mentioned by participants as a rudimentary tally based on the examples women described. These frequencies, though not a statistical measure, shed some light on the presence of the thin-body ideal since the 1940s. The plump ideal frequency decreases with increase in years, resulting in zero mentions for the past decade. The diversity in ideal bodies has been reduced with time and now apparently is narrowed down to the singular thin-body ideal. As explained by grandmothers in this study, there has always been some access and contact with U.S. media, and the movie stars represented the ideal bodies. The U.S. ideal body type for females has "become steadily slimmer and less curvaceous than in the 1950s, the era of Marilyn Monroe's bosomy beauty" (Hesse-Biber, 2007). The increased media exposure, having thin Latina celebrities and the thinner U.S. ideal has eliminated the range of locally accepted bodies. It has created more spaces and opportunities for body image disorders and normative weight discontent, which emerge as the social standard.

Table 5.4

Body Model Frequency by Decade as Coded in 53 Interviews

	Thin	Plump	Overweight
		(gordita)	
1940-1950	3	0	0
1950-1960	7	5	1
1960-1970	5	4	1
1970-1980	8	1	0
1980-1990	8	3	0
1990-2000	8	1	0
2000-2011	21	0	0

Discussion

The general body norms can be summarized as preference for a thin body, for both aesthetic and health reasons, for women of all three age groups. The cult of slimness

(Germov and Williams, 1999) was evident in all interviews. This cult of slimness is clearly revealed with more than half of the 53 participants trying to lose weight at the time of the study regardless of their body weight, and most have ideal weights that are less than their current weigh. The drive for thinness took the form of dissatisfaction with their body, constant dieting and food restrictions, and the perception that no matter how much they struggled or how weight they lost they would still not meet social standards. This was most evident in the cases of women that dieted regardless of weight, and this behavior was incorporated into their normal routine. For example, Aura, a stunning young woman, who reported mostly being underweight throughout her life, dieted and practiced restricted eating as part of a fad she shared with her friends. Melissa, an active soccer playing high school senior, described restraining her diet and exercising heavily when she read the scale incorrectly and thought she was a few pounds above her usual weight. This example underscores how numbers on scales not how individuals feel rule the diet trend. In the case of misread or un-calibrated instruments this can be a dangerous thing, putting healthy women on the race against the extra pounds. Herman and Mack (1975) reported this type of incorporation of dieting regardless of body weight in their study of college age women. It is evident that this type of behavior has become established in the lives of many Puerto Rican women.

The subject of body weight and size resulted sensitive for many women, especially for those that considered themselves overweight or obese. Body size was strongly associated to specific people or life events. In some cases it was tied to emotional abuse from a spouse that used weight as a source for disparaging and inflicting feelings of shame on his wife. In these cases talking about weight and food and eating

became part of a narrative of mistreatment and very negative interpersonal relationships. In other cases body size and food were part of a specific relationship with either the mother or the father. In cases where that parent had passed away conversing about these topics was also a way of remembering that person and their role in the participants' lives. In the 53 interviews more tears were shed than I was expecting, and this emphasized how the body transcends and impacts many realms of peoples' lives.

There is variation in body norms according to life stages. Most women explained that during middle school there was a preference for girls with plump bodies. This ideal of a plumper body is marked by the preference for female bodies that resemble adult female bodies, and that skinny girls that are underdeveloped or haven't gone through their secondary characteristics are not attractive. Not because they are skinny, but because they do not have the female secondary sexual traits that are of interest to boys at that age and after. Of the 13 distinct life stages coded only two, newborns and puberty, or early adolescence, were identified clearly in the qualitative portion of this dissertation study with a preference for a plump body rather than a thin body. The cultural consensus analysis results in Chapter 4 is concordant with babies being chubby as a positive connotation, but not with girls in early adolescence. The quantitative measurements when contextualized with interview data offer a more comprehensive picture of the cultural landscape. When asked if it is acceptable for girls in puberty to gain weight most people disagreed, but when they explain that girls that gain weight and get their secondary sexual characteristics sooner, meaning developing breasts and wider hips, then it is a positive thing.

The thin body ideal is socially constructed and represents youth, beauty, success

and health (Germov and Williams, 1999). Grandmothers in this study recognized that thinness is inherently symbolic of youth, and many subtly resisted this by explaining that gaining weight was part of old age and that if you did not accept that you would not age with dignity. This was especially cited for beauty as a reason to be thin. When asked about health the same women made it clear that being thin was a sign of good health, and that was why they must remain attentive to their body size. In the literature the main reason senior women give for desiring and preferring a thin body is usually health (Clarke, 2002; Grogan, 2008). There is this notion that senior women's bodies are not objectified, which may be true socially, but it does not exclude self-objectification. We cannot expect females that have lived the greater portion of their lives being objectified to gradually outgrow this phenomenon due to age. It is possible that objectification of senior women's bodies has changed and it is currently more prevalent, and also that intense selfobjectification does not wear off as we would assume. These findings are similar to those by Johnston et al. (2004) that report with older age concern about appearance persists, even though a change in there are changes in level of appearance concerns due to change in life priorities.

The participants that comprised the mother age group reported more realistic expectations regarding weight loss and maintenance. They had dieted throughout their lives and at their middle age acknowledged that they couldn't expect to look like a teenage girl. This did not stop them from dieting, exercising and managing their weight in some way. Their idea of realistic weight loss is tied to their perception of ideal bodies being hard to obtain, which is similar to the findings of Pompper and Koenig (2004). This age group does not identify closely with media images, in light of the lack of senior

women as celebrities they may feel less pressure to conform to the thin-body ideal. The grandmothers reluctantly accept their weight gain, but pressure younger women in their families not to conform to excess weight. This was also the case of mothers that struggled with weight issues and did not want their daughters to suffer the same fate and would use their weight story as a cautionary tale for younger women. Most mothers justified this "benign" form of weight control as a well-meaning way to save their daughters and nieces from the horrors of bullying and prejudice based on weight. This strategy is at odds with the self-tolerance discourse, which on the surface states that other people should "accept" meaning tolerate themselves as they are, yet those close to you should strive to be thin to avoid fat stigma. The solution was not identified as deconstructing the thin-body ideal, or empowering women to truly accept themselves, but rather to conform as a means of not upsetting the system. This type of mentality did not help young women that struggled with extreme dieting, restrained eating and obsessed about their weight; it only served to reinforce and perpetuate the cult of slimness.

Basing the preference for a thin body was reported to be both for health and aesthetics reasons for women of all age groups. This finding suggests that young women are exposed to the health discourse of the importance of maintaining a specific weight due to health reasons (though they didn't state any in particular), and are simultaneously being exposed to the thin body beauty ideal. This seems to translate across age groups. It can be generalized that though life stages mark greater social tolerance of gaining weight, the standard for women is to desire and put forth the preference for thinness. It also indicates that the conflation of beauty and health as rationalization behind the thin-body idealization is occurring for women of all age groups. This is concerning since the health

aspect of body weight is constantly being developed and that the drive for a thin body for beauty does not take into consideration the multiple health weights spectrum.

Extreme scrutiny and cultural aesthetic ideals are more unforgiving for female bodies than male bodies. The female body ideals stemming from fashion and celebrities have been described as evidence of patriarchal social control of women (Bordo, 2003). Women are also active social agents in the construction of these ideals, not just passive subjects that conform to ideals. Women perpetuate the thin-body ideal by "reinforcing the thin ideal on themselves through constant self-surveillance of their bodies" and by putting other women under body-surveillance "to ensure they comply or attempt to conform to the thin ideal as well" (Germov and Williams, 1999, p. 125). The social pressure applied to ensure compliance with the cult of slimness does not translate into direct action. If this were the case then we would expect women in societies that highly value thinness, like in the U.S. to mostly be thin, and the literature points to high rates of overweight and obesity for women there (Ogden et al., 2006; Ogden et al., 2012). Therefore that pressure to lose weight does not necessarily translate into action on weight reduction, but it does create a constant concern and unhappiness for many women, even for women over 40 years of age.

Surveillance and self-surveillance were practices that are already embedded in Puerto Rican society. The case of mothers and grandmothers being the observers and enforcers of the granddaughters' dietary habits and weight status is evidence that the surveillance component of the objectified body consciousness is present. Shame regarding body weight was also clearly stated by participants of all ages in this study. The reluctance of some individuals to participate in the study because they are overweight,

and of others not disclosing their current weight exemplify shame of not fitting the social standard. Odette's explanation of the constant pressure to lose weight, and therefore pervasive notion that her body is a source of shame is another example of how objectification has infiltrated Puerto Rican body ideals. The issue of control, the third component of objectified body consciousness, is that one that remains on the sideline, though there are signs that it is permeating the cultural ideas about weight control. Many individuals mentioned that if you really wanted to lose weight you could, yet they also explained that your metabolism is inherited and that it changes with age. These perceptions may be changing partly due to the increase in merchandise promoting weight loss, which is usually accompanied by heroic stories of extreme weight loss that make create a narration of equal opportunity weight loss. In these stories that notion that 'if I did it, anybody can do it' reigns. This is the case of the popular "Transformación Total" [Total Transformation] TV show, the local *Biggest Loser* adaptation. This narrative also contributes to this basic idea of control over weight loss that is essential in completing the objectified body consciousness trio (McKinley, 1999) and engrains it in current Puerto Rican society.

The normative weight discontent was pervasive in the study sample, and family triads shared specific body narratives. Some families did not perceive excess weight as negative, while others had a clear legacy of fat stigma. The collective family memory serves as the keystone for how individuals think about their own bodies and how they frame social body standards. Many participants recalled their families' weight and issues surrounding it to explain their thoughts on these standards. Even with the mention of media as a major influence on body ideals this seemed to translate into how individuals

perceived pressure to be thin. The supposed pressure media has on women's ideas is well situated within existing family body norms. Media influences women of all ages, and this is a mechanism that introduces body ideals and information about weight, yet the family apparently is the source of much of the pressure to have a thin body. We have to expand the way we think media is impacting girls and women as individuals, and take a more holistic approach and study the family as the unit feeling that impact and reproducing the pressure. Body size ideals are shared strongly among families, and age cohorts share the discourses used to talk about those ideals.

Concern about weight was reflected more in the interviews of mothers and grandmothers, than those of granddaughters. The fewer mentions of weight concern for granddaughters may be related to most women in that group having lower BMIs than the women in the other age groups. It was even mentioned by some participants, that since they were not overweight they do not know if that is an issue for many people, especially as far as feeling explicit pressure to be thin.

The references and descriptions of ideal bodies emphasized the existence of legitimate elements of body image that function as mechanisms of cultural and national differentiation. In Puerto Rico diversity in hair type, skin color, and body shape (i.e. wide hips, small waist) embody national identity. These categories have their boundaries (Godreau, 2002), but I point them out because they contrast with body weight, which is not embraced as variable embodying identity. The broader diversity, which previously existed regarding this category, has been reduced and centers on the mainstream U.S.-European thin-body ideal; moreover as a category it has not formed part of the nationalistic discourse of cultural resistance on the island. This study did not elicit diverse

thin-body ideals, and a research question that emerges for future studies is the contrast between the particular Puerto Rican ideal and the mainstream (Caucasian) U.S. body ideal. The strong sense of cultural and national identity has not been translated into the arena of body size ideals. The adaptation of the thin-body ideal to the local context creates a hybrid model that retains the preference for wide hips and large buttocks, and combines it with thinness, zero flabbiness and flat stomachs. The body panopticon is well established in Puerto Rico.

Conclusion

The lived experiences of the women interviewed for this study and countless women encountered during my fieldwork season in Puerto Rico differ tremendously from the lives of women studied by Massara. These differences are a testament of cultural changes in perceptions and preferences of body size. The qualitative data collected offered depth and breadth on the various experiences with body weight. It helped to contextualize the shift towards the thin-body ideal, and also to represent the relevance of body size in the quotidian lives of women. The diversity of accepted bodies has been narrowed to a single category of thin-body. This is indicative of a narrow female body size spectrum within the range of thin bodies. The narratives shared by the participants fit with objectified body theory. This match with Puerto Rican body models and Euro-U.S. theories of the body underscores the change in body ideals. Media is widely cited and blamed for the creation and imposition of the thin-body ideal. The media is part of the cycle that reproduces and perpetuates the ideal, yet it is not clear the role this plays in acculturation of body ideals in Puerto Rico. The role of media in helping to understand and explain culture change is examined in the following chapter.

Chapter 6: Acculturation, Media and Shifting Body Ideals

Changes in body ideals occur within wider environmental, social and economic changes (Becker, 2004; Ritenbaugh, 1982). Culture is embodied in different ways, and body size is one. Different types of media serve as instruments through which the meanings and cultural symbolism of bodies is communicated and reinforced in many societies. In the case of the U.S., Bordo (2003) explains that sociocultural body ideals are established and represented in mass media. Exposure to different cultures through participation in the global economic system paves the road for transforming local cultures to the images common in transnational media. Transnational media, referring to media that transcends national borders and is controlled mostly by transnational corporations, focuses on information and entertainment as a commodity (Gershon, 1997). This type of globalization of media has been associated with challenges to national sovereignty, potential loss of national culture and homogenization of culture (Gershon, 1997; Kearney, 1995). Body size models are a cultural domain that is influenced by the processes of globalization and acculturation. The information imported to local cultures can be adopted directly, though mostly it passes through a cultural filter that transforms it and molds it around existing body ideals. Media, including print, magazines, movies, and television, are hypothesized to serve as mechanisms for acculturation (Becker et al., 2007; Rivadeneyra and Ward, 2005; Schooler, 2008).

In both cross-sectional and longitudinal studies the role of television on body ideals has been examined (Anderson-Fye, 2004; Becker, 2004; Becker et al., 2007). Anne Becker assessed the impact of the introduction of television on body ideals and eating habits in Fiji (Becker, 2004). Almost a decade after her initial study (Becker, 1995) she

found that young women expressed a preference for thinner bodies, and especially used TV actors, such as *Xena the Warrior Princess*, as cultural references for ideal bodies. This shift was associated to a change in cultural values of prioritizing self-presentation over the construction of personal identity through the nurturing of others (Becker, 2004). She reported that introduction of television, and therefore exposure to television programming, influenced the shift towards a thin-body ideal.

There are other case studies that do not demonstrate the same level of association in changing body ideals. One of the best-described examples is the case of young women in Belize. Anderson-Fye (2004) conducted research with teenage girls in San Andrés, Belize. In this frequented tourist area the study participants have wide access and exposure to U.S. programming, and interact with U.S. and European tourists. The researcher explained that the girls' socio-cultural construction of bodily beauty did not center on body weight. They had a strong understanding that they could not change their bodies in "significant and lasting ways", they had to focus on highlighting their hourglass body shape by adorning their bodies with hair and make-up and clothes (Anderson-Fye, 2004). Culture change is not a linear and single path process, and therein lays the interest in studying how different body ideals are shaped, fused and incorporated into existing cultural ideals. The common factor among these cultural body ideals was the absence of a strong and singular thin body ideal. This stands in stark contrast to the more widely known and studied, U.S. and European thin body ideal (Brown and Slaughter, 2011; Cheney, 2011). In the U.S. mainstream culture thin-bodies have been given meanings of success, personal control, beauty and health (Cordell and Ronai, 1999; Garner et al., 1980; Rothblum, 1990). On the other hand, obesity and overweight are symbolic of moral failing and illness (Quinn and Crocker, 1999; Crandall et al., 2001). This emphasizes the need to create a comprehensive picture of the factors influencing and shaping current body size models in diverse cultural contexts, especially in light of possible loss of cultural variation in this domain (Brewis et al., 2011). To assess the incorporation of a thin body size ideal body discrepancy was measured and correlated with measures of acculturation and media influence such as television viewing. Since the thin body ideal imported from the U.S. includes fat stigma as an important factor, anti-fat attitudes were measured and correlated with acculturation measures, and television viewing.

Research Hypotheses (4-6)

The objective of this study is to identify and understand Puerto Rican body size models. Among the questions that guide this study is the socio-cultural construction of body ideals. In this section I examine the relationship between media exposure, acculturation and body ideals. The following hypotheses guide the research and analysis.

Hypothesis (4): If acculturation level influences the social context of body size norms, then people that are highly acculturated within the U.S. culture are expected to have more thin positive and more anti-fat body size ideals.

Hypothesis (5): If media exposure influences the creation of body size norms, then individuals who are exposed to more print and visual media are expected to have more thin positive and more fat negative body norms than those exposed to less media.

Hypothesis (6): If type of media influences body norms differently, then individuals who watch more drama programs, movies and *telenovelas* (Latin soap operas) are expected to have higher body discrepancy (difference between ideal

body figure and current body figure) and anti-fat scores than those exposed less to these types of media.

Data on specific measure of anti-fat attitudes, U.S. and P.R. biculturality, and media exposure and body discrepancy are described and explained. Anti-Fat Attitudes Scale (AFAS) score and Body Discrepancy (BD) scores (outcome variables) represent two different components of the body model: (1) preference or non-preference for a thinner body, and (2) presence and level of anti-fat attitudes. The purpose of exploring the relationships between these variables is to better our understanding of the factors that shape current Puerto Rican body ideals.

Methods

Sample. A sample of 139 subjects was achieved using a respondent driven sampling strategy (Gile and Handcock, 2010; Heckathorn, 2011). Of this total sample, 70 were females between the ages of 16-86 years of age, and 60 were males between the ages of 17-90 years of age. The female sample is based on intergenerational triads. All women recruited belonged to a family triad, and one close male per every female was recruited to participate. All subjects were Puerto Ricans living in urban settings on the main island, and they were interviewed between March and December 2011. Of the 139 participants, 53 women belonging to approximately 17 intergenerational triads were interviewed using a semi-structured interview guide. These interview data were used in combination with the quantitative data to generate a comprehensive scope of body ideals in Puerto Rico.

Materials and procedure. Participants were administered a series of surveys, which included socio-demographic information, self-reported height and weight, the anti-

fat attitudes scale (Morrison and O'Connor, 1999), a media exposure inventory (print and visual media), the Puerto Rican Biculturality Scale (Cortés et al., 1994), and a contour drawing scale (Thompson and Gray, 1995). To assess anti-fat attitudes participants answered the Anti-Fat Attitudes Scale (AFAS) created by Morrison and O'Connor (1999), which is a five question, 5-point agreement Likert type scale. The maximum possible score is 20, representing strong anti-fat attitudes, and the minimum score is zero, representing little or no anti-fat attitudes. The five items yielded a Cronbach's alpha coefficient of .76. This value approximates the convention of a Cronbach's alpha coefficient of .75 as a cut-point for reliability of a scale (Bernardi, 1994; Cortina, 1993), which indicates that the items reliably measure the concept of anti-fat attitudes.

To measure acculturation participants were given the Puerto Rican Biculturality Scale (PRBS) developed by Cortés et al. (1994). The PRBS measures closeness to Puerto Rican and United States culture without assuming mutual cultural exclusivity (Cortés et al., 1994), but rather accounting for possible independent participation in both cultures. This Likert-type scale consists of 4 items are on a 5-point scale of strength of endorsement, 14 items that are on a 4-point scale of strength of endorsement. The total 18 items are divided into 9 items that assess closeness to P.R. culture, and 10 items that assess closeness to U.S. culture. For the purpose of analysis and discussion the scores of the scale are referred to as PRBS U.S. score and PRBS P.R. score. This helps to describe and explain the scores of this measure, which can be used simultaneously without one score excluding the other. The maximum score for U.S. and P.R. culture closeness is 38, and the minimum is a score of nine. A high score represents more closeness or affiliation to both cultures, and a low score represents lack of closeness to either culture. A person

with a high score in P.R. culture can also have an equally high score for U.S. culture, which would indicate a highly bicultural individual. Cronbach's alpha reliability coefficient was used to measure internal consistency, which is the average correlation between items, of the survey instrument PRBS. The measure is useful in examining the level of consistency between items of a scale, regarding each other, and this reflects the instruments ability to reliably assess a variable (Handwerker, 1996). The nine items that assess closeness or involvement in U.S. culture yielded a Cronbach's alpha coefficient of .826. The nine items that measure closeness to P.R. culture yielded a Cronbach's alpha coefficient of .782. A value close or above 0.80, the convention for a good Cronbach's alpha, (Bernard, 2006) suggests that the scale does a reliable job on measuring the desired variable. This suggests that the items in the scale designed to measure closeness to P.R. and U.S. culture are reliable measures for these variables.

Media exposure was assessed using a media inventory. This included a 'programs watched' inventory. The top rated TV shows from January to February 2011 were taken from the Nielsen report for Puerto Rico (Winham and Hampl, 2008). Participants were given a list that included the top 13 rated TV shows, and had 22 blanks spaces to write in any additional shows they watched regularly. Participants were asked to report if they watched the shows, which language the show was broadcast in (English, Spanish or both), and how frequently they watched the show (daily, 4 days a week, 3 days a week, 2 days a week, once a week). This inventory was created and tailored for the Puerto Rican cultural setting, but it was based on similar instruments developed by Tiggemann and Pickering (1996). To classify and study television exposure as a variable, categories were created based on show genre, resulting in 14 show categories. These were: sitcoms,

drama, telenovelas (Latin American soap operas), game shows, do it yourself programming, reality TV, sports, religious programming, news, adult cartoons, children's cartoons, science/history, talk shows (which included late night and variety shows), and music television. The duration of the programs mentioned was used to calculate the amount of television viewed per week, per genre and as an aggregate total. The participants also answered a magazine inventory, a news inventory and were asked how many movies they watch per week. The magazine inventory included ten magazines that were frequently seen in local newsstands and stores. There was additional space to list other magazines that were not originally included. Participants answered how frequently they viewed the magazines (weekly, monthly, 2 or 3 months, don't buy it but skim it in other locations), and the language the magazine was in (English, Spanish or both). The magazines were later classified into seven magazine genres: beauty, health, gossip, professional, sports, news, and religious. This information was used to calculate the total number of magazine viewed on a monthly basis. Additionally the news inventory captured the newspapers and news websites participants viewed on a weekly basis. The totality of this media inventory offers a holistic approximation of frequency of media exposure. These measurements were used to assess how the amount of media individuals are exposed to influences their body size models preferences.

Body size perceptions are commonly measured through figure or line drawing scales, which are widely used in body image research (Fallon and Rozin, 1985; Furnham et al., 2002; Stunkard et al., 1983). In this investigation this variable was measured using a Contour Drawing Rating Scale (CDRS) created by Thompson and Gray (1995). This scale consists of nine female and nine male figures, and it is an improvement from

previous scales that had been found inappropriate because they lacked facial features and were unrealistic representations of human forms.

Participants were asked to select the image they considered representative of their current body by making a mark anywhere below the figures, as well as the figure they would like to look like, again they could mark anywhere below the figures including between figures (Thompson and Gray, 1995). They also identified which figure they considered overweight and which figure they considered obese. The first scale given to the participant was their same sex figure scale. The participants were asked to look at an opposite sex figure scale, and select which body they think is the average opposite sex body. Then they were asked to mark which figure of the opposite sex they found to the ideal figure. The last task related to the figure scale was to, on a separate sheet that included both male and female scales, indicate which figure they considered was overweight for female, overweight for males, obese for females and obese for males.

The information of the current and ideal figure for the self can be used to examine body discrepancy (BD). Body discrepancy (BD) is used in the body image literature to refer to the difference between the body an individual has and the body he or she would like to have. BD was calculated by subtracting the desired body figure number from the actual body figure number chosen by the participant from the figure rating scale. The discrepancies score "is an index of body size dissatisfaction" (Furnham et al., 2002). The CDRS demonstrated good test-retest reliability and construct validity (Wertheim et al., 2004). A positive BD score indicates that the person desires to lose weight, a negative number that the person desires to gain weight (Brewis et al., 1998; Fallon and Rozin, 1985). The difference between these two figures is the body discrepancy score. This is

an ordinal measure that can be treated as an interval level variable for analysis (Allen and Seaman, 2007; Carifio and Perla, 2007). This outcome variable was analyzed along the four other previously mentioned variables to examine the hypotheses established. The CDRS (Thompson and Gray, 1995) was also used to elicit ideal body types, and body size categorizations.

Data analysis. The variables of AFAS score, PRBS U.S. score, PRBS P.R. score, media exposure, television genre exposure, and BD scores were analyzed using SPSS 19.0. The mean, standard deviation, and mode for all variables were calculated to describe the general behavior of these variables in the sample. To examine the distribution of each variable Q-Q plots and boxplots were constructed. The results of these figures indicate that AFAS score, PRBS U.S. score, PRBS P.R. score, and BD score are normally distributed among the sample. The variables that make up media exposure (magazines, printed newspapers, news websites, movies and number of television shows viewed monthly) were not normally distributed. The type of television viewed by genre (the 14 categories) were not normally distributed either.

Gender and age are two covariates that are important in understanding construction of body size models. To assess variance along these categories the mean of each variable was compared by gender (2 categories) and by age group (3 categories). These analyses help to decipher how these two covariates influence the behavior of the study variables, and also provide details that help to piece together the story of change in body size models in Puerto Rico. The statistical analyses used to compare means are described in the next subsection by variable.

The association between the variables was tested using appropriate correlation analyses. The AFAS score and the BD score are ordinal variables that can be treated as interval variables for data analysis because of they have five or more options, though it is important to keep in mind that they are not continuous measures. The PRBS scores are ordinal level variables that can only be treated as such. Television exposure is a ratio level variable measured in minutes watched per week. This variable, though ratio level, presents limitation for analysis because it is not normally distributed. Below the descriptive statistics, and analyses of variance for each variable are presented, followed by the results of the correlation analyses.

Results

Anti-fat attitudes scale scores. The mean, standard deviation, mode and range for the variables of AFAS score, PRBS U.S. score, PRBS P.R. score, TV viewing weekly and BD scores are presented in Table 6.1. The AFAS score mode was 13.0, which is half the possible score. This indicates that overall the sample did not present strong anti-fat attitudes. One-way ANOVA analyses were conducted to examine statistical differences in AFAS score means by gender and by age group. There was not a significant effect of age group on AFAS scores at the p < .05 level (see Table 6.2). However, there was a significant effect of gender on AFAS score at the p < .01 level. Men had a higher mean AFAS score (M=15.0, SD=4.159), than females (M=13.01, SD=4.161).

Table 6.1

Descriptive Statistics AFAS, PRBS, TV Viewing Weekly and BD Score for the Study Sample

	AFAS	BD score	PRBS U.S.	PRBS P.R.	TV viewing
	score	(N=127)	score	score	weekly (minutes)
	(N=139)		(N=139)	(N=139)	(N=139)
Mean	14.0	1.057	24.12	30.50	1081.62
Std. dev.	4.263	1.5656	5.780	4.601	895.741
Mode	13.0	2.0	24	32	780
Min Max.	5-25	-2.5 – 6.0	11-38	18-38	0-4710

Table 6.2

One-way ANOVA Results for AFAS and BD Scores by Age and Gender (N=139)

Independent variable	Dependent variable	df	F	η^2	p
Gender	AFAS score	(1, 137)	7.917	.06	.006*
Gender	BD score	(1, 125)	7.395	.06	$.007^{*}$
Age	AFAS score	(2,136)	1.480	.02	.231
Age	BD score	(2, 124)	8.318	.12	.000**
Age	Female BD score	(2, 65)	6.486	.17	.003*
Age	Male BD score	(2, 56)	2.199	.07	.120

^{*}Significant at the p < .01 level

Body discrepancy scores. Body discrepancy (BD) scores were also analyzed for differences in means by gender and age group for a sample of 127 participants. To examine the effect on gender on BD scores a one-way ANOVA analysis was conducted. The results of the analysis indicate that there is a significant effect of gender on BD score at the p<.05 level. The female participants (n=68) had higher BD scores on average (M=1.40, SD=1.6646) compared to the male participants (n=59) (M=.661, SD=1.3515). Age group also had a significant effect on BD score at the p<.001, with the age groups comprised of both men and women in this analysis. The middle age group had the highest

^{**} Significant at the p < .001 level

BD score mean (M=1.573, SD=1.3113), followed by the senior age group (M=1.365, SD=1.8583), and the young age group had the lowest BD score mean (M=.392, SD=1.2881).

To further analyze the effect of age groups on BD scores, a one-way ANOVA was conducted for women and men independently comparing age groups BD scores. Age group had no significant effect of on BD scores for men (see Table 6.2). For females however, age group did have a significant effect on BD scores (n=67) at the p < .01 level. The middle age women had higher BD scores, followed by senior women, and the young women had the lowest BD scores.

The participants were asked to report their current weight and their ideal weight. The overwhelming majority of the sample (N=137, missing 2), 71.2% desired to lose weight, 12.9% wanted to gain weight, and 14.4% wanted to stay at their current weight. These differences were tested using a chi-square test and the results indicate the number of individuals desiring to lose weight was significantly different than the other two categories, $X^2(2, N=137)=93.474$, p<.001. Men and women alike mainly wanted to lose weight; this was tested by performing a Mann-Whitney U test to study the effect of gender on the desire to lose weight, gain weight, or stay the same. The results indicated that gender did not have a significant effect on these categories, (U=2297, Z=-.268, p=.788). These results indicate that losing weight is a common sentiment among both Puerto Rican men and women.

The difference between current self-reported weight and ideal weight is called weight discrepancy. This measure was positively correlated with BMI, as evidenced by the results of Pearson's product moment correlation, r(135)=.892, p<.001. Figure 6.1

illustrates the relationship between these two variables. BMI was also correlated with BD score using a Pearson's product moment correlation.

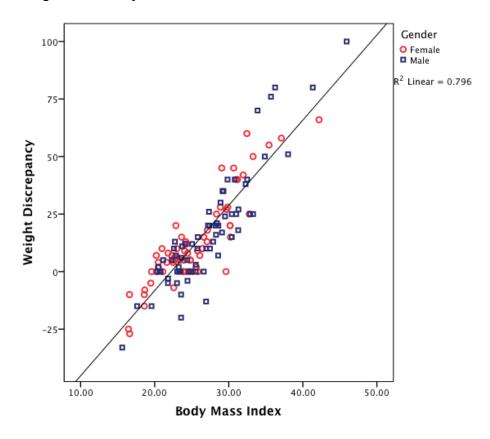


Figure 6.1 Relationship between BMI and weight discrepancy.

The results indicate that BMI and BD score are positively correlated, r(127)=.650, p<.001. The higher a person's BMI the higher their BD score. Figure 6.2 illustrates the healthy weight BMI category by weight discrepancy categories, and it demonstrates that individuals in this category show a combination of desire to change their body size through weight loss and weight gain (though fewer of these cases). Figure 6.3 illustrates the overweight BMI category by weight discrepancy categories. This shows that though most overweight individuals desire to lose weight, there are still a portion of them that want to stay at their current weight, and a few that would like to gain weight. The

underweight individuals all reported desire to gain weight, and the obese individuals all reported desire to lose weight.

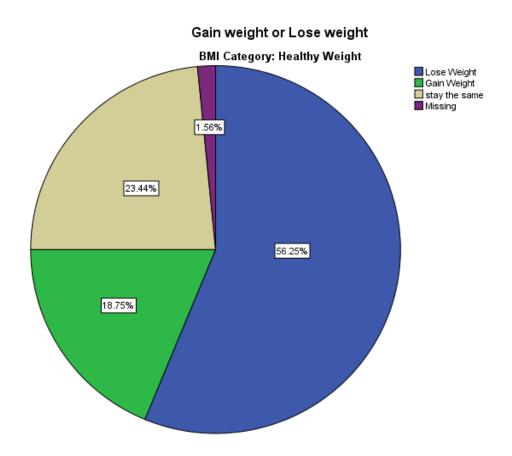


Figure 6.2 Healthy weight BMI by weight discrepancy categories.

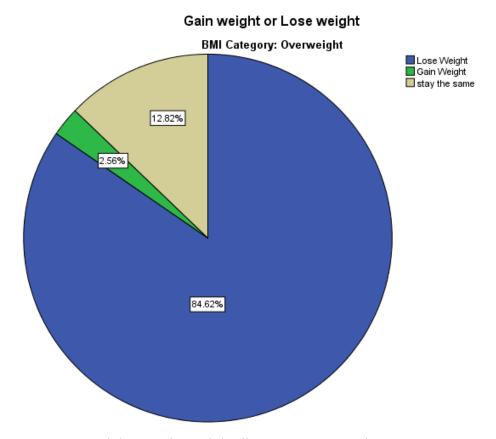


Figure 6.3 Overweight BMI by weight discrepancy categories.

Puerto Rican biculturality scale scores (PRBS scores). The PRBS for both cultures were analyzed separately. The modal score for the PRBS U.S. was 24; this score lies halfway in the scale (highest possible score; 38, lowest possible score: nine). The modal PRBS P.R. score was 32, which is in the top third of the scale. This is higher than the modal score for the PRBS U.S. variable, and this difference fits our expectations since this is an island-dwelling Puerto Rican sample. The PRBS scores are ordinal level variables (as mentioned previously); therefore non-parametric analyses are necessary to further examine these variables. To compare the means of the PRBS U.S. and PRBS P.R. scores by gender a Mann-Whitney U test was conducted. Based on the results of the analysis (see Table 6.3) there is a statistically significant difference between males and

females group's median PRBS P.R. scores. Females had a statistically significant higher PRBS P.R. score (M= 31.37, SD= 4.250) than males (M= 29.61, SD= 4.800). PRBS U.S. scores by gender were analyzed using a Mann-Whitney U test, and based on the results there are no statistically significant differences between male and female PRBS U.S. score (see Table 6.3).

Table 6.3

Effect of Gender on PRBS Scores (Mann-Whitney U test) (N = 139)

Variable	U	Z	R	P
PRBS P.R. score	1902	-2.168	.18	.030*
PRBS U.S. score	2367.5	-0.200	.02	.841

^{*}Significant at p < .05 level

A Kruskal-Wallis test was used to compare PRBS U.S. and P.R. scores by age groups (senior n=45, middle age n=42, younger n=52) for a total sample of 139 subjects. This test is appropriate for ordinal variables that are compared across more than two groups (Corder and Foreman, 2009). Based on the results age group has a significant effect on PRBS P.R. scores (see Table 6.4 for results). The senior age group had a higher median than the other two age groups. There is no statistically significant difference in PRBS U.S. score by age group based on the Kruskal-Wallis test (see Table 6.4).

Table 6.4

Mean Rank of the Proportion of PRBS Scores by Age group (Kruskal-Wallis test)

DV	Senior (n=45)	Age Groups Middle Age (n=42)	Young (n=52)	X^2 (2, <i>N</i> =139)	η^2	P
PRBS P.R. score	82.70	64.48	63.47	6.677	0.05	.035*
PRBS U.S. score	70.38	69.00	70.48	.037	0	.981

^{*}Significant at the p < .05 level

Each PRBS culture score is independent and not exclusive from the other, meaning that one individual can test equally high on both cultures. A Wilcoxon signed rank test was conducted to compare mean ranks of PRBS U.S. score and PRBS P.R. scores by participant. This analysis showed that there is a statistically significant difference between subjects' PRBS U.S. and P.R. scores (Z=-7.198, p=.000). The median PRBS U.S. score was 24, and the median PRBS P.R. score was 31. The results suggest that individuals that display a greater affinity towards Puerto Rican culture tend to demonstrate less affinity to United States culture. Though the scale allows the possibility for measuring closeness to these two cultures independently, in this sample there seems to be few of the cases of individuals testing equally for affinity to both cultures.

Media exposure. Media exposure is a composite measure that includes movies, printed newspapers, news websites, magazines and television shows viewed on a monthly basis. The means, standard deviations, and modes of these measures are presented in Table 6.5. These variables are ratio level, but their distributions are not normal. Appropriate non-parametric statistical analyses were used to examine this data.

Table 6.5

Monthly Media Exposure (N = 139)

	Magazines	Newspapers	News websites	Movies	Num. of TV
					shows
Mean	1.68	21.58	12.97	10.44	64.90
Std. Dev.	3.131	25.484	23.025	14.891	49.270
Mode	0	0	0	0	20
Min.	0	0	0	0	0
Max.	26	116	112	112	260

A Mann-Whitney U test was conducted to examine the effect of gender on amount of media exposure by each variable independently (movies viewed monthly, printed

newspapers read monthly, news websites viewed monthly, number of TV shows viewed monthly, number of magazines read monthly). Gender had a significant effect only on one of the five media exposure categories. The analysis indicates that for a sample of 139 subjects, gender has a significant effect on number of television shows viewed monthly at the p < .001 level, (see Table 6.6). On average the female participants watched more TV shows (M=80.24, SD=51.32) on a monthly basis compared to male participants (M=49.33, SD=42.02).

Table 6.6

Effect of Gender on Media Exposure (Mann-Whitney U test) (N = 139)

Variable	U	Z	R	P
Magazines read monthly	2149	-1.242	.11	.214
Printed news read monthly	2029.5	-1.667	.14	.096
News websites viewed monthly	2306	-0.545	.05	.586
Movies watched (monthly)	2367.5	-0.203	.02	.839
Number of TV shows watched monthly	1454	-4.050	.34	$.000^{*}$

^{*}Significant at p < .001 level

The effect of age group on media exposure was examined using a Kruskal-Wallis test. Age had a significant effect on four of the five media exposure variables (see Table 6.7 for results). For a sample of 139 subjects the analysis indicates that age group has a significant effect on number of printed newspapers viewed monthly. The senior age group reported reading more printed newspapers than the middle age and young group. There was also a statistically significant effect of age on news websites viewed monthly. The middle age group viewed more news websites than the younger, and the senior age groups viewed less news websites (see Table 6.7 for mean ranks results) than both other age groups on average. Age group also had a significant effect on number of movies viewed monthly. The young age group viewed more movies monthly than the senior and

middle age group. The results of the Kruskal-Wallis test indicate that age also had an effect on number of television shows viewed monthly. The level of significance of this last variable is right on the cusp of statistical significance at the p < .05 level. The senior age group viewed more TV shows than the middle age group, and the young age group viewed less TV shows than the other two age groups.

Table 6.7

Mean Rank of the Proportion of Media Exposure by Age Group (Kruskal-Wallis Test)

DV	Senior (n=45)	Age Group Middle Age	Young (n=52)	X^{2} (2, N=139)	$oldsymbol{\eta}^2$	P
	(-)	(n=42)	(-)	())		
Magazines (monthly)	70.94	70.90	68.45	.151	0.001	.927
Printed news (monthly)	82.37	69.49	59.71	8.055	0.06	.018*
News websites (monthly)	55.74	79.37	74.77	12.184	0.09	.002**
Movies (monthly)	60.87	66.85	80.45	6.260	0.05	.044*
Number of TV shows (monthly)	81.06	67.82	62.19	5.475	0.04	.065

^{*}Significant at the p < .05 level

Television genres. The TV shows participants reported watching were classified into 14 different genres. The mean of each genre are presented by minutes watched weekly in Table 6.8. The type of television programing viewed is not normally distributed, and nonparametric statistical analyses were used to examine the variables. The mode for all but one TV genre viewed weekly was zero; the mode of televised news viewed weekly was 300 minutes. The standard deviations of the TV genre means represent the variation of minutes viewed weekly, and were generally greater than the mean for TV genre viewed. A closer examination of the distribution revealed that there are several outliers, individuals that viewed more television than the average. There were

^{**}Significant at the p < .01 level

a total of four outliers, these were removed to examine how they impacted the distribution, and this revealed that regardless of the outlier the distribution is non-normal.

Table 6.8

Descriptive Statistics for TV Genre Viewed (mins/week) (N=139)

	Mean	Std. Deviation	Min.	Max.
Sitcom	32.05	122.889	0	1110
Drama programs	322.66	403.529	0	1860
Telenovela	72.09	245.394	0	2100
Talk Shows	186.26	273.896	0	1350
News	195.97	191.151	0	1200
Adult Cartoons	14.24	80.865	0	690
Children's Cartoons	5.83	36.094	0	300
Science/History programs	23.09	86.022	0	600
Reality TV programs	17.70	62.221	0	420
Music TV	15.11	126.785	0	1200
Do-It-Yourself programs	47.48	195.889	0	1380
Game shows	11.87	117.119	0	1350
Sports Programs	136.40	469.577	0	2850
Religious Programs	.86	10.178	0	120
Total Television viewed	1081.62	895.741	0	4710

A Mann-Whitey U test was performed to examine the difference in means in TV genre by gender. Of the 14 TV genre categories three resulted in differences in mean by gender. Drama programs viewed (minutes per week) was statistically significantly different between males and females (see Table 6.9 for results). Females watched more drama programs, mean rank of 83.06, than males mean rank 56.75. *Telenovelas* watched (minutes per week) was statistically significantly different between males and females. Females watched more *telenovelas*, mean rank of 78.89, than males on average, mean rank of 60.98. The other type of programming that was significantly different by gender was talk show programming. Females watched more talk shows, mean rank of 77.45, than males on average, mean rank of 62.44. Total amount of television watched weekly

was significantly different by gender. Females watched more television, mean rank of 81.22, than males, mean rank of 58.62.

Table 6.9

Effect of Gender on TV Genre Viewing (mins/week) (Mann-Whitney U Test) (N=139)

Variable	U	Z	r	P
Sitcom	2380.5	-0.233	.02	.816
Drama programs	1501	-3.894	.33	$.000^{***}$
Telenovelas	1792.5	-4.298	.36	$.000^{***}$
Talk shows	1893.5	-2.322	.20	.020*
News	2355.5	-0.262	.02	.793
Adult cartoons	2277.5	-1.435	.12	.151
Children's cartoons	2412	-0.044	.003	.965
Science/History programs	2279	-1.097	.03	.273
Reality TV programs	2363	-0.419	.04	.675
Music TV programs	2414	-0.020	.001	.984
Do-it-Yourself programs	2278.5	-1.284	.11	.199
Game shows	2346	-1.409	.12	.159
Sports programs	2166.5	-1.840	.16	.066
Religious programs	2380.5	-0.993	.08	.321
TV watched	1629.5	-3.310	.28	.001**

^{*}Significant at p < .05 level

A Kruskal-Wallis test was performed to examine the difference in means of TV genre viewed across age groups. Of the 14 television genre variables four were found to be statistically significantly different between age groups (see Table 6.10 for results). Sitcom programming watched weekly was different by age groups. Young age participants watched more sitcoms than middle age and senior age groups. Talk show programming watched weekly was significantly different by age groups; the senior age group watched more talk shows than the middle age group, which in turn watched more talk shows than the young age group. News programming watched weekly was significantly different by age groups. The senior age group watched more news than the middle age group, and the young age group watched the least televised news. Adult

^{**}Significant at the p < .01 level

^{***}Significant at the p < .001 level

cartoon programming watched weekly was significantly different by age groups, with young participants watching more than the other two age groups. Total amount of television viewed weekly was statistically different by age groups. The senior age group watched more television weekly, than the middle age and young group. This can be a factor of time available to watch television due to daily activities. To examine the effect of daily activities on amount of TV watched weekly a Kruskal-Wallis test was performed. The results indicate that amount of TV viewed weekly is significantly different by work status $X^2(5, N=136)=16.445$, p=.006. Stay at home mothers and grandmothers, individuals looking for a job, and retired participants watched more TV than students, participants that work part time and/or full time.

Table 6.10

Mean Rank of the Proportion of TV Genre Viewed (mins/weekly) by Age Group (Kruskal-Wallis Test)

		Age Group	S			
DV	Senior (n=45)	Middle Age	Young (n=52)	X^2 (2, <i>N</i> =139)	η^2	P
		(n=42)	, ,			
Sitcom	61.11	69.19	78.35	11.446	0.08	.003**
Drama programs	69.99	70.40	69.68	.008	0	.996
Telenovelas	71.26	73.46	66.12	2.252	0.02	.324
Talk shows	90.63	65.87	55.48	21.243	0.15	.000***
News	88.68	75.55	49.36	26.479	0.19	.000***
Adult cartoons	66.00	66.00	76.69	14.084	0.1	.001**
Children's cartoons	68.00	69.62	72.04	2.957	0.02	.228
Science/History programs	69.10	71.11	69.88	.200	0.001	.905
Reality TV programs	67.61	69.68	72.33	1.227	0.01	.541
Music TV programs	69.00	69.00	71.67	3.370	0.02	.185
Do-it-Yourself programs	68.19	73.17	69.01	1.905	0.01	.386
Game shows	72.09	69.00	69.00	4.208	0.03	.122
Sports programs	69.00	73.33	68.17	1.305	0.009	.521
Religious programs	71.04	69.50	69.50	2.089	0.02	.352
TV watched	81.03	69.85	60.58	6.231	0.05	.044*

^{*}Significant at the p < .05 level

^{**}Significant at the p < .01 level

^{***}Significant at the p < .001 level

Hypothesis 4: U.S. acculturation and thin positive and anti-fat body size ideals. Hypothesis 4 states: If acculturation level influences the social context of body size norms, then people that are highly acculturated with U.S. culture are expected to have more thin positive and more anti-fat body size ideals. The research questions and hypotheses guiding this study are best addressed by examining how the variables described in the previous section behave in connection to each other. Association measures, such as correlations, give us an insightful perception of how these variables interact, though it is clear that the relationship inferred from these tests do not imply causation. To assess the relationship between PRBS U.S. score, PRBS P.R. score and AFAS score a Kendall's tau-b correlation was conducted. Kendall's tau-b correlation is the most powerful statistical correlation analysis for ordinal level variables (Sheskin, 2007), which is the case for these three variables. This correlation test is used to examine the strength and direction of the PRBS U.S. score and PRBS P.R. score on the outcome variable AFAS score to test hypothesis 4. The correlation analysis based on a sample of 139 subjects, suggests that PRBS P.R. score and AFAS score are negatively correlated at the p < .05 level, $\tau_b(137) = -.121$, p = .047. It is not a strong correlation, but it suggests that there is some association between these variables that requires further study. The correlation analysis for PRBS U.S. score and AFAS score, based on a sample of 139 subjects, indicates that there was a positive correlation these variables at the p<.01 level, $\tau_b(137) = .160$, p = .008. This result suggests that an individual that demonstrates cultural affinity to U.S. culture has strong anti-fat attitudes, more so than individuals strongly affiliated to Puerto Rican culture. The interesting pattern that emerges in these relationships is that closeness to P.R. culture suggests that those individuals have a more

fat-neutral body model, and closeness to U.S. culture fits with stronger anti-fat notions that are well rooted in the U.S. thin-body/anti-fat model.

A Kendall's tau_b correlation was conducted to examine the relationship between PRBS U.S. score, PRBS P.R. score and BD score (outcome variable). There was no significant relationship between PRBS U.S. score and BD score at the p < .05 level, $\tau_b(127) = .047$, p = .473. There was also no significant relationship between PRBS P.R. score and BD score at the p < .05 level, $\tau_b(127) = .034$, p = .603. The body discrepancy component of the body size model is not related to acculturation level, unlike the anti-fat attitudes component. This highlights that these two subsets of the larger body size model are not necessarily influenced or shaped by the same information. An individual can desire to have a thinner body, and even present some anti-fat attitudes towards his or her body; this does not translate into anti-fat attitudes in general. The subset of degree of anti-fat attitudes is associated to affinity to U.S. and P.R. culture, but in this case the thin-body preference or non-preference can be better explained by other variables, such as media exposure or type of media exposed to.

Hypothesis 5: Media exposure and thin positive and anti-fat body norms.

Hypothesis 5 states: If media exposure influences the creation of body size norms, then individuals who are exposed to more print and visual media are expected to have more thin positive and fat negative body norms than those exposed to less media. I examined this hypothesis by correlating the five media exposure variables to the AFAS score and BD score. A Spearman's correlation test was used because it best suits correlations between ordinal level (AFAS and BD scores) and ratio level variables (media exposure measures) with non-normal distributions. Two of the five media exposures were

correlated to the BD score, and one media exposure measure was correlated to AFAS score (see Table 6.11 for results). The results of the analysis indicate that there is a positive correlation between printed news viewed monthly and BD score at the p<.05 level, r(127)= .193, p = .03. The correlation analysis also suggests that there is positive correlation between number of TV shows viewed monthly and BD score at the p<.05 level, r(127)= .297, p = .001. From the total 5 variables that comprise the media exposure domain only one was associated with AFAS score. The results of the Spearman's correlation analysis indicate that there is a negative correlation between news websites viewed monthly and AFAS score at the p<.05 level, r(139)= -.181, p = .033. These results suggest that type of media influence different components of the two-part (pro-thin/anti-fat) body size model.

Table 6.11

Media Exposure Association to AFAS Score and BD Score (Spearman's rho)

	AFAS scor	AFAS score (<i>N</i> =139)		e (<i>N</i> =127)
	Rho	P	Rho	P
Magazines (monthly)	.038	.653	.077	.391
Printed Newspapers (monthly)	.142	.095	.193	.030*
News websites (monthly)	181	.033*	.014	.874
Movies (monthly)	092	.280	.003	.974
Number of TV shows (monthly)	069	.421	.297	.001**

^{*}Significant at the p<.05 level

Hypothesis 6: Television genre influence on body norms. Hypothesis 6 states:

If type of media influences body norms differently, then individuals who watch more drama programs, movies and *telenovelas* (Latin soap operas) are expected to have higher body discrepancy and anti-fat scores than those exposed less to these types of media. To address hypothesis 6 a correlation analysis between the 14 variables of TV genres

^{**}Significant at the p<.01 level

viewed, total TV viewed weekly, and the outcome variables of BD scores and AFAS scores was conducted. A Spearman's rank order correlation was used to examine the relationship between these variables. This correlation is the appropriate statistical analysis because it allows for ordinal level variables (AFAS score, BD score) and ratio level variables to be correlated, and does not assume normal distribution of the variables. Of the 14 TV genre variables only two TV genres were correlated with AFAS score (see Table 6.12 for results). For a sample of 139 subjects, there was a positive correlation between AFAS score and talk shows watched (minutes per week), which was statistically significant, r(139)= .172, p = .043. There was also a negative correlation between AFAS scores and watching adult cartoons (minutes per week), which was statistically significant, r(139)= -.183, p = .031.

Associations were found for four of the 14 TV genre viewed and BD scores (see table 6.12 for results). For a sample of 127 subjects, watching drama programs, talk shows and do-it-yourself programs were positively correlated to BD scores. There was also a negative correlation between BD score and minutes of music television watched weekly, which was statistically significant r(127)= -.194, p = .029. Also a positive correlation was found between BD score and total minutes of television watched weekly, which was statistically significant r(127)= .273, p = .002.

Table 6.12

Correlation Between TV Genre (mins./week) and AFAS Score, BD Score (Spearman's rho)

	AFAS sco	re (<i>N</i> =139)	BD score	e (N=127)
	Rho	p	Rho	P
Sitcoms	162	.057	.127	.154
Drama programs	147	.085	.189	.033*
Telenovelas	.013	.879	.107	.23
Talk shows	.172	.043*	.253	.004**
News	.077	.368	.126	.159
Adult cartoons	183	.031*	033	.71
Children's cartoons	001	.992	007	.94
Science/History programs	.025	.77	074	.405
Reality TV programs	078	.359	.022	.806
Music TV	.082	.336	194	$.029^{*}$
Do-It-Yourself programs	.057	.508	.192	.031*
Game shows	009	.917	.032	.72
Sports programs	.088	.305	001	.995
Religious programs	023	.784	.068	.449
Total television viewed	036	.675	.273	.002**

^{*}Significant at the p<.05 level

Hypothesis 6 also required analyzing the number of movies watched on a monthly basis to the outcome variables of AFAS score and BD score. A Spearman's correlation was conducted, and the results indicate that AFAS score and number of movies viewed monthly was not correlated, (r(139)= -.092, p = .280). The results of Spearman's correlation for movies viewed and BD score did not indicate any association, r(127)= .003, p = .974.

Biculturality and media exposure. In this study acculturation was assessed using an appropriate biculturality scale. In light of the relationship between culture and media in this section I explored the association of the biculturality measures and media exposure. This is an exploration based on the data gathered, it does not respond to answer a specific research question. Biculturality measures and media exposure were examined

^{*}Significant at the p<.01 level

to explore how media exposure, including type of television viewed was associated with acculturation measures (PRBS U.S. and P.R. score) a Spearman's Rank Order correlation was performed.

PRBS P.R. score and media exposure. The five media exposure measures (magazines, printed news, news websites, movies and number of TV shows monthly) were not correlated to PRBS P.R. scores in any significant degree (see Table B1 in Appendix B). There was a positive correlation between PRBS P.R. scores and minutes of *telenovelas* watched per week, which was statistically significant, r(139)= .167, p = .049. The significance value is approximately 0.05, which is indicates that the association is not strong, but it is likely an association that deserves further research. There was also a positive correlation between PRBS P.R. scores and minutes of news programming watched per week, which was statistically significant, r(137)= .195, p = .021. The most frequently reported televised news watched was local Puerto Rican newscasts.

PRBS U.S. score and media exposure. There were two media exposures that were correlated to PRBS U.S. score. Number of magazines read monthly was positively associated with PRBS U.S. score, r(139)=.235, p=.005. The magazines reported with the highest counts (more than 10 reports), in order from highest frequency to lowest, were: National Geographic, Imagen (Puerto Rican beauty magazine), People Magazine, Time Magazine, Buena Vida (Puerto Rican health magazine), Hola! (Spanish celebrity magazine), Cosmopolitan, TV Aqui (Puerto Rican celebrity magazine), and Vanidades (Puerto Rican beauty magazine).

Number of TV shows watched monthly was also positively correlated with PRBS U.S. score, r(139)=.197, p=.02. PRBS U.S. scores were correlated to five of the 14 TV

genre categories. For a sample of 139 participants, there was a positive correlation between PRBS U.S. scores and minutes of drama watched per week, which was statistically significant r(139) = .190, p = .025. There was a positive correlation between PRBS U.S. scores and minutes of science/history programming watched per week, which was statistically significant r(139) = .194, p = .022. There was a positive correlation between PRBS U.S. scores and minutes of reality shows watched per week, which was statistically significant r(139) = .184, p = .03. There was a positive correlation between PRBS U.S. scores and minutes of do-it-yourself programming watched per week, which was statistically significant r(139) = .192, p = .023. Finally, a Spearman's rho correlation was run to determine the relationship between PRBS U.S. scores and total minutes of television viewed per week. There was a positive correlation between PRBS U.S. scores and total minutes of television watched per week, which was statistically significant r(139) = .238, p = .005. There was a negative correlation between PRBS U.S. scores and minutes of telenovelas watched per week, which was statistically significant r(139) = -.203, p = .017.

Discussion

The process of uncovering and deciphering body ideals has made it possible to reveal the different variables that construct the body size models; though no simple explanations can be offered. The complexity of constructing a body size model is evident in the multiple and non-linear relationships between variables. This is the case of Puerto Rico in more than one arena. It is a complicated political position as a colony of the U.S., and the cultural combination this political status helps to create an ideal scenario to study the role of culture in shaping body norms.

The biculturality measure, tailored to the Puerto Rican context, offered insight into the degree of affinity people explicitly express for U.S. culture. The majority of participants felt some level of closeness, reflected in the modal score of 24 out of 38 for the U.S. measure. This reflects the reality of being a colony of the U.S. for over 113 years, in which acculturation at any level is unavoidable. This measure was explicit and politically charged for most participants. This was evident in the frequent mix of responses to the item that asked: 'How proud do you feel to be of being a person from the U.S. (estadounidense)?' This item elicited an array of responses; most took the form of questioning the assumption that they were estadounidenses. All Puerto Ricans are U.S. citizens, yet citizenship does not equate with identity. There is explicit resistance to classification as an estadounidense by many individuals, and Islanders frequently highlighted the distinction. This resistance was very verbal, yet the similarity in fashion and the consumption of U.S. food, U.S. media and such was very evident. The resistance is not embodied in a body size or appearance that challenges or differs from the U.S. thinbody model. Cultural resistance remains mainly centered on language (Acosta-Belén, 1992; Torruellas, 1990), art (Anazagasty-Rodríguez, 2002), folklore and ideology to a certain extent (Davila, 1997a; Duany, 2000).

The role of media in the acculturation process was explored: I found that acculturation to U.S. culture is associated with certain television programming viewing, and with increased television viewing in general. Acculturation to U.S. culture is also positively related to anti-fat attitudes. It is not clear whether media served as a mechanism for communicating anti-fat attitudes. The talk show genre that was related to anti-fat attitudes was not correlated to U.S. acculturation. This highlights that media may

not be the only vehicle through which messages about weight bias are being incorporated into the local Puerto Rican context. In the case of telenovelas there appeared to be a correlation between watching this type of genre and identifying more closely with Puerto Rican culture. Quantitative measures indicate that certain exposure to drama and science/history programming, reality shows and do-it-yourself shows is related to U.S. acculturation⁸. Based on the correlations presented above it can be hypothesized that increased television viewing can lead to closer acculturation to U.S. culture, and independent of type of genre exposed to, closeness to U.S. culture is associated with stronger anti-fat attitudes. Also exposure to drama programs and do-it-yourself programming is associated to closeness to U.S. culture and to higher body discrepancy, meaning preferring a thinner body size. Television exposure serves two purposes: acculturating individuals, and creating a body size model. It is necessary to highlight that media is not the only mechanism through which acculturation takes place. Many Puerto Ricans participate in some type of travel to the U.S. mainland, be it for vacation, to visit family members, even to study and work. This migration and return migration pattern also acts as a mechanism for acculturation. Puerto Rican men and women serve in the armed forces of the U.S., since World War I to the present. When the military draft was in effect all eligible Puerto Rican men participated in the armed forces alongside Caucasians and African-Americans. For example, one of the participants of the study, a Korean War veteran, expressed his anger about how the "gringos" mistreated Puerto

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⁸ Data on language of the TV programs was collected, but was not included as a variable for categorizing TV shows, since the most important attribute of the programs are the visual images presented, which may have a direct impact on body ideals. Country of production of the program was not included as a variable in classifying TV programs. This is based on literature that focuses on genre of programming and not on differences in national productions of TV programs. A study of that magnitude would require a unique focus on media, which is not the ultimate purpose of this research.

Ricans in the army, even though they were all fighting for the same country. Some of the participants of the study had also been born and lived for some time in the mainland U.S. These are some of the multiple paths that act together to shape the acculturation process, it does not solely rely on media.

The positive relationship between talk show (including celebrity gossip shows, late night and variety shows) viewing and higher AFAS score and BD score suggests that these programs may influence the thin-body preference/anti-fat body model. The talk shows that were mostly reported are Latin American, specifically Puerto Rican. Further content analysis of these shows would have to be conducted to determine their relationship with AFAS and BD. TV programs are a mechanism through which body ideals that prefer the thin-body are dispersed and permeate general cultural norms. The people exposed to these norms and messages can incorporate them to varying extents, and as was the case in this study, can feel pressured to conform to body ideals presented in the media. This also draws attention to the globalization of the thin-body/anti-fat body size model. This model can be discussed as the U.S. and European model, but it appears to have permeated many cultural groups. It most likely represents the current mainstream Latin American body size model as well, though more content analysis should be conducted to determine the specific Latin American TV body model.

Gender effect on AFAS and BD. It was observed that gender has an effect on eight of the variables studied. Table 6.13 summarizes the variables for which gender has a significant effect. The results indicate that men demonstrate higher anti-fat attitudes than women. Women had lower anti-fat attitudes, but they had higher body discrepancy scores than men. In North American society a similar trend has been reported, women

internalize the social-cultural value of thinness and demonstrate higher body dissatisfaction than men, and men externalize the idealization of thinness demonstrating stronger anti-fat attitudes (Aruguete et al., 2006; Brochu and Morrison, 2007). The assessment of anti-fat attitudes via the quantitative scale reflected that these attitudes were on average at the mid-point, not strongly anti-fat but not on the lower end of anti-fat either. The participant-observation and field notes from the months collecting data also indicate that talking about others' weight and body shape is viewed as normal and most people engage in this. One of the best examples of this is that this issue was brought up by many field informants and observed widely that it became an item included in the interview protocol. This was expressed by most people as a custom of commenting on a person's weight if you had not seen them in a long time. Most informants complained that this was either framed as "you gained some weight", "you are chubby", or "you lost weight", "you look so thin, are you okay?" In many interviews participants explained that nobody was ever happy with how others look, they tend to comment as to people being too fat or too thin. Additional to these statements, I witnessed many a public situation where others commented on someone's weight, with little concern over appearing meddlesome or offending the person. In this case talking about others' weight was not framed as an issue of being politically correct, and rather was seen as good natured (especially regarding jokes) and common.

The fact that women had higher body dissatisfaction implies that though women did not demonstrate overtly anti-fat attitudes, and they have more strongly internalized the thin body ideal. Most women wanted to lose weight, and the difference between their current and ideal body was greater than for men. This is what could be expected for a

society that idealizes the thin-body, and the places considerable pressure on female bodies. Women of varying BMIs desired to lose or gain weight. This discrepancy regarding women's' weight has been termed 'normative discontent' by Rodin et al. (1985). This occurs not only for women, but for both men and women in this study. Most participants desire to lose weight, including individuals that are categorized as having a healthy weight according to their BMI. There were seven men and five women that were of healthy weight that desired to gain weight. Four of those five women had a BMI that was on the border between underweight and healthy weight, this explains their desire to gain weight. The men however had BMIs that fell between the healthy and overweight boundaries. Individuals categorized as overweight according to their BMI mostly desire to lose weight, yet there are some exceptions. One middle age overweight male wants to gain weight, and three women and two men that are overweight want to stay at their current weight. The male desire for weight gain is expected based on numerous studies on male body image that indicate the for men body image discrepancy takes various avenues, including weight loss and increase in muscularity which requires weight gain usually (Bergeron and Tylka, 2007; Blashill, 2011; Cash and Roy, 1999). The female exceptions of overweight individuals that do not want to lose weight contradict the norm, and are mostly senior participants. Odette, a 22-year-old tall and overweight young health sciences graduate student, aptly expressed this predominant and constant weight dissatisfaction. She expressed that no matter what her weight was she always felt dissatisfied and that she needed to lose weight. When she gained weight she would look back at that time in her life that she weighed less and would think that she looked and felt good at that weight. In summary, she was never satisfied or happy with her weight.

Odette: Yo donde mejor estuve fue en décimo grado que pesaba las 140 libras. Pero yo siempre he tenido ese complejo de que soy más gordita. Siempre he tenido ese complejo. [Where I was at my best was in tenth grade I weighed 140 pounds. But I always had this complex that I am too fat. I have always had this complex.]

Isa: ¿Así que aún cuando estabas en las 140 no te estabas disfrutando las 140? [So, even when you were at 140 pounds you weren't enjoying the 140?] Odette: Como que pensaba que tenía que rebajar más. Ya después cuando aumenté otra vez a 150, 160, era como que. Pero a veces pensaba que tal vez a los nenes le gustaban más las flacas y que no se iban a gusta de mi porque yo era más gordita. Yo no me consideraba gordita, yo me consideraba pues, más grande. No tenía ese cuerpo flaco. [I thought that I had to lose more weight. Then when I gained [weight] again up to 150, 160 [pounds], it was like. But sometimes I

thought that maybe boys liked the skinnier ones and that they were not going to

like me because I was chubbier. I didn't consider myself fat, I considered myself well, bigger. I didn't have that skinny body.]

Odette went on to explain that she weighed more than most of her classmates while in high school, yet she played many sports and danced. That she recognized that she was healthy, yet her parents made her go on diets to lose weight so she would "look better". This control over her body not only by her, but also by her parents reiterates the objectified female reality, in which the body is under constant surveillance by self and others (Fredrickson and Roberts, 1997; McKinley, 1999). Odette touched upon the three components of self-objectification: surveillance, body shame, and beliefs about control over one's appearances (McKinley, 1999). Gretchen, a 22-year-old college student, told of a similar experience, in this case she said she weighed approximately 135 pounds (no more than 140) and that she thought she was fat. She stated in her interview that she stopped eating, when I asked what she stopped eating, her response was simple and frightening: food.

Gretchen: "Yo creo por eso mismo, porque yo estaba como ahora. Pero yo creo que pa' ese tiempo me consideraba bien gorda. Y llegue a decir "Vamos a ver como rebajamos" y deje de comer. Y así no comía en la escuela ni nada y pues,

llegaba a mi casa y como mi mamá cocinaba y tenía mil cosas que hacer pues si no comía no se daba cuenta. Hasta que empezó a verme bien flaca y empezó a obligarme a comer y las peleas y que sé yo y pues eventualmente volví a comer, y pues. Volví a comer mis tres comidas al día y engordé." [I think that because of that [losing weight], because I was the same as I am now. But I think that for that time I considered myself very fat. And I told myself "Lets see how we lose weight" and I stopped eating. And like that, I didn't eat in school or anything and well, I would get home and my mom cooked and had a thousand things she had to do so if I didn't eat she wouldn't notice. Until she started seeing me very skinny and she started making me eat and the fights and I don't know and so eventually I ate again and well. I returned to eating my three meals a day and I gained weight.]

These exemplars illustrate the conflation of ideal female beauty and health in the thin-body model. A potential consequence of this confusion of standards is engaging in risky and unhealthy weight management behaviors. The 'normative discontent' about weight for women has permeated Puerto Rican society, and it can now be included with the other societies that experience this.

In general women were more exposed to television media. Though media has been hypothesized to generate and perpetuate the thin-body ideal more in depth studies about the content of the television programs are needed to study this hypothesis in the Puerto Rican context. It is not just exposure to images, but the messages tied to these images than serves to create and foster specific body ideals.

Table 6.13

Variables that were Significantly Different by Gender (N=139)

Variable	Higher mean
AFAS score	Men
BD score	Women
PRBS P.R. score	Women
Num. TV shows watched monthly	Women
Drama TV shows	Women
Telenovelas	Women
Talk shows	Women
Total TV watched weekly (minutes)	Women

The effect of age group on the behavior of variables was observable in 10 variables. Table 6.14 summarizes the variables for which age group had a significant effect. Body discrepancy was higher for middle age participants than for those of young age. This was a surprising result, because it has been suggested that seniors, particularly women, would suffer less self-objectification regarding body image, and be less likely to suffer the consequences of this phenomenon due to changes in priorities and roles (Fredrickson and Roberts, 1997; Johnston et al., 2004; Tiggemann and Lynch, 2001). This result draws attention to the importance that body image has for individuals of all ages, and at different life stages. Even senior participants had higher body discrepancy scores than young participants. This age difference in BD score is examined can be explained partly by BMI. It is expected that individuals with BMI that categorizes them as underweight and overweight and obese would have higher BD scores than individuals that fall in the healthy weight BMI category. Middle age and senior groups had average higher BMIs than young participants. This is reiterates the importance of body image at different ages, expressed as the desire to have a different type of body, mostly a smaller body size.

The majority of differences by age group are on type of media exposure and TV genre viewed. Middle age participants viewed more news websites than the young participants, and seniors viewed less news than both other age groups. This difference in means may be the result of the varying level of technology literacy, and a function of the different interests based on stages of life. Senior people may not be as computer literate, and possibly do not use the internet as much as the other age groups. Young participants

may not be as interested in viewing news websites as the middle age group due to their particular interests. The senior age group was the one that reported viewing more TV shows than the middle age and young groups. This difference in means can be caused by time available to watch TV. Many of the senior subjects were retired, or worked fewer hours than the middle age and younger groups. One example of this is one of the outliers, a senior woman who viewed a lot of television. She views a great amount of television because she stays home all day caring for a disabled, bed-confined adult son.

Table 6.14

Variables that were Significantly Different by Age Group (Senior, Middle Age, and Young) (N=139)

Variable	Highest Mean	Lowest Mean
BD score	Middle Age	Young
Printed news monthly	Senior	Young
News website	Middle Age	Senior
Number movies monthly	Young	Middle age
Number of TV shows monthly	Senior	Young
Sitcom watched weekly	Young	Senior
Talk shows weekly	Senior	Young
Adult cartoons weekly	Young	Middle Age and Senior
TV News monthly	Senior	Young
Total TV viewed weekly	Senior	Young

It is interesting that reading more newspapers was positively related to BD scores, but not reading magazines. The newspapers reported as being read more frequently were the local Puerto Rican papers: *El Nuevo Día, Primera Hora,* and *El Vocero*. There is probably a deeper relationship related to age reflected in this correlation. Senior people had higher BD scores and they also reported reading more printed newspapers than either the middle age or younger groups. This is probably the case of the relationship between number of TV shows viewed monthly and BD score, senior people reported viewing more TV shows and they also scored higher for BD. One limitation of this study is that

the sample size is not large enough to control for age when running the statistical analyses. These results require further research, and more detailed studies on the influence of media on body image. In conclusion not all media types influence the creation of the body size model to the same degree and do not affect the same subset of the model (thin-body/anti-fat).

Media exposure by specific television genre influences BD scores. One of the research hypotheses was that it was expected that increased exposure to drama, telenovelas and movies would result in increased body discrepancy, and not all three media are positively correlated to body discrepancy. Of the three media genre only exposure to drama programming is related to higher body discrepancy, but not to anti-fat attitudes. An interesting result is that the only variable that was associated to both outcomes variables was amount of talk show programming watched weekly. More exposure to talk shows was associated with both high body discrepancy and high anti-fat attitudes. The category of talk show included daytime type talk shows, and late-night shows. There were 670 shows in total reported by the participants, of these the top five shows were: Super Xclusivo, Dando Candela, Sábado Gigante, Gordo y la Flaca, and *Pégate al Mediodía*. From the top five list, three are Puerto Rican television shows. All of the top five talk shows, except Sábado Gigante, have a strong farándula (gossip about famous people) focus. The title of one of the shows is El Gordo y la Flaca (the fat man and the skinny woman) itself expresses the central focus on body image. The gossip talk shows are heavily critical of female body shape and size, favoring thinner women and making fun of women that are public figures and are overweight. The top show Super *Xclusivo* is a gossip show about anything that is going on in the news, and one of the

frequent topics is the obesity of a female political figure that has become well known as a target for fat jokes. *Sábado Gigante* is a Saturday evening variety show that has been on the air for decades. One of its trademarks is the scantly clad model on the set, next to the elderly male host. The unexpected positive relationship between do-it-yourself (DIY) programming and BD scores can be explained by the misnomer of 'do-it-yourself'. Some of the shows that were categorized into this variable are fashion and make-up shows that are featured in DIY channels. Female participants that were interviewed about personal weight history were asked about figures that represented ideal bodies. The frequent responses were famous local dancers or U.S. actresses. This highlights the importance of media in shaping body ideals, from the local media to broader U.S. media. These findings are a starting point for research on how the content of these types of television programs impact and shape individuals' body image.

Participants frequently mentioned advertisements, television and magazines as the source of ideal bodies. Though many women identified this is a source for discontent due to comparing their own bodies to those of models, most of them responded that the pressure they felt to maintain a certain weight or figure was their own pressure. Coral, a 19 year old college student or medium built, stated that people should begin to question media and social pressure to be thin.

Coral: "Pues no sé mira, yo creo que es bien importante reconocer que hay mucha, mucha presión en los medios, en la publicidad, en las comidas que se nos ofrecen. Que hay que pensar dentro de eso, que hay detrás de todo para que a nosotros nos afecte...cuestionarse porque razón o porque hay que estar en línea, porque esto es lo normal o lo regular." [Well, I don't know, look, I think it is really important to recognize that there is a lot, a lot of pressure from the media, in advertisement, in the foods they offer us. We must think within that, what is behind that so that affects us so much...question for what reason or why we should be slim, why is this the normal or the regular.]

Coral was keen to point out that though she would like standards to change and for acceptance to grow, she still felt pressure to maintain a certain 'healthy' weight. Another example of the pressure some participants assigned to media was the case of Keila, an outspoken 16 year old, she was of average weight and very attractive, but expressed extreme dissatisfaction about her body. Keila mentioned that pressure to be thin originates in the media, but recognized that runway models were not realistic ideal bodies.

Keila: "Yo veo un anuncio de Victoria's Secret y lo tengo que cambiar. Pues porque la gente quizás piensa que las modelos que, eso no es real, o sea ellas son todas hechas, pero como quiera le hace sentir a uno mal. Uno piensa que tengo que ser así, en realidad no." [I see a Victoria's Secret commercial and I have to change it [the channel]. Maybe people think that models, that are not real, I mean they are all made [touched up], but still it makes you feel bad. You think that you have to be like that, en reality no.]

Keila's statement captures the general sentiment of feeling the pressure, while simultaneously recognizing that achieving that type of thin body is unattainable. This reality was evident for women of middle age, though they remained dissatisfied with their own bodies (being the group with higher BD scores). Nancy, a lively mother, who reported trying all types of diet supplements expressed that advertisement with thin females models made you want to try anything to achieve that body, even though you know it is not possible.

Nancy: (riéndose) "Sí, todo lo contrario. Eso es lo que pues...uno se deja llevar por los anuncios. Por tonta...ponen esta única modelito que tu te crees que te vas a ver así. Lo que me ha hecho es todo lo contrario de lo que yo espero." [(laughing) "Yes, all the contrary. That is what...you are led by those ads. Because of been a fool...they put this model that you think you are going to look like that. What it has done for me is the opposite of what I hoped.]

This type of discontent about media pressure was pervasive in female participants of different ages, but strongly expressed by young women. These same women reflected a level of media literacy that challenged the typical thin runway model as the ideal body, yet that did not dissipate the pressure for them to be thin, and it did not challenge the thin-body ideal. Leticia, a slim and reserved mother, expressed that young girls should be thin.

Leticia: "Porque eso es lo que nos bombardean todo el tiempo y los anuncios y las revistas y todas esas cosas y uno pensará y uno piensa, tan jovencita y tan gordita [mujeres en la vida real, no en los medios], o sea, que sí, que uno piensa que en la juventud pues deberías estar por lo menos un poquito más flaca." [Because that is what they bombard us with all the time and the ads and the magazines and all those things and you think and you think, so young and so chubby [that actual women around her are, not in the media], I mean, yes, you think that during your youth you should at least more slim.]

Beatriz, a large and lively grandmother, echoed this sentiment when she stated that heavy women are discriminated against: "Si que discriminan, y los muchachos ahora, hoy dia, antes no. Pero hoy dia lo que les gustan son las bien flaquitas." [Yes they discriminate, the boys nowadays, before no. But nowadays what they like are the very skinny [girls]. Participants felt that mass media (magazines, advertisements, etc.) promotes the thin body through presenting such bodies and by bombarding consumers with weight loss products and messages. Odette, reiterated this by stating that:

"Pero por todos lados hay ads, tu vas a internet y sale un pop up que si "tal y tal pastilla". Anuncios en la televisión. Sabes, siempre se esta bombardeando todo el tiempo de rebajar. Últimamente en la radio hay un Carbotrap o algo así." [Everywhere there are ads, you go on the internet and there is a pop up saying "such and such [diet] pill". Television commercials. You know, there is a constant bombardment all the time to lose weight. Lately on the radio there is [an ad] for Carbotrap or something like that.]

The time spent conducting fieldwork and living in Puerto Rico I gathered that in Puerto Rico, like in the U.S. thin bodies are loaded with positive attributes and of fat bodies loaded with negative ones. This requires further media content analysis, and especially how well individuals internalize these body ideals.

Conclusion

The Puerto Rican body size model has shifted towards a thin-body preference and the negative valuation of fat is evident, though not widespread as demonstrated by the AFAS average score (mid-point in the scale). The objectification of women's bodies through self-surveillance and social control of the body have become culturally entrenched. Ideas about the negative attributes of overweight and obese people are coming together to foster a normative discontent regarding weight. It is widely recognized that the ideal body is unattainable, yet the path to achieving it is still pursued by many and it weighs heavily on most people's body image schema. The ideal body is seen as a singular thin female body, and as a range of various slender bodies for men. This corresponds with men externalizing the thin body ideal especially onto female bodies and not being focused on their male thinness and muscularity (Aruguete et al., 2006; Blashill, 2011). This singular ideal is centered on appearance, though health is projected and expressed to be the real concern. Health concerns surrounding body weight exist, but the beautiful thin-body is also confused for the healthy body. Healthy people that do not resemble this ideal, submit themselves to dangerous and unpleasant weight loss habits in their quest for self and social acceptance. This combination is lethal to individual's self-esteem, size acceptance and to healthy lifestyles that do not produce the singular body ideal. Further research and direct interventions need to be conducted to

change the message that conflates beauty with health, and address the 'normative discontent' at all age levels and particularly for women.

Chapter 7: Discussion and Conclusion

The central research aim of this dissertation was to address the cultural changes in the Puerto Rican body size ideal. The baseline study from 30 years ago indicated Puerto Ricans believed gaining weight was positive and a sign of being problem-free (Massara, 1989). In that study, which created a general characterization of Puerto Ricans as positively perceiving fat, weight gain during certain life stages was favored. Most notable was the cultural expectation of women gaining weight once they got married as a sign of being well maintained by their spouses (Massara, 1989). In my dissertation I asked participants the same question Massara asked 30 years prior to obtain this information: "If a women begins to gain weight, up to 15-20 pounds after marrying, what is the most common reaction of her husband: (a) he is pleased (b) he dislikes it (c) he does not care. Since the baseline study was conducted in the late 1970s, cultural body size models have shifted. Puerto Ricans generally do not value excess weight.

Life stages continue to work as a framework for understanding changes in weight and the tolerance to these changes. In the results of this dissertation it is evident that weight gain is not valued positively, instead, it is viewed as inevitable in older age, when someone is undergoing a separation and after giving birth. One finding from Massara's study that resonated in current Puerto Rican society was the idea that someone who is too thin is perceived to be sickly or is undergoing some stressful situation. This highlights the issue that in Puerto Rico, in contrast to the U.S., there is such a thing as 'too thin'.

Another key finding of this study is that there are intergenerational differences regarding representation of the ideal body in the media, and of infants and children being overweight. Also, anti-fat attitudes are evident in explicit manners on the island, and

exposure to specific media genre influence body discrepancy. In this chapter I discuss the key findings of the study, their implications and relation to culture change. Finally, I address the limitations of this research, and future research stemming from the findings of this dissertation

From Valuing Fat Bodies to Thin Bodies

The general characterization of Puerto Ricans as a cultural group which values fat and overweight bodies is no longer accurate. Massara collected data for men and women in three age groups, 18-25 years of age, 26-40 years of age and over 41 years of age (Massara, 1989, p. 53). The sample in this dissertation was also divided into three age groups, based on generations that overlapped the age groups of Massara's sample. It was not possible to access the same participants from the baseline study, but it was possible to capture information from similar age groups and compare their answers to those of the previous research. In addition to this sampling strategy, the use of individual weight histories to compose the broad picture of what body size ideals were in the past versus what they are currently made it possible to address culture change from more than one perspective. This key finding suggests that over the past 30 years the spectrum of acceptable and idealized body sizes, ranging from overweight to thin have been reduced to a single category of thinness as the generalized sociocultural norm.

It is important to point out that in Puerto Rico there is such a thing as being too thin. This result highlights that though the general body size preference has changed, the U.S. thin body ideal has not been adopted completely. The legacy of a food scarce environment in which excess weight would confer advantage for survival may have created a boundary for regarding very thin bodies as ideal because of their connotations

of being sickly. This idea of a cultural barrier to extreme thinness, especially from middle age and senior groups, should be further explored. It has potential use in the creation of educational material and interventions regarding borderline eating disorders among younger groups on the island. This is especially relevant since risk for eating disorders, such as anorexia and bulimia, have been reported among college undergraduates on the island (Reyes et al., 2010).

Life Stage Weight Gain: Inevitable but not Acceptable

Body size norms are shaped by life stages, especially biological circumstances that are viewed as external to individual control. One of the most interesting stages for which weight gain is perceived as inevitable is advanced age. Many middle age women stated that after 40 years old there are biological changes that make it more difficult to lose weight. However, it is not until the 60-year mark that weight gain is widely seen as out of individual control. Some seniors, men and women, which were well over 60 years, argued that they could no longer be expected to diet and exercise to maintain the weight they had when they were younger.

At first glance this type of expression seemed to resemble liberation from trying to lose weight or be concerned with one's weight. Further inquiry revealed that the sentiment is resignation in light of a biological reality that one would be hard pressed to change. The idea of eating everything you want when you grow older and no longer feel as much pressure to maintain a certain weight is an illusion some participants held, yet no one appeared to live out. This highlights the shift from acceptance of bodies with excess weight to what can be considered tolerance of those types of bodies. This shift implies that certain body sizes can be tolerated because of what are considered natural biological

processes, or due to health reasons. Those body sizes, particularly overweight and obese, are not celebrated and few individuals are content with those body sizes.

This finding marks a shift from the preference for weight gain to the resignation of not being able to maintain an individual ideal weight. Participants over 60 years of age, the life stage in which weight is considered inevitable, found it less contentious to deal with excess weight and social expectations. For instance, senior participants were keen to highlight that they could care less what anyone thought because they were old and they did not have to be concerned with what other people thought about their weight. This discourse of resignation may also be a source for intergenerational conflict about body size norms. The concept of not maintaining surveillance over food consumption and of not closely monitoring weight was tied to older age almost exclusively. Young people were expected to participate in the struggle to achieve and maintain a socially accepted body weight. Some grandmothers expressed this in the sense of having their daughters and granddaughters engage in dieting and in strategies to stay thin because they were not old enough to 'let themselves go'.

Intergenerational Variation

Another key finding is that though there is a clear general cultural body size model there are generational variations on specific domains within this broad model. The three age groups had varied perceptions regarding ideal bodies in print media, particularly model centerfolds in local newspapers, and the television hosts and actors/actresses. The quantitative results matched with the qualitative results, especially those of young women and men in their challenge of what the media presents as being ideal. Many young women were very vocal and had strong opinions on how the media

pressures young women to be thin, and the negative consequences this has for their selfworth.

Studies with Fijian women (Becker et al., 2002; Williams et al., 2006) highlighted that in a culture that traditionally valued excess weight, intergenerational conflict arose from the clashing ideas of family and community that positively perceived excess weight, and the Western media messages of idealizing thinness. In the case study of Puerto Rico there is no clear-cut pattern about intergenerational conflict. Some families demonstrated intergenerational conflict based on overweight grandparents, especially grandmothers, holding their daughters and granddaughters to a thin body standard. In other families the pattern resembled the one found for Fijian women (Williams et al., 2006). Fijian girls are reported to receive conflicting messages, family and community value overweight, which contrasts with peer and media messages promoting a thin body as positive (Becker et al., 2002; Williams et al., 2006).

Interestingly, in both scenarios the central topic that informants discussed was the weight of others, either lack of proper weight gain or too much of it. This is a central piece of Puerto Rican family conversation, talking publicly about other people's weight. The absence of a politically correct discourse for talking about this subject is a reminder of the not so distant past when weight was not a contentious issue, especially not one that could damage a person's self-esteem and body image.

Anti-Fat Sentiments

Puerto Ricans hold varying levels of anti-fat attitudes. The preference for thinness does not have to be intuitively accompanied by stigmatization of fat, thus this prompted me to investigate anti-fat attitudes as a separate component of the body size model. The

results of the quantitative scale (AFAS) that measured explicit fat negative sentiments demonstrate that Puerto Ricans are similar to Canadians and people from the United States in their average scores for anti-fat attitudes. In Puerto Rican society, as is the case in other Latin American groups, talking about people being overweight is not a social taboo. In fact it is a cultural custom to comment on a person's weight, especially by comparing them to others in their family, or making reference of their previous weight. It was evident from fieldwork that comments were not taken personally; especially by men, but for women it struck a nerve to be called out on weight gain. It was interesting to collect data on explicit anti-fat feelings in this context because many people were not shy about voicing their opinion.

The results of the AFAS were correlated with other quantitative measures, and were significantly correlated with close affiliation to U.S. culture. This finding is of particular importance since it has been argued that fat stigma is being exported from the U.S. were it is a key element in the body size model to other cultures at a global level (Brewis et al., 2011; Brewis, 2011).

The acculturation scale was designed especially for Puerto Ricans, and it was the only measure of acculturation used in this dissertation. Future research should include other acculturation measures, especially addressing the exposure to U.S. programming and print media. Additionally, fat stigmatization requires further investigation in the form of weight discrimination in the workplace, healthcare, and in other settings in Puerto Rico. The issue of weight bias has been extensively addressed in the context of the U.S. (Andreyeva et al., 2008; Puhl and Heuer, 2009; Schwartz and Brownell, 2004). Since anti-fat sentiments are being adopted in Puerto Rico, it is necessary to address them

before they become institutionalized and pose a greater problem for individuals that are overweight or obese, such as discrimination based on body weight.

Body Dissatisfaction and Media Exposure

The media inventory indicated that certain genres are correlated with body dissatisfaction, such as drama programming, celebrity news shows, and shows focused on how to dress, how to look more attractive. It is reported that body image dissatisfaction is correlated with specific television genre (Dohnt and Tiggemann, 2006; Schooler, 2008; Schooler and Trinh, 2010), especially soap operas and music videos (Tiggemann and Pickering, 1996). It is interesting that watching *telenovelas* was not related to increased body image dissatisfaction, and this may be related to Schooler's (2008) results of Latina women identifying women in *telenovelas* as having realistic bodies.

The role of media in shaping cultural ideals requires further research, especially content in print, visual, and internet media to which people are widely and frequently exposed. The fact that young people challenge the idea that mass media sets and imposes the cultural body ideals must be untangled. Mass media has been demonized as the being the generator of images that shape the ideals, yet the media also reproduces ideals that are already present in a society. Another aspect that needs further research is that female bodies were identified as being thin, yet male actors and television hosts do not necessarily have the ideal body. This was especially problematic when participants mentioned examples such as Don Francisco from *Sábado Gigante*, and male actors in *telenovelas*. The seeming double standard for men and women in media was not addressed by my study, but is an interesting area for examining gender differences in body ideals and acceptance of bodies that deviate from the norm.

Change in Body Size Models

Change can take different trajectories. One is that change is uniform for all people in a cultural group, regardless of age, because they are subject to the same forces causing the shift. Another is that change affects people of different ages in different ways; members of different age groups are subject to interpreting the messages that cause cultural change within their historical and life contexts, which vary with age. A third possibility is stability. In this case there are certain beliefs and/or behaviors that are retained in the family context or at the broader community level. These three propositions are not mutually exclusive, and in the case of Puerto Rico, it appears that no single one can explain the shift in body size ideals.

The shift in valuing thinness instead of excess weight is uniform; all participants espoused this belief. There are nuances to generational perceptions of the role the media plays in representing ideal bodies. Senior participants were more inclined to perceive television hosts, actors, and models as ideals, a finding that was not as strong in middle age and young participants. Finally, there are some aspects of the cultural model of body size that remain constant, though have not gone uncontested, such as the case of infants and children being *gorditos* (plump, or overweight). Preference for and positive valuation of chubby babies is a legacy of the environmental conditions (food scarcity, high morbidity from infectious diseases) that many senior and middle age Puerto Ricans experienced on the island during the 1940s up to the 1960s.

From a global health perspective it is essential to understand the processes and patterns of global interconnectedness, how these affect and influence local norms and behaviors. The mechanisms that influence change in different cultural domains are still a

source of study, especially how they interact with existing ideas. In the case of body size ideals, I studied media, acculturation, age, and gender as sociocultural variables that impact shifts in these ideals. Gender is a major variable because of the differing pressures on men and women regarding body shape and weight (Grogan, 2008; Pingitore et al., 1997; Rodin et al., 1985). In my research it was interesting that though men and women may perceive pressure differently they tended to share core beliefs about body size. This was surprising since so much attention has been placed on the relevance of this topic for women. This is not to say that the difference does not exist, but rather to highlight that it is also an important domain for men, not just for women. Media has been cited and referred to as one of the major sources influencing body size standards (Becker et al., 2002; Grabe et al., 2008; Williams et al., 2006). Media functions as a mechanism that presents sociocultural ideals, and also influences the creation of those ideals. In this particular case study, media was related to body discrepancy by specific genre. Interestingly, it was a source of much debate by participants that identified advertisements and celebrities as shaping their own body ideals. Many young women challenged the perception that women should look like runway models and actresses, especially because those ideal bodies were not easily attainable or widely found naturally. These variables help to shape body size norms, yet cannot be identified as being solely responsible for the shift in these norms.

Implications of Research Findings

The study conducted in the 1970s with Puerto Ricans in Philadelphia was initiated because of concerns with cultural preference for excess weight and the high prevalence of overweight and obesity in that community. In the 30 years since that study, the

overweight and obesity prevalence on the island has increased, not as a direct result of valuing excess weight, but primarily due to change in dietary and exercise patterns. Currently, approximately 66% of the Puerto Rican population on the island is categorized as being overweight or obese (CDC, 2012). The general cultural body size model is congruent with the biomedical perceptions of excess weight being negative for individual health. The results I uncovered point to different types of negative consequences that are related to the idea of 'fat is bad'. Stigmatization of being overweight or obese can have negative consequences, which are not being addressed at the moment.

The negative consequences of depression, stress, differential treatment due to discrimination and low self-esteem have also been reported to exacerbate the other physiological consequences of excess weight (Atlantis and Ball, 2008; Muennig, 2008). This is an area that is in need of more research and especially more detailed ethnography of the lives of overweight and obese individuals, both at the U.S. level and in other cultural contexts. Part of this issue is also how public health discourse and campaigns communicate messages that can be detrimental for individuals that may already be suffering due their excess weight. Campaigns that focus solely on the topic of individual will power and control obfuscate the structural factors that shape individual well-being. It is necessary to generate discourses and information that addresses these issues, such as access to safe recreational areas, and food prices that limit household food choice.

Recently in Puerto Rico is has become hard to ignore how high crime rates impact physical activity, with people fearing walking outside, or going to local basketball courts. These realities impact the health of the population, and the diverse priorities of public

health need to be visibly connected -- this is one way to start to identify how to deal with high prevalence of overweight and obese persons.

One of the interesting findings of this study was that quantitative results of the surveys did not necessarily match the qualitative data. Answering questions or statements about fat, especially about other people being overweight, appeared to generate responses that were not mirrored in the narratives collected. Participants answer differently when the hypothetical scenarios are presented as occurring or involving anonymous others. This contrasts with the semi-structured interviews in which people related the questions to their own lives and experiences. This accentuates the importance of combining quantitative surveys with more in depth qualitative narratives. This was evident from the participant-observation and field notes data as well, not just from the narratives from the participants. When asked about one's own life and body responses change and are more subdued regarding weight bias and anti-fat sentiments. This has implications for instruments chosen or created to study these variables.

Another implication emerging from my research is the alarming and dangerous strategies that young women are engaging in to lose weight. Many of the participants that explained how they would not eat for days, or go on diets that included only drinking shakes, or would exercise continuously, and in cases used diet pills to replace meals entirely, stated that they thought it was important to lose weight for health reasons. Health and beauty easily become conflated. In the name of health these women were engaging, ironically, in very unhealthy practices. The yo-yo dieting that followed most of their mothers for the majority of their adult life was being emulated and taken to new extremes by their daughters. In the name of health most people were tolerant of these

strategies and of the obsession with their weight. The grandmothers and mothers did not describe unhealthy weight management at the time of the study, but they also explained that it was beneficial to lose weight for health purposes. Some grandmothers were more attuned to the importance of physical activity rather than the number on the scale, many due to their own experiences and medical advice about how to be healthier. Many mothers in the study mentioned diets similar to the ones their daughters were using when they were young. The family environment influences the perspectives of the younger generation, and serves to carry on the legacies of normative discontent for women.

The family can at times be perceived as one of the sources for normative weight discontent for women, but at the same it offers an avenue for health education and intervention. The women who belonged to a triad in which their grandmothers and mothers struggled with their weight throughout their lives, for whom this domain was a source of stress, and their *cruz* (cross to bear), were also dissatisfied with their bodies. Their mothers and grandmothers reinforced these feelings of disliking their bodies and/or weight. If health education of weight management, exercising and diet, was addressed at the family level it would then function to reach all women, and set examples for the younger ones of how to manage their weight expectations and healthier weight loss strategies.

Limitations and Future Research

This dissertation addressed a myriad of issues related to how body size models are constructed and how this affects women's daily lives. One of the limitations of this research is that the effect of SES was not addressed as a variable that shapes body size norms, or personal expectations of weight. The participants ranged from lower middle

SES to high SES (these being the fewer). It may be that SES is a variable with regards to how important body size may be, and also to the level of anti-fat attitudes. This can also play a role in other domains of body image, such as hair color and texture, and skin color (Gravlee, 2002).

Other limitations include the possibility of biased responses due to social desirability effect. The topic of body size, especially asking people about their own weight and how they feel about others' bodies can be a sensitive topic. In some cases participants may have felt that there was a politically correct way to talk about overweight and obesity. The quantitative surveys used were pre-tested and tailored, yet this does not exclude the possibility that some wording could affect how participants chose to respond. In the cultural consensus survey the word 'acceptable' was problematic for some respondents. They explained that weight gain was inevitable, but acceptable implied complacency that might give the wrong idea. This issue with the word 'acceptable' was duly noted and examined as part of the themes that recurred in the narratives by the female participants. Participants were also asked to report their weight and height, which can be biased. People tend to underestimate their weight and overestimate height (Keith et al., 2011). Since these self-reported measurements were used mainly as aggregate data and for the description of the sample, this potential bias was not a source of major concern. The sample for this dissertation research was composed of people that live on the island, versus Massara's study that included mostly Puerto Ricans living on the U.S. mainland. This may be a source of bias based on close interaction with U.S. culture. However, Massara's sample was comprised of recent migrants and therefore was similar to their island counterparts (Massara, 1989). Another

limitation of this study is that media exposure was surveyed, but the actual content of the print and visual media was not analyzed. This is an area of future research, especially based on how strong some participants felt about the role media plays in shaping their own body image.

The conflation of health and beauty require detailed attention and examination, especially in how this conflation may be perceived from public health campaigns. The prevalent notion among the study participants was that it was preferred to be thin because it was healthy, regardless of other important health components. The conceptualization of health was not holistic, but rather one-dimensional with regard to weight. Thinness is being promoted, especially among women, in many times under the guise of health, and little attention is given to the range of healthy bodies that do not depend on a specific number on a scale.

An area for future research includes examining the effect that undesired weight gain has for people, especially women, of different ages. In the family context this is very salient, since mothers and grandmothers were identified as sources for learning about body norms and self-tolerance. The mental health consequences of low self-esteem, and general discontent and the impact this can have on an individual's everyday life and social relationships require more investigation. A handful of participants expressed how weight and body image dissatisfaction limited their social interactions and caused them to be depressed and anxious most of the time. Talking about weight, especially one's own weight was not easy for many participants. It was at times uncomfortable for participants, and in many cases, it was tied to issues of spousal psychological abuse, used as a derogatory aspect to put a person down. It was also at times associated to how individuals

related to their mothers and fathers through food, especially in cases when the one or more of the parents had passed away. At the beginning of fieldwork I was not expecting to encounter interviews in which participants were so emotionally moved by the subject of body size. It became evident that there was more to size than a number; body size seemed to evoke memories of how they interact with others and their place in the world according to those relationships. More tears were shed than I anticipated, emphasizing that the subject of the body influences many realms of life. Culturally appropriate instruments that directly assess the impact of weight satisfaction on various realms of individuals' lives are an area of future research.

Other areas that need further examination are ethnographies of the male body experiences. My research captured some information mainly through quantitative methods. It would also be interesting to engage with the subject of male expectations and preferences about the female body, and what females think males prefer in Puerto Rico. In the U.S. studies on this subject have found that men usually are more tolerant of heavier weights for women than what women are for their own weight (Cohn and Adler, 1992; Rozin and Fallon, 1988). Another area in body image studies that has been gaining momentum is how lesbian, gay and transgender individuals perceive their bodies and the importance of weight and appearance in these various groups. In Puerto Rico some studies have been conducted, many focused on men and body image (Toro Alfonso, 2007; Toro Alfonso et al., 2010; Toro Alfonso et al., 2012). Finally, the other important line of research, which was not directly addressed in this dissertation, is the issue of food security on the island, and the role this plays in dietary patterns and health. It seemed to be a constant topic that emerged in the interviews about how in the decades that food was

scarce it was nutritionally better because it included more roots, vegetables, fish and fruits. This issue has direct impact on weight and for chronic diseases for Puerto Ricans. The food environment is currently rich in highly processed foods, and snacks and foods considered as empty calories. This resembles the U.S. food environment of excess in high fat, high sugar, processed foods (Popkin, 2009; Popkin and Nielsen, 2003). This trend makes for an interesting contrast between the fast food and junk food compared to the traditional Puerto Rican diet (especially consumption of beans, tubers and local fruits).

The questions this research addressed, and some of the findings, also need to be studied in other populations. There are groups that continue to be cited, as being traditionally valuing of excess weight, and those cultural models need to be reassessed in light of increased globalization. Issues of body image, healthy weight management and fat stigma also need to be addressed with ethnic minorities in the United States. The topic of culture change in body size models are one that is dynamic and under constant reformulation, therefore require reexamined and to be observed closely. Understanding the similarities in body norms in societies and groups that traditionally valued excess weight sheds light on the mechanisms of culture change and how they are shaped by local contexts.

Future research in that same line include working with public health scholars in designing campaigns and information that address the issue of conflating beauty and health. Part of this includes designing workshops about healthy weight, exercise patterns and diet that include the broader structural elements that shape health. Interventions and health education needs to be aligned with the reality Puerto Ricans live, particularly in light of the high crime rates, and aging population, and high prices of produce. The local

produce is not widely available, local agriculture has been declining over the past decades, and in sociopolitical system in which you are taxed more for local products than for imported products from the mainland U.S. it is inevitable that food insecurity will exist. All of these structural factors need to be considered when public health officials and government agencies campaign for people to 'just go for a walk' to get exercise, and to consume from fresh fruits and vegetables. It is not just sheer will power and self-control that influences weight gain and loss, and it is time that personal responsibility is framed within economic and sociopolitical responsibility.

Conclusion

The overarching conclusion is that certain aspects of culture change while others may remain and be carried on from one generation to the next. Individuals of older age are not immune to these shifts, especially when body size is serves as a health indicator. Expressing that a woman was "*Qué gordita*!" was a positive remark up to the 1970s. This now has acquired a negative connotation and evidences the shift in body size norms for Puerto Ricans.

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APPENDIX A INTERVIEW PROTOCOL





Office of Research Integrity and Assurance

To:

Jonathan Maupin

From:

00 par Carol Johnston, Chair

Biosci IRB

Date:

12/23/2010

Committee Action:

Expedited Approval

Approval Date:

12/23/2010

Review Type:

Expedited F7

IRB Protocol #:

1012005794

Study Title:

Intergenerational Variation in Cultural Models of Body Size in Puerto Rico

Expiration Date:

12/22/2011

The above-referenced protocol was approved following expedited review by the Institutional Review Board.

It is the Principal Investigator's responsibility to obtain review and continued approval before the expiration date. You may not continue any research activity beyond the expiration date without approval by the Institutional Review Board.

Adverse Reactions: If any untoward incidents or severe reactions should develop as a result of this study, you are required to notify the Biosci IRB immediately. If necessary a member of the IRB will be assigned to look into the matter. If the problem is serious, approval may be withdrawn pending IRB review.

Amendments: If you wish to change any aspect of this study, such as the procedures, the consent forms, or the investigators, please communicate your requested changes to the Biosci IRB. The new procedure is not to be initiated until the IRB approval has been given.

Please retain a copy of this letter with your approved protocol.

Intergenerational Variation of Body Size Models in Puerto Rico (Assent Form 15-17 year olds)

I have been told that my parents (mom or dad) have given permission (said it's okay) for me to take part in a project about people's opinions on body size and body ideals. The goal of the projects is to understand the cultural bases and consequences of different ways Puerto Rican women understand and respond to their body image. The researchers are interested in learning how grandmothers-mothers-daughters generational triads vary in their opinions about different body sizes.

I will be asked to answer a series of questions about my opinions about different body sizes and my weight history. With my permission the researchers will audio record the interview, and if I say no they will not audio record it. I will also be asked to answer 8 surveys about body satisfaction, attitudes about body sizes, media inventory and acculturation scale, among others. This can take up to 2 hours and 30 minutes.

I am taking part in this study because I want to. I know that I can stop at any time if I want to and it will be okay if I want to stop. I have read this assent form, and recognize that I can ask the researcher anything regarding this form, and anything related to this study.

Sign Your Name Here	Print Your Name Here		
Date			



MAIN CAMPUS PO BOX 872402 TEMPE, AZ 85287-2402 TELEFONO (480) 965-6213 FAX (480) 965-7671

Variación Intergeneracional en Modelos de Tamaño del Cuerpo en Puerto Rico

(Formulario de Asentir Mujeres15-17 años de edad)

Me han dicho que mis padres (madre o padre) han dado permiso (han dicho que está bien) que yo participe en el proyecto sobre las opiniones de las personas sobre los tamaños del cuerpo e ideales del cuerpo. El objetivo de este proyecto es entender las bases y consecuencias culturales de las diferentes maneras que las mujeres puertorriqueñas entienden y responden a la imagen de su cuerpo. Los investigadores están interesado en aprender como los tríos generacionales de abuela-madre-hija varían en sus opiniones sobre diferentes tamaños del cuerpo.

Me pedirán que conteste preguntas sobre mis opiniones de diferentes tamaños de cuerpos, y mi historial de peso. Con mi permiso los investigadores grabarán el audio de la entrevista, y si digo que no ellos no lo grabarán. También se me pedirá que conteste 8 cuestionarios sobre satisfacción corporal, actitudes sobre el tamaño corporal y una escala de aculturación, entre otros. Esto puede tomar hasta 2 horas y 30 minutos.

Estoy participando porque quiero participar. Sé que puedo para en cualquier momento si deseo y que estará bien si quiero parar de participar. He leído este formulario de asentimiento, y reconozco que puedo preguntarle al investigador cualquier cosa sobre este formulario, y cualquier cosa sobre este estudio.

Firme su nombre aquí	Su nombre en letra de molde Aquí	
•		
Fecha Fecha		

Intergenerational Variation of Body Size Models in Puerto Rico

(Assent Form 15-17 year olds)

I have been told that my parents (mom or dad) have given permission (said it's okay) for me to take part in a project about people's opinions on body size and body ideals. The goal of the projects is to understand the cultural bases and consequences of different ways Puerto Ricans understand and respond to their body image. The researchers are interested in learning how opinions about different body sizes vary within families and close groups of people.

I will be asked to answer 5 surveys about my opinions about different body sizes, body satisfaction, acculturation and attitudes towards people of different sizes, among others. This can take up to 45 minutes.

I am taking part because I want to. I know that I can stop at any time if I want to and it will be okay if I want to stop. I have read this assent form, and recognize that I can ask the researcher anything regarding this form, and anything related to this study.

Sign Your Name Here	Print Your Name Here		
Date			

ASU IRB
Approved
Sign_S(\(\gamma\)
Date____\221\(\gamma\)



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Variación Intergeneracional en Modelos de Tamaño del Cuerpo en Puerto Rico

(Formulario de Asentir Varones 15-17 años de edad)

Me han dicho que mis padres (madre o padre) han dado permiso (han dicho que está bien) para que yo participe en el proyecto sobre las opiniones de las personas sobre los tamaños del cuerpo e ideales del cuerpo. El objetivo de este proyecto es entender las bases y consecuencias culturales de las diferentes maneras que los puertorriqueños entienden y responden a la imagen de su cuerpo. Los investigadores están interesado en aprender cómo las opiniones sobre diferentes tamaños corporales varían entre familiares y/o en grupos de personas cercanos.

Me pedirán que conteste 5 cuestionarios sobre mis opiniones de diferentes tamaños de cuerpo, satisfacción corporal, aculturación y actitudes hacia personas de diferentes tamaños, entre otros. Esto puede tomar hasta 45 minutos.

Estoy participando porque quiero participar. Sé que puedo para en cualquier momento si deseo y que estará bien si quiero parar de participar. He leído este formulario de asentimiento, y reconozco que puedo preguntarle al investigador cualquier cosa sobre este formulario, y cualquier cosa sobre este estudio.

Firme su nombre aquí	Su nombre en letra de molde Aquí	
Fecha		

ASU IRB
Approved
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Intergenerational Variation of Body Size Models in Puerto Rico
CONSENT FORM

(Adult version: over 18 years of age)

AND SOCIAL CHANGE

INTRODUCTON

The purposes of this form are to provide you (as a prospective research study participant) information that may affect your decision as to whether or not to participate in this research and to record the consent of those who agree to be involved in the study. Please read this consent form, and you may ask the interviewer questions regarding the consent forms, and anything pertaining to this study.

RESEARCHERS

Professor Jonathan Maupin and doctoral student Isa Rodriguez-Soto from Arizona State University have invited your participation in a research study.

<u>STUDY PURPOSE</u>

The purpose of the research is to understand the socio-cultural bases and consequences of variation in how Puerto Rican women understand and respond to their bodies using an intergenerational perspective. The ultimate goal of the research is to better our understanding of how women from different generations think differently and/or similarly from each other. We are recruiting triads of women from the same family, women that belong to one of the three generational categories (grandmothers)-(mothers)-(daughters).

DESCRIPTION OF RESEARCH STUDY

There are two phases to this study – the main part of the study and a follow-up study with family members of the women in the main part of the study. You are being asked to participate in the first, main phase. You have been asked to participate in this study because you fit the necessary criteria, and/or are a family member of one of the participants. We are asking up to 60 women to participate in this main phase of this study. If you decide to participate you will be asked to:

- Complete an interview about your opinions and ideas about body size, and your own weight history. If
 you agree, the interview will be audio taped. This will take about 1 hour, and no more than 2 hours.
- · Answer basic social-demographic questions.
- Fill out 8 questionnaires of various lengths about body image. This will take no more than 1 hour.
- Name three male relatives that you are close to, and we will ask you to provide their contact
 information. You do not need to do anything else in regard to these contacts you provide. We will not
 share any of the information you give us with them, other than that you are a participant in the study
 and gave us their contact information.

RISKS

We do not foresee any risks associated with participating in this research. As with any research, there is some possibility that you may be subject to risks that have not yet been identified.

BENEFITS

Although there may be no direct or substantive benefits to you for participating, the possible benefits of your participation in the research is improved scientific knowledge about body image and cultural ideals about weight, which are linked with eating disorders, obesity and other health issues in Puerto Rico. Also from the information you provide others might benefit from improvements in healthy weight programs in this and other communities. Most people enjoy the interview and find it interesting and thought-provoking.

CONFIDENTIALITY

All information obtained in this study is strictly confidential unless disclosure is required by law. The results of this research study may be used in reports, presentations, and publications, but the researchers will not identify you.

ASU IRB

Sign Sty Approved

Date 12210 12211

WITHDRAWAL PRIVILEGE

It is okay for you to say no. Even if you say yes now, you are free to say no later, and withdraw from the study at any time before data collection is complete. If you withdraw from the study before data collection is complete, all data you provide will be destroyed.

COSTS AND PAYMENTS

The researchers want your decision about participating in the study to be absolutely voluntary. There is no compensation for participation.

COMPENSATION FOR ILLNESS AND INJURY

If you agree to participate in the study, then your consent does not waive any of your legal rights. However, in the event of harm, injury, or illness arising from this study neither Arizona State University nor the researchers are able to give you any money, insurance coverage, free medical care, or any compensation for such injury.

VOLUNTARY CONSENT

Any questions you have concerning the research study or your participation in the study, before or after your consent, will be answered by **Isa Rodriguez-Soto**, cel: 787-362-7210, e-mail: isa.rodriguez-soto@asu.edu. If you have questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the Human Subjects Institutional Review Board, through the ASU Research Compliance Office, at (480)-965-6788.

This form explains the nature, demands, benefits and any risk of the project. By signing this form you agree knowingly to assume any risks involved. Remember, your participation is voluntary. You may choose not to participate or to withdraw your consent and discontinue participation at any time without penalty or loss of benefit. In signing this consent form, you are not waiving any legal claims, rights, or remedies. A copy of this consent form will be offered to you.

Your signature below indicates that you consent to participate in the above study. Participant's Signature Printed Name Date Other Signature Printed Name Date (if appropriate) **INVESTIGATOR'S STATEMENT** "I certify that I have explained to the above individual the nature and purpose, the potential benefits and possible risks associated with participation in this research study, have answered any questions that have been raised, and have witnessed the above signature. These elements of Informed Consent conform to the Assurance given by Arizona State University to the Office for Human Research Protections to protect the rights of human subjects. I have offered the subject/participant a copy of this signed consent document." Signature of Investigator Date



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Variación Intergeneracional en Modelos de Tamaño del Cuerpo en Puerto Rico FORMULARIO DE CONSENTIMIENTO

(Versión Mujer Adulta: sobre 18 años de edad)

INTRODUCCION

El propósito de este formulario es proveerle a usted (como un posible participante del estudio investigativo) información que puede afectar su decisión sobre participar o no en esta investigación y para documentar el consentimiento de esos que acuerden involucrarse en el estudio. Por favor lea este formulario de consentimiento y puede preguntarle al entrevistador preguntas sobre los formulario de consentimiento y de cualquier cosa sobre este estudio.

INVESTIGADORES

El profesor Jonathan Maupin y la estudiante doctoral Isa Rodríguez-Soto de la Universidad Estatal de Arizona (Arizona State University) lo están invitando a participar en este estudio.

PROPOSITO DEL ESTUDIO

El propósito de la investigación es entender la base sociocultural y consecuencias de la variación de cómo las mujeres puertorriqueñas entienden y responden a sus cuerpos usando una perspectiva intergeneracional. El objetivo principal de la investigación es entender mejor cómo las mujeres de diferentes generaciones piensan diferente y/o similar unas de otras. Estamos reclutando tríos de mujeres de la misma familia, mujeres que pertenezcan a una de las tres categorías generacionales de (abuela)-(madre)-(hija).

DESCRIPCION DEL ESTUDIO

Este estudio consta de dos fases – una parte principal y un estudio de seguimiento con familiares de las mujeres. Se le está pidiendo participar en la primera fase. Se le ha pedido que participe en este estudio porque cumple con los criterios necesarios, y es un familiar de una de las participantes. Le estamos pidiendo a 60 mujeres que participen en esta fase principal del estudio. Si usted decide participar se le pedirá que:

- Complete una entrevista sobre sus opiniones e ideas sobre el tamaño del cuerpo y sobre su propia historia con el peso. Si usted está de acuerdo, la entrevista será grabada en audio. Esto tomará casi 1 hora, y no más de 2 horas.
- · Conteste unas preguntas socio-demográficas básicas.
- Llene unos 8 cuestionarios de varios largos sobre la imagen del cuerpo. Esto tomará no más de 1 hora
- Nombre tres familiares varones que sean cercanos a usted y le pediremos que nos provea la
 información para contactarlos. Usted no necesita contactarlos, solamente proveer esa información.
 Nosotros no compartiremos ninguna de la información que usted nos dio con ellos, aparte de que
 usted es una participante en este estudio y nos dio su información.

RIESGOS

No hay riesgos previstos asociados a su participación en este estudio. Como con cualquier investigación, hay alguna posibilidad que usted pueda estar sujeto a riesgos que no se han identificado todavía.

BENEFICIOS

Aunque puede que no haya ningún beneficio directo o sustancial para usted por participar en esta investigación, el posible beneficio de su participación es mejorar el conocimiento científico sobre la imagen del cuerpo e ideas culturales sobre el peso, que están ligadas con desórdenes alimentarios, obesidad y otros temas de salud en Puerto Rico. Además, otros se pueden beneficiar de mejoras a programas para peso saludable en esta u otras comunidades. La mayoría de las personas disfrutan la entrevista y la encuentran interesante y que los hace reflexionar.

CONFIDENCIALIDAD

ſ	ASU IRB Approved					
	Sign_ Date_	755	210	1221	77	

Todo la información obtenida en este estudio es estrictamente confidencial a menos que el acceso a la misma sea requerido por ley. Los resultados de esta investigación pueden ser usados en informes, presentaciones y publicaciones, pero los investigadores no lo identificarán a usted.

PRIVILEGIO DE RETIRARSE

Está bien para usted decir que no. Aún si dice que sí ahora, usted tiene la libertad de decir que no luego, y de retirarse del estudio en cualquier momento antes de que se complete la colección de datos. Si usted se retira del estudio antes que se recolecten los datos todos sus datos serán destruidos.

COSTOS Y PAGOS

Los investigadores quieren que su decisión sobre participar en el estudio sea absolutamente voluntaria. No hay compensación por participar.

COMPENSACION POR ENFERMEDAD Y LESION

Si usted acuerda participar en el estudio, entonces su consentimiento no renuncia a cualquier derecho legal. Sin embargo, en el evento de daño, lesión o enfermedad surgiendo de este estudio ni la Universidad Estatal de Arizona (Arizona State University) ni los investigadores pueden darle ningún dinero, cobertura de seguro, tratamiento médico gratuito, o ninguna compensación por tal lesión.

CONSENTIMIENTO VOLUNTARIO

Cualquier pregunta que usted tenga acerca de este estudio, antes o después de su consentimiento, serán contestadas por **Isa Rodriguez-Soto**, cel: 787-362-7210, e-mail: isa.rodriguez-soto@asu.edu. Si usted tiene preguntas sobre sus derechos como participante en este estudio, o si piensa que usted ha sido puesto en riesgo, puede comunicarse con el director del Human Subjects Institutional Review Board, a través del ASU Office of Research Integrity and Assurance, al teléfono (480)-965-6788.

Este formulario explica la naturaleza, requisitos, beneficios y cualquier riesgo del proyecto. Al firmar este formulario usted consiente con conocimiento asumir cualquier riesgo involucrado. Recuerde que su participación es voluntaria. Usted puede escoger no participar o retirar su consentimiento o descontinuar su participación en cualquier momento sin penalidad o pérdida de beneficio. Al firmar este formulario de consentimiento, usted no está renunciado a ningún reclamo, derecho o remedio legal. Una copia de este formulario de consentimiento se le ofrecerá a usted.

formulario de consentimiento se le	ofrecerá a usted.	
Su firma aquí indica que usted con documento.	siente su participación en el estudio	explicado previamente en el
Firma del Participante	Nombre en letra de molde	Fecha
Otra Firma (si es apropiado)	Nombre en letra de molde	Fecha
DECLARACION DEL INVESTIGA	DOR	
'Certifico que yo le he explicado al posibles riesgos asociados con est de testigo a la firma arriba. Estos e por la Universidad Estatal de Arizo Investigaciones Humanas para pro	individuo arriba la naturaleza y prop e estudio, he contestado cualquier p	oregunta que ha surgido, y he servido lado cumplen con la Assurance dada ficina para la Protección de umanos. Yo le he ofrecido al
Firma del Investigador		Fecha



 COLLEGE OF LIBERAL ARTS
 Main Campus
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 AND SCIENCES
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 (480) 965-6213

 SCHOOL OF HUMAN EVOLUTION TEMPE, AZ 85287-2402FACSIMILE
 480) 965-7671

 AND SOCIAL CHANGE
 (480) 965-7671

Intergenerational Variation of Body Size Models in Puerto Rico CONSENT FORM

(Adult version: over 18 years of age)

INTRODUCTON

The purposes of this form are to provide you (as a prospective research study participant) information that may affect your decision as to whether or not to participate in this research and to record the consent of those who agree to be involved in the study. Please read this consent form, and you may ask the interviewer questions regarding the consent forms, and anything pertaining to this study.

RESEARCHERS

Professor Jonathan Maupin and doctoral student Isa Rodriguez-Soto from Arizona State University have invited your participation in a research study.

STUDY PURPOSE

The purpose of the research is to understand the socio-cultural bases and consequences of variation in how Puerto Rican women understand and respond to their bodies using an intergenerational perspective. The ultimate goal of the research is to better our understanding of how women from different generations think differently and/or similarly from each other. We are recruiting triads of women from the same family, women that belong to one of the three generational categories (grandmothers)-(mothers)-(daughters). We are also recruiting male family members of female participants to answer general surveys about body size in Puerto Rico.

DESCRIPTION OF RESEARCH STUDY

There are two phases to this study – the main part of the study and a follow-up study with family members of the women in the main part of the study. You are being asked to participate in the second, follow-up phase. You have been asked to participate in this study because you fit the necessary criteria, and/or are a family member of one of the participants. We are asking up to 60 men to participate in this follow-up phase of the study. If you decide to participate you will be asked to:

- · Answer basic social-demographic questions.
- Fill out 5 questionnaires of various lengths about body image. This will take no more than 45 minutes.
- We will not share any of the information you give us with the other relatives participating in this study.

RISKS

We do not foresee any risks associated with participating in this research. As with any research, there is some possibility that you may be subject to risks that have not yet been identified.

BENEFITS

Although there may be no direct or substantive benefits to you for participating, the possible benefits of your participation in the research is improved scientific knowledge about body image and cultural ideals about weight, which are linked with eating disorders, obesity and other health issues in Puerto Rico. Also from the information you provide others might benefit from improvements in healthy weight programs in this and other communities. Most people enjoy the interview and find it interesting and thought-provoking.

CONFIDENTIALITY

All information obtained in this study is strictly confidential unless disclosure is required by law. The results of this research study may be used in reports, presentations, and publications, but the researchers will not identify you.

ASU IRB
Approved
Sign SM Approved
Date 12210 12211

WITHDRAWAL PRIVILEGE

It is okay for you to say no. Even if you say yes now, you are free to say no later, and withdraw from the study at any time before data collection is complete. If you withdraw from the study before data collection is complete, all data you provide will be destroyed.

COSTS AND PAYMENTS

The researchers want your decision about participating in the study to be absolutely voluntary. There is no compensation for participation.

COMPENSATION FOR ILLNESS AND INJURY

If you agree to participate in the study, then your consent does not waive any of your legal rights. However, in the event of harm, injury, or illness arising from this study neither Arizona State University nor the researchers are able to give you any money, insurance coverage, free medical care, or any compensation for such injury.

VOLUNTARY CONSENT

Any questions you have concerning the research study or your participation in the study, before or after your consent, will be answered by **Isa Rodriguez-Soto**, cel: 787-362-7210, 787-832-8569, e-mail: isa.rodriguez-soto@asu.edu. If you have questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the Human Subjects Institutional Review Board, through the ASU Research Compliance Office, at (480)-965-6788.

This form explains the nature, demands, benefits and any risk of the project. By signing this form you agree knowingly to assume any risks involved. Remember, your participation is voluntary. You may choose not to participate or to withdraw your consent and discontinue participation at any time without penalty or loss of benefit. In signing this consent form, you are not waiving any legal claims, rights, or remedies. A copy of this consent form will be offered to you.

Your signature below indicates that you consent to participate in the above study.

Participant's Signature	Printed Name	Date	
Other Signature (if appropriate)	Printed Name	Date	
possible risks associated with p been raised, and have witnesse Assurance given by Arizona Sta	IT the above individual the nature and participation in this research study, have the above signature. These element the University to the Office for Human led the subject/participant a copy of this	e answered any questions that h s of Informed Consent conform Research Protections to protect	nave to the
Signature of Investigator		Date	



MAIN CAMPUS TELE PO Box 872402 (480 TEMPE, AZ 85287-2402 FAX (480

TELEFONO (480) 965-6213 2 FAX (480) 965-7671

Variación Intergeneracional en Modelos de Tamaño del Cuerpo en Puerto Rico FORMULARIO DE CONSENTIMIENTO

(Versión Varón Adulto: sobre 18 años de edad)

INTRODUCCION

El propósito de este formulario es proveerle a usted (como un posible participante del estudio) información que puede afectar su decisión sobre participar o no en esta investigación y para documentar el consentimiento de esos que acuerden involucrarse en el estudio. Por favor lea este formulario de consentimiento y puede preguntarle al entrevistador preguntas sobre los formulario de consentimiento y de cualquier cosa sobre este estudio.

INVESTIGADORES

El profesor Jonathan Maupin y la estudiante doctoral Isa Rodriguez-Soto de la Universidad Estatal de Arizona (Arizona State University) lo están invitando a participar en este estudio.

PROPOSITO DEL ESTUDIO

El propósito de la investigación es entender la base sociocultural y consecuencias de la variación de cómo las mujeres puertorriqueñas entienden y responden a sus cuerpos usando una perspectiva intergeneracional. El objetivo principal de la investigación es entender mejor cómo las mujeres de diferentes generaciones piensan diferente y/o similar unas de otras. Estamos reclutando tríos de mujeres de la misma familia, mujeres que pertenezcan a una de las tres categorías generacionales de (abuela)-(madre)-(hija). También estamos reclutando familiares varones de las féminas participantes para contestar unos cuestionarios generales sobre el tamaño corporal en Puerto Rico.

DESCRIPCION DEL ESTUDIO

Este estudio consta de dos fases – una parte principal y un estudio de seguimiento con familiares de las mujeres. Se le está pidiendo participar en la segunda fase, de seguimiento. Se le ha pedido que participe en este estudio porque cumple con los criterios necesarios, y/o es un familiar de una de las participantes. Le estamos pidiendo a 60 hombres que participen en esta fase de seguimiento del estudio. Si usted decide participar se le pedirá que:

- Conteste unas preguntas socio-demográficas básicas.
- Llene unos 5 cuestionarios de varios largos sobre la imagen del cuerpo. Este tomará no más de 45 minutos.
- Nosotros no compartiremos ninguna de la información que usted nos de con otros familiares participando en este estudio.

RIESGOS

No hay riesgos previstos asociados a su participación en este estudio. Como con cualquier investigación, hay alguna posibilidad que usted pueda estar sujeto a riesgos que no se han identificado todavía.

BENEFICIOS

Aunque puede que no haya ningún beneficio directo o sustancial para usted por participar en esta investigación, el posible beneficio de su participación es mejorar el conocimiento científico sobre la imagen del cuerpo e ideas culturales sobre el peso, que están ligadas con desórdenes alimentarios, obesidad y otros temas de salud en Puerto Rico. Además, otros se pueden beneficiar de mejoras a programas para peso saludable en este u otras comunidades. La mayoría de las personas disfrutan la entrevista y la encuentran interesante y que los hace reflexionar.

CONFIDENCIALIDAD

	ASU IRB
	Sm Approved
Sign	21N
Date	122210-122111

Todo la información obtenida en este estudio es estrictamente confidencial a menos que el acceso a la misma sea requerido por ley. Los resultados de esta investigación pueden ser usados en reportes, presentaciones y publicaciones, pero los investigadores no lo identificarán a usted.

PRIVILEGIO DE RETIRARSE

Está bien para usted decir que no. Aún si dice que sí ahora, usted tiene la libertad de decir que no luego, y de retirarse del estudio en cualquier momento antes de que se complete la colección de datos. Si usted se retira del estudio antes que se recolecten los datos todos sus datos serán destruidos.

COSTOS Y PAGOS

Los investigadores quieren que su decisión sobre participar en el estudio sea absolutamente voluntaria. No hay compensación por participar.

COMPENSACION POR ENFERMEDAD Y LESION

Si usted acuerda participar en el estudio, entonces su consentimiento no renuncia a cualquier derecho legal. Sin embargo, en el evento de daño, lesión o enfermedad surgiendo de este estudio ni la Universidad Estatal de Arizona (Arizona State University) ni los investigadores pueden darle ningún dinero, cobertura de seguro, tratamiento médico gratuito, o ninguna compensación por tal lesión.

CONSENTIMIENTO VOLUNTARIO

Cualquier pregunta que usted tenga acerca de este estudio, antes o después de su consentimiento, serán contestadas por Isa Rodriguez-Soto, cel: 787-362-7210, e-mail: isa.rodriguez-soto@asu.edu. Si usted tiene preguntas sobre sus derechos como participante en este estudio, o si piensa que usted ha sido puesto en riesgo, puede comunicarse con el director del Human Subjects Institutional Review Board, a través del ASU Office of Research Integrity and Assurance, al teléfono (480)-965-6788.

Este formulario explica la naturaleza, requisitos, beneficios y cualquier riesgo del proyecto. Al firmar este formulario usted consiente con conocimiento asumir cualquier riesgo involucrado. Recuerde que su participación es voluntaria. Usted puede escoger no participar o retirar su consentimiento o descontinuar su participación en cualquier momento sin penalidad o pérdida de beneficio. Al firmar este formulario de consentimiento, usted no está renunciado a ningún reclamo, derecho o remedio legal. Una copia de este formulario de consentimiento se le ofrecerá a usted.

Su firma aquí indica que usted cons documento.	siento su participación en el estudio e	explicado previamente en el
Firma del Participante	Nombre en letra de molde	Fecha
Otra Firma (si es apropiado)	Nombre en letra de molde	Fecha
posibles riesgos asociados con este de testigo a la firma arriba. Estos el por la Universidad Estatal de Arizor Investigaciones Humanas para prot	DOR individuo arriba la naturaleza y propó e estudio, he contestado cualquier pr ementos de Consentimiento Informa a (Arizona State University) a la Ofio eger los derechos de los sujetos hur la de este documento de consentimio	regunta que ha surgido, y he servido do cumplen con la <i>Assurance</i> dada cina para la Protección de manos. Yo le he ofrecido al
Firma del Investigador		Fecha



COLLEGE OF LIBERAL ARTS MAIN CAMPUS AND SCIENCES SCHOOL OF HUMAN EVOLUTION TEMPE, AND SOCIAL CHANGE

PO Box 872402 AZ 85287-2402

TELEPHONE (480) 965-6213 FACSIMILE (480) 965-7671

Intergenerational Variation of Body Size Models in Puerto Rico PARENTAL LETTER OF PERMISSION

Dear Parent:

Sincerely,

I am a graduate student under the direction of Professor Jonathan Maupin in the School of Human Evolution and Social Change in the College of Liberal Arts and Sciences at Arizona State University. I am conducting a research study to better understand female body ideals of Puerto Ricans from an intergenerational perspective. Please read this consent form, and you ask me questions regarding the consent forms, and anything pertaining to this study.

I am inviting your child's participation, which will involve an interview about body ideals and her opinions about body size in Puerto Rico, which will take approximately 1 hour and 30 minutes. With your and your child's permission the interview portion will be audio recorded. Your child will also be asked to answer 8 surveys, which will take no longer than 1 hour. Your child's participation in this study is voluntary. If you choose not to have your child participate or to withdraw your child from the study at any time, there will be no penalty. Likewise, if your child chooses not to participate or to withdraw from the study at any time, there will be no penalty. The results of the research study may be published, but your child's name will not be used.

Although there may be no direct benefit to your child, the possible benefit of your child's participation in the research to improve scientific knowledge about body image and cultural ideals about weight, which are linked with eating disorders, obesity and other health issues in Puerto Rico. There are no foreseeable risks or discomforts to your child's participation.

Responses will be confidential. The results of this study may be used in reports, presentations, or publications but your child's name will not be used. The results will only be shared in the aggregate form.

If you have any questions concerning the research study or your child's participation in this study, please call me at (787)-362-7210 ,or Dr. Jonathan Maupin at (480) 965-2167.

Isa Rodríguez-Soto		
By signing below, you are the above study.	e giving consent for your child	(Child's name) to participate in
Signature	Printed Name	Date
feel you or your child hav	about you or your child's rights as a subject been placed at risk, you can contact the d, through the Office of Research Integri	Chair of the Human Subjects

ASU TRB Approved Sign 122111 Date



COLLEGE OF LIBERAL ARTS AND SCIENCES SCHOOL OF HUMAN EVOLUTION AND SOCIAL CHANGE

MAIN CAMPUS PO Box 872402 TEMPE, AZ 85287-2402 FACSIMILE

TELEPHONE (480) 965-6213 (480) 965-7671

Variación Intergeneracional en Modelos de Tamaño del Cuerpo en Puerto Rico

CARTA DE PERMISIO PARENTAL (Versión Mujeres)

Estimado Padre o Encargado:

Soy una estudiante graduada bajo la dirección del Profesor Jonathan Maupin en la Escuela de Evolución Humana y Cambio Social en el Colegio de Artes y Ciencias de la Universidad Estatal de Arizona. Estoy realizando un estudio sobre los ideales del cuerpo femenino de los puertorriqueños desde una perspectiva intergeneracional. Por favor lea este formulario de consentimiento, y puede hacerme preguntas sobre los formularios de consentimiento y cualquier cosa sobre este estudio.

Estoy invitando a su hija a participar en una entrevista sobre los ideales del cuerpo y sus opiniones sobre el tamaño corporal en Puerto Rico, que tomará aproximadamente 1 hora y 30 minutos. Con su permiso y el de su hija la porción de la entrevista será grabada en audio. También se le pedirá que conteste 8 cuestionarios, que deben tomar no más de 1 hora. La participación de su hija es voluntaria. Si usted escoge que su hija no participe o que se retire del estudio en cualquier momento no habrá penalidad alguna. Igualmente, si su hija escoge no participar o retirarse del estudio en cualquier momento, no habrá penalidad alguna. Los resultados del estudio pueden ser publicados, pero el nombre de su hija no se usará.

Aunque puede que no haya beneficio directo para su hija, el posible beneficio de la participación de su hija en esta investigación es el mejoramiento del conocimiento científico sobre la imagen corporal e ideas culturales sobre el peso, que están ligadas con desórdenes alimentarios, obesidad y otros asuntos de salud en Puerto Rico. No hay riesgos ni incomodidades previstas para la participación de su hija.

Las respuestas son confidenciales. Los resultados de este estudio pueden ser usados en informes, presentaciones o publicaciones, pero el nombre de su hija no se usará. Los resultados serán compartidos sólo en forma agregada.

Si usted tiene preguntas sobre el estudio investigativo o sobre la participación de su hija en este estudio por favor comuníquese conmigo al (787)-362-7210, o con el Dr. Maupin al (480)-965-

Sinceramente,		
Isa Rodríguez-Soto		
Al firmar abajo usted está cons la hija) participe en el estudio e		(nombre de
Firma	Nombre en letra de molde	Fecha
	los derechos suyos o de su hija como o su hija ha sido puesto en riesgo, pu	

director del Human Subjects Institutional Review Board, a través del ASU Office of Research Integrity and Assurance, al teléfono (480)-965-6788.



COLLEGE OF LIBERAL ARTS MAIN CAMPUS AND SCIENCES PO BOX 872402 SCHOOL OF HUMAN EVOLUTION TEMPE, AZ 85287-2402 AND SOCIAL CHANGE

TELEPHONE (480) 965-6213 FACSIMILE (480) 965-7671

Intergenerational Variation of Body Size Models in Puerto Rico PARENTAL LETTER OF PERMISSION

Dear Parent:

I am a graduate student under the direction of Professor Jonathan Maupin in the School of Human Evolution and Social Change in the College of Liberal Arts and Sciences at Arizona State University. I am conducting a research study to better understand female body ideals of Puerto Ricans from an intergenerational perspective. Please read this consent form, and you ask me questions regarding the consent forms, and anything pertaining to this study.

I am inviting your child's participation, which will involve answering 5 surveys about body ideals and his opinions about body size in Puerto Rico. This will take approximately 45 minutes. Your child's participation in this study is voluntary. If you choose not to have your child participate or to withdraw your child from the study at any time, there will be no penalty. Likewise, if your child chooses not to participate or to withdraw from the study at any time, there will be no penalty. The results of the research study may be published, but your child's name will not be used.

Although there may be no direct benefit to your child, the possible benefit of your child's participation in the research to improve scientific knowledge about body image and cultural ideals about weight, which are linked with eating disorders, obesity and other health issues in Puerto Rico. There are no foreseeable risks or discomforts to your child's participation.

Responses will be confidential. The results of this study may be used in reports, presentations, or publications but your child's name will not be used. The results will only be shared in the aggregate form.

If you have any questions concerning the research study or your child's participation in this study, please call me at (787)-362-7210, or Dr. Jonathan Maupin at (480)-965-2167.

Sincerely,		
Isa Rodríguez-Soto		
By signing below, you are the above study.	e giving consent for your child	(Child's name) to participate in
Signature	Printed Name	Date
feel you or your child have	s about you or your child's rights as a sub we been placed at risk, you can contact th rd, through the Office of Research Integr	

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Approved
Sign S M
Date 122210 (12211)



COLLEGE OF LIBERAL ARTS AND SCIENCES SCHOOL OF HUMAN EVOLUTION AND SOCIAL CHANGE

MAIN CAMPUS PO BOX 872402 TEMPE, AZ 85287-2402

TELEPHONE (480) 965-6213 FACSIMILE (480) 965-7671

Variación Intergeneracional en Modelos de Tamaño del Cuerpo en Puerto Rico

CARTA DE PERMISIO PARENTAL (Versión Varones)

Estimado Padre o Encargado:

Soy una estudiante graduada bajo la dirección del Profesor Jonathan Maupin en la Escuela de Evolución Humana y Cambio Social en el Colegio de Artes y Ciencias de la Universidad Estatal de Arizona. Estoy realizando un estudio sobre los ideales del cuerpo femenino de los puertorriqueños desde una perspectiva intergeneracional. Por favor lea este formulario de consentimiento, y puede hacerme preguntas sobre los formularios de consentimiento y cualquier cosa sobre este estudio.

Estoy invitando a su hijo a participar en este estudio, su participación consta de contestar 5 cuestionarios acerca de los ideales del cuerpo y sus opiniones sobre el tamaño corporal en Puerto Rico. Esto tomará aproximadamente 45 minutos. La participación de su hijo es voluntaria. Si usted escoge que su hijo no participe o que se retire del estudio en cualquier momento no habrá penalidad alguna. Igualmente, si su hijo escoge no participar o retirarse del estudio en cualquier momento, no habrá penalidad alguna. Los resultados del estudio pueden ser publicados, pero el nombre de su hijo no se usará.

Aunque puede que no haya beneficio directo para su hijo, el posible beneficio de la participación de su hijo en esta investigación es el mejoramiento del conocimiento científico sobre la imagen corporal e ideas culturales sobre el peso, que están ligadas con desórdenes alimentarios, obesidad y otros asuntos de salud en Puerto Rico. No hay riesgos ni incomodidades previstas para la participación de su hijo.

Las respuestas son confidenciales. Los resultados de este estudio pueden ser usados en informes, presentaciones o publicaciones, pero el nombre de su hijo no se usará. Los resultados serán compartidos sólo en forma agregada.

Si usted tiene preguntas sobre el estudio investigativo o sobre la participación de su hijo en este estudio por favor comuníquese conmigo al (787)-362-7210, o con el Dr. Maupin al (480)-965-2167.

2107.		
Sinceramente,		
lsa Rodríguez-Soto		
Al firmar abajo usted está consintionio) participe en el estudio explica		(nombre del
Firma	Nombre en letra de molde	Fecha
Si usted tiene preguntas sobre los estudio, o si piensa que usted o su director del Human Subjects Institu Integrity and Assurance, al teléfon	ı hijo ha sido puesto en riesgo, puo utional Review Board, a través del	ede comunicarse con el
		SU IRB

FEMALE INTERVIEW GUIDE

In this part of the study I will ask you a series of questions about your opinions and experiences

regarding body size and weight in Puerto Rico. Is it okay with you if I record our conversation?

If I ask something that makes you uncomfortable you are free to not answer it. Remember at any time of the interview you can choose to withdraw from the study with no penalties. If I ask something and it is not clear please ask me to re-phrase or repeat.

I would first like to learn more about your own weight history.

- 1. Have you ever gained a great deal of weight? If yes, how much weight did you gain? When? Why (prompt: water retention, nerves, pregnancy)? What was the reaction of others (family, friends) to your weight gain?
- 2. Have you ever lost a great deal of weight? If yes, how much weight did you lose? When? Why (Prompt: sickness, nerves, diet)? What was the reaction of others (family, friends) to your weight loss?
- 3. At what weight have you felt your best?
- 4. What would be the weight with which you would feel the best today?
- 5. Do you feel that your weight interferes with your daily activities in anyway? If so, could you give a specific example?
- 6. Do you do any intense physical activity? 7. If you have ever tried to lose weight, indicate the methods which you have used:
- 8. If you have been on a diet, why were your efforts successful or unsuccessful? 9. If you have tried to lose weight, describe the attitudes of the following persons:
- 10. Do you think that the attitudes of your spouse, family or friends influences your weight or weight loss?

If so, could you describe a specific example?

11. Do you think that other persons react to your weight? If so, how do they react to you?

Could you give a specific example?

Now I will ask about your body size and weight at different ages:

- 12. A young child (baby up to 5 years old): What have you been told you were like as an infant? Who told you? What do you remember regarding your body weight when you were young? (Prompt: Were you a skinny baby, a chubby baby?)
- 13. A child (5-10 years old): How would you describe your body (prompt: size, weight, shape) when you were in elementary school? What do you remember about your body and weight during that time? Would you describe yourself as skinny, chubby or any other term? Were you aware of you body size and weight at that time? While growing up, did you have any sicknesses or accidents? If yes, can you describe them?
- 14. During the pre-teen and early teenage years (11-15 years old): How would you describe your body (prompt: size, weight, shape) when you were in middle school? What do you remember about your body and weight during that time? Did others comment about your body weight or size at those ages? If yes, what were the comments? Did you diet or exercise to lose weight during at those ages? Why? Did you have a *quinceañero*? If yes, tell me about your body weight and size at that time (prompt: your dress, the party, your date).
- 15. As an older teenager (16-19 years of age): How would you describe your body (prompt: size, weight, shape) when you were in high school? Did others comment about your body weight or size at those ages? If yes, what were the comments? Did you diet or exercise to lose weight during at those ages? Why? What did you think about your body shape and weight at that time in your life?
- 16. As a young adult (20-30 years of age): How would you describe your body (prompt: size, weight, shape) during the time between your 20 and 30 years of age? (Prompt: college years, after high school)

	0 3	,	\mathcal{L}	,		
17.	As an	adult (31	-40 years	of age):		
Pare	ents					
Frie	nds					

Other:

How would you describe your body (prompt: size, weight, shape) during the time between your 31 and 40 years of age? (Prompt:)

- 18. As an older adult (41-50 years of age): How would you describe your body (prompt: size, weight, shape) during the time between your 41 and 50 years of age? (Prompt:)
- 19. As an older adult (51-60 years of age): How would you describe your body (prompt: size, weight, shape) during the time between your 51 and 60 years of age? (Prompt:)
- 20. As a person of the third age (61 years and older): How would you describe your body (prompt: size, weight, shape) after 61 years of age? (Prompt:)

- 21. Could you describe your family's attitudes toward food and eating while you were growing up? 22. Were your parents ever separated or divorced? If yes, how old were you when this happened? 23. Who raised you as a child? 24. What was your relationship with your father like?
- 25. What was your relationship with your mother like?
- 26. What was your mother's weight like when you were growing up? How did you feel about it? (Prompt: big/small, powerful/weak, comforting/cold)
- 27. What was your father's weight like when you were growing up? How did you feel about it?
- 28. Can you give me your brothers' and sisters' ages, present weight, height and tell me whether they are underweight, averages or overweight?
- 29. When was your first job? How would you describe your body (prompt: size, weight, shape) during at that time?
- 30. (If ever married o lived with partner): How would you describe your body (prompt: size, weight, shape) before getting married?

How would you describe your body (prompt: size, weight, shape) when recently married or living together (from wedding to 1st anniversary)?

- 31. How would you describe your body (prompt: size, weight, shape) after recently giving birth to the baby (from birth to baby's 1st birthday)? How would you describe your body (prompt: size, weight, shape) after baby was 2 years old? Do you recall any comments regarding your weight during the pregnancy and after giving birth?
- 32. IF INTERVIEWEE HAS MORE THAN 1 CHILD: What was your experience with weight gain and lose during your pregnancy #2 (#3, #4, etc.)? How would you describe your body (prompt: size, weight, shape) before pregnancy (#)? How would you describe your body (prompt: size, weight, shape) after recently giving birth to that baby (from birth to that baby's 1St birthday)? How would you describe your body (prompt: size, weight, shape) after that baby was 2 years old? Do you recall any comments regarding your weight during the pregnancy and after giving birth to that baby? Was one pregnancy different from the other regarding weight gain and loss?
- 33. Have you ever been separated from your spouse? IF yes, Did the separation affect your body weight? If yes, how, and why?
- 34. Are there any persons in your family that are underweight? IF No: In general, what can one do in order to gain weight?

How would you describe your body (prompt: size, weight, shape) after 2 years of

marriage or of living together?

(If ever pregnant): How would you describe your body (prompt: size, weight, shape) during before getting pregnant?

- 35. Are there any persons in your family that are overweight? IF No: In general, what can one do in order to lose weight?
- 36. Have you ever felt discriminated against because of your body weight and size? If yes, in what occasion(s) (prompt: when) did the discrimination occur? How did you feel?
- 37. Have you ever witnessed discrimination (or teasing) against someone because of his or her body weight and size? If yes, when?

What were the circumstances? How did you feel about the situation?

- 38. Do you know of any health issues associated with body weight? (Prompt: with any body size, underweight, average weight, overweight) If yes, what? Mention all you know.
- 39. From whom or where did you learn about these health issues of body weight? (Prompt: news, radio, classes, and medical doctors).
- 40. What is your opinion about the following statement: "Puerto Ricans do not like overweight or fat people".
- 41. What is your opinion about the following statement: "Puerto Ricans like overweight or fat people".
- 42. In your experience, if a woman begins to gain weight, up to 15-20 pounds after marrying, what is the most common reaction of her husband?
 - A. He is pleased B. He dislikes it C. He does not care.
- 43. Do you feel pressure to maintain a specific body size? Which body size?

Where does the pressure come from? (Prompt: family members, health campaigns, advertisement campaigns, etc.)

- 44. Is it acceptable for women to gain weight in certain stages of their life? If yes, at which life stages or occasions? (Prompt: Can you think of specific occasions for which you would not care if you gained weight? For example: pregnancy, marriage, old age, surgery, and health problems).
- 45. Is it unacceptable for women to gain weight in certain stages of their life? If yes, at which life stages or occasions? (Prompt: Can you think of specific occasions for which you would not like to gain weight? For example: before a wedding, for a high school class reunion, a vacation trip, summer).

- 46. Are there stages or occasions in which it is acceptable for girls and boys to be overweight? Please give me examples of the ages and occasions at which it is acceptable for girls to be overweight. Please give me examples of the ages and occasions at which it is acceptable for boys to be overweight.
- 47. Are there stages or occasions in which it is NOT acceptable for girls and boys to be overweight? (Prompt: Is there a specific occasion you remember from your or you child's childhood?) Please give me examples of the ages and occasions at which it is not acceptable for girls to be overweight.
- 48. Describe the body of woman you consider to be sexy (Prompt: weight, style, attire, attitude). What do you base this description on? (Prompt: what women want to look like or what men want to see in a woman). Does this body type vary with age? If yes, how? (Prompt: the description of a sexy woman is the same for a 19 years old women and for one that is 40 or 60 years old?)
- 49. What is you opinion about the following statement: "Puerto Rican men prefer plump (fat) women".
- 50. What is you opinion about the following statement: "Puerto Rican men prefer skinny (slender) women".
- 51. Men preferences for thin or plump women, is it related to the age of the man? (Prompt: young and older men have the same preferences about a woman's body size?)

Is it related to the age of the woman? (Prompt: If a man prefers thin women, no matter what the woman's age is (young or old) he will prefer a thin body? If it is a young woman a man will prefer her thin or plump, and if she is an older woman he would prefer her thin or plump)?

- 52. Please define the term overweight.
- 53. Please define the term obese.

Show the figure rating scale to the interviewee for the following questions

- 54. What terms would you use to describe the body size of figure #1 in the scale?
- 55. What terms would you use to describe the body size of figure #2 in the scale?
- 56. What terms would you use to describe the body size of figure #3 in the scale?
- 57. What terms would you use to describe the body size of figure #4 in the scale?
- 58. What terms would you use to describe the body size of figure #5 in the scale?
- 59. What terms would you use to describe the body size of figure #6 in the scale?

60. What terms would you use to describe the body size of figure #7 in the scale?
61. What terms would you use to describe the body size of figure #8 in the scale?
62. What terms would you use to describe the body size of figure #9 in the scale?
Review the terms offered by the interviewee; make sure all are accurate with the figure. "Lets review the terms you mentioned, I would like for you to explain the terms a little further."
63. What does it mean when you say that someone is? (Term used by the interviewee for figure #1)
64. What does it mean when you say that someone is? (Term used by the interviewee for figure #2)
65. What does it mean when you say that someone is? (Term used by the interviewee for figure #3)
66. What does it mean when you say that someone is? (Term used by the interviewee for figure #4)
67. What does it mean when you say that someone is? (Term used by the interviewee for figure #5)
68. What does it mean when you say that someone is? (Term used by the interviewee for figure #6)
69. What does it mean when you say that someone is? (Term used by the interviewee for figure #7)
70. What does it mean when you say that someone is? (Term used by the interviewee for figure #8)
71. What does it mean when you say that someone is? (Term used by the interviewee for figure #9)
ATTRIBUTES OF THE TERMS
72. What characteristics do you associate with the term(terms used (Prompt: when you hear the term, what do you immediately think of?)
73. What characteristics do you associate with the term(terms used (Prompt: when you hear the term, what do you immediately think of?)
74. What characteristics do you associate with the term(terms used (Prompt: when you hear the term, what do you immediately think of?)

75. What characteristics do you associate with the term when you hear the term, what do you immediately think of	
76. What characteristics do you associate with the term when you hear the term, what do you immediately think of	_(terms used (Prompt:
77. What characteristics do you associate with the term when you hear the term, what do you immediately think of	
78. What characteristics do you associate with the term when you hear the term, what do you immediately think of	
79. What characteristics do you associate with the term when you hear the term, what do you immediately think of	
We have reached the end of the interview, do you have question something else you would like to add? Thank you for your part contact you for a follow-up survey in several months.	*

INTERVIEW PROTOCOL MALES AND FEMALES

SOCIO-DEMOGRAPHIC SURVEY

Conser	nted	□Yes	Interviewer na	ıme:		
Place o	of Interv	view			Date o	f interview:
1.	What t	own do you liv	re in?			
2.	In wha	at year were you	ı born? ENTER	R YEAR	L:	
3.	Where	were you born	? (Town and C	ountry)		
4.	Are yo	ou: 🗆 1 female	□2 male			
5.	Have y	ou ever lived i	n the United St	ates for	at least	1 year at a time? 1 Yes
	\square 2	No IF	No, Skip to Qu	estion '	7	
6.			l have you lived	in the	United	States?
7.	7. Do you identify as Puerto Rican? 1 Yes 2 No IF No, how do you identify ethnically?					
8.	How d	lo you describe	your skin color	or race	?	
9.	9. Are you currently employed? \square 1 Yes \square 2 No					
10.	Select	which best des	cribes your dail	ly activi	ties or	responsibilities:
	□ 1	Working full-	time	□ 5	Lookii	ng for work
	☐ 2 full tin	Working part- ne	time	□ 6	House	work and/or raising children
	□ 3	Unemployed o	or laid off		□ 7	Retired
	□ 4	Student			□ 8	Others:

11.	How would you describe your main job or occupation?						
12.	What was your father's occupation (most of his life)?						
13.	What was your mother's occupation (most of his life)?						
14.	How many people li		ehold, includir	ng yourself?			
15.	How many are under	18 years of age	e?				
16.	How many daughter	s do you have, a	•	•	n?		
17.	How many sons do y	ou have, and w	hat year were	they born?			
18.	How do you describe	e your socioecon	nomic status?				
19.	What is the highest g (Check only one)	grade (or year) o	of regular educ	ation you hav	e completed?		
	Elementary School	High School	Colle	ege (Graduate School		
egree	01	09	13	19_	Master's		
egree	02	10 11	14 15	20_ 21_	J.D. Ph.D.		
	04 05 06 07 08	12 GED	17/	22 Bachelors			
20.	Which of these categ the past 12 months? wages, veteran's ben	This should inc	lude income (l	pefore taxes) f	rom all sources		
1 [☐ Less than \$5,000			0 through \$49			
2 [□ \$5,000 through \$1	1,9999	7 🗆 \$50,00	0 through \$74	.,999		

3 L	☐ \$12,000 through \$15,999	8 🗆 \$75,000 through \$99,999
4	☐ \$16,000 through \$24,999	9 □ \$100,000 through \$200,000
5 E	□ \$25,000 through \$34,999	10 □ \$200,000 and greater
21.	Have you ever been diagnosed	d with an eating disorder by a health professional?
22.	\square 1 Yes \square 2 1 Would you describe your over	
	□excellent □very good	□good □fair □poor
23.	How tall are you?	feetinches
24.	What would you estimate is y	our current weight? lbs
25.	Do you consider yourself:	about the right weight overweight
	underweight	
26.	What would your ideal weighkg	t be, if you could choose? lbs OR
	Are you currently or have you dieting?	ar recently attempted to lose weight by exercise or
	□ 1 Yes □ 2 No	
28.	Select the option that best des	cribes the SES you belong to:
	1 – Working Class 2 – Mic	ldle Class
	3 – Upper class	4 – Other:
29.	Select the option that best des growing up:	cribes the SES of your family while you were
	1 – Working Class 2 – Mid	ddle Class
	3 – Upper class	4 – Other:

Contour Drawing Rating Scale Questions

INSTRUCTIONS

Present subjects with the 8" x 11" sheet with nine ordered male and nine ordered female drawings marked "CURRENT". (Write on the response line the number (or that closest to) of the figure chosen)

9
CURRENT 1. Draw a mark below the drawing that most accurately depicts your current body size. You n
place the mark anywhere below the drawings, including between figures.
2. Now place a mark on the line below the set of opposite sex figures that depicts what you th
is the average figure.
IDEAL Present subjects with the 8" x 11" sheet with nine ordered male and nine ordered female drawings marked "IDEAL". (Write on the response line the number (or that closest to) the figure chosen)
1.Draw a mark below the drawing that most accurately depicts your ideal body size (the size y
would like to be). You may place the mark anywhere below the drawings, including between
figures
2. Draw a mark below the drawing of the opposite sex figure which you believe is the ideal bo
size (again, you may make the mark between figures).
OVERWEIGHT AND OBESE
1. Draw a mark below the drawing that you consider to be overweight . You may place the ma
anywhere below the drawings, including between figures.
2. Draw a mark below the drawing that you consider to be obese . You may place the mark
anywhere below the drawings, including between figures.

AFAScale

Please indicate how much you agree or disagree with each of the following statements:

	Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree
1. Fat people are less physically attractive than thin people.	1	2	3	4	5
2. I would never date a fat person.	1	2	3	4	5
3. On average, fat people are lazier than thin people	1	2	3	4	5
4. Fat people only have themselves to blame for their weight.	1	2	3	4	5
5. It is disgusting when a fat person wears a bathing suit at the beach.	1	2	3	4	5

This questionnaire is about culture. Please select the alternative that best describes you.

1. How much do you enjoy s	speaking Spanish?	
(1) tremendous enjoys	ment (2) quite a bit of enjoyment	(3) not too much enjoyment
(4) no enjoyment	(5) don't speak Spanish	
2. How much do you enjoy s	speaking English?	
(1) tremendous enjoys	ment (2) quite a bit of enjoyment	t (3) not too much enjoyment
(4) no enjoyment	(5) don't speak English	
3. How much are Puerto Ri	can values a part of your life?	
(1) very much a part (2) a g	good part (3) a small part	(4) no part at all
4. How much are American	values a part of your life?	
(1) very much a part (2) a g	good part (3) a small part	(4) no part at all
5. How many days a week w	ould you like to eat Puerto Rican f	Good?
6. How many days a week w	ould you like to eat American food	1?
7. How proud are you of bei	ng Puerto Rican?	
(1) very proud	(2) fairly proud (3) not to	oo proud
(4) not proud at all	(5) I feel ashamed	
8. How proud are you of bei	ng American?	
(1) very proud	(2) fairly proud (3) not to	oo proud
(4) not proud at all	(5) I feel ashamed	
9. How comfortable would y	ou be in a group of Americans who	o don't speak Spanish?
(1) very comfortable (2) fai	rly comfortable	
(3) not too comfortable	(4) not comfortable at all	

10. How comfortable would English?	l you be in a gro	up of Puerto Ricans w	ho don't speak
(1) very comfortable (2) fa	irly comfortable		
(3) not too comfortable	(4) not comfor	rtable at all	
11. How important is it to y had children, how importan	•		
(1) very important	(2) fairly impo	rtant	
(3) not too important	(4) not importa	ant at all	
12. How important is it to y children, how important we	•		· ·
(1) very important	(2) fairly impo	rtant	
(3) not too important	(4) not importa	ant at all	
13. How much do you enjoy	Spanish TV pr	ograms?	
(1) very much (2)	quite a bit	(3) not too much	(4) not at all
14. How much do you enjoy	American TV _l	programs?	
(1) very much (2)	quite a bit	(3) not too much	(4) not at all
15. How important is it to y	ou to celebrate	holidays in the Puerto	Rican way?
(1) very important	(2) fairly impo	rtant	
(3) not too important	(4) not importa	ant at all	
16. How important is it to y	ou to celebrate	holidays in the Americ	can way?
(1) very important	(2) fairly impo	rtant	
(3) not too important	(4) not importa	ant at all	
17. With respect to kindnes	s and generosity	, do you think Puerto	Ricans are:
(1) very kind and gen	erous	(2) fairly kind and gen	nerous
(3) a little kind and g	enerous	(4) not kind and gener	ous at all

18. With respect to kindness and generosity, do you think Americans are:					
(1) very kind and gene	erous	(2) fairly kind and generous			
(3) a little kind and ge	nerous	(4) not kind and generous at all			
19. How important would it be to you for your children to have all Puerto Rican friends?					
(1) very important	(2) fairly impo	rtant			
(3) not too important	(4) not important at all				
20. How important would it	be to you for yo	our children to have all American friends?			
(1) very important	(2) fairly impo	rtant			
(3) not too important	(4) not importa	ant at all			

Media Inventory – Magazines and Newspapers

From the list below please check off the magazines and newspapers you read and indicate the how frequently you read each magazine and newspaper. For those that apply, please indicate if you read them in English or in Spanish, or both.

Magazine	I read this mag.	I browse the website	English and/or Spanish	Frequency
Imagen				
Buena Vida				
Hola!				
TV Aquí				
Teve Guía				
Vea				
GQ				
ELLE				
Time Magazine				
National Geographic				
NewsWeek				
People				
Cosmopolitan				
Vogue				
Marie Claire				
Other:				

l – weel	k.	ly	
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4 - sometimes

2 - monthly

5 – do not buy it, browse it if available somewhere

3 – every 2-3 months

Newspaper Inventory

Newspaper	I read this paper	I browse the	English and/or	Frequency
		website	Spanish	
El Nuevo Día				
Primera Hora				
El Vocero				
Claridad (semanario)				
Other:				
Other:				
Other:				

Frequency:

- 5 daily
- 4 4 days a week
- 3 3 days a week
- 2 2 days a week
- 1 once a week
- 0 rarely

Media Inventory – Television

From the list below please check off the television programs you watch and indicate the how frequently you watch each television program. For those that apply, please indicate if you watch the show in English or in Spanish, or both.

Television Program	I watch this show	English And/or Spanish	Every two months
Super Exclusivo			
Mira Quién Baila			
Sábado Gigante			
Soy tu Dueña (telenovela)			
Super Cine (last weeks movie)			
Caso Cerrado			
Las Noticias (WAPA, Univisión, Telemundo, WIPR)			
Sal y Pimienta			
Mar de Amor (telenovela)			
Risas en Combo			
Dónde esta Elisa? (telenovela)			
Perro Amor (telenovela)			

Dando Candela		
El Capo		
Mira que TVO		
Cristina		
Don Francisco Presenta		
Locas de Atar (telenovela)		
Aquí y Ahora		
Un esposo para Estela (telenovela)		
Aida (WIPR)		
Grey's Anatomy		
CSI Miami		
NCIS Los Angeles		
The Good Wife		
CSI Las Vegas		
Ghost Whisperer		
Law and Order		
CSI NY		
NCIS		
Law and Order: Criminal Intent		
The Mentalist		
Bones		
Criminal Minds		
House		
The Big Bang Theory		
Dancing with the Stars		
Wheel of Fortune		
Jeopardy		
The Oprah Winfrey Show		
Two and Half Men		
Family Guy		
Private Practice		
Law and order LA		
Law and Order SVU		
American Idol		

Other:						
Other:						
Other:						
Other:						
Other:						
Other:						
Other:						
Other:						
Other:						
Other:						
Other:						
Other:						
Other:						
Other:						
How often do you watch movies (at the theater or at home)?						
# a week	# a	month	rarely			
The movies you watch are mostly (choose all that apply):						
☐ Foreign films						
☐ Hollywood type films						
Other:(spec	ify)					

INTERVIEW PROTOCOL – SPANISH VERSION

Variación Intergeneracional en Modelos del Tamaño del Cuerpo en Puerto Rico

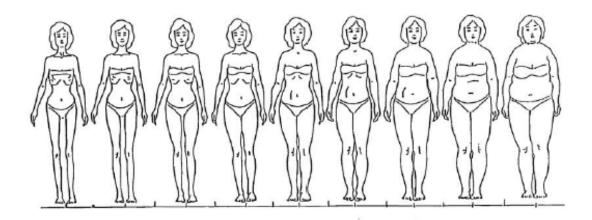
ID	
Lugar de la Entrevista Fecha de la entrevista: Pueblo Fecha de la entrevista:	
1. ¿En qué pueblo vive usted?	
2. ¿En qué año nació usted? ESCRIBA AÑO:	
3. ¿Dónde nació usted? (Pueblo y País)	
4. Usted es: 1 Hembra 2 Varón	
5. ¿Usted ha vivido en los Estados Unidos al menos por un año? 1 Si O 2 No O Si Marcó No, Salte a la Pregu	ınta 6
a. ¿Cuántos años en total vivió en los Estados Unidos?	
6. ¿Usted se identifica como puertorriqueño? 1 Sí O 2 No Si Marcó Sí salte a la Pregunta 7 a. ¿cómo se identifica étnicamente?	
7. ¿Cómo usted describe su color?	
8. Seleccione cual mejor describe sus actividades o responsabilidades diarias: 1 Trabaja tiempo-completo 5 Buscando empleo 2 Trabaja a tiempo parcial 6 Ama de casa y/o cuida sus hijos a tiempo completo 3 Desempleado o cesanteado 7 Retirado 4 Estudiante 8 Otro: . ¿Cómo usted describiría su trabajo u ocupación principal? 1 . ¿Cuántas personas viven en su hogar incluyéndole a usted?	_
1 . ¿Cuántos tienen menos de 18 años de edad?	
1 . ¿Cuál era la ocupación o trabajo principal de su padre?	
1 . ¿Cuál era la ocupación o trabajo principal de su madre?	
13. ¿Tiene hijos o hijas? Si No Si Marcó No, Salte a la Pregunta 14 a. Fecha de nacimiento: Sexo: M F EG:mes/dia/año b. Fecha de nacimiento: Sexo: M F F EG:mes/dia/año c. Fecha de nacimiento: Sexo: M F F F F F F F F F F F F F F F F F F	
e. Fecha de nacimiento: Sesso: M F	

1

Variación Intergeneracional en M		•	
 ¿Cuál es el grado (u año Escuela Elemental 	-		
01 🔘	Escuela Superior	Universidad	Escuela Graduada
02 O	<u>~</u>	13	Maestría
03 O	10_Q_	14 (= Asocia	qo) 1D. 🔘
% \(\)	11 <u>Q</u>	15 <u> </u>	Ph.D
05 O	12 <u> </u>	16 🔘	MD. O
06 O	<u> </u>	17 🔘	
07 O		Bachillerato O	
00 O			
	s meior describe su ingres	o familiar total de los pas	ados 12 meses? Este debe incluir ingreso,
_	2	-	enta de propiedades, y demás.
1 Menos de \$5,000	6 (\$35,000 a \$49,999	
2 \$5,000 a \$11,999	7 (\$50,000 a \$74,999	
3 \$12,000 a \$15,999	8	\$75,000 a \$99,999	
4 \$16,000 a \$24,999	9 (\$100,000 a \$200,000	
5 \$25,000 a \$34,999	10 (Más de \$200,000	
1 . ¿Alguna vez un profesio	nal de la salud le ha diagno	osticado un desorden alim	entario? 1 Sí 🔾 2 No 🔘
1 . Describiría su salud gene	excel	ente Omuy buena O) buena 🔾 mediana 🔾 pobre
18. ¿Cuánto mide usted?	piesp	ulgadas	
19. ¿Cuánto estima usted es	su peso actual?	Ibs	
20. Usted se considera:	Cerca del peso correcto	o Osobrepeso O baj	jo peso
21. ¿Cuál sería su peso ideal	, si pudiese escoger?	Ibs	
22. ¿Usted actualmente o rec	ientemente ha intentado p	erder peso con ejercicio o	dietas? 1 Si O 2 No O
23. ¿Alguna vez un profesio	nal de la salud le ha diagno	osticado diabetes? 1 S	O 2 № O
a. ¿Cuándo?:			
b. Es diabético act	tualmente: O1 Sí	O 2 No	
24. Selecciona la opción que	mejor describe su estatus s	socio-económico:	
Clase obrera	Clase media	Clase alta	Otro ESE:
25. Selecciona la opción que n	nejor describe el estatus so	cio-económico de su fam	ilia mientras usted crecía (de padre y madre):
Clase obrera	Clase media	Clase alta	Otro ESE:

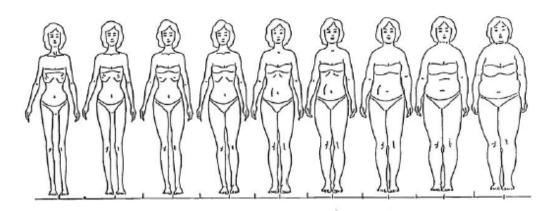
MOSTRAR TARJETA

Haga una marca debajo de la figura que más exactamente representa su tamaño de cuerpo ACTUAL. Puede poner la marca en cualquier lugar debajo de las figuras, incluyendo entre figuras.



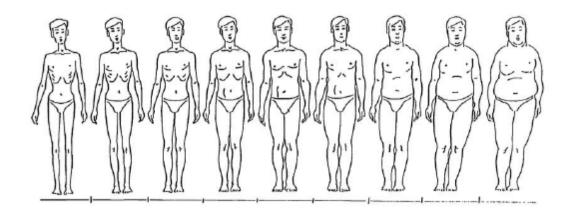
Haga una marca debajo de la figura que más exactamente representa su tamaño de cuerpo IDEAL (el tamaño que le gustaría ser).

Puede poner la marca en cualquier lugar debajo de las figuras, incluyendo entre figuras.



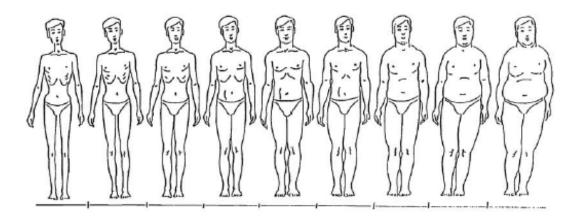
Ponga una marca debajo de la línea de la figura del sexo opuesto que mejor representa lo que usted piensa que es el CUERPO PROMEDIO del sexo opuesto.

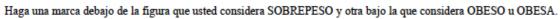
Puede poner la marca en cualquier lugar debajo de las figuras, incluyendo entre figuras.

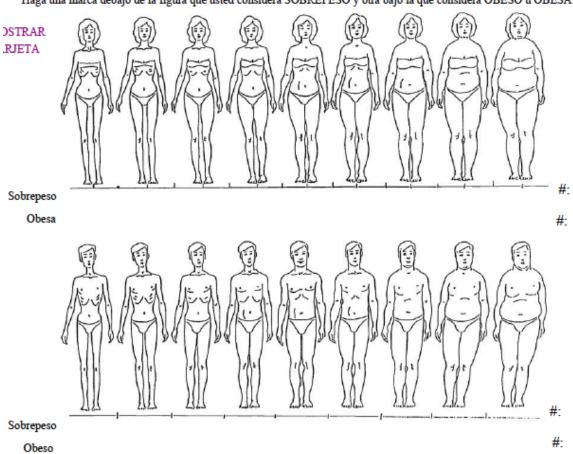


Ponga una marca debajo de la línea de la figura del sexo opuesto que mejor represente lo que usted piense que es el CUERPO IDEAL del sexo opuesto.

Puede poner la marca en cualquier lugar debajo de las figuras, incluyendo entre figuras.







Parala AFAS		

Por favor indique cuánto usted está de acuerdo o desacuerdo con las siguientes declaraciones (aseveraciones):

	Muy en Desacuerdo	En Desacuerdo	Ni en Desacuerdo Ni De Acuerdo	De Acuerdo	Muy de Acuerdo
	0	1	2	3	4
La gente gorda es menos atractiva físicamente que la gente flaca.	0	0	0	0	0
Yo nunca saldría (en una cita romántica) con una persona gorda.	0	0	0	0	0
En promedio, la gente gorda es más vaga que la gente flaca.	0	0	0	0	0
La gente gorda sólo se pueden culpar a ellos mismos por su peso.	0	0	0	0	0
Es asqueroso cuando una persona gorda usa un traje de baño en la playa.	0	0	0	0	0

Por favor conteste todas las preguntas. No existen contestaciones correctas o incorrectas, sólo nos interesa su opinión.

	Cierto	Falso			
Me angustia ir a la playa y a la piscina por tener que usar traje de baño.	D				
Siento deseos de seguir una dieta para rebajar cuando veo u oigo un anuncio dedicado a esos productos.		O			
3. Me angustia contemplar mi cuerpo en un espejo.	O	0			
4. Quiero ser gordo o gorda.	0	O			
 Me angustia que me digan que estoy "llenita/o", "gordita/o", "redondita/o" o cosas parecidas, aunque sea un comentario positivo. 	D				
 Envidio la delgadez de las y los modelos que aparecen en los desfiles de modas y en los anuncios de ropa. 	0	O			
7. Las muchachas y jóvenes delgadas son más aceptadas por los demás que las que no lo son.	Ø				
8. Me gustaria que mis hijos e hijas (si tuviera) fueran gorditos/as.					
Me angustian los anuncios que invitan a rebajar.	O	Q			
10. Si una mujer aumenta de peso, hasta 15-20 libras, después de casarse la reacción más común de su esposo es: A. Estar complacido B. No le gusta C. No le importa					

Escala de Biculturalismo Este cuestionario es sobre la cultura. Para las siguientes preguntas alternativa que mejor						
1. ¿Cuánto disfruta hablar español?						
Otremendamente Omucho Oun poco Onada Ono habla español						
2. ¿Cuánto disfruta hablar inglés?						
Otremendamente Omucho Oun poco Onada Ono habla inglés						
3. Los valores puertorriqueños, constituyen ¿qué parte su vida?						
Ouna parte muy grande Ouna buena parte Ouna pequeña parte Oninguna parte						
4. Los valores estadounidenses, constituyen ¿qué parte de su vida?						
Ouna parte muy grande Ouna buena parte Ouna pequeña parte Oninguna parte						
5. ¿Cuántos días a la semana le gustaría comer comida puertorriqueña?						
6. ¿Cuántos días a la semana le gustaría comer comida estadounidense?						
7. ¿Cuán orgulloso(a) se siente de ser puertorriqueño(a)?						
Omuy orgulloso(a) Obastante orgulloso(a) Ono muy orgulloso(a)						
Ono orgulloso(a) en absoluto Se siente avergonzado(a)						
8. ¿Cuán orgulloso(a) se siente de ser estadounidense?						
Omuy orgulloso(a) Obastante orgulloso(a) Ono muy orgulloso(a)						
Ono orgulloso(a) en absoluto Se siente avergonzado(a)						
9. ¿Cuán cómodo(a) se sentiría usted entre un grupo de estadounidenses que no hablan español?						
Omuy cómodo(a) Obastante cómodo(a) Ono muy cómodo(a) Ototalmente incómodo(a)						
10. ¿Cuán cómodo(a) se sentiría usted entre un grupo de puertorriqueños que no hablan inglés?						
Omuy cómodo(a) Obastante cómodo(a) Ono muy cómodo(a) Ototalmente incómodo(a)						
11. ¿Cuán importante es para usted criar a sus hijos con valores puertorriqueños? Si tuviera hijos, ¿cuán importante sería para usted criarlos con valores puertorriqueños?						
Omuy importante Obastante importante Ono tanto Ono importante en lo absoluto						

12. ¿Cuán importante es para usted criar a sus hijos con valores estadounidenses? Si tuviera hijos, ¿cuán importante sería para usted criarlos con valores estadounidenses?
muy importante Obastante importante Ono tanto Ono importante en lo absoluto
13. ¿Cuánto disfruta usted de los programas de la televisión hispana?
Omucho Obastante Ono tanto Onada
14. ¿Cuánto disfruta usted de los programas de la televisión estadounidense?
mucho bastante no tanto nada
15. ¿Cuán importante es para usted celebrar los días festivos de la manera puertorriqueña?
muy importante Obastante importante Ono tanto Ono importante en lo absoluto
16. ¿Cuán importante es para usted celebrar los días festivos de la manera estadounidense?
Omuy importante Obastante importante Ono tanto Ono importante en lo absoluto
17. Con respecto a la bondad y generosidad, ¿piensa usted que los puertorriqueños son?
muy bondadosos y generosos bastante bondadosos y generosos
Opoco bondadosos y generosos Oni bondadosos ni generosos
18. Con respecto a la bondad y generosidad, ¿piensa usted que los estadounidenses son?
Omuy bondadosos y generosos Obastante bondadosos y generosos
poco bondadosos y generosos ni bondadosos ni generosos
19. ¿Cuán importante sería para usted que todas las amistades de sus hijos fuesen puertorriqueñas?
muy importante Obastante importante Ono tanto Ono importante en lo absoluto
20. ¿Cuán importante sería para usted que todas las amistades de sus hijos fuesen estadounidenses?
Omuy importante Obastante importante Ono tanto Ono importante en lo absoluto

Inventario de Medios - Revistas y Periódicos

De la lista abajo por favor marque cuales revistas y periódicos usted lee, e indique la frecuencia con la que lee cada revista y periódico. Para los que apliquen, por favor indique si los lee en español, inglés o en ambos idiomas.

Revista	Leo esta rev.	Leo el sitio en la web	Idioma	Frecuencia
Imagen				
Buena Vida				
Hola!				
TV Aqui				
Teve Guía				
Vea				
Time Magazine				
National Geographic				
People				
Cosmopolitan				
Otro:				

Periódico	Leo este periódico	Leo el sitio en la web	Idioma	Frecuencia
El Nuevo Día				
Primera Hora				
El Vocero				
Claridad (semanario)				
Daily Sun (antes San Juan Star)				
Otro:				
Otro:				

Inventario de Medios - Televisión

De la lista abajo por favor marque cuáles programas usted ve, e indique la frecuencia con la que ve cada programa. Para los apliquen, por favor indique si los ve en español, inglés o en ambos idiomas.

Programa Televisión	Veo este programa	Idioma	Frecuencia
Super Xclusivo		Español	
Sábado Gigante		Español	
El Gordo y la Flaca		Español	
Caso Cerrado		Español	
Las Noticias (WAPA, Univisión, Telemundo, WIPR)		Español	
Dando Candela		Español	
Pégate al Medio Día		Español	
Grey's Anatomy			
CSI			
NCIS			
Ghost Whisperer			
Law and Order			
House			
Telenovelas: Sí No			
Otro:			

Otro:					
Otro:					
- ¿Cuán frecuentemente ve películas (en el cine o en casa)?					
#:	a la semana	O1	aramente		
- Las películas que ve son mayormente (escoja todas las que apliquen): Películas extranjeras Películas de Hollywood					
Otro (especifique):					
COMMENTS:					

		Cierto	Falso
1	La mejor manera de perder peso es hacer ejercicio y mantener una dieta balanceada.	0	0
2	Usualmente decir que un bebé está "gordito" tiene una connotación positiva.	0	0
3	En los empleos se discrimina contra las personas que están sobrepeso y obesas.	0	0
4	Las personas gordas y las personas flacas tienen metabolismos similares.	Ó	Ó
5	En la mayoría de los casos el sobrepeso y la obesidad son hereditarios (lo lleva en los genes).	0	0
6	Comer comidas fritas no te hace aumentar de peso.	Ó	Ô
7	La mayoría de las personas gordas tienen alta auto estima.	0	0
8	Usualmente es más dificil para un hombre gordo que para uno delgado conseguir una pareja.	0	0
9	La mayoría de las niñas (5-10 años de edad) gorditas son felices.	0	Ô
10	Los actores y presentadores que salen en la televisión tienen el cuerpo ideal.	0	Ó
11	Hay más presión para que las hijas en la familia sean delgadas que para los hijos varones.	0	0
12	A la mayoría de los hombres mayores les atraen las mujeres gorditas.	0	0
13	Comer comidas altas en carbohidratos te hace aumentar de peso.	0	0
14	El cuerpo de las mujeres del "bombón de Así" (publicado en Primera Hora) es el que la mayoría de las mujeres desean tener.	0	0
15	Usualmente decirle a una mujer que está "gordita" tiene una connotación positiva.	0	0
16	Cuando los niños están sobrepeso se debe culpar a los padres o encargados.	0	0
17	Las pastillas para rebajar son un buen método para bajar de peso.	0	0
18	La mayoría de los hombres mayores prefieren a las mujeres delgadas.	Ó	Ó
19	Para mi es aceptable que los hombres aumenten de peso luego de casarse.	Ó	Ó
20	Cuando familiares te ven, luego de mucho tiempo sin verte, no suelen comentar sobre tu peso.	Ō	Ō
21	Estar delgado es una de las cosas más importantes para las personas en Puerto Rico.	0	0
22	Las batidas de proteína son un buen método para aumentar de peso.	Ŏ	Ŏ
23	Los términos "sobrepeso" y "obeso" son términos médicos, no se usan coloquialmente (comúnmente en conversación).	0	0
24	À la mayoría de los hombres jóvenes les atraen las mujeres gorditas.	0	0
25	Usualmente las niñas aprenden sobre dietas y ejercicios de sus madres.	0	0
26	Para bajar de peso no es muy importante tener fuerza de voluntad.	0	0
27	La mayoría de las personas gordas están satisfechas con su cuerpo.	Ó	Ŏ
28	Es más aceptado socialmente que un hombre esté sobrepeso a que una mujer esté sobrepeso.	0	Ó
29	La mayoría de los niños gorditos suelen tener padres y madres gorditos.	Ó	Ŏ
30	En Puerto Rico la gente sigue el lema de: "se come para vivir, no se vive para comer".	O	Ō
	Las imágenes de mujeres y hombres transmitidas por los medios de comunicación (televisión,	Ō	Ō
31	cine, Internet, prensa escrita) influyen en los estándares de belleza del cuerpo. A la mayoría de los varones jóvenes le gustan las mujeres delgadas.	ŏ	$\tilde{}$
32	Para mi es aceptable que un hombre aumente de peso luego de tener hijos.	ŏ	$\stackrel{\sim}{\sim}$
33		\sim	\sim
34	Con los años (a mayor edad) las personas tienden a aumentar de peso.		

Cierto Falso Es bueno comer lo que uno quiere cuando quiera, ya que con la barriga llena se está más contento. El término "obeso" implica que la persona está enferma o en mal estado de salud. Comer dulces, bizcochos y chocolates te hace aumentar de peso. 37 Para mi es aceptable que las niñas aumenten de peso en la pubertad. 38 Las actrices y presentadoras que salen en la televisión tienen el cuerpo ideal. 39 Comer comida chatarra ("junk food") hace que la gente aumente de peso. 40 La mayoría de los niños gorditos (5-10 años de edad) son felices. 41 Las fajas son un buen método para bajar de peso. 42 La mayoría de las mujeres tienden a fijarse mucho en la figura de los hombres. 43 Para mi es aceptable que una mujer aumente de peso luego de casarse. A la mayoría de los hombres le gustan las mujeres con curvas más que las mujeres flacas. 45 Entre mis amigos y amigas se habla mucho del peso A los familiares y amigos les complace que una persona aumente mucho de peso y no le sugieren Estar sobrepeso puede causar alta presión y problemas cardíacos. Decirle a un hombre que está "gordito" usualmente tiene una connotación positiva. 40 La mayoría de las personas cuando terminan una relación de pareja tienden a aumentar de peso. \circ 50 Las mujeres del "bombón de Así" (publicado en Primera Hora) tienen el cuerpo ideal. 51 Estar sobrepeso causa diabetes. 52 En las escuelas no existe discrimen contra los niños gorditos y las niñas gorditas. 53 Casi siempre cuando las amistades te ven, después de mucho tiempo sin verte, comentan sobre tu peso. Usualmente decirle a una persona que está "gorda" tiene una connotación negativa. 55 Usualmente las mujeres no se preocupan por bajar de peso antes de su día de boda. Si una persona rebaja mucho sus familiares y amigos se preocupan, y preguntan si está enfermo. 57 Es fácil llegar a tener un cuerpo delgado si la persona así lo desea. 58 Usualmente es más fácil para una mujer gorda que para una delgada conseguir una pareja. 59 Los hábitos alimentarios y de actividad física se aprenden de los padres y las madres. 60 Para mi es aceptable que las mujeres aumenten de peso luego de tener hijos. 61 Las personas gordas son objeto de burla en los lugares públicos (restaurantes, playa, parques, etc.). El sobrepeso y la obesidad pueden ser a causa de problemas de salud. 63 Hablo con mis amistades y familiares acerca de productos o actividades para rebajar Es mejor ser gordo y feliz, que ser flaco y descontento. 65 Es común que cuando las personas terminan una relación de pareja tienden a bajar de peso. Para mi es aceptable que las personas aumenten de peso con los años (a mayor edad). Existe presión social en Puerto Rico para que las personas mantengan una figura delgada. La falta de ejercicio no afecta o influye en el aumentar de peso. La mayoría de la gente gorda desarrolla problemas de salud por su consumo excesivo de comida y les pasa como el pez, que muere por la boca.

INTERVIEW - FEMALES ONLY

Guía de Entrevista : Parte Estructurada En esta parte del estudio yo le haré una serie de preguntas sobre sus opiniones y experiencias acerca del tamaño del cuerpo y peso en Puerto Rico. 1. ¿Usted hace alguna actividad física intensa? Sí a. ¿Cuál actividad? 2. Alguna vez intentó bajar de peso: Sí ○ No 3. Si alguna vez intentó bajar de peso, indique cuál(es) método(s) ha usado: Método Edad Duración Peso máximo Comentarios (e.g., ganó peso de vuelta) perdido 4. Si ha tratado de perder peso, describa las actitudes de las siguientes personas: Indiferente Relación Desaprobación Positivo, alentador Esposo/pareja Hijos/as Padres Amigas Otro:

() No

Si marcó NO salte a la pregunta 6

() Si

¿Usted tiene hermanos y/o hermanas?

17

5a. ¿Puede darme las edades, peso y altura actual y clasificación de peso (bajo peso, peso promedio o sobre peso) de sus hermanos y hermanas?

Relación	Edad	Peso actual	Altura	Clasificación de peso	Comentario

6. ¿Hay personas en su familia que estén bajo peso?

Relación	Edad	Sexo	Razón para estar bajo peso	¿El/ella está haciendo algo para aumentar de peso? Si sí, ¿qué?

- 7. En general, ¿qué uno puede hacer para aumentar de peso?
- 8. ¿Hay personas en su familia que estén sobrepeso?

Relación	Edad	Sexo	Razón para estar sobrepeso	¿El/ella está haciendo algo para bajar de peso? Si sí, ¿qué?

9. En general, ¿qué uno puede hacer para bajar de peso?

10. Defina los siguientes términos:	
Sobrepeso:	
Obeso:	
Gordita:	
Gorda:	
Enseñarle la escala de figuras de mujeres a la entrevistada para las siguientes preguntas: MOSTRAR TARJE?	ſΑ
11. ¿Cuáles términos usted usaría para describir el tamaño corporal de la figura #1 en la escala? Qué características asocias con ese término?	
12. ¿Cuáles términos usted usaría para describir el tamaño corporal de la figura #2 en la escala? Qué características asocias con ese término?	
13. ¿Cuáles términos usted usaría para describir el tamaño corporal de la figura #3 en la escala? Qué características asocias con ese término?	
14. ¿Cuáles términos usted usaría para describir el tamaño corporal de la figura #4 en la escala? Qué características asocias con ese término?	
15. ¿Cuáles términos usted usaría para describir el tamaño corporal de la figura #5 en la escala? Qué características asocias con ese término?	
16. ¿Cuáles términos usted usaría para describir el tamaño corporal de la figura #6 en la escala?Qué características asocias con ese término?	
17. ¿Cuáles términos usted usaría para describir el tamaño corporal de la figura #7 en la escala? Qué características asocias con ese término?	
18. ¿Cuáles términos usted usaría para describir el tamaño corporal de la figura #8 en la escala? Qué características asocias con ese término?	
19. ¿Cuáles términos usted usaría para describir el tamaño corporal de la figura #9 en la escala? Qué características asocias	

ENTREVISTADOR

1. PREGUNTE:

¿Está bien con usted si grabo esta parte de la entrevista?

2. PREPARE SU GRABADORA

3. ASEGURESE QUE GRABE BIEN Y QUE EL AUDIO SE ESCUCHE BIEN

-		_		-
Gmia	n n	H-mm	Tet	71512

En esta parte del estudio yo le haré una serie de preguntas sobre sus opiniones y experiencias acerca del tamaño del cuerpo y peso en Puerto Rico.

¿Está bien con usted que grabe nuestra conversación?

Si pregunto algo que la hace sentir incómoda está en libertad de no contestar. Recuerde que en cualquier momento en la entrevista usted puede escoger retirarse del estudio sin penalidades. Si le pregunto algo y no está claro, por favor pidame que re-frasee o repita.

Pri	Primero me gustaría saber más sobre su propia historia con el peso.				
1.	¿Alguna vez ha aumentado mucho de peso? Si dijo No, salte a Pregunta #2 a. Si si, ¿cuánto peso aumentó? b. ¿Cuándo? c. ¿Por qué (Pista: retención de agua, nervios, embarazo)? d. ¿Cuál fue la reacción de los demás (familiares, amigos) sobre su aumento en peso?				
2.	¿Alguna vez ha bajado mucho de peso? Si dijo NO, salte a pregunta #3 a. Si si, ¿cuánto peso rebajó? b. ¿Cuándo? c. ¿Por qué (Pista: enfermedad, nervios, dieta)? d. ¿Cuál fue la reacción de los demás (familiares, amigos) sobre su reducción en peso?				
3.	¿En qué peso usted se ha sentido mejor?				
4.	ε Usted siente que su peso interfiere con sus actividades diarias en cualquier manera?				
	a. De un ejemplo por favor				
5.	¿Ha estado a dieta alguna vez? 🔲 Sí 💮 No				
	 Describa por qué fueron exitosos o no exitosos sus esfuerzos por favor. 				
6.	¿Cómo las actitudes de su pareja, familia o amigos influyen en su peso o imagen corporal? a. Describa un ejemplo específico por favor (Pista: por ejemplo la gente que motiva)				
7.	Si pudiese cambiar algún aspecto físico suyo, ¿qué cambiaría y por qué?				
8.	¿Cómo reaccionan las otras personas a su peso?				

Ahora le preguntaré sobre su tamaño y peso corporal a diferentes edades:

a. Ofrezca un ejemplo específico por favor.

9. ¿Qué le han dicho sobre su tamaño de cuerpo o peso cuando usted era recién nacida o bien bebé (infante)?

Niña (1-5 años)

- 10. ¿Qué le han dicho de cómo era usted cuando era un pequeña, como entre los 1-5 años de edad?
- 11. ¿Conoce sobre métodos y costumbres de engordar a los niños y niñas en Puerto Rico?

- - - - - - -

- 12. ¿Sabe si a usted en algún momento lo trataron de engordar?
 - a. ¿Recuerda qué método usaron?
 - b. ¿Qué le decian sobre por qué querian que usted engordara?

Niña (6-10 años)

- Describame su cuerpo (pista: tamaño, peso, forma) cuándo estaba en la escuela elemental.
- 14. ¿Estaba consciente de su peso y de su cuerpo a esas edades?
- 15. ¿Habían niñas o niños que los molestaban en la escuela por su peso o cuerpo?
 - a. ¿Qué les decían? ¿Cómo los molestaban?
 - b. ¿Cómo se sentía usted sobre esas situaciones?
- 16. En su familia, ¿había alguien que siempre comentaba sobre el peso de los familiares?
 - a. ¿Qué tipo de comentarios hacía?
- 17. ¿Qué tipo de cuerpo o peso era el que le parecía atractivo a las demás personas en esa época?
- 18. Mientras crecía, ¿usted tuvo accidentes o enfermedades?
 - a. Si tuvo accidentes o enfermedades, ¿puede describirlas?

Adolescente (11-13 años)

- Describame su cuerpo (pista: tamaño, peso, forma) cuando estaba en la escuela intermedia, entre los 11-13
 años.
- 20. ¿Qué comentaban otras personas sobre su peso o la forma de su cuerpo a esas edades?
- 21. ¿Recuerda si en esos años molestaban a alguien en la escuela, vecindario o en su familia por su peso o tamaño del cuerpo?
 - a. ¿Qué les decían? ¿Cómo los molestaban?
 - b. ¿Cómo se sentía usted sobre esas situaciones?
- 22. Durante esos años, ¿usted hizo dietas o ejercicios para rebajar? ¿Por qué?
- 23. ¿Qué tipo de cuerpo o peso era el que le parecía atractivo a las demás personas en esa época?
- ¿Usted tuvo un quinceañero? Si tuvo quinceañero, cuénteme sobre su tamaño corporal en ese momento (pista: su traje, la fiesta, su acompañante)

Adolescente tarde (14-18 años)

- Describame su cuerpo (pista: tamaño, peso, forma) cuando estaba en la escuela superior (14-19 años).
- ¿Qué comentaban otras personas sobre su peso o forma de su cuerpo en la "high"?
- 27. ¿Usted hacia dieta o ejercicios para rebajar en este tiempo? ¿Por qué?
- 28. ¿Cuál era el cuerpo de mujer que a las demás personas le parecía ideal en esa época?
- 29. ¿Qué figura pública (actriz o modelo) era el ideal de belleza de la época?

Joven adulta (19-24 años)

30. Describame su cuerpo (pista: tamaño, peso, forma) cuando tenía entre 19-24 años de edad.

- 31. ¿Cuál era el cuerpo de mujer considerado ideal, o que le gustaba a las demás personas (varones, etc.) en esa época?
- 32. ¿En esa época, ya usted tenía pareja?
 - a. ¿Recuerda comentarios relacionados a su cuerpo por parte de su pareja, o alguien cercano a usted?
- 33. ¿Cuál figura pública (actriz o modelo) era el ideal de belleza de la época?

Edad: 25-30 años

- 34. Describame su cuerpo (pista: tamaño, peso, forma) entre los 25 y 30 años de edad.
- 35. ¿Cómo era el cuerpo de mujer que era considerado ideal en ese tiempo?
- 36. ¿Cuál figura pública (actriz o modelo) era el ideal de belleza de la época?

Edad: 31-40 años

- 37. Describame su cuerpo (pista: tamaño, peso, forma) entre los 31 y 40 años de edad.
- 38. ¿Puede describir el cuerpo de mujer que era considerado ideal en ese tiempo?
- 39. ¿Cuál figura pública (actriz o modelo) era el ideal de belleza de la época?

Edad: 41-50 años

- Describame su cuerpo (pista: tamaño, peso, forma) entre los 41-50 años de edad.
- 41. ¿Recuerda algo en particular sobre su cuerpo, ya sea aumento de peso, haber rebajado, etc.?
- 42. ¿Había alguna figura pública (actriz o modelo) que usted recuerde que era el ideal de belleza de la época?

Edad: 51-60 años

43. Describame su cuerpo (pista: tamaño, peso, forma) entre los 51 y los 60 años.

Edad: 61 años +

Describame su cuerpo (pista: tamaño, peso, forma) después de sus 61 años.
 (Pista: Se retiró)

FAMILIA

- 45. Explíqueme las actitudes de su familia acerca de la comida y comer mientras crecía.
- 46. ¿Sus padres estuvieron separados o divorciados?
 - a. Si si, ¿cuántos años tenía usted cuando esto sucedió?
 - b. ¿Su madre o padre rebajó o aumentó de peso durante ese proceso?
 - c. ¿Usted o algún hermano/a suyo rebajó o aumentó de peso durante ese proceso?
- 47. ¿Quién la crió cuando niña?
- 48. ¿Cómo era la relación con su padre?
- 49. ¿Cómo era la relación con su madre?

- 50. ¿Cómo era el peso de su madre mientras usted crecía?
 - a. ¿Cómo se sentía usted acerca de esto? (Pista: grande/pequeña, poderosa/débil, consoladora/fría)
 - b. ¿Su mamá usaba algún método (dietas, ejercicios, etc.) para bajar o subir de peso?
 - c. Si dijo si, ¿en qué años o qué edad su mamá cuando usó esos métodos?
 - d. ¿Por qué quería ella bajar o subir de peso?
- 51. ¿Cómo era el peso de su padre mientras usted crecía?
 - a. ¿Cómo se sentía usted acerca de esto?
 - b. ¿Su papá usaba algún método (dietas, ejercicios, etc.) para bajar o subir de peso?
 - c. Si dijo si, ¿en qué años o qué edad su papá cuando usó esos métodos?
 - d. ¿Por qué queria él bajar o subir de peso?
- 52. ¿Cuál fue su primer empleo?
 - a. ¿Cuándo obtuvo su primer empleo?
 - b. Describame su cuerpo al momento de ese empleo
 - Explíqueme sobre la presión, o la falta de presión, para mantener su figura en ese trabajo.
- 53. ¿Alguna vez ha estado casada (o está casada) o convivido con su pareja sentimental?
 - a. ¿A qué edad se casó o comenzó a convivir con su pareja?
 - b. ¿Cómo describiría usted su cuerpo (pista: tamaño, peso, forma) antes de casarse?
 - c. ¿Cómo describiría usted su cuerpo de recién casada o recién comenzando la convivencia (desde la boda hasta el 1er aniversario)?
 - d. ¿Cómo describiría usted su cuerpo a más de 1 año de casada o de vivir juntos?
- 54. ¿Alguna vez ha estado embarazada? Si dijo NO, salte a pregunta #62
 - a. ¿Cuántos embarazos en total ha tenido?
 - Describame su cuerpo antes del 1er embarazo.
 - c. ¿Cómo describiría su cuerpo cuando recién parida (desde el nacimiento hasta el 1er cumpleaños)?
 - d. ¿Qué comentarios recuerda por parte de otros sobre su peso durante su embarazo y/o luego del parir?
- 55. SI LA ENTREVISTADA TIENE MAS DE 1 HIJO/A:
 - a. ¿Cuál fue su experiencia con el aumento y la pérdida de peso durante su embarazo #2 (#3, #4, etc.)?
 - b. ¿Cómo describiría usted su cuerpo antes del (#) embarazo?
 - c. ¿Cómo describiría usted su cuerpo cuando recién parida (desde el nacimiento hasta el 1er cumpleaños de ese bebé)?
 - d. ¿Recuerda usted comentarios por parte de otros sobre su peso durante su embarazo y/o luego del parir?
 - e. ¿Hubo diferencias entre los embarazos acerca de aumentar y bajar de peso?
- 56. ¿Alguna vez ha estado separada de su compañero?

Si dijo NO salte a pregunta #63

- a. ¿La separación afectó su peso? Si sí, ¿cómo y por qué?
- 57. ¿En algún momento u ocasión de su vida ha sentido que alguien no la ha aceptado por su peso o tamaño de su cuerpo?
 - a. ¿En qué ocasión(es) (Pista: cuándo)? ¿Por qué?
 - b. ¿Cómo se sintió usted y qué hizo al respecto?
- Expliqueme si ha presenciado que no acepten, o hasta que discriminen (o burlas) contra, alguien por su peso o tamaño de su cuerpo.
 - a. ¿Cuándo?
 - b. ¿Cuáles fueron las circunstancias?

c. ¿Cómo se sintió usted sobre la situación?

- -----
- 59. ¿De qué fuentes aprende sobre temas de salud del peso corporal? (Pista: noticias, radio, clases, médicos)
- 60. ¿Cuánta presión siente usted para mantener un peso o tamaño corporal específico?
 - a. ¿Qué tamaño corporal o peso?
 - b. ¿De dónde viene esa presión? (Pista: familiares, campañas de salud, campañas de publicidad)
- 61. ¿Es aceptable que las mujeres aumenten de peso en ciertas etapas de su vida?
 - a. ¿Cuáles etapas u ocasiones?
 - b. (Pista: ¿Puede usted pensar en ocasiones específicas en las cuales a usted no le importaría si aumenta de peso? Por ejemplo: embarazo, casarse, al envejecer, cirugía, problemas de salud)
- 62. ¿Es inaceptable que las mujeres aumenten de peso en ciertas etapas de su vida?
 - a. ¿Cuáles etapas u ocasiones?
 - b. (Pista: ¿Puede usted pensar en ocasiones específicas en las cuales a usted no le gustaría aumentar de peso? Por ejemplo: antes de una boda, para una reunión de clase graduada, un viaje de vacaciones, en verano, etc.).
- 63. ¿Hay etapas u ocasiones en los cuales es aceptable que las niñas y niños estén sobrepeso?

Por favor de ejemplos de las edades y ocasiones en las cuales es aceptable para que las nenas estén sobrepeso.

Por favor de ejemplos de las edades y ocasiones en las cuales es aceptable para que las nenes estén sobrepeso.

Llegamos al final de la entrevista, usted tiene preguntas para mi o algo más que usted quiere añadir? Gracias por su participación. Yo la contactaré para un cuestionario de seguimiento en varios meses.

APPENDIX B CULTURAL CONSENSUS ANSWER KEY

Table B1. General CCM answer key with significance level from Binomial Test

Domain	Cultural Consensus Statement	Answer key	Significance
	Usually when people say that a baby is "fat" it has a positive connotation.	TRUE	.000*
	Most fat girls (5-10 years of age) are happy.	TRUE	.611
	I find it acceptable for men to gain weight after getting married.	FALSE	.000*
	I find it acceptable for men to gain weight after having kids.	FALSE	.000*
	As people age they tend to gain weight.	TRUE	.000*
	I find it acceptable for girls to gain weight during puberty.	FALSE	.127
Domain 1:	Most fat boys (5-10 years of age) are happy.	TRUE	.309
Life Stage Weight	I find it acceptable for women to gain weight after getting married.	TRUE	.175
	People that are in the process of separating from their partner tend to lose weight.	FALSE	.001*
	Usually women are not concerned with losing weight before their wedding.	FALSE	.000*
	I find it acceptable for women to gain weight after having children.	TRUE	.000*
	People that are in a separation process from their partner tend to gain weight.	TRUE	.000*
	I find it acceptable for people to gain weight as they age.	TRUE	.000*
	Fat people and skinny people have similar metabolisms.	FALSE	.041*
Domain 2: Body Size	The terms "overweight" and "obese" are medical terms, they are not used commonly in conversations.	TRUE	.000*
Health	In most cases overweight and obesity are hereditary (they are in your genes).	FALSE	.062
	It is good to eat what you want when you want it, since with a full	FALSE	.011*

	stomach you are happier.		
	The term "obese" implies that a person is sick or unhealthy.	TRUE	.235
	Being overweight can cause high blood pressure and heart problems.	TRUE	.000*
	Being overweight causes diabetes.	TRUE	.000*
	If a person loses a lot of weight their family and friends are concerned and ask if he/she is sick.	TRUE	.000*
	Overweight and obesity can be caused by health problems.	TRUE	.000*
	Most fat people develop health problems because of their excessive eating and they are like fish, they die through their mouth.	TRUE	.000*
	The best way to lose weight is by having a balanced diet and exercising.	TRUE	.000*
	Eating fried foods does not make you gain weight.	FALSE	.235
	Eating foods that have lots of carbohydrates makes you gain weight.	TRUE	.000*
Domain 3:	Weight loss pills are a good method for losing weight.	FALSE	.000*
Weight Loss/Gain	Protein shakes are a good method for gaining weight.	TRUE	*000
	To lose weight it is not important to have will power.	FALSE	.000*
	Eating candy, cake and chocolates makes you gain weight.	TRUE	.000*
	Eating junk food makes people gain weight.	TRUE	.000*
	The "fajas" are a good method for losing weight.	FALSE	.000*
	Lack of exercise does not affect or influence weight gain.	FALSE	.000*
	When kids are overweight their parents or guardians are to blame.	TRUE	.000*
Domain 4: Weight in the Family	When family members see you, after a long time without seeing you, they do not comment about your weight.	FALSE	.000*

.000*

TRUE

Girls learn about diets and exercise

	from their mothers.		
	Most fat children have fat mothers and fathers.	TRUE	.000*
	My friends and family tend to talk a lot about weight.	TRUE	.235
	Usually when friends see you, after a long time without seeing you, they comment about your weight.	TRUE	.000*
	Eating patterns and physical activity habits are learned from father and mothers.	TRUE	.000*
	I talk with my friends and family about weight loss products and activities.	TRUE	.865
	Usually it is harder for a fat man than for a thin one to find a mate.	TRUE	.498
	There is more pressure for daughters in a family to be skinny than for sons.	TRUE	.735
	The majority of older men are attracted to chubby women.	FALSE	.000*
	The majority of older men prefer thin women.	TRUE	.000*
	Being thin is one of the most important things for people in Puerto Rico.	FALSE	.000*
Domain 5:	Most young men are attracted to chubby women.	FALSE	.000*
Preference for Skinny or Fat	It is more socially accepted for a man to be overweight than for a woman to be overweight.	TRUE	.000*
	In Puerto Rico people follow the slogan of: "you eat to live, you do not live to eat".	FALSE	.062
	Most young men like thin women.	TRUE	.000*
	Most women tend to pay a lot of attention to men's body shapes.	TRUE	.000*
	Most men like women with curves more than skinny women.	TRUE	.000*
	Family and friends are pleased that a person gained a lot of weight and do not suggest they lose weight.	FALSE	.000*
	It is easy to have a thin body if you want to have it.	TRUE	.175

	Usually it is easier for fat women than for thin ones to find a mate.	FALSE	.000*
	There is social pressure in Puerto Rico for people to maintain a thin figure.	TRUE	.000*
	People that are overweight and obese are discriminated against in the workplace.	TRUE	.000*
	Most fat people have high self-esteem.	FALSE	.396
	Usually telling a woman that she is "chubby" has a positive connotation.	FALSE	.000*
Cont'd. Domain 5:	Most fat people are satisfied with their bodies.	FALSE	.000*
Preference for Skinny	Telling a man that he is "chubby" usually has a positive connotation.	FALSE	.000*
or Fat	Discrimination against fat girls and boys does not exist in schools.	FALSE	.000*
	Usually telling a person they are "fat" has a negative connotation.	TRUE	.000*
	Fat people are made fun of in public places (restaurants, beaches, parks, etc.).	TRUE	.000*
	It is better to be fat and happy, than skinny and unhappy.	TRUE	.000*
	Television actors and hosts have the ideal body.	TRUE	.611
Domain 6:	The images of men and women transmitted through media (i.e. television, movies, internet, written press) influences beauty standards regarding the body.	TRUE	.000*
Media and the Body	Television actresses and hosts have the ideal body.	TRUE	.017*
	The body of the women of the "Bombón de Así" is the one most women want to have.	TRUE	.000*
	The body of the women of the "Bombón de Así" (published in Primera Hora) is the ideal body.	TRUE	.498

^{*}Significant at the p < .05 level