EXAMINING MEMORABLE WEIGHT STIGMA MESSAGES AND THE EFFECTS ON WEIGHT-RELATED OUTCOMES

by

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(Under the direction of Analisa Arroyo)

ABSTRACT

Weight stigma promotes stereotypes and bias against people who deviate from society's (thin) ideal and is transmitted by stigma communication to protect non-stigmatized individuals and sanction stigmatized individuals. Prior research has demonstrated well the effects of weight bias on stigmatized peoples, referred to in this study as people with overweight/obese appearance (POA); however, research has yet to investigate the content of weight stigma messages and potential outcomes related to such communication for non-stigmatized individuals. This study examines memorable messages that individuals recall their parents telling them from childhood to understand what messages are transmitted to children, as well as and the potential influence on their weight-related attitudes and behaviors as adults. Using Amazon Mechanical Turk, 203 adults were surveyed and asked to recount a memorable time during their formative years where a parent(s) discussed another person's weight or size in front of them. Using qualitative and quantitative methods, memorable weight stigma messages were sorted and analyzed. Qualitative results indicate that there are a variety of themes present in weight stigma messages, indicating that blame, dehumanization, and teaching and warning others are

common when transmitting weight stigma messages. Quantitative results suggest that parents' mark cues (statements about physical, stigmatized traits: e.g., "…can't believe how heavy she is"; "…didn't understand why…[she] was OK being so fat") were utilized most often and were negatively associated with other cues in memorable weight stigma messages. Peril cues (statements about the perceived threat from stigmatized people) were exhibited the least, and a revised conceptualization of peril is argued for the context of weight stigma. Lastly, parents' peril cues and responsibility cues (statements placing blame) relate to their adult children's weight stigma attitudes, and parents' mark cues related to their adult children's weight anxiety. Implications suggest that 1) there are a variety of forms of weight stigma messages transmitted in the family, 2) cues vary in prevalence and likelihood of use in weight stigma messages, and 3) hearing and recalling weight stigma messages may relate to individuals' weight-related cognitions, but with their behaviors.

Index words: *weight stigma, memorable messages, stigma communication, social identity theory, objectification*

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DEDICATION

To John, Eric, and Kitsune.

You are the best brothers (human and dog) that a person could have. Thank you for accepting me as I am and believing in me.

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TABLE OF CONTENTS

LIST OF TABLES

Pages

LIST OF FIGURES

Pages

CHAPTER 1

INTRODUCTION

In Western cultures, there is enormous pressure for women to have the "perfect," thin body and for men to have a toned, muscular body. The media is littered with images of bodies that are thin, lean, and sculpted, while bodies with overweight/obese appearance are often not depicted (Arroyo & Andersen, 2017; Greenberg et al., 2004). The preponderance of images promoting this ideal reflects the cultural views that privilege thin bodies over overweight appearing ones, resulting in individual preference for a thin body and shame when one naturally cannot obtain it (Arroyo, 2015; Expósito et al., 2015; Greenberg et al., 2004; Klaczynski et al., 2004; Stice et al., 2001). Over time, this preference for thin bodies has changed to the more specific preference of thin, muscular bodies (e.g., thin, toned thighs are preferred over thin thighs) (Bozsik et al., 2018). Valuing thin, muscular bodies as attractive inherently promotes negative bias towards bodies with overweight/obese appearance (Arroyo & Andersen, 2017; O'Brien et al., 2013).

Though the media is a strong force in promoting body ideals (Arroyo, 2015; Hawkins et al., 2014; Stice et al., 2001), weight-related attitudes and communication are learned and transmitted through interpersonal and intergroup communication (Arroyo et al., 2017; Benedikt et al., 1998; Goffman, 1963; Nichter, 2000). From interactions with others, people learn what appearance, behavior, and communication is culturally appropriate or "normal," and in turn form perceptions about what is inappropriate or

deviant (Goffman, 1963). Because thin and average weight bodies are more highly valued in Western culture, individuals with overweight appearance are considered deviant and encounter weight bias and discrimination. Such views are learned and reinforced over time to maintain group expectations and membership (Brown, 2000; Koerner & Fitzpatrick, 2002; Tajfel & Turner, 1986).

Parents are influential during the socialization process due to their early and continued involvement and influence during children's formative years (Cox & Paley, 1997; Laursen & Collins, 2004). Children look to parents for what is appropriate and normal (Bandura et al., 1963; Laursen & Collins, 2004), including for what constitutes appropriate weight-related appearance and communication. Indeed, evidence suggests that children learn weight bias from parents early in life (reportedly as early as 2.5 years of age) (Davison & Birch, 2001, 2004; Ruffman et al., 2015), and that weight commentary and attitudes are transmitted intergenerationally (Arroyo & Andersen, 2016b; Arroyo et al., 2017). These views are influenced and reinforce the thin ideal in Western culture, particularly in the U.S. In addition to reinforcing appearance-related cultural norms, parental weight commentary affects children's weight-related outcomes, such as body image issues, negative weight-related attitudes, increased objectification, and negative health behaviors (e.g., Haines et al., 2016; Puhl & Latner, 2007; Ruffman et al., 2015; Wertheim et al., 2002), largely due to the increased weight salience one experiences. As such, the thin ideal, as transmitted through parents' communication, has been shown to adversely affect children and promote bias against individuals with overweight/obese appearance.

Weight communication research largely on sending or hearing comments that reflect self-objectification and dissatisfaction with their own bodies (e.g., fat talk: "I look so fat today", Shannon & Mills, 2015, p. 158; Arroyo & Andersen, 2016a; Arroyo et al., 2014) or how parents and children engage in this practice together (e.g., co-rumination: Arroyo & Andersen, 2016b; Arroyo et al., 2017). Much of this research focuses on the bodies of the communicators (i.e., parents, children), but negative weight communication may be made about *others'* bodies (e.g., "wow, they need to lose weight"). There is limited research investigating how people communicate about others' bodies and the related effects involved with discussing others' weight-related appearance (exceptions discussed below). Further, such comments reflect both weight communication and weight stigma, also not previously addressed in the literature. The current study examines messages about others' bodies to gain insights into weight stigma communication.

Weight stigma communication is conceptually similar to other forms of weight communication, as they focus on bodies as objects, as well as compare bodies to the prevailing cultural norms ideals for appearance and beauty (Anderson & Bresnahan, 2013; Arroyo et al., 2017; Puhl & Heuer, 2009, 2010). Considering this, hearing parents' weight stigma messages could relate to negative weight-related outcomes as demonstrated in prior research with other forms of weight communication (e.g., fat talk). This study specifically examines weight anxiety, fear of fat, restrictive eating behavior (i.e., dieting), and exercise behavior. These weight-related outcomes have been connected to other forms of weight commentary and are also risky to individuals' well-being. For instance, weight anxiety and fear of fat are related to a host of negative outcomes such as weight-centric discussions, poor physical and mental health, and body image related

concerns (Atalay & Gencoz, 2008; Bennett & Stevens, 1996; Chow et al., 2017; Erickson et al., 2000; Webb et al., 2016; Wellman et al., 2017). Restrictive eating and poor exercise have been linked with negative body talk and weight stigma victimization (Brewis, 2014; Puhl & Heuer, 2009, 2010; Tomiyama, 2014; Westermann et al., 2015). Thus, these four variables seem particularly relevant and important to examine as potential outcomes related to weight stigma communication.

Hypothesizing the potential effects is not straightforward, however. Despite a conceptual linkage, it seems that weight stigma and weight communication are investigated using different theoretical perspectives, allowing for a gap in the research. Stigma research is rooted in sociological tradition of social identity, which would suggest that weight stigma communication can be used to promote positive the status and outcomes of speakers and non-stigmatized others (e.g., increased power, solidarity with the elevated ingroup: Brown, 2000; Smith, 2007a; Tajfel & Turner, 1986). In contrast, the body image literature suggests that weight communication increases weight salience and the risk of negative outcomes (e.g., Arroyo & Andersen, 2016a, 2016b; Arroyo et al., 2017; Benedikt et al., 1998; Francis & Birch, 2005; Thompson & Zaitchik, 2012; Wertheim et al., 2002). Since research from these two fields would predict contradictory outcomes, this study considers both traditions and aims to better understand the intersection of weight stigma and weight communication. In sum, the current study seeks to examine: (1) the weight stigma messages parents transmit to children, (2) the influence of parents' weight stigma messages on individuals' stigma attitudes, and (3) the relationship between parents' weight stigma messages and individuals' weight-related outcomes.

CHAPTER 2

LITERATURE REVIEW

(Weight) Stigma Defined

Stigma

It is first necessary to understand the nature of weight stigma and stigma communication. Despite the numerous approaches to researching stigma (e.g., Goffman, 1963; Meisenbach, 2010; Smith, 2007a; Tomiyama, 2014), there is great consistency across conceptualizations of the phenomenon. *Stigma* is the deviant mark or condition a person possesses or exhibits and to which society ascribes negative qualities and stereotypes (Goffman, 1963; Smith, 2007a). The transmission of negative views and stereotypes reinforce the distinctions between stigmatized and non-stigmatized persons, denoting them as lesser or "tainted" in some way (Goffman, 1963, p. 3; Granberg, 2011; Tomiyama, 2014). To clarify, stigma is not derived from the mark itself, but rather is the socially constructed relationship between the condition (or mark) and the negative attributions and stereotypes related to and endorsed about it (Goffman, 1963). As such, a condition is considered stigmatized when society determines that a condition or behavior deviates from societally created social norms.

Despite consistency with conceptualizations, *what* is stigmatized will be different across sociocultural groups. Perceptions of norms and deviance are constructed by and within cultures, so an attribute may be stigmatized in some cultures but not in others (Goffman, 1963; Jones et al., 1984). For example, being thin is considered ideal or

desirable, and thus non-stigmatizing, within the broader Western culture, yet may also be devalued in non-Western cultures or in social groups within the U.S. that hold different weight and beauty norms (e.g., Samoan men living in Samoan-dominant communities, Moroccan Sahraoui women, and Ghanaian men are more likely to prefer women's bodies larger than the perceived average and/or less likely to prefer the thin ideal; Brewis & McGarvey, 2000; Frederick et al., 2008; Rguibi & Belahsen, 2006; Swami & Tovee, 2007). As this study is based is focused on Western notions of weight and appearance and sampled participants from the U.S., it considers the broader, dominant views of weight norms and weight stigma within U.S./Western culture.

Weight Stigma

Weight stigma is the compilation of negative stereotypes, prejudice, and discrimination of individuals because they do not conform to the ideal or 'normal' body weight (Puhl & Latner, 2007). Though this conceptualization does include individuals who have underweight appearance and/or are battling eating disorders, this study focuses on individuals who are discredited and stigmatized because of overweight appearance and size, as this specifically deviates from the Western thin ideal (Chang & Bazarova, 2016; Granberg, 2011; Mustillo et al., 2013; Yeshua-Katz, 2015).[1] Thin bodies are privileged in Western cultures, while people often hold negative, anti-fat bias towards overweight appearing ones (Expósito et al., 2015; Fontana et al., 2013; O'Brien et al., 2013). The pro-thin, anti-fat bias is learned and reinforced through cultural, intergroup, and interpersonal influences, promoting false perceptions that: 1) thin people are attractive and competent and 2) overweight people are undesirable, incompetent, and lazy (Black et al., 2014; Expósito et al., 2015; Fontana et al., 2013; O'Brien et al., 2013).

These attitudes are the foundation of weight stigma, are prevalent in Western culture (Korn, 2009; Puhl & Brownell, 2001; Rhode, 2009), and are expressed and experienced in nearly every context of daily living (Fontana et al., 2013; Lewis et al., 2011; Paul & Townsend, 1995; Roehling, 1999; Schvey et al., 2013).

Prior research has looked at various facets of the stigma process (e.g., attitudes, discrimination); however, the current study takes a communication-based approach to examining weight stigma. Research into the stigma processes has expanded to consider stigma *communication*, taking a message production and effects approach to understand the process of sharing stigma beliefs between non-stigmatized people (e.g., Smith, 2007a, 2007b, 2012), and providing a communication lens to how stigma is considered and investigated. Smith (2007b), for example, codified messages in advertisements and PSAs that might, in fact, be functioning to stigmatize various groups of people (e.g., people with STIs, people who are overweight/obese) in order to examine messages that promote specific stigmas. Smith (2014) tested responses to different hypothetical stigmatized acquaintances to assess predictive factors and outcomes, demonstrating that the model of stigma communication is a successful tool to codify and examine interpersonal messages as well. The model of stigma communication offers a communication lens to stigma research, one that can be used in relational contexts (e.g., parent-child; sibling) to better understand the interpersonal messages that individuals transmit to stigmatize others, POA in this case.

Conflating Weight and Health: Ethical Issues and Risks

Misconceptions about weight promote the exclusion of POA and the social acceptance of weight stigmatizing messages and actions. Weight stigma is prevalent in

our society and presents risks to POA. When stigmatized, POA are at higher risk for negative personal and professional outcomes. Research has demonstrated links between weight stigma and negative personal outcomes, such as poor psychological and health outcomes (Puhl & Heuer, 2010; Schafer & Ferraro, 2011; Sutin & Terracciano, 2013; Tomiyama, 2014), as well as social inequity, bullying, and aggression in their peers (Bucchianeri et al., 2013; Bucchianeri et al., 2014; Gray et al., 2009; Puhl & King, 2013; Westermann et al., 2015). Stereotyping and bias toward POA lead to increased risk of societal mistreatment also, such as poorer or inequitable treatment in medical, educational, professional, and legal settings (Glass et al., 2010; Paul & Townsend, 1995; Phelan et al., 2015; Roehling, 1999; Schvey et al., 2013; Swami et al., 2008; Vanhove & Gordon, 2014). The reproduction of misconceptions about weight and health promotes the pervasiveness and acceptability of weight stigma and consequent discrimination of POA that lead to these negative outcomes. Thus, it is important to limit the transmission of weight stigma to better protect and support those who would be victims of such bias and discrimination.

The risk is not limited to stigmatized people, however; weight discussions that promote an inherent connection between weight and health are toxic to the broader culture. Research suggests that people tend to visually evaluate bodies to assess "health" (Burrows, 2008; Maffetone et al., 2017). Furthermore, categorizing individuals using BMI categories to understand weight and health promotes the notion that, due to their appearance, POA are unhealthy and may be at higher risk of illness in the future (Maffetone et al., 2017). In so doing, people often conflate weight-related appearance and health in appraisals and communication (Burrows, 2008; Wright & Dean, 2007). In

equating weight-related appearance and health, society perpetuates false perceptions and stigma, as well as increases the pressure on everyone to fit the thin-ideal. The body preoccupation and encouragement to be thin has been shown to predict dieting and eating disorder symptoms (Francis & Birch, 2005; Killen et al., 1996; Thelen & Cormier, 1995), internalization of societal appearance-related standards (Tester & Gleaves, 2005), and increased frequency of body comparison and surveillance (Latner, 2008; Levitt, 2003; Tiggeman & McGill, 2004).

Furthermore, when individuals believe that there is an inherent weight-health connection is the complete responsibility of individuals, it creates a narrative in which other societal factors and inequities are ignored (Wright & Dean, 2007). There are structural barriers prohibiting some from engaging in health behaviors. For instance, individuals in lower socioeconomic status neighborhoods lack grocery stores and instead primarily have places to shop in which unhealthy foods are cheaper and more readily available than healthy ones (Walker et al., 2010; Wrigley et al., 2004). Also, some physical activity centers promote the exclusion of people due to their body shapes and sizes (Pickett & Cunningham, 2017). These barriers can negatively affect all people regardless of shape and size; however, when blame is placed on the individual, it changes the conversation and draws attention away from structural issues. It is therefore important to divorce perceptions of health from weight-related appearance and to understand what and how ideas are communicated in order to inhibit the transmission of weight stigma.

Parent-Child Communication about Weight and Weight Stigma

There are many sources that influence people's views about weight and appearance, including family (e.g., Cooley et al., 2008; Francis & Birch, 2005), peers

(Anderson et al., 2014; Nichter, 2000), and the media (e.g., Frederickson & Roberts, 1997; Harper & Tiggeman, 2008). There is extensive research demonstrating that parent-child communication is particularly powerful in the development of individuals' weight-related attitudes, communication, and behavioral outcomes. This is in part due to parents being the primary teachers in individuals' socialization process (Laursen & Collins, 2004; Miller & Lane, 1991), and reinforced by their greater power and higher status in the family system (Cox & Paley, 1997; Knapp et al., 1981). Research suggests that people learn weight bias during their formative years (Ruffman et al., 2015), and parents' weight communication is associated with individuals' body objectification, body shame, and overall body image (Arroyo & Andersen, 2016b; Cooley et al., 2008; McKinley, 1999), something that is attributed to parents influence over them. Further, individuals' behavioral outcomes have shown to be related to their parents' weight-related commentary. Parents' fat talk and encouragement to lose weight, for example, is related to higher levels of dieting and disordered eating behavior (Arroyo et al., 2017; Francis & Birch, 2005; Thelen & Cormier, 1995), arguably due to increased weight salience encouraging objectification. It is possible then that parent-child weight stigma communication may also be related to individuals' weight stigma attitudes, weight-related concerns, and weight management behaviors (e.g., dieting, exercise) because it teaches children how to think about weight and appearance, as well as promotes weight salience and body objectification.

One way in which children might learn views about weight and appearance is through memorable messages from parents. *Memorable messages* are "short discursive units" that are especially salient to an individual, in this case adult children, and

influential in shaping one's perceptions about self and others (Barge & Schlueter, 2004, p. 238; Knapp et al., 1981). These messages are often embedded within instances where individuals were taught explicitly or learned implicitly to follow specific norms, prize certain values within the system, and properly perform in given contexts (Barge & Schlueter, 2004; Knapp et al., 1981). As such, these instances are highly salient and impactful to individuals' socialization and development (Barge & Schlueter, 2004). For example, an individual may remember their parent preventing them from eating a candy bar because "it's not what you eat if you want to be healthy." In this way, the message has been filed away in the individual's memory as a touchstone to be used when considering what to do (or not do) to be healthy and/or manage one's weight-related appearance. Thus, memorable messages[2] about weight reflect salient, influential information easily recalled and used, and so are likely to impact individuals' attitudes and perspectives about weight, appearance, and health.

Toward that end, it is important to investigate what types of memorable messages children recount to guide their weight-related attitudes and behaviors: What weight stigma messages do adult children remember hearing from their parents? Prior research has addressed similar questions within the weight literature but has either not focused on weight *stigma messages* or has not been examined within the family context. Thompson and Zaitchik (2012), for example, investigated memorable weight-centered messages that individuals recalled their parents telling them, including statements that adult children needed to lose weight, avoid unhealthy foods, or complimented for being attractive post-weight loss. The goal was to understand weight-centric messages in the family more generally rather than examining the presence and role of stigmatizing messages. Previous

research on weight stigma demonstrates that non-stigmatized people do in fact talk about POA (as a message target outside of the immediate conversation): In Thomas and colleagues' (2008) study on lived experiences of people with overweight/obese appearance (hereafter referred to as POA)[3] in Australia, one participant recalls an instance where two people discussed her body to each other (i.e., "This is the trouble with obese people, they take up too much room on the train," p. 324). Similarly, a participant in Lewis and colleagues' (2011) study reported that it was common occurrence to hear people with average weight appearance to communicate stigmatizing messages about POA to each other, saying things like "…that's what happens when you eat too much" and "I bet you they are going to eat two meals" (p. 1352). As seen here, people are discussing others' bodies and do so in a way that stigmatizes the message targets. Though there is evidence that parents transmit stigmatizing messages about POA to their children, further investigation is needed to capture, examine, and categorize the types of weight stigma messages that are transmitted and memorable to individuals.

This study examines the types of weight stigma messages that parents transmit to their children about others, conceptualizing this as a parent/non-stigmatized person → child/non-stigmatized person communication process. Prior research has demonstrated that parents are important contributors to individuals' development (Curran & Andersen, 2017; Miller & Lane, 1991), but research has yet to thoroughly investigate the form of weight stigma messages being communicated in the parent-child dyad, particularly those about other people. Since this is formative research, the content of parents' reported weight stigmatizing messages should be examined first:

***Research Question 1*:** What are the types of memorable weight messages about others do individuals recall (from their parents)?

Model of Stigma Communication and Weight Stigma Messages

Stigma Communication

Much of the research on stigma does not directly investigate the communication processes surrounding the phenomenon. Stigma research traditionally focuses on prejudice, stereotyping, discrimination, or some combination thereof to understand the process and related effects. However, Smith (2007a; 2007b) extended this more traditional socio-psychological approach by adding a communication component and advancing the model of stigma communication (MSC). The MSC conceptualizes *stigma communication*, including what generally constitutes stigma communication, basic definitions of stigma cues as guidelines for message codification, and a theoretical process arguing how such messages are received and processed (see Figure 1).

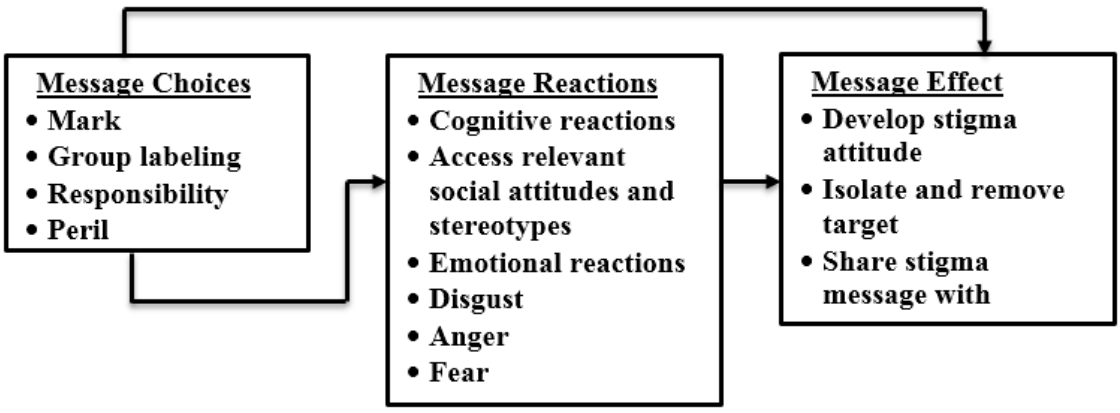

Figure 1. *The Model of Stigma Communication (Smith, 2007a)*

According to the MSC, stigma messages are transmitted to warn and protect other non-stigmatized individuals about tainted and potentially dangerous people (Smith, 2007a; Smith, 2012). When individuals share stigmatizing messages about POA with

their children, they are theoretically going to safeguard them from being around or similar to POA (as "tainted" individuals). A major point of the theory's utility rests in the method for analyzing stigma message content. The MSC proposes that stigma messages are only constituted as such when one or more stigma cue types are present in the message: 1) mark, 2) label, 3) peril, and 4) responsibility for the attribute (Smith, 2007a, 2007b).

Mark cues. Many forms of stigma, weight stigma particularly, are based largely on the physical appearance of an attribute or condition that is perceived to be deviant or wrong (Goffman, 1963; Granberg, 2011; Jones, 1984). Physical attributes vary in the degree to which they are socially stigmatized, but common examples are tattoos, (large, "ugly") scars, differently shaped or missing limbs, wheelchair use, and having overweight/obese appearance. When individuals transmit stigma communication, *mark cues* call attention to these physical attributes and how they deviate from perceived social norms (Smith, 2007a, 2007b). Mark cues in messages about POA would refer to individuals' bodies or body parts as appearing larger or not as toned as sociocultural norms and ideals (e.g., larger stomach, untoned thighs). In addition to denoting what is visible, mark cues may also state what is visible when it should not be—it can be present so long as it is covered in public. For instance, people may not be overtly stigmatized for having tattoos if they are covered while in public or professional settings. In the context of weight stigma, mark cues may suggest that POA should be covering their body parts differently or completely to better follow social norms. Note: Not all stigmas have visible and/or physical attributes (e.g., depression).

Two major components of mark cues are concealability, or what is visible, and disgust, the emotional response to physical attribute (Smith, 2007a). Stigmatized attributes may vary in concealability: While some stigmatized conditions can be fully concealed (e.g., tattoos) and allow individuals to pass as "normal," there is no respite for POA from being marked and consequently stigmatized. Weight-related appearance is always visible and evaluated. Considering this, POA may be stigmatized two-fold: Individuals can face criticism for their current weight and size, or having the attribute, and also for not "appropriately" concealing their body (e.g., showing one's midsection, wearing a two-piece bathing suit) (Lewis et al., 2011; Thomas et al., 2013). Additionally, disgust is a major component to mark cues, such that non-stigmatized individuals may experience disgust about stigmatized marks and evoke similar disgust in others through stigma communication (Smith, 2007a). Generally, mark cues conveying disgust and issues with stigma concealability motivate others to avoid, reject, be biased against stigmatized individuals (e.g., POA) (Mackie & Smith, 2002; Smith, 2007a).

(Group) Label cues. Labeling stigmatized others is important in the construction and promotion of stigma—applying name(s) to designate who belongs in the "normal" group and those who belong in the "deviant" group (Goffman, 1963). Group label cues, referred to in this study as *label cues*, are used to highlight the differences between stigmatized and non-stigmatized groups, separating people into categories of "us" (as normal) and "them" (as deviant) (Smith, 2007a). Oftentimes, this is done by applying negative stereotypes (as inaccurate, overly generalized information) associated with the stigmatized group, applying inaccurate information of the group to one stigmatized person.

Labeling others depersonalizes and devalues the targeted person or people; others can then only recognize people *as* the stigmatized attribute (and related stereotypes) rather than as valuable multi-faceted individuals (Goffman, 1963; Smith, 2007a). For instance, label cues distinguish all POA as belonging to the same "overweight" social identity, using a variety of degrading terms that refer to individuals *as* the stigma/stigmatized group (e.g., "fat people are…", "those obese people…"). Labels generally have a bi-directional relationship with stereotypes, whereby stereotypes are used in labels and labels promote stereotyping (Goffman, 1963; Stigma, 2007a). Ultimately, labels dehumanize POA, so that they are seen only as their weight and size, as well as the stereotypes used to label them.

Peril cues. Stigmas are based on views that individuals are deviant and so will pose a physical or moral threat to the society (Goffman, 1963). *Peril cues* are used to relate the danger of this threat of stigmatized people to "normal" self and others (Smith, 2007a, 2007b). Though many stigmas are formed due to a physical threat to the community (e.g., Hansen's disease), deviant weight-related appearance is non-communicable and generally poses no direct physical threat. However, POA are perceived as a moral or social threat, rather than a physical one to non-stigmatized individuals.

Moral threats can take various forms. At times, people believe that acceptance of POA will alter societal weight and appearance standards. It is a commonly held belief that POA are less moral (e.g., irresponsible, lacking self-control) than normal weight individuals (Black et al., 2014; Blaine & McElroy, 2002; Holland et al., 2015), and so POA (and the acceptance of them) may represent a threat of moral corruption to the

community. Lastly, though not a moral or physical threat, non-stigmatized individuals might perceive a social risk from POA; non-stigmatized individuals may experience social discomfort or uncertainty during interpersonal interactions with POA (Holland et al., 2015). This social threat is not considered in original conceptualizations of peril cues; however, looking at "threat" broadly, it seems important to consider social threat as potentially related through peril cues in weight stigma communication. Despite not posing a physical threat, peril cues will relate moral threats and possibly social threats when transmitted in weight stigma communication.

Responsibility cues. In weight stigma communication, *responsibility cues* are used to communicate that stigmatized individuals are to blame for their attribute or condition (Smith, 2007a), specifically attending to the decisions that individuals have made or continue to make that led them to their stigmatized status (Smith, 2007a). Fault may be attributed to individuals for the condition onset, or gaining the stigmatized attribute, or for condition offset, or ridding oneself of the attribute (Stigma, 2007a). Notably, perceptions about responsibility often are tied to false perceptions that stigmatized people are immoral, irresponsible, have weak character; it is these negative characteristics that has caused the onset or prevented the offset of the stigma (Black et al., 2014; Blaine & McElroy, 2002; Goffman, 1963).

The consideration of responsibility is particularly prevalent to weight stigma. It is commonly believed that weight is completely controllable, promoting the idea that POA are fully responsible for their weight and size (Black et al., 2014; Blaine & McElroy, 2002; Puhl & Brownell, 2003; Wright & Dean, 2007). This further extends to reinforce and promote the common stereotype that POA are lazy and lack self-control (Black et al.,

2014)—people believe that POA could be thin if they would only be disciplined and make an appropriate effort (e.g., eat right, exercise). However, individuals' weight-related appearance (i.e., size, shape) is affected by a number of factors, including genetics (Bouchard, 1994; Maes et al., 1997; Ravussin & Borgardus, 2000), social ties (Christakis & Fowler, 2007), and environmental conditions and access to resources (e.g., access to food, vegetables: Walker et al., 2010; Wrigley et al., 2004). Blaming others for their condition, in this case appearance, diminishes the need to empathize with others and instead justifies their stigmatizing and discriminating behaviors against them (Goffman, 1963; Jaffe & Worobey, 2006; Smith, 2007a). Therefore, responsibility cues are likely to be particularly prevalent in weight stigma communication and promote weight stigma and discrimination.

Weight Stigma Messages

Stigma messages may include one, multiple, or all cue types, which means that weight stigma communication can take a variety of forms. There has been some research investigating the various stereotypes about POA that people endorse (Bento et al., 2012; Davison & Birch, 2004; Greenberg et al., 2003; Murray, 2005; Roehling, 1999; Roehling et al., 2008); however, less is known about the types of negative descriptions or stereotypes about POA that are (most) frequently transmitted via weight stigma communication between non-stigmatized people. One such study that investigated weight stigma communication was conducted by Anderson and Bresnahan (2013): Participants in this study responded to images of varying body types (e.g., overweight female, underweight male) via written messages describing their perceptions about these various bodies (e.g., "disgusting," "tubby") and underweight bodies (e.g., "scrawny," "gawky")

(Anderson & Bresnahan, 2013; p. 609-610). Results indicated that people responded to various bodies with negative, stigmatizing thoughts when viewing different body types – particularly for males with overweight or obese appearance. This is an important first step to investigating weight stigma communication and is instructive to understanding individuals' views; however, the results of Anderson and Bresnahan's (2013) study indicate what people think and report to researchers. Unfortunately, it does not present information how participants would *interpersonally communicate* with others about these bodies or the frequency with which each of the stigma cues appear in these messages.

Since stigma messages are often communicated interpersonally for the reasons of warning and protecting others, it is necessary to investigate the messages that are transmitted by non-stigmatized individuals during interpersonal interactions. This study seeks to extend this research by asking individuals about the messages they have heard during interpersonal interactions within the parent-child context. In addition to increasing the general knowledge in this area, identifying what stigma cues are readily used in stigma messages in interpersonal interactions is helpful in knowing how to combat negative attitudes about weight-related appearance. Since little is known about the types of cues used most frequently in interpersonal weight stigma messages, the research question is advanced:

> ***Research Question 2*:** How often are each of the stigma cues used in individuals' memorable weight stigma messages?

Weight Stigma Communication and Weight-related Outcomes

In addition to examining the content of memorable weight stigma messages, the current study seeks to extend the literature by examining how parents' weight stigma

communication (about others' bodies) affects their adult children's weight-related outcomes. Children reportedly learn weight attitudes early and from parents (Davison & Birch, 2001; Ruffman et al., 2016), and there is ample evidence that children will look to parents as a model for appropriate behaviors (Arroyo & Andersen, 2016a; Arroyo et al., 2017; Bandura, 2001; Laursen & Collins, 2003). Additionally, though not reproducing a behavior, other research has shown that parental weight communication is influential on children's weight-related outcomes (Arroyo & Andersen, 2016a, 2016b; Benedikt et al., 1998; Francis & Birch, 2005; Thompson & Zaitchik, 2012; Wertheim et al., 2002). Like various forms of weight communication, weight stigma communication also draws attention to bodies and reinforces weight and appearance norms. It is possible then that parents' weight *stigma* communication could also relate to individuals' weight-related outcomes. It is therefore prudent to investigate this further considering the two relevant, but separate, areas of research: 1) weight communication and 2) stigma and stigma communication.

Stigma and Stigma Communication Literature

Though there has been extensive research on witnessing and participating in weight communication, there has been little research on the effects of witnessing stigma communication, particularly in the context of weight stigma. To date, much of the research on weight stigma is focused on understanding the outcomes of targeted stigmatized people (Annis et al., 2004; Bucchianeri et al., 2014; Thomas et al., 2008). Communication-based research on stigma suggests that *communicating* stigma is purposeful and functional for non-stigmatized individuals (Smith, 2007a, 2012). Smith (2007a, 2007b) argued that stigma communication protects non-stigmatized people from

deviant, tainted, and potentially dangerous stigmatized others and reinforces "normal" group distinctions. This is generally considered to be protection from physical danger; however, it may also act as "protection" or distancing from deviant individuals while strengthening ties with one's positive ingroup (Brown, 2000; Levine et al., 2005). This distinction can be used to maintain current unfair or oppressive societal structures, boost non-stigmatized people's (individual and collective) esteem, social standing, and power (Blascovich et al., 2000; Brown, 2000; Ebneter et al., 2011; Goffman, 1963; Hogg et al., 1995; Tajfel, 2010; Turner et al., 1979). While holding a stigmatized identity can be burdensome, negative, or even risky to stigmatized individuals (Goffman, 1963; Granberg, 2011; Hunger et al., 2015; Jones et al., 1984), maintaining a normal-deviant distinction through stigma communication can be beneficial for and provoke adaptive behaviors in non-stigmatized people.

In the case of weight stigma, people with thin or average weight appearance may transmit negative information about POA to reinforce social distinctions between POA and people with average weight appearance. Transmitting weight stigma communication will create distance and emphasize the disparities between the different groups body sizes. These distinctions that highlight positive status of bodies with thin/average appearance and negative status of bodies with overweight appearance should prompt individuals with average weight appearance to feel more positively about their own appearance and social standing. Furthermore, using weight stigma communication could be used to self-protect from possible social sanctions for interacting with or supporting stigmatized people, thereby being stigmatized by association (Goffman, 1963; Blascovich et al., 2000; Brown, 2000; Latner et al., 2012). When children hear their parents' weight

stigma messages, it could teach and reinforce any or all of the following: teach children to maintain their own appearance and group standing, increase social distinctions and distance between self and POA, and reinforce and promote their positive, "normal" weight identity through the use of weight stigma.

Weight Communication Literature

In contrast, prior research stemming from the weight communication literature indicates that, even when not the target, witnessing weight communication increases the likelihood that the receiver will experience adverse effects. Participation in conversations about individuals' (own and conversational partners') appearance predicts negative weight-related outcomes such as body dissatisfaction, dietary restraint, less exercising, and more disordered eating behaviors (Arroyo et al., 2017; Cooley et al., 2008; Gapinski et al., 2003; Lee et al., 2013; Lin & Soby, 2016; Wertheim et al., 2002). For instance, Lee and colleagues (2013) reported that when individuals witnessed peers' negative self-body talk on social media, they experienced increased body dissatisfaction. Generally, this connection is explained as the result of increased body awareness and objectification. Participating in weight communication reinforces that appearance is something that to be evaluated and controlled (Arroyo & Andersen, 2016a; Benedikt et al., 1998; Nichter, 2000). Indeed, it has been argued that expressing negative self-body talk is a manifestation of self-objectification, that then further reinforces objectification and weight salience (Arroyo & Harwood, 2012, 2014; Arroyo & Andersen, 2016b).

Since weight communication has been shown to predict maladaptive behaviors and poor weight-related perceptions (Arroyo & Andersen, 2016a; Arroyo et al., 2017; Cooley et al., 2008; Gapinski et al., 2003; Stice et al., 2003; Wertheim et al., 2002),

transmitting weight stigma communication may also be related to maladaptive outcomes and so risky for individuals to receive. Weight stigma communication is not often considered as a form of "weight communication," with more focus being placed on weight-centric discussion like fat talk and co-rumination; however, weight stigma communication inherently involves the evaluation, categorization, and desire for regulation of others' bodies that could increase the saliency and perceived importance of weight-related appearance. When considered in conjunction with the stigma literature, weight stigma communication could be counterproductive to its intended function to protect and promote fellow non-stigmatized ingroup members. Thus, weight stigma communication is unique in that it could act as protective-stigma communication and/or as potentially damaging-weight communication.

Outcomes: Weight Stigma Attitudes, Body-related Concerns, Weight Control Behaviors

There appears to be some contradiction about how the transmission of weight stigma communication affects non-stigmatized people. The current study seeks to investigate the connections between parents' weight stigma messages (via memorable messages) and individuals' weight-related outcomes. Specifically, it examines the relationship between memorable weight stigma messages and: 1) weight stigma attitudes (toward POA), 2) weight anxiety, 3) fear of fat, 4) restrictive eating behaviors, and 5) exercise behaviors.

Weight stigma attitudes. Stigma communication is meant to transmit information and attitudes about a particular stigma and stigmatized people between non-stigmatized people. It is prudent to examine the relationship between weight stigma communication and weight stigma attitudes. *Weight stigma attitudes* are the biases and

prejudices that people have about individuals because of their weight, size, shape, and/or overall weight-related appearance (Fontana et al., 2013). Weight stigma attitudes are pervasive in Western (specifically U.S.) culture due to pressure to confirm to the thin ideal, as well as popular misconceptions that weight is entirely controllable (Blaine & McElroy, 2002; Tischner & Malson, 2012; Wright & Dean, 2007). These attitudes are pervasive and affect individuals' behaviors toward people according to their body size and shape (e.g., thin, average, overweight). For instance, holding weight stigma attitudes has been linked with the increased likelihood of the discrimination of POA (Allport, 1954; Dovidio & Hebl, 2005; Lantz et al., 1997, Paul & Townsend, 1995; Puhl, 2001), occurring in a variety of personal and professional contexts (e.g., education, legal proceedings: Lynagh et al., 2015; Schvey et al., 2013). The link between weight stigma attitudes and weight discrimination is well established and clearly detrimental to targets, yet research on *how* individuals learn weight stigma attitudes is still needed. Since the process begins early in life from parental influence, further investigation is needed to understand the mechanisms of transmission.

Weight-related concerns: Weight anxiety and fear of fat. Discussions that critique bodies have been shown to affect individuals' self-perceptions, including increased weight-related concerns (Arroyo & Andersen, 2016b; Bailey & Ricciardelli, 2010; Benedikt et al., 1998). Research has established the connection between weight communication and weight-related perceptions and behaviors; since weight stigma communication are discussions about bodies, it is possible that it could also adversely affect individuals' weight-related outcomes. To investigate this, the possible influence on

individuals' own body-related concerns should be considered, specifically individuals' weight anxiety and fear of fat.

Weight anxiety is defined as the fear, nervousness, or concern one currently experiences about their weight and weight-related appearance (e.g., the look of one's thighs, stomach) (Tiggeman & McGill, 2004), and so is present-oriented. Concerns about one's current weight-related appearance are associated with such negative outcomes as poorer physical health (e.g., disordered eating behavior, less physical activity) and mental health (e.g., depressive symptoms) (Atalay & Gencoz, 2008; Bennett & Stevens, 1996). Similarly, *fear of fat* is the distress or dread that people experience when considering the possibility of gaining weight and/or assuming an overweight/obese appearance in the future (Chrisler, 2012; Fahs & Swank, 2017; Webb et al., 2016). Like weight anxiety, fear of fat is associated with other negative weight-related cognitions (e.g., body evaluations, shame: Latner, 2008; Wellman et al., 2017), negative body-related discussions (Chow et al., 2017), and poorer physical health (e.g., emotional eating behaviors, less weight loss, weight gain: Chow et al., 2017; Latner, 2008; Webb et al., 2016; Wellman et al., 2017). While having different time orientations, both are commonly experienced when engaging in weight-centric discussions and body comparisons (Latner, 2008; Levitt, 2003; Tiggeman & McGill, 2004). Social comparisons are inherent in the weight stigma communication process: When messages about POA and transmitted, communicators will inherently appraise POA appearance and compare it with their own appearance to establish stigmatized versus non-stigmatized weight-related appearance and identity. Considering this, weight stigma communication may associate with weight anxiety and fear of fat.

Weight-related behaviors: Restrictive eating and exercise. Research indicates that suggest that weight communication predicts individuals' weight-related behaviors, whether through participating in or hearing about self-body talk (e.g., mother-daughter discussions about mothers and daughters' bodies; Arroyo et al., 2017; Houldcroft et al., 2014) or by being the target of weight stigmatizing critiques (Himmelstein & Tomiyama, 2015; Koca & Asci, 2006; Puhl & Heuer, 2009; Rice, 2007). It is possible then that weight stigma communication, as discussions about others' weight, will relate to weight control behaviors, specifically in the forms of *restrictive eating* and *exercise behavior*.

Restrictive eating behavior was conceptualized as dieting and awareness of food contents, following research by Ocker and colleagues (2007). Dieting and food awareness are often experienced by individuals who desire to restrict caloric intake and/or experience concern about the amount and frequency with which food is ingested (Garner et al., 1982); ultimately these behaviors are used to control and restrict eating. *Exercise* frequency is also assessed as a potential weight control behavior. Of note, this study does not assign a valence to exercise behavior, but rather considers exercise as a means of controlling weight-related appearance. Both restrictive eating and exercise behaviors could be employed to manage their weight-related appearance (and social identity). Investigation is further needed to determine whether weight stigmatizing discussions about others, such that the recipient is not the *target,* may associate with their weight-related behavioral outcomes.

Encountering weight-centric communication and weight stigmatizing behavior can affect eating and exercise behaviors – for POA targeted by weight stigmatizing behavior specifically and people who encounter various forms of weight communication

more generally (Arroyo et al., 2017; Himmelstein & Tomiyama, 2015; Houldcroft et al., 2014; Puhl & Heuer, 2009). It is reasonable to assume that even non-stigmatized individuals may be susceptible to negative outcomes when exposed to weight stigma communication; however, this has not yet been studied. Given that non-stigmatized individuals are not the victim of attacks, it seems more likely that their adult children's outcomes would be more consistent with those encountering weight-centric (non-stigmatizing) communication, specifically by engaging in behaviors to control their weight-related appearance. Further in support of this, social identity theory and stigma research would suggest that hearing comments about POA would teach children that they should maintain their appearance/size so that they continue to be considered part of the "normal" ingroup and keep them from being deviant (having overweight/obese appearance) (Brown, 2000; Goffman, 1963; Hunger et al., 2015; Turner et al., 1979; Reno & McNamee, 2015). In conjunction with encountering this pressure to have thin/average weight appearance, non-stigmatized individuals may be motivated to engage in weight control behaviors to maintain their weight-related appearance. In sum, this study examines the potential relationships between weight stigma communication via memorable messages and individuals' weight stigma attitudes, weight-related attitudes (i.e., weight anxiety, fear of fat), and weight management-related behaviors (i.e., restrictive eating behaviors, exercise behaviors).

The following sections further elaborate on the proposed relationships between recalled parent's weight stigma communication and individuals' weight-related outcomes. Each of these stigma cues will likely provoke and promote different views about weight; thus, the effects of specific cues are considered rather than the effect of the

message generally. The following section will consider the unique relationships that might emerge between the types of stigma cues and weight-related outcomes.

Hypotheses and Research Questions

Weight Stigma Attitudes

Though predicted for different reasons, the presence of any type of stigma cue in memorable weight stigma messages should positively associate with individuals' weight stigma attitudes. Individuals who observed parents' communicating negative weight messages about others are more likely to consider making stigmatizing comments is normal (even correct) behavior and will likely reproduce it in the future. Moreover, the function of stigma communication is to transmit stigma information and attitudes between non-stigmatized people (Smith, 2007a); if this is the case, it is likely that weight stigma messages should relate to weight stigma attitudes.

Mark cues and weight stigma attitudes. Research on social learning explains the potential transmission of attitudes and behaviors. Social learning theory (Bandura, 2001; Bandura & Huston, 1961; Bandura et al., 1963) proposes that individuals will learn how to communicate and behave by observing and reproducing the actions of others. This is also affected by models' level of power and status, such that individuals are more likely to model behaviors of those with power and status (Bandura, 2001). Children are likely to look to parents, as those with power and status in the family, to understand what appropriate behavior and reproduce the behaviors when necessary.

Weight stigma attitudes are not behaviors yet may still be learned by witnessing parents' behaviors and communications. Weight-related attitudes or perceptions (e.g., body objectification) cannot be directly observed like other concrete behaviors, but

parents' weight communication may transmit weight-related attitudes. For instance, Arroyo and Andersen (2016b) demonstrated that mothers' and daughters' self-objectification was related through weight-related communication. Individuals cannot directly model parents' weight stigma attitudes but may view their stigmatizing messages as an indicator to hold consistent attitudes and engage in similar communication (e.g., also pointing out individuals' appearance-related flaws). Following social learning theory, individuals may be more likely to accept their parents' weight stigma attitudes—evidenced by communication—and reproduce similar attitudes and communication. Thus, parents' mark cues in weight stigma messages should be associated with individuals' weight stigma attitudes.

Label cues and weight stigma attitudes. In the context of stigma, labeling is a protective act that promotes distance between "normal" non-stigmatized and "tainted" or "dangerous" stigmatized people (Goffman, 1963; Smith, 2007a). Smith (2007a) proposes that the purpose of stigma communication is to protect non-deviant people from stigmatized others convey why stigmatized people are "wrong" or "deviant." Parents then are theoretically attempting to teach their children (non-stigmatized group members) that they are and should be different from POA (stigmatized people), as well as what makes POA subjected of stigmatizing messages. Labeling via weight stigma communication acts to separate average weight individuals and POA, making the body-related appearance categorizations salient and encouraging "othering" views of POA. Lastly, keeping this distance ensures that non-stigmatized people will rely on stereotypes for information and endorse weight stigma attitudes (Smith, 2007b, 2014), which means they are less likely to find information to correct false perceptions of POA.

Additionally, labels teach children to evaluate bodies for status and view POA as lesser than. There is evidence to suggest that individuals learn weight-related communication and attitudes from their parents, including to evaluate bodies (Arroyo & Andersen, 2016). When hearing stigma labels about POA, children learn not only to evaluate bodies as positive or negative, but to do so to assess and distinguish social group membership. When, as children, individuals hear such memorable messages, they may observe such communication and so learn that it is appropriate to identify people by weight group, but also consider their own weight group as positive and overweight group membership as negative. Labels make weight-related appearance categorizations salient and reinforce that dehumanizing and "othering" POA is acceptable and even positive. As such, parents' label cues in memorable messages should relate to individuals' increased weight stigma attitudes.

Peril cues and weight stigma attitudes. Individuals who hear peril-based messages are more likely to endorse weight stigma attitudes. When individuals encounter threat-avoidance messages, they tend to consider the threat and level of efficacy (Witte, 1992). If the perceived ability to complete a behavior (i.e., efficacy; Bandura, 1977) is high, then individuals will accept and follow the message advice. Peril cues elaborate on the threat of POA, and caution others from interacting with them. Non-stigmatized individuals' efficacy is likely to be high in this regard: It is fairly easy to bar stigmatized individuals from social acceptance or maintain physical distance (Gray et al., 2009). Parents' messages about the threat of POA may signal to their children that they too should avoid similar people and interactions, as well as hold the same stigmatizing attitudes.

Parents might offer warnings of being *like* POA. Though weight management efficacy levels might differ across individuals, generally people believe that weight is controllable (Black et al., 2014; Blaine & McElroy, 2002; Tischner & Malson, 2012). Despite being a misconception, receivers are likely to have some level of confidence that they can always appropriately manage their weight to not be like a POA in the future. They should be confident in managing, rather than denying, any fear stimulated by peril messages, following the advice of parents to stay away from and/or not be like POA. Thus, individuals receiving messages with peril cues will be more likely to also endorse weight stigma attitudes.

Responsibility cues and weight stigma attitudes. It is a common misperception that weight and size is completely controllable (Blaine & McElroy, 2002; Puhl & Brownell, 2003; Tischner & Malson, 2012; Wright & Dean, 2007). Due to this misperception, weight stigmatized people are blamed for condition onset (e.g., weight gain) and offset (e.g., weight loss) (Arroyo & Andersen, 2017; Black et al., 2014). Thus, it is easy for people holding views of weight controllability to also believe that POA *must* be weak, lazy, and/or irresponsible. Messages that reinforce these common stereotypes will also teach and reinforce their children's views about the ability to control one's body and appearance.

Responsibility cues are very likely to encourage weight stigma attitudes, due to the connection between blame and aggressive stigmatization. Prior research suggests that there is a high correlation between individuals' blame for weight/size and dislike of overweight people (Jaffe & Worobey, 2006). Additionally, people will sanction others more harshly who engage in immoral actions and attitudes like weakness and laziness

(Smith, 2007a). Therefore, when parents communicate these attitudes through responsibility cues, individuals are likely to learn and internalize similar stigmatizing attitudes about POA. As such, being taught to blame people for their weight and size (via responsibility cues) will predict to individuals' weight stigma attitudes. Considering the above, the following hypothesis is advanced:

> **Hypothesis 1:** Stigma cues in memorable messages are positively related to individuals' weight stigma attitudes, such that mark, label, peril, and responsibility cues will positively relate to individuals' weight stigma attitudes.

Weight Anxiety

Weight stigma messages are predicted to be associated with individuals' weight-related concerns about their own bodies, specifically weight anxiety and fear of fat. The present section will discuss weight anxiety, or present-oriented concerns about weight (Tiggeman & McGill, 2004). There is research guiding hypotheses with respect to mark and label cues only; thus, only these relationships will be considered.

Though there is likely a relationship between weight anxiety and mark and label cues, it is unclear as to the precise nature of these relationships. The directionality of association with weight anxiety depends on the theoretical approach guiding hypotheses, namely social identity theory (Brown, 2000; Tajfel & Turner, 1979; Turner, 2010) and self-objectification theory (Fredrickson & Roberts, 1997). These theories offer contradictory hypotheses when predicting weight anxiety. Social identity theory would suggest that individuals will attempt to maintain their position in a positive, elevated social group (Brown, 2000; Tajfel, 2010). When parents transmit weight stigma messages about POA to their children, it reinforces their positive weight identity and likely

decreases their concerns about their current appearance. Stigma research supports this: Smith (2007a) argues that individuals transmit stigma messages to separate and reinforce group differences between normal (positive) and deviant (negative) social groups. As such, the tenants of the MSC and social identity theory would suggest that parents weight stigma communication about POA would reinforce positive social identities and protect their children.

Prior research on weight communication and self-objectification would suggest that people who hear weight stigma messages are more likely to experience more weight anxiety due to increased salience about weight and appearance. Self-objectification theory states that individuals, particularly women, are taught to consider their bodies as objects separate from the "self" (Fredrickson & Roberts, 1997; McKinley & Hyde, 1996). Viewing and appraising one's body as an object is related to a multitude of negative weight-related attitudes and outcomes (Grabe et al., 2007; Lindberg et al., 2007; McKinley, 1999). Further, negative weight communication, as a reflection of objectification, has shown to predict poor weight-related outcomes such as disordered eating behaviors and poor psychological well-being (Arroyo & Andersen, 2016a; Arroyo et al., 2017; McKinley, 1999; Puhl & Latner, 2007; Wertheim et al., 2002). Parent-child weight stigma communication could be another method by which individuals learn to self-objectify and be concerned with their weight and appearance. If so, it is likely that hearing parents' stigmatizing comments will be associated with more weight anxiety.

The nature of weight stigma communication lends enough similarity to body talk that this study needs to account for predictions set forth from the body image and body talk literature. Instead of choosing one theory. However, mark and label cues align with

different theories, such that mark cues are likely to promote objectification and that labeling is likely to support social identity predictions for individuals' weight anxiety (expanded on below).

Mark and weight anxiety. POA-targeted mark cues should positively relate to individuals' weight anxiety. Mark cues bring attention to physical appearance and relates it to be as somewhat distinct from the person (Smith, 2007a, 2007b). This suggests that people are objectifying others' bodies when transmitting messages with mark cues, or even learning to do so when hearing such mark cues. People are socialized to practice body objectification (Fredrickson & Roberts, 1997; McKinley & Hyde, 1996) through a variety of channels, a practice that is carried across contexts and bodies and not limited to only deviant bodies. Engaging in body surveillance and critique of others is likely to carry over into individuals objectifying their own bodies, and consequently experiencing more weight anxiety (Lindberg et al., 2007). Self-objectification and critique are related to increased body-related concerns (Arroyo & Andersen, 2016a; Jaffe & Worobey, 2006). Considering this, mark cues are closely tied to practices of objectification and so are likely to positively relate to individuals' weight anxiety.

Label and weight anxiety. In contrast, label cues are conceptually more in line with social identity theory predictions, since they inherently separate people into good and deviant groups (Smith, 2007a), or non-stigmatized people of average weight appearance and POA. This distinction in social groups is likely to protect non-stigmatized people from experiencing anxiety about their own current weight and appearance. Whereas mark cues might make weight more salient, labeling encourages individuals to consider weight group associations (e.g., underweight, average weight, overweight

appearance). Individuals receiving label cues will learn and be aware of weight group differences, as well as use memorable messages as a touchstone to remind them of these group differences.

Understanding and remembering group differences should help to protect individuals, as intended by stigma communication. Since they are consistent with societal norms and ideals, people with average weight appearance are positioned within a higher status weight group compared to POA. As stigmatized individuals, POA are relegated to lower status weight identity groups. Thus, when individuals who hear stigmatizing talk labeling POA (e.g., as overweight, fat), they are also receiving a signal that they do not have the negative POA weight identity. Holding a positive group membership then promotes and reinforces their positive self-views and sense of self (Hogg, 2000; Tajfel & Turner, 1986), so that individuals positioned in positive social groups are protected to some extent. Moreover, non-stigmatized individuals should use memorable messages as teachable moments and points of comparison to reinforce their own current positive/non-stigmatized group affiliation in the moment (Barge & Schlueter, 2004; Brown, 2000; Knapp et al., 1981). Label cues then should teach individuals to be less concerned with their own bodies since they are already hold a positive weight identity. Being securely fitted in this weight identity group should protect them from anxiety about their weight-related appearance and group standing. Thus, label cues will be negatively associated with individuals' weight anxiety and the following is predicted:

Hypothesis 2: Stigma cues will be associated with weight anxiety, such that:

H2a: Mark cues will positively relate to individuals' weight anxiety.

H2b: Label cues will negatively relate to individuals' weight anxiety.

Fear of Fat

Though providing contradictory predictions for weight anxiety, objectification theory and social identity theory are in line when predicting individuals' fear of fat. Fear of fat is the future-oriented concern about weight, or one's anxiety about gaining weight or having overweight appearance in the future (Chrisler, 2012; Fahs & Swank, 2017). It is likely the hearing weight stigma messages generally will predict increased fear of fat: One's positive social identity, as non-stigmatized people, might protect them from present-oriented body concerns (Hogg & Reid, 2006; Hogg et al., 1995; Tajfel, 2010), but it cannot guard against concerns about an uncertain future. Weight identity is somewhat fluid (Granberg, 2011), and weight-related appearance can change due to a variety of factors (Maes et al., 1997). As a result, non-stigmatized individuals who are unconcerned with their current appearance may still experience anxiety about the possibility of having overweight appearance and being stigmatized in the future.

In addition, individuals who are taught to objectify their bodies are more likely to engage in body surveillance and hold appearance-related concerns throughout their lives (Arroyo & Andersen, 2016a; Becker et al., 2013; Bennett & Stevens, 1996; McKinley, 1999). And while present- and future-oriented concerns about weight are likely to correspond, individuals who are not currently anxious about their appearance may still worry about their appearance in the future. Levitt (2003) states that individuals' fear of fat is connected to society's push for thinness (as beauty) and warnings against *becoming* fat, particularly to avoid declining social status. Thus, though satisfied in the present, hearing weight stigma messages will make weight-related appearance and, consequently,

increase the saliency of considering that one can lose their "normal" non-stigmatized standing in the future.

Cues are likely to teach children to engage in and form different appraisals of their bodies, as well as their perceptions of their ability to stave off body change and the potential downward mobility in weight group identity. Mark, label, and peril cues all offer concerns about weight to individuals, particularly for their future selves, that could promote a heightened fear of fat. Responsibility, however, offers a – somewhat skewed – view that individuals' weight status and social identity is under one's control, decreasing one's anxiety about becoming overweight in the future. These predictions are further expanded upon below.

Mark and fear of fat. Mark cues are likely to be related to individuals' fear of fat. As stated, messages about individuals' physical attributes (i.e., mark) make one's weight-related appearance salient. Individuals who more regularly engage in self-appraisals are more likely to experience more negative weight-related perceptions (Lindberg et al., 2007). People are overtly evaluating *others*, rather than oneself, in the context of weight stigma; however, practicing other-oriented evaluations (of POA) could make weight salient generally and increase one's own body-related concerns more specifically.

Further, hearing mark cues can affect anxiety due to a lack of understanding about how to manage one's weight-related appearance– conceptually speaking, marks only tell what, not why, it is deviant (Smith, 2007a). These cues focus attention on bodies and body parts but offers neither information on how to manage appearance nor one's physical health. Thus, mark cues offer information and expresses concern about the

"problem" or threat, but individuals are left with no way to reduce their anxiety about the future. According to uncertainty reduction theory (Berger, 1986; Berger & Calabrese, 1967), individuals require information to reduce uncertainty and anxiety; however, it is not possible from just mark cues. Considering this, mark cues about POA are likely working as a means of promoting objectification and concerns about future-related appearance (i.e., fear of fat).

Label and fear of fat. Similarly, label cues about POA offer no means by which to curb one's anxiety about future weight and appearance. Positive self-labeling may offer protection to negative outcomes in the present (Blascovich et al., 2000; Brown, 2000; Hogg et al., 1995; Tajfel, 2010), but this protection may not extend to individuals' weight-related concerns for their future selves. It might be heightened in fact, since they are provided with examples of what could happen when one's positive weight group standing changes. In comparison to other relatively fixed identities (e.g., gender, race), weight identity is somewhat fluid. Individuals can experience changes to body shape and size, and so they can more easily shift between various weight groups (Granberg, 2011; Rice, 2007). This means that although individuals might enjoy positive weight-group associations in the present, it is possible that body changes in the future could result in them taking on the POA identity and label. This fluidity in status might provoke concern or anxiety about the future. Though individuals may feel secure with their weight-related appearance and identity in the present, hearing POA-targeted label cues may increase anxiety about their ability to maintain a positive weight identity in the future (fear of fat).

Peril and fear of fat. Peril cues communicate perceived threats from stigmatized individuals because of inherent physical, moral, and/or social threat(s) (Smith, 2007a).

Hearing peril-based stigma messages prompts individuals to be on their guard (Smith, 2007a, 2007b), which may extend to fear of *becoming* like stigmatized others and sharing in the same negative social position (Brown, 2000; Hunger et al., 2015). For weight stigma, peril cues would teach individuals to be fearful of having overweight appearance in the future (i.e., experiencing fear of fat). Further, increasing one's anxiety and fear about stigmatized attributes and people, as with peril cues, denotes them as a threat (Smith, 2007a). Individuals faced with threats but have little self-efficacy to manage a threat are likely to experience maladaptive outcomes (So, 2013; Witte, 1992). Memorable messages are often used as touchstone memories by which people will learn and compare events in the future to ensure they are acting appropriately; if this is the case, individuals learn that they should be wary of POA and weight gain but are not given information about how to do this. They may be able to avoid POA, but not know how to avoid gaining overweight appearance. As such, they could experience more anxiety about the threat of weight gain and becoming stigmatized in the future.

Responsibility and fear of fat. In contrast, responsibility cues about POA should predict less anxiety about one's potential weight gain in the future (i.e., fear of fat). Responsibility cues note that individuals have control over their state (Smith, 2007a, 2007b), offering a sense of self-efficacy to avoid or get rid of a stigmatized attribute. One's efficacy is related to their sense of control over a situation or behavior, and when perceived efficacy is high, individuals are less likely to feel anxious about completing a behavior or managing a threat (Bandura, 1977; Witte, 1992). Further, information about how to manage weight-related appearance should reduce uncertainty and consequent anxiety about experience body changes in the future (Berger, 1986; Berger & Calabrese,

1967). Even if this information is false or based on stereotypes, people can still feel in control over their weight and so experience less anxiety over the potential for weight gain and stigmatization in the future. Individuals who believe weight-related appearance is entirely controllable should feel more efficacious in their weight management abilities. Thus, recalling responsibility cues should relate to less anxiety about having overweight/obese appearance in the future:

Hypothesis 3: Stigma cues are associated with fear of fat, such that:

H3a: Mark, label, and peril cues are positively related to individuals' fear of fat.

H3b: Responsibility cues are negatively related to individuals' fear of fat.

Weight Control Behaviors

It is also possible that parents' weight stigma messages could influence individuals' weight control behaviors (i.e., behaviors in which the goal is to purposely reduce size, alter shape, and/or prevent weight gain; Williams et al., 2007), specifically regarding their rate of restrictive eating and exercise behaviors. Investigation has shown that negative and dysfunctional communication (e.g., parent-child enmeshment, destructive conflict, weight talk) significantly heightens the risk of disordered and restrictive eating behaviors (e.g., bulimic symptoms, extreme dieting behaviors) (Arroyo et al., 2017; Hunger et al., 2015; Killian, 1994; Lewis et al., 2011). This could partly be attributed to heightened self-objectification, shame, and the need for control. Similar associations have been demonstrated between weight stigma and eating behaviors, such that people are more likely to engage in unhealthy eating behaviors after encountering negative weight stigma in the media and interpersonal interactions, presumably as a

method to cope (Hunger et al., 2015; Lewis et al., 2011; Schvey et al., 2013). Weight stigma messages may teach individuals to view bodies—their own and others'—as objects to be continuously scrutinized or controlled as a method of coping.

Similarly, hearing weight stigma messages could relate to individuals' exercise behavior. Prior research suggests that POA are less likely to engage in exercise behavior after experiencing weight stigma victimization (Hunger et al., 2015; Puhl & Heuer, 2009, 2010; Tomiyama, 2014). Additionally, weight anxiety and weight talk are related to individuals' avoidance of exercise (Atalay & Gencoz, 2008; Hunger et al., 2015; Koca & Asci, 2006; Lantz et al., 1997). It is possible that parents' weight stigma messages teach individuals to make and be afraid of judgments about weight-related appearance, and that this focus on appearance could then detract from attending to physical health goals (e.g., lowering cholesterol levels, increasing strength). Moreover, if weight stigma messages relate to more weight anxiety and how others might evaluate them, it could also predict lower frequency of exercise behavior. Socializing individuals to be concerned with weight-related appearance through stigma communication would likely predict restrictive eating and exercise behaviors in adulthood, whereas security about weight group status and decreased security will also relate to increased exercise behavior.

Mark and weight control behaviors. Parents' mark cues should be associated with their adult children's restrictive eating and exercise behaviors. Mark cues highlight the "flawed" physical attributes of POA (Smith, 2007a), and discussions about others' bodies (e.g., overall size, thighs) convey that it is normal to objectify and critique (POA's) bodies and so reinforces the importance of physical appearance in society. Prior research has shown that parents' negative weight communication and children's body

surveillance is associated with children's disordered eating attitudes and restrictive behaviors (Arroyo et al., 2017; Cooley et al., 2008; Francis & Birch, 2005). Thus, teaching children to surveil bodies via weight stigma communication should relate to increased restrictive eating behaviors. Additionally, mark cues may relate to rates of exercise. Though research suggests that being stigmatized predicts lower rates of exercise (Puhl & Heuer, 2009, 2010; Tomiyama, 2014), this has largely been attributed to POA (as targets of stigma) being disheartened and fearful to exercise in public. Since non-stigmatized individuals are less likely to be victimized, they would be at lower risk for the same outcomes. Thus, mark cues should be positively related to restrictive eating and exercise behavior.

Peril and restrictive eating. Peril cues are likely to be associated with weight control behaviors. The fear of the dangers of weight gain and potential overweight/obese appearance will likely spur individuals to engage in weight control behaviors. In this context, the concern may not be one's appearance *now* but rather what it can become in the future. When facing fear and threat, individuals will act in ways that will lessen or remove the threat and cope with fear (So, 2013; Witte, 1992); in this context, this would be the threat of having overweight appearance in the future. Because peril cues do not offer information on how to manage this threat, it is possible that people will manage their fear in maladaptive ways. One way that individuals engage in maladaptive control and coping is through restrictive eating behaviors (Abrantes et al., 2006; Killian, 1994; Puhl et al., 2017). Peril cues that prompt stigma-related fear may motivate individuals to engage in restrictive eating to avoid body change and weight stigma. Thus, peril cues should be positively related to restrictive eating.

Responsibility and exercise behavior. In contrast, responsibility cues inherently offer a rationalization (though erroneous) that individuals' weight status is completely controllable. The perception that weight is controllable may offer a sense of efficacy over their weight-related appearance and engaging in weight control behaviors encourage individuals to maintain their appearance and weight group status. Despite evidence to the contrary, individuals often believe that weight is controllable, and that people are responsible for their own size and appearance (Black et al., 2014; Ebneter et al., 2011; Puhl & Brownell, 2003; Tischner & Malson, 2012). As above, individuals will act to remove a threat (So, 2013; Witte, 1992), and this misconception offers a way for people to feel efficacious about managing their weight group status. To manage the threat, individuals may consider views that exercise will allow them to manage their weight-related appearance. Thus, responsibility cues should positively relate to exercise behavior. The following hypothesis is advanced:

Hypothesis 4: Stigma cues will be associated with weight control behaviors, such that:

H4a: Mark cues are positively related to restrictive eating and exercise behavior.

H4b: Peril cues are positively related to restrictive eating behavior.

H4c: Responsibility cues are positively related to exercise behavior.

Cue Totals and Weight-related Outcomes

Though previous predictions indicate that cues can operate independently, multiple cues may be exhibited in the same message and/or may be too interconnected to be full separable (Smith, 2007b, 2014). It is important to consider the possible effects of

multiple cue types on weight-related attitudes and behaviors. Research would suggest that greater elaboration on a thought is likely to show more engagement and yield a persuasive effect (Petty & Cacioppo, 1981; Shen et al., 2017). Though not quite the same elaboration, hearing messages with multiple cues might also stimulate more cognitive appraisal about weight, appearance, and weight stigma, which could yield greater negative outcomes. Individuals will engage in greater elaboration when they are motivated and/or when messages are personally relevant (Mongeau & Stiff, 1993; Petty & Cacioppo, 1981); as warnings to self and others, people are motivated to attend to and elaborate on (weight) stigma messages. Stigmatizing others is a way to socially bond with others (Smith, 2012), so individuals are likely to be motivated to listen to and process weight stigma messages. The number of cues increases the ideas about weight stigma that must be processed, highlighting the relevance and motivation for receivers to attend to such messages. Memorable messages have been processed and catalogued as an important (Barge & Schlueter, 2004; Knapp et al., 1981), so memorable messages with multiple stigma cues could prompt greater in-depth appraisal and heighten outcomes. However, there is little guidance from the literature about the additive effects on weight-related attitudes and behaviors, so this research question is advanced:

> ***Research Question 3*:** What is the relationship between stigma cue amount and individuals' weight-related attitudes and behaviors?

CHAPTER 3

METHOD

Participants and Procedure

Data collection procedure. Participants were recruited using Amazon Mechanical Turk (M-Turk), an online crowdsourcing system in which individuals may sign up and participate in survey research for monetary compensation. Information about the study was posted on Amazon's M-Turk research website, including a description of the study, required qualifications to participate, and the compensation for completely fulfilling the task (information listed in Appendix A). M-Turk members or "workers" could determine if they were eligible and willing to participate in the study. Considering this, M-Turk members had to show that they were above the age of 18, live in the United States, and have a M-Turk research approval rate of 98% -- a score indicating that they have a history of higher caliber responses. People of all genders and races/ethnicities were welcome to participate. If workers fulfilled the criteria and wished to participate, they were directed to the consent form and questionnaire. The study took approximately 12-15 minutes to complete, and participants were compensated $0.75 if they completed the study (following the criteria listed in the description). Measures were limited to reflect the compensation amount and to prevent undue burden on workers.

Participants. Two hundred and three participants were recruited through M-Turk to take the study; however, several participants did not appropriately complete the survey and/or offered irrelevant memorable messages. After removing these cases, the final

sample for qualitative analysis consisted of 187 memorable messages. Two messages were removed from this sample for quantitative analysis, as they were positively valenced and not stigma messages (quantitative sample: n = 185).

Of this final sample (n = 187), 56.2% participants reported to be female, 42.2% as male, and 1.6% as other (with participants providing in an open-ended response "FTM" and "Trans Male" as their self-identified gender). The mean age was 37.8 (SD = 12.49; Range: 18-74), and a majority of the sample reported being White/Caucasian (81.6%; Asian/Asian American: 8.1%, Black/African American: 4.9%, Hispanic/Latino: 3.2%, Native American: 0.5%, Other: 1.6%). Participants were also asked to report their height and weight to calculate their BMI according to the CDC formula (*703 x weight/[height(in) x height(in)]*: Centers for Disease Control and Prevention, 2017). The majority of individuals reported both weight and height (n = 183, 98%). A larger proportion of the sample were categorized as "normal or healthy weight" (48.6%; underweight: 2.7%, overweight: 25.7%, obese: 23.0%), but the mean BMI score fell in the "overweight" category (M = 27.41, SD = 7.88).

Measures

For the full list of measures and items below, see Appendix A. For the coding manual used for the content analysis of memorable weight stigma messages, see Appendix B.

Memorable (Weight Stigma) Messages

Following previous research on memorable messages (e.g., Barge & Schlueter, 2004; Reno & McNamee, 2015), a definition of memorable messages was offered to participants, stating:

> "It is common for people to look back on their childhood and recall something their parent(s) said to them that had an important effect on their life. Our parents have communicated to us a lot of messages, but the interest here is on those messages we vividly remember because they seemed to have a sizable impact on how we behave, think, and believe about ourselves today. We consider these "memorable messages" – which we define as verbal statements that have been told to you that you may remember for a long period of time or has stuck with you in some way. These statements may also have influenced your life in some way."

Then, similar to Thompson and Zaitchik (2012), participants were asked to give details about the memorable message (message and relevant context) and impact from hearing these messages. Specifically, participants were asked,

> "First, we would like you to recall a memorable message you received from your parent(s) in which they NEGATIVELY discussed AN OVERWEIGHT or OBESE PERSON'S body, weight, shape, and/or size. Please think of ONE SPECIFIC TIME before you begin. When you have identified a specific time, please move on to the next set of questions.
>
> "(*Question 1*) Now that you have had time to think about this time more in-depth, we would like you to tell us about it. Please describe the specific message/interaction when your parent(s) NEGATIVELY discussed AN OVERWEIGHT OR OBESE person's body, weight, shape, and/or size. This message cannot be about you. Provide as much detail about the message or interaction as possible so that we can better understand your experience. Don't worry if you can't remember everything word for word.
>
> "(*Question 2*) Next, please briefly describe how this influenced you (e.g., attitudes, behaviors)."

Since this study is focused on message content, only Question 1 responses were relevant to and included in the content analysis coding.

Weight Stigma Attitudes

Weight stigma attitudes assessed using the Revised Anti-Fat Attitudes Questionnaire (AFA; Crandall, 1994), which measures individuals' weight-related bias towards people who are considered overweight/obese. To limit participant fatigue, a shortened version of the scale was created and used. This was done by removing several duplicate items, reducing the scale from twenty-four (24) items to fourteen (14) items

(e.g., “If I were an employer looking to hire, I would avoid hiring an overweight person.”). Participants responded to the scale items using a 5-pt Likert scale (1= *Strongly Disagree*, 5 = *Strongly Agree*). Scores were averaged to reflect individuals’ overall level of weight bias, such that higher scores reflect higher levels of weight bias (M = 2.52, SD = 0.69, α = 0.86). The revised scale demonstrated high reliability and has been shown to be a valid measure of weight-related prejudice (Ruggs et al., 2010). The AFAS (M = 3.02, SD = 0.77, α = 0.79) and DFPS (M = 2.03, SD = 0.78, α = 0.84) as separate factors also yielded acceptable reliability.

Weight Anxiety

Weight anxiety was measured using the Social Physique Anxiety Scale (SPAS; Hart et al., 1989). Participants responded to 12 items (e.g., “Unattractive features of my physique or figure make me nervous in certain social settings”) assessing to what extent they feel nervous about their bodies and physical imperfections. Participants used a 5-point Likert scale (1-5: 1 = *Not at all characteristic of me*; 5 = *Extremely characteristic of me*) to respond to each item; scores were then averaged to represent participants’ general weight anxiety, with higher scores reflecting greater weight anxiety (M = 3.23, SD = 0.98, α = 0.92). The Social Physique Anxiety Scale (SPAS) has demonstrated good construct and criterion validity, with prior research showing the scale is reliable (inter-item: α = .90; test-retest: α = .82; Hart et al., 1989).

Fear of Fat

Individuals fear and anxiety about gaining weight in the future was measured using Goldfarb and colleagues’ (1985) Fear of Fat Scale. The original ten (10) item scale was shortened to five (5) items for this study to ensure good conceptual fit; as such, items

were only retained if they focused on individuals' future-oriented cognitions (e.g., "Becoming fat would be the worst thing that could happen to me.") in accordance with the conceptual definition of "fear of fat." Individuals used a 4-point Likert type scale (1= *very untrue*, 4= *very true*) to respond to each item. Responses were averaged to reflect an overall score, with higher scores reflecting greater fear and anxiety of becoming fat in the future (M = 2.25, SD = 0.80, α = 0.83). Goldfarb's Fear of Fat Scale has shown to have good discriminant and convergent validity (Goldfarb et al., 1985; Rushford, 2006), internal consistency (Goldfarb et al., 1985), test-retest reliability (r = 0.88, Corcoran & Fischer, 1987), and is a valid and reliable measure across cultures and genders (α = 0.88, Ambwani et al., 2008; α = 0.85, Goldfarb et al., 1985).

Restrictive Eating Behaviors

The degree to which individuals engage in restrictive eating behaviors was assessed using the dieting and awareness of food contents subscales of the Eating Attitudes Test-16 (Ocker et al., 2007), which was revised from Garner et al.'s (1982) Eating Attitudes Test-26. Dieting and awareness of food contents subscales from the EAT-16 were chosen due to the focus on awareness, restriction, and avoidance of food, which well embody the idea of restrictive eating behaviors. Using a 5-point Likert scale (1= *Never;* 5 = *Always*), participants responded to five (5) items assessing dieting (e.g., "I feel uncomfortable after eating sweets") and four (4) items measuring awareness of food contents (e.g., "I particularly avoid foods with high carbohydrate content"). Responses were averaged together to denote an overall score of restrictive eating behaviors, with higher scores denoting higher rates of restrictive eating (M = 2.69, SD = 0.87, α = 0.87). Although the EAT-26 is more widely used, some have called into question the validity of

the measure and proposed revised measures (e.g., EAT-21, EAT-20; EAT-16; Lane et al., 2004; Mintz & O'Halloran, 2000; Ocker et al., 2007). Preliminary research using EAT-16 has demonstrated that the scale overall has fair construct validity and metric invariance across samples, as well as established acceptable levels of inter-item reliability for each subscale (dieting: M = 2.66, SD = 0.92, α = 0.81; awareness of food contents: M = 2.77, SD = 0.96, α = 0.78) (Ocker et al., 2007).

Exercise Behavior

The Health Practices Scale's Exercise Subscale (Jackson, 2006) was used to gauge participants' exercise behavior. Individuals responded to eleven (11) items (e.g., "How regularly do you exercise vigorously") using a 5-point Likert scale (1 = *Never*, 5 = *Always*). Responses were averaged to reflect participants' general exercise behavior, with higher scores representing a greater frequency of engaging in exercise (M = 3.08, SD = 0.93, α = 0.94). This scale was created from other previous validated health measures, and the exercise subscale has demonstrated very good inter-item reliability in prior research (α = 0.92) (Jackson, 2006).

Descriptive Information

Before participants reported on the memorable message(s), they responded to questions about the memorable message, including: message target (following Reno & McNamee, 2015; i.e., "Who was being discussed?"), gender of message target (i.e., "Based on your knowledge, what was the gender of person being discussed?"), message sender (i.e., "Who/which parent said this?"), and interpersonal context of the interaction (i.e., "Who was with you when this was said?"). These were used to prime the

participant, prompt them to think about the interaction with more depth and ensure that they were thinking of one specific instance.

After writing out the memorable message in their own words, participants responded to a series of questions about the interaction, including: *message confirmation* (following Reno & McNamee, 2015: "What was your response to your parent(s) when hearing this?"), *stigma frequency* (i.e., frequency of hearing parents say similar *statements about others* to or in front of the participant: "How often did you hear your parents say similar statements about other people?"), and *stigma magnitude* (i.e., "To what extent would classify this statement as stigmatizing?").[4] Message confirmation is discussed below. Using a 5-point Likert scale to report stigma frequency (1 = *Never,* 5 = *Always*) and stigma magnitude (1 = *Slightly stigmatizing,* 5 = *Extremely stigmatizing*), participants reported that they recalled parents saying similar statements (M = 3.02, SD = 0.96) and perceptions regarding how stigmatizing they believed the memorable message/interaction was (M = 3.26, SD = 1.20).

These responses were asked to gain a better understanding about the context surrounding the memorable message. Prior theorizing and research would suggest that the individuals are likely to model behaviors and attitudes on 1) same gender parent (Bandura, 2001), 2) repetition of information might habituate the views and related perceptual and behavioral outcomes, and 3) frequently being the target of stigma will independently predict negative outcomes (e.g., Bucchianeri et al., 2013; Hunger et al., 2015; Phelan et al., 2015; Puhl & Heuer, 2010; Puhl & King, 2013). Cataloging this information allows us to better understand the process and potential impact of these and similar messages on receivers.

Coding Process for Memorable Weight Stigma Messages

Past studies have coded memorable messages for factors like the structure, organization, content, and context of message transmission (e.g., Knapp et al., 1981); however, this study is concerned with message content and so it deviates a bit from traditional methods of memorable message analysis. This procedure instead is focused on coding stigma message cues within memorable message content, drawing on Smith's (2007a) conceptual definitions of stigma cues and procedures from Smith's (2007b) and Shen et al.'s (2017) content analysis coding process.

Participants' responses for "memorable messages" were first checked to ensure that responses were relevant to the study, coding as relevant or irrelevant. Messages were coded as relevant if they were focused on perceived weight, appearance, body size, body shape, eating, and exercise (or topics that could be relevant to discussions of weight/weight stigma). Memorable messages not related to weight/weight stigma were marked as irrelevant and removed from data analysis. After preliminary checks, there were 185 participant responses left to code for the presence of stigma cues. Each participant reported one memorable message, and the memorable message was treated as the unit of analysis. Participants reported memorable messages of 54 words on average (M = 54.4, *med.* = 51, *min.* = 6, *max.* = 271).

Two independent coders (one primary, one reliability) reviewed the memorable messages to identify the stigma cues embedded in each message, so that the number of each stigma cue type could range from 0+. Further, there could be several of the same type of cue in the same message (e.g., two mark cues) and/or multiple different cues in the same message (e.g., mark and responsibility). To clarify, this could mean that one

message could have the following stigma cue composition: 1) mark cues = 2, 2) label cues = 0, 3) peril cues = 1, and 4) responsibility cues = 0.

The coders reviewed messages multiple times to assess the frequency of cue individually. The reliability coder reviewed roughly 20% of the messages, resulting in an acceptable reliability between coders (reported below).

The remaining messages were then coded (by the primary coder) to identify the presence of four types of stigma cues (Smith, 2007a, 2007b). As noted, a mark cue focuses one's attention on a physical attribute and could incorporate feelings of disgust and desires to reduce or conceal the physical attribute (Smith, 2007a) (e.g., "*it's disgusting when their love handles show*"). A label cue focuses attention on the person's association with a particular group due to the attribute (Smith, 2007a), often referring to the attribute *as* the person and devaluing them for their group association (e.g., "fat people should not eat in public" reflects "us" versus "them" separation). A mark cue is centered on the attribute and not the person, whereas a label cue relates the person as the attribute itself. This was also an important distinction used to clarify the two cues during the coding process. Following Koo and Li (2016), a two-random effects model with an absolute agreement definition was used to check intercoder reliability. Using this method with 95% confidence intervals, data suggests that the intercoder reliability was good and moderate for coding mark cues ($ICC = 0.83$, $CI = 0.70 – 0.91$, $df = 1, 39$, $p = .000$) and label cues ($ICC = 0.71$, $CI = 0.52 – 0.83$, $df = 1, 39$, $p = .000$) in memorable weight stigma messages.

Peril cues relate that the stigmatized person/people are in some way dangerous to or threaten non-stigmatized people (Smith, 2007a; 2007b)[5]. In the case of weight stigma,

it is also likely that many of the messages will reflect the danger of "being like" the stigmatized person and/or negative indirect ramifications on loved ones because of the person's weight or size. The concept of peril is broadened in this case to include such indirect peril and warnings against overweight and obesity, so that the results will be better in line with the types of warning and danger-related messages associated with weight stigma. Using the same method as above, evidence suggests that there was good intercoder reliability (*ICC* = 0.83, *CI* = 0.71 – 0.91, *df* = 1, 39, *p* = .000).

Responsibility cues reflect views that message targets are somewhat or fully in control of their stigmatized status (Smith, 2007a). Weight is commonly believed to be controllable (Black et al., 2014; Puhl & Brownell, 2003), and non-stigmatized people are likely to blame weight stigmatized individuals for the onset and offset of condition (Black et al., 2014; Holland et al., 2015). As such, it is highly likely that parental messages will contain responsibility cues reflecting blame for weight gain and/or lack of weight loss. Analysis revealed good intercoder reliability using intraclass correlations (*ICC* = 0.88, *CI* = 0.78 – 0.93, *df* = 1, 39, *p* = .000). Once messages were coded for cue types, messages were checked again to see if any did not have stigma cues embedded; two positively framed messages without stigma cues were removed, but all remaining messages had at least one stigma cue present. Since cue total is used in analysis, intercoder reliability was also checked for cue total (sum of all stigma cues present in memorable messages). Analysis revealed that there was sufficient agreement on the total number of cues present in stigma messages (*ICC* = 0.84, *CI* = 0.71 – 0.92, *df* = 1, 39, *p* = .000).

CHAPTER 4

QUALITATIVE ANALYSIS

One major aim of this study was to investigate the types of weight stigma messages that individuals recall their parents (as memorable messages) saying to or in front of them (Research Question 1). This question was framed to include any stigmatizing message about POA to determine the breadth of message types that parents may transmit. The variety of emergent patterns (or "themes") in the data need to be identified and organized; to do this, a thematic analysis was conducted. Though sometimes considered a tool of analysis rather than a method (Boyatzis, 1998), Braun and Clarke (2006) argue that it is a valued method of analysis in its own right. It offers a flexible approach to data analysis in which patterns are discovered from a specified data set (Braun & Clarke, 2006, 2014). Thematic analysis has been widely used in research (Bradford et al., 2019; Braun & Clarke, 2014; Hickey et al., 2018; Okop et al., 2016), and has been an effective method of analysis to code and interpret parental messages about weight (Thompson & Zaitchik, 2012).

In thematic analysis, important statements and morals that convey meaning and appear in patterns (or "themes") across the data set are identified, codified, and organized (Braun & Clarke, 2006, 2014; Thompson & Zaitchik, 2012). Themes can be represented by a compilation of messages that reflect individuals' experiences and are connected by overarching patterns (Braun & Clarke, 2006). These patterns help to create "coherent narratives" about a given subject (Thompson & Zaitchik, 2012, p. 43); the focus was on

weight stigma in this study. There are no "size" requirements within a message or across the set to establish a theme, but patterns are emergent threads or themes that are prevalent and appear repeatedly in the data (Braun & Clarke, 2006). Ultimately, this is determined at the discretion of the researcher(s) following rigorous review and analysis. Themes in a data set are not necessarily those that are the most prominent but may also be those that best answer the research question(s) posed (Braun & Clarke, 2006). In this instance, one research question asking about the types of messages sent allows for a multitude of themes, which might be important due to the prevalence in the data or relevance to (weight) stigma. This study considered both the prevalence of themes in the data set, and then ordered the themes in terms of quantity of messages sorted into each category from most prevalent to least. If thematic categories were small but relevant, they were included (noted as minor themes).

Braun and Clarke (2006) argue that there are six phases of thematic analysis. In phase 1, researchers need to become familiar with the data, which could be done through transcribing or (re)reading messages. This could also include initial ideas for themes. Phases 2 and 3 focus on identifying codes and themes, such that researchers should review data, identifying interesting features in the data, and beginning to collate messages under various themes (Braun & Clarke, 2006). Organizing themes might be done several times to be thorough and refine results. Lastly, themes should be named and defined, and more compelling examples should be used to illustrate these patterns (Braun & Clarke, 2006).

In this study, an inductive method of thematic analysis was employed, whereby the analysis was influenced by the data content rather than a specific theory or coding

scheme. Following Braun and Clarke (2006), a rich description of the data set was attempted, so that researchers and readers might get a sense of the important patterns that were discovered throughout the entire data set; this is thought to be useful for formative research in particular. Moreover, much of the message organization generally took place at semantic level, or based on the message itself (e.g., "disgust" messages generally had the word disgust or something similar in the message). Generally, however, a broader view was taken and at times the apparent motivation was considered (e.g., "warning" messages demonstrated parents warning children, but individuals might not explicitly report it was a "warning"). As such, analysis included both semantic and latent themes, or those that reflect possible underlying assumptions and views (Braun & Clarke, 2006).

To answer Research Question 1, individuals were asked to recall and write about the (most) memorable message they heard from their parent(s) (including parental figures); these messages are used as the data set to be reviewed for thematic analysis. These messages (n = 187) were reviewed multiple times and sorted to identify relevant trends. Broader themes in the memorable weight stigma messages were identified; common trends within each theme were then noted to demonstrate the nuances in each thematic category and to better structure the results. The data were read through four times to become acquainted with participants' stories and to understand what themes or patterns of behavior that might show consistency across memorable messages. While reading, a list of possible patterns and themes were compiled. If categories seemed to overlap conceptually, they were again reviewed and merged into a broader theme with appropriate sub-categories. A more detailed review of the coding and analysis process is discussed below.

The author then conducted three rounds of analysis and message sorting to ensure categories were distinct and organized. In the first round of sorting, each message was sorted into one of the relevant categories listed. If a memorable message did not neatly fit, it momentarily remained unsorted until the end of the first round. At that point, the author reviewed the messages to identify whether it could be better sorted with unsorted other messages or if it would better fit in one of the already present thematic categories. Notably, most memorable messages fit into the proposed themes, with few exceptions.

In the second and third rounds of sorting, categories and subcategories were refined and organized. Categories were reviewed to make sure they were distinct and appropriately reflecting the broader theme. Each message was reviewed for their relationships with other messages within the category and with other messages in other categorical groupings. If categories, subcategories, or messages shared conceptual similarity, they were combined or resorted accordingly. Of note, though most categories remained, two subcategories were considered redundant and removed for a cleaner sorting and better overall conceptual fit. In the fourth round of analysis and sorting, the final list of thematic categories was determined.

CHAPTER 5

QUALITATIVE RESULTS

Research Question 1 was offered to guide the examination of parents' weight messages. Specifically, it aims to investigate and uncover the types of (negative) memorable weight messages about others (third parties) that individuals recall their parents transmitting. Eight broad themes emerged in the data (n = 187), listed in the order of prevalence: degrading remarks (59, 31.6%), warning and teaching (26, 14.0%), blame (25, 13.4%), physical standards (23, 12.3 %), comparisons and restrictions (19, 10.2%), social control (18, 9.6%), disgust and disbelief (13, 7.0%), and stereotypes (reinforcing and contradicting) (11, 6.0%). These were further sorted into subcategories and are discussed below (full list of categories and subcategories are presented in Table 1).

To provide some context for the participants, their reported gender, age, race/ethnicity, and their state of residence is listed with the memorable messages discussed. This is demographic information that is commonly surveyed to provide information on participants and their background; further, gender, age, and race/ethnicity affect weight-related perceptions and weight communication (Ambwani et al., 2008; Martz et al., 2009; McFarland & Petrie, 2012; Mustillo et al., 2013; Rguibi & Belahsen, 2006; Salk & Engeln-Maddox, 2012; Swami, 2015). Providing state of residence reflects the region of the country in which participants are currently living. Providing the location of residence conveys the regional diversity of the sample, which allows for the consideration of differences across the regions of the U.S.

Table 1. *Emergent Themes from Qualitative Analysis*

Themes		
Category Name	Sub-category	Distinctions within sub-category
Degrading remarks (31.6%)	1. Negative descriptions	1a. Specific descriptions 1b. General (unspecified) descriptions
	2. Humor and snide comments	2a. Specific jokes 2b. General (unspecified) jokes 2c. Snide comments
	3. Name-calling	3a. Fat-names 3b. Animal-names
Warning and teaching (14.0%)	1. Warnings	1a. Warnings about appearance 1b. Warnings about health 1c. Warnings about "weight"
	2. Teaching	2a. Personal outcomes 2b. Professional outcomes
Blame (13.4%)	1. General blame	
	2. Perceptions of self-control and eating behavior	2a. Maturity and appropriateness 2b. Public spaces
	3. Perceptions of laziness and exercise behavior	
	4. Blaming POA-targets' close others	
Physical standards (12.3%)	1. Standards for physical appearance	
	2. Standards for physical performance	2a. Concern for individuals' health 2b. Exacerbation of physical ailments 2c. Performance and professional responsibilities
Comparisons and restrictions (10.2%)	1. Comparisons	1a. Comparing target to self 1b. Comparing target to others
	2. Restrictions	

Social control (9.6%)	1. Control of public self-presentation	1a. Public self-presentation 1b. Self-presentation while dressing in "public" space 1c. Self-presentation while eating in a public space 1d. Public self-presentation reflecting on others
	2. Control of physical and social space	2a. Physical space 2b. Social space
Disgust and disbelief (7.0%)	1. Disgust	1a. Explicit (verbal) statements of disgust 1b. Implicit (nonverbal) expressions of disgust
	2. Disbelief	
Stereotypes (6.0%)	1. Projecting stereotypes and bias	1a. Connecting overweight status and negative behaviors 1b. Juxtaposition of overweight status and positive outcomes
	2. Addressing and contradicting stereotypes	

Degrading Remarks: Descriptions, Humor, and Name-calling

Nearly one-third of the memorable messages constituted *degrading remarks* (59 messages, 31.7%). This theme was further organized into three subcategories of 1) negative descriptions, 2) humor and 3) snide remarks, or name-calling. During analysis and sorting, these memorable messages were identified as one of these three subcategories and then connected under the umbrella term of degrading remarks. Firstly, negative descriptions, humor, and name-calling all seemed conceptually linked to direct definitions and labels. Direct definitions are communication that explicitly defines labels us and others and indicates what we are or should be (Brooks & Goldstein, 2001; Wood, 2013). Labels may broadly be defined as assigned names that enhance perceived group identity and collectiveness by emphasizing the attribute differences between normal and

deviant people (Smith, 2007a, 2007b). The three subcategories appear to be linked to each other. *Descriptions and name-calling* show some conceptual similarities, as they are similar to overt, negative labeling; *name-calling* and *humor and snide commentary* both appeared to demean and degrade POA-message targets (without other apparent motives as displayed in other categories).

Negative Descriptions

Thirteen (13) messages were identified as negative descriptions of POA. Parents' negative descriptions were messages that communicated to others that POA-message targets were negative and/or showed negative attributes. These remarks: 1) described people (or parts of people) as "fat", 2) noted how "large" or "big" targets were, and/or 3) generally commented on individuals' weight (as relating to their size).

Specific descriptions. Most negative descriptions overtly referred to people as being "fat" (7 messages), "large," and/or "big" (5 messages), discussing bodies generally or addressing specific body parts. These terms varied, but they all provided explicit description of POA bodies or body parts. At times, statements described the body overall, such as "*how large the woman was*" (Female, 35, White/Caucasian, Idaho). For instance, one woman remembered her father stating, "*that she was a big woman*" (Female, 23, White/Caucasian, Texas). In these negative description messages, participants reported explicit statements from parents, but these messages discussed POA-targets' bodies wholistically rather than noting specific parts. In contrast, other participants reported that their discussed deviant *parts* of bodies, making statements like, "…*how her feet were even fat…*" (Female, 35, White/Caucasian, Idaho). Considering all negative descriptions messages, POA may be criticized as having larger than "average" body parts (e.g., "*how*

her feet were even fat") and having the appearance of an overweight body overall (e.g., "*how large the woman was*").

Specific negative descriptions also seemed to vary in the treatment of weight as a concept, such that some suggested there is an established dichotomy of a person being "fat" or "not fat", while others indicated there are varying levels of "fat-ness." Evidence of fat-not fat dichotomy was demonstrated with parental statements like, "*Damn, she's fat!*" (Female, 26, White/Caucasian, California) and "*look at that big fat woman*" (Female, 52, White/Caucasian, Ohio). Messages like these indicated that a person—in this case the POA-target—was either fat or not-fat and did not acknowledge variety of shape or size in appearance outside of this. In contrast, parents' used qualifiers to describe "fat" and denote some variety in shape and size. This was evident in comments like "*how fat she was*" (Male, 36, White/Caucasian, Texas), "*he was so fat*" (Female, 26, Black/African American, Pennsylvania), and "*she's already too fat*" (Female, 44, 5, Ohio). Use of qualifiers could suggest that there are different perceptions about weight, what constitutes deviant weight and weight group associations.

General (unspecified) descriptions. At times, parents were reported to offer general descriptions or comments about POA-targets. General comments about weight (2 messages) were the least prevalent and were mere recollections that parents discussed POA-targets' weight and appearance (e.g., "*My mother and my aunt starting talking about her weight*"; Female, 58, White/Caucasian, New Jersey). It is possible that parents did make more specific statements, but that these were not fully remembered or reported. Despite the lack of specificity in description, it is apparent from these statements that

parents' statements equate POA's size to their "weight," a common misconception in U.S. culture.

The commonalities of these two types of statements are that speakers seem to separate themselves from POA-targets through these descriptions (e.g., *those* people are fat). This process of separation through communication is partially explained by social identity theory and stigma research: Individuals will increase social distance with those who deviate from their positive social group and its norms (Goffman, 1963; Hebl et al., 2000; Hogg et al., 1995). This is particularly relevant to non-stigmatized individuals, as they are motivated to remove themselves from stigmatized others for self-protection and to ensure proper group norms are protected and followed. In order to do this, individuals often rely on visual cues, in this case weight, to identify who does and does not belong to their social identity group. This variance in level of group association/deviance has been noted in research: Levine and colleagues (2005) found that those who were fans of opposing football (soccer) teams were still likely to associate with the rival fan over a non-football fan. It could be that people do see varying levels of deviance from their valued group identity; however, in this context, it seems that there is only deviance and no perceived similarity according to weight group. It would be important in future research to investigate how message framing of weight, dichotomous or categorical, might affect individuals' weight-related perceptions about self and others, as well as affect communication and support-giving behaviors between individuals with different weight-related appearances.

Parents who used negative descriptions seemed to explicitly depict targets with no other apparent motivation (e.g., warning children, teaching children). These descriptions

were, of course, degrading to people and were meant to convey that the POA-targets' overweight appearance 1) deviated from a perceived (thin) norm and 2) was negative. These simple, explicit descriptions reflected the categorization of individuals into different weight castes – at minimum, it communicated that there are deviant-overweight appearing and normal-non-overweight-appearing groups. Noting others' marks as a way to categorize them imposes barriers between people and identifies people as deviant (Goffman, 1963; Smith, 2007a). Interestingly, these degrading remarks still acknowledged targets as individuals/people (albeit ones with negative characteristics), whereas other forms of weight stigma messages completely stripped that humanity away (e.g., animal-names, discussed below). Thus, descriptions called attention to weight-related marks, but did not reduce people *to only* their bodies (as with other messages).

Humor and Snide Comments

Fifteen messages were categorized as *humor and snide commentary*, which took the form of 1) general (unspecified) jokes about POA-targets, 2) specific jokes, and 3) rude or snide remarks made about POA-targets. Most of these comments appeared to be made about POA-targets without their knowledge, but a few memorable messages were recalled as being about *and also directed to* POA-targets. General (unspecified) jokes in this sample could be an issue of recollection or reporting, such that participants could not recall or felt uncomfortable with reporting the statement in its entirety. These messages were still offered as memorable and impactful and so are included in the analysis and discussed below.

Specific jokes. Adult children recalled their parent(s) making specific jokes about POA-targets (5 messages). These jokes were used to criticize POA's size, appearance,

and functionality in spaces. Humor about size took the form of statements like: "*someone likes to go to town on cake*" (Male, 26, White/Caucasian, Massachusetts) and "*the news anchor looked like she had eaten another news anchor*" (Male, 23, White/Caucasian, Connecticut). Critiques about size were less explicit than specific negative descriptions (above); instead, parents used degrading stereotypes and references to POA's eating behaviors to relate their attitudes.

Parents' jokes were also made about POA bodies and how they fit or behaved in different spaces. POA-targets' bodies apparently had limited ability to operate within space, with parents making jokes such as: "[that she was] *too fat to come in our car with us because she would bust the wheels off*" (Male, 35, White/Caucasian, New Jersey) and "*if she gain any more weight, they are going to have to roll her into the house*" (Male, 57, White/Caucasian, Kansas). These messages tended to connect individuals' inability to function "properly" and/or imposition on or danger to others with their body size or shape. Despite the focus on functionality, these messages seemed to reflect that parents' issue with POA was their deviant *appearance* and used exaggerated (often outrageous) descriptions to be humorous and degrade POA-targets.

General (unspecified) jokes. Similar to the general negative descriptions above, some participants recalled that their parents made jokes about POA without specifying the details of those jokes (6 messages). Participants gave specifics on context (e.g., going up to a salad bar, leaving Walmart), but referred to the joke in general terms like "*whispering fat jokes*" (Male, 25, White/Caucasian, Illinois) and "*making fun of a random stranger's size*" (Male, 31, White/Caucasian, Idaho). Due to the data collection method, it is impossible to determine whether this was due to participant recall or their

reporting. The lack of message specificity could demonstrate that parents' degrading humor can still be memorable and impactful to their children even when specific details are missing. Future research should use real-time (in person, over the phone) interviews to probe these general statements further when encountered. Overall, parents' jokes were degrading to POA-targets, and seemed to offer some cover for parents to comfortably attack POA-targets under the guise of "just making a joke."

Snide comments. Along with humor, a few parents reportedly made more serious, snide comments about message targets (4 messages). As with joking, parents' snide comments also varied in specificity. Mostly snide comments appeared to be made as offhanded, cutting comments about POA-targets. Some participants made general references such as, "*made some snide remarks*" (Male, 35, White/Caucasian, Illinois). Other participants recalled more specific, detailed statements. For instance, one participant recalled a specific comment from her father made about the participant's sister (his daughter) and mother (his wife, stated to participant's mother): "*[dad said] he couldn't stand how much [his daughter] was eating… He then said my mom was also getting a big butt which she instantly seemed hurt by*" (Female, 32, White/Caucasian, Minnesota). From the reported memorable messages, receivers understood these comments to be rude, biting attacks on POA-targets due to their appearance.

Though seemingly disparate, joking and snide comments seemed to share some similarities. Like humor, snide comments appeared to be delivered in indirect, offhand ways. Parents, to various degrees, seemed to attempt humor with their snide comments. Unlike other message types, the "audience" or intended recipient is unclear here: Why and to whom are parents transmitting these comments? It is unclear whether intended

beneficiary of such humor and commentary is for oneself or for others—general or specific. Though jokes may be delivered to entertain others, parents' comments indicated that these messages might be made for the benefit of the speaker. One participant, for example, stated that her mother laughed at her own degrading humor/rude commentary ("*My mom made rude comments about his size… She was also laughing,*" Female, 33, White/Caucasian, Michigan). This is in stark contrast to other types of messages (e.g., warning and teaching), in which the messages, though degrading to POA, appear to be intentionally transmitted for the benefit of others. Further, if speakers *are* communicating these negative messages for their own benefit, this commentary would deviate from stigma communication (Smith, 2007a), in which messages are transmitted for the benefit of non-stigmatized individuals. Stigma communication may need to be re-examined to account for this motivation. Since these statements may be made to benefit the speaker rather than a non-stigmatized recipient, this type of weight commentary and related motivations should be explored further in future research.

The use of stigmatizing messages to benefit self could be due to the perceived power and social standing gained when making stigmatizing jokes and degrading remarks. According to research on politeness theory (Brown & Levinson, 1987; Cupach & Carson, 2002), individuals are motivated to protect their positive face, or our need to be liked and approved of by others. Individuals often use humor as corrective face strategies to protect their positive face (Cupach & Metts, 1994). Moreover, research shows that aggression and dominance can be used to elevate one's power position and standing (Dunbar, 2015; Solomon & Samp, 1998). Though not considered abuse or violence, weight stigmatizing messages are demeaning, degrading (Lewis et al., 2011;

Meisenbach, 2010), and may be used to commit interpersonal aggression (Bucchianeri et al., 2013, Bucchianeri et al., 2014). By stigmatizing others, individuals might feel they have elevated their power and social standing, and using, humor can decrease the risk of losing positive face in the situation (Cupach & Metts, 1994), and so using humor allows individuals to commit these aggressive acts with low risk to their positive face. Speakers may be further protected by humor when stigmatizing others: Individuals receiving these messages may have a greater risk to their positive face when attempting to contradict or question the speakers' degrading humor as a person can redirect the critique back to the original critic (e.g., "What's *your* problem, you can't take a joke?"). Individuals may be using degrading jokes and expressions to both reduce the position of others and elevate their own status, all under the guise of joking around. Future research should consider and investigate the motivations, individual-level power, and status-related outcomes of people transmitting stigmatizing messages, through degrading humor and snide comments.

Name-Calling

Name-calling was the most prevalent form of degrading remarks (27 messages, approximately 46% of the category, 14.5% of the memorable messages). Names were extremely degrading and dehumanized POA-targets. Two types of names were discovered in the memorable messages: 1) fat-names and 2) animal-names. Name-calling generally distanced speakers from POA-targets, as well as degraded and dehumanized targets—as only a body or as something less than human.

Fat-names. At times, name-calling took the form of fat- or weight-related names that labeled POA-targets in terms of their "fat-ness" or larger body size/shape (as

determined by sociocultural norms), referred to here as *fat-names* (13 messages). Parents reportedly used a variety of labels (i.e., fat, fatty, fat ass, fat f***, fat Mfer, big ass, chubby, and muffin top), with "fatty" and "fat ass" being the two most common. Fat-names were used somewhat universally across types of people, such that parents applied such names to both strangers and known others (e.g., family members). Generally, fat-names seem to: 1) reduce POA-targets to bodies and 2) maintain speakers' social power, and 3) distance speakers (and other non-stigmatized people) from POA-targets.

Reduction. Fat-names appeared to be used to label or (re)name individuals due to and drawing on their weight-related appearance. Instead of recognizing POA as individuals, fat-names replaced the targets' personhood, reducing POA to just their body/appearance. For example, one participant recalled:

> "…*We were driving with our grandfather and as we drove through our neighborhood, there was a boy playing outside in his yard. …my grandfather rolled down his window and yelled, 'hi fatty!'…*"
> – Male, 54, White/Caucasian, Alabama

Though in this instance the POA-target is presumably known to the speaker, it is clear that the parental figure did not acknowledge the boy as an individual with agency but rather as a deviant body. These types of messages reflected a general reduction of POA from valuable, unique individuals to valueless, deviant bodies. This follows the body image and stigma literatures: Objectification theory advances that individuals are trained to view themselves as bodies (Fredrickson & Roberts, 1997), and stigma labels are used to reduce an individual to a stigmatized attribute (Goffman, 1963; Smith, 2007a). Fat-names, it seems, may reflect both objectification and stigmatization of others, as these messages reduce people to bodies generally, and specifically reduce them as the stigmatized deviant bodies. Notably, fat-names shared similarities with negative

descriptions in some ways. Negative descriptions and fat-names referred to POA bodies and body parts, noting their deviance from sociocultural weight norms. The difference was with *how* the references are made: Whereas descriptions were a means of attaching negative characteristics to individuals (e.g., *"That person is really fat",* Female, 40, White/Caucasian, Pennsylvania), name-calling replaced POA with a specific name (e.g., "*hi fatty*", Male, 54, White/Caucasian, Alabama). In so doing, POA-targets, as unique individuals, are reduced to objects.

Some participants reported that their chosen memorable message reflected similar messages that they heard frequently during childhood. Though frequency was not the focus of this project, several participants in this particular subcategory noted frequency in addition to a specific moment in time. One female participant reported the following:

> "I recall my mom and me discussing who were her friends when she was in high school. …*Mom mentioned a "huge" girl whose actual name she couldn't even remember. She said everyone referred to the girl as "Old Ironsides."[This was because they said the girl was tall, fat, and ugly. She showed pictures of the girl] …I remember thinking she wasn't ugly at all…* I asked mom why people would say such mean things about her. *I recall that mom had been smirking at the [yearbook] picture and just had a derisive look on her face. When I asked the question she didn't really know what to say to me and seemed to get embarrassed. Finally, she said "Well I think it helped her. She understood that how she looked was not accepted. It let her know she needed to change herself*.""
> –Female, 50, White/Caucasian, Tennessee

The POA-target discussed was remembered and openly discussed as being "Old Ironsides" rather than by her name, and so referred to as a deviant body (i.e., "tall, fat, and ugly") instead of as a valuable person. As above where the grandfather called a kid "fatty", the personhood is reduced to that of a deviant body only. Though clearly a memorable message from her mother, this report also demonstrates that name-calling was regularly implemented in conversations to and about the message target. This interaction

was a specific occurrence, but the name-calling, and consequent reduction of the POA-target, was likely a regular occurrence at the time. Similarly, another participant recalled that her father referred to a neighbor as the "*chubby*" or "*heavy*" kid when bringing him up in conversation (Female, 46, White/Caucasian, Virginia). Reduction occurs in all these messages, but for some it could be happening frequently or in isolation in their daily lives. The frequency of these messages is something to be considered and investigated in future weight stigma communication research.

Retaliation. Fat-names also were used to reflect or reinforce speakers' standing and/or (re)gain power over targets. The ability to stigmatize others indicates that speakers possess some level of social standing or power (Goffman, 1963; Korn, 2009; Schvey et al., 2013). This was reflected in the memorable messages, such that parents reportedly used names (e.g., fat ass) to attack POA-targets who were perceived as having wronged or imposed upon the parents in some way. These retaliatory attempts occurred after events like being cut off in traffic (mother called the driver "*a 'fat ass' and a 'fat bitch' to her face…*"; Female, 23, White/Caucasian, Massachusetts) or receiving negative looks from targets ("*My dad insulted a stranger at Walmart by asking him 'what are you looking at fat ass'…*"; Female, 35, White/Caucasian, Ohio). Parents used verbal attacks as retaliation to perceived slights in social situations, possibly in order to protect and promote their own standing while undermining and degrading POA.

Retaliatory attacks could be manifested attempts to (re)gain power in interpersonal and social situations. Power is the perceived ability to exert influence or control over another person, and such perceptions of power is influenced by societal power hierarchies (Dunbar, 2004, 2015). As they are in the dominant, "correct" group,

non-stigmatized individuals may perceive that they have (or deserve) more power than stigmatized, deviant individuals (e.g., POA). Thus, when parents believed that they were slighted by POA, they could have been motivated to attack as a means to retain the power and standing that they believed they deserved. This has been demonstrated in the aggression literature: Research suggests that individuals can gain or retain power through destructive means (Dunbar, 2015), which can be done through verbal aggression, or messages that attack individuals' self-concepts in order to undermine it (Myers & Bryant, 2008). Verbal aggression can be committed through a variety of behaviors including name-calling (Bodenmann et al., 2010; Bucchianeri et al., 2014), as seen in the current study with fat-names. If others' self-concepts are undermined, the use of verbal aggression in response reinforces the speakers' power and identity-related social standing (Klostermann et al., 2015; Marshall, 1994). Fat-names like "fatty" or "fat ass" are representations of weight-based verbal aggression that undermine, belittle, and dehumanize POA and promote the speaker as a non-stigmatized person. This relegation to their "deserved" lower status position, even if not consciously done, ensures that speakers are secure in their societal power hierarchies and that POA are put "in their place." Future research should consider that fat-names or other weight stigmatizing messages could be used as power plays or forms of verbal aggression to gain power in interpersonal and social interactions.

Retaliatory acts via aggression were addressed directly toward the person(s), but notably two participants recalled that their parents' retaliatory acts were committed unbeknownst to POA-targets. Participants' parents were upset by POA and responded by calling one POA a "*fat ass bitch*" (Male, 30, White/Caucasian, Georgia), while the other

stated, "*Will this fatty fat guy hurry up?!*" (Male, 26, Middle Eastern, New Jersey). In both instances, these statements were not witnessed by POA-targets. It appears that attacks might not always need to be witnessed by POA-targets to be used as forms of retaliation, as it seems that these parents used fat-names to attack when they had lost control in a situation. As evidenced in the current study, it is not uncommon for people to use name-calling toward POA; however, when one considers the process of retaliation, it does seem uncommon that these parents would engage in verbal aggression for retaliation when the target cannot witness and reap the negative outcomes from it. Thus, these messages indicated that parents' attacks still enhanced their power, standing, and/or self-concept merely by making such statements. It is therefore reasonable to presume that this form of retaliatory act achieved the desired effect by stating it to oneself and or by others hearing the name-calling. Future research should investigate the role of stigmatizing messages as retaliation and acts of dominance to (re)gain power and position, such as using weight stigma to commit power plays or negative maintenance behaviors to regulate power and distance between non-stigmatized and stigmatized individuals.

Distance. Fat-names also were used as labels to increase distance and distinction. Labels categorize individuals *as* a specific attribute or as being associated with a particular group (Link et al., 2011; Goffman, 1963). When individuals are labeled in ways that denote them as "others," the labels separate speakers from targets (e.g., us versus them) and reinforces the ingroup-outgroup division (Glass et al., 2013; Goffman, 1963; Link et al., 2011; Mustillo et al., 2013). Consistent with this, parents' labeling via fat-names were used as a tool to create distance by highlighting the perceived "otherness" of POA. People are often concerned with facing stigma-by-association and will distance

themselves from stigmatized person(s) (Goffman, 1963; Hebl et al., 2000; Östman & Kjellin, 2002; Pryor et al., 2011). This was particularly evident when considering the message targets: Though fat-names were applied to strangers and known others alike, parents particularly used fat-names to distance POA who were in-network relations (e.g., extended family).

Several individuals recalled their parents using fat-names on POA-targets who are positioned within the broader family system. Individuals are generally motivated to protect close connections as fellow members of the same positive social group (Brown, 2000; Tajfel et al., 1979), so the use of fat-names against family members seems counterproductive to these aims. In these instances, however, POA-targets were family members by marriage or distantly positioned from parent-speakers in their family networks. Thus, this labeling might not reflect on speakers' immediate group and still could be used to distance POA family members and make weight-related ingroup-outgroup distinctions. For instance, participants remembered memorable messages in which their parents used fat-names to describe in-laws. One male participant stated that his father called his own father-in-law (participant's maternal grandfather) a *"fat f****" (Male, 32, White/Caucasian, Florida). Another participant recalled:

> "…my mom and I were cleaning up [after a family event] and my dad noticed a bit of extra trash and food droppings on the floor around where my aunt's husband (my uncle by marriage) was sitting. *He made a comment about how if his "fat ass" wasn't shoveling food in his mouth so fast he wouldn't have made such a mess.*"
> –Female, 37, White/Caucasian, Ohio

These fat-names labeled and degraded POA-family members, yet these people were somewhat removed within the family network. In-laws are in-group members by marriage, but some may not consider in-laws as "family" (Floyd et al., 2006). Silverstein

(1990) states that individuals experience a variety of issues with in-laws, and it is common to feel closer with one's own family than the family of one's spouse. It is impossible to assert these parents' particular views on families, but it is likely that they found their in-laws more removed from them than their immediate family. If so, then parents might have perceived that these fat-names did not degrade their own immediate family but promoted differentiation between their non-stigmatized immediate family/self and stigmatized POA-family members. Ultimately, the labeling and distancing of deviant members may be a way to protect the speakers' non-deviant social group members and group identity from perceived threats.

Prior research identifying types of weight stigmatizing communication used towards targets has been limited (e.g., Lewis et al., 2011; O'Brien et al., 2013; Thomas et al., 2008). Despite this, there is great consistency across disciplines that demonstrate the reduction of people via labeling, social distancing, and attempts to maintain societal power structures are all part of the stigmatizing process. Even when discussed as disparate concepts, it is apparent that power, reduction, and distance are all interrelated within the context of weight stigma. Reducing individuals to their stigmatized attributes means that they are recognized, not as humans, but as deviants. Social distancing through labeling warns non-stigmatized people to stay away from stigmatized people (Smith, 2007a), reinforcing social distance and power hierarchies. The use of verbal aggression and labeling through fat-names as seen in this study reinforces prior research, demonstrating that distancing, reduction, and aggression (as assertion of power) are related, and so it should be further investigated in the context of weight stigma.

Animal-names. Parents also labeled POA with animal-related names (referred to here as animal-names; 15 messages, 25% of the category, 8% overall). A variety of animal-names were used to label POA, including *pig* (6 messages), *cow* (4 messages), and *hippo* (2 messages). A small compilation of other names was also reported (e.g., *whale, beefalo*). Like fat-names, animal-names also seem to be employed to degrade, reduce, and create distance with POA. The use of animal-names extended this process further by stripping away individuals' humanity entirely: Whereas fat-names reduce one to a human body, animal-names prevent individuals from being regarded as human altogether.

The use of animal-names was similar to that of fat-names, as they reduced and created distance with the POA-targets. Reduction can be seen in statements such as, *"... 'Just a cow'*" (Female, 33, White/Caucasian, Louisiana), "*those fat slobs were not embarrassed to make pigs of themselves in public…*" (Male, 49, White/Caucasian, California) and "*…look at that hippo run*" (Female, 42, Black/African American, Arizona). While they are degrading the target, they are reducing POA's humanity and categorizing them as only an animal. This reduction reinforces that POA-targets are viewed as distinct from speakers, diminished by being labeled as something less than human. Though there are similarities between animal-names and fat-names, there are notable patterns that distinguish fat- and animal-names, including: 1) degree of label variation (including nonverbal behaviors) and the 2) target of type of animal insult.

***Name variations and nonverbal behaviors*.** One significant difference between fat-names and animal-names, are the name variations and the nonverbal communication used in conjunction with the verbal labels. Pig-names were the most prevalent type of

animal-name. Further, pig-names also had the greatest variation of labels under the broader "pig" umbrella (e.g., "porker" and "eats like pigs"). Parents were most often recalled as having directly applied verbal labels to POA-targets (e.g., "*he called her a fat pig*"; Female, 30, White/Caucasian, Colorado). However, there were instances in which these labels were paired with *nonverbal behaviors*, such as by snorting like a pig after using pig-names. For example, a participant recalls her father using verbal and nonverbal symbols for "pig" when critiquing a female contestant on Fear Factor:

> "…*The woman [contestant wearing a swimsuit to do water trials] who was up was pretty average, only a little extra weight, not obese by any stretch, but not a model, you know? And my father starts snorting like a pig and said something, 'what a porker.*'…"
> – Female, 27, White/Caucasian, California

The use of "porker" and snorting like a pig are verbal and nonverbal means to define POA as pig-like. Notably, participants only offered descriptions of nonverbal behavior in memorable messages where parents used pig-names. From these memorable messages, it appeared that nonverbal communication was especially impactful to receivers or at least important in the retelling of these types of memorable messages. Nonverbal and verbal communication operate simultaneously in the communication process (Knapp et al., 2013). This was reflected here, such that both nonverbal and verbal communication was impactful and important in parental weight stigma messages. It appears that parents' nonverbal behaviors mostly remain unmentioned in the retelling of memorable messages; therefore, despite being influential in all communication, it is possible that many people were unaware or did not acknowledge the role of nonverbal behaviors in memorable weight messages. Prior research on stigma communication has largely neglected the role of nonverbal behavior in the stigma transmission process and has focused solely on

verbal message exchange. Based on these memorable messages, nonverbal behavior plays an important role in stigmatizing messages and should be further investigated in future research.

(Perceived) Gender of targets. There also appeared to be a difference with targets of fat- and animal-names, such that parents appeared to apply labels different depending on the perceived gender of POA-targets: Animal-names were applied to women, whereas fat-names were applied to both men and women. Again, this is perceived gender from third-party observers and may not be the actual gender identity of POA-targets.

Animal-names were primarily applied to women. Specifically, the labels of cow, hippo, beefalo, baboon, and whale were applied only to women. Pig-names were generally applied to women, except one man and couples where both men and women were present. Though men were targets of name-calling within the memorable messages, it appears that men were more likely to be targeted with fat-names or a combination of fat- and animal-names, rather than animal-names solely. The few times animal-names were applied to men, parents used pig-names. This seemed to indicate that women are more often the targets of dehumanizing name-calling, receive more degrading name-calling messages, and/or that men are degraded in more specific ways as opposed to a greater variety of sentiments used for women. Research suggests that women are more likely to be subjected to negative weight-related commentary and harsher stigmatizing views (Blaine & McElroy, 2002; Conley & Glauber, 2005; Martz et al., 2009; Nichter, 2000; Payne et al., 2011; Schvey et al., 2013; Tiggeman, 2012). Men are victimized with stigma messages, but that there are clearly distinctions in how labels and weight stigma

messages are applied to POA based on gender. Future research is necessary to investigate to gender differences in transmitting and being the target of weight stigma messages.

Subject of insult. Animal-names seemed to be applied differently according to the subject of the insult, specifically POA-targets' appearance or behavior. Pig-names and cow-names were used to label both behavior and appearance, whereas hippo-names were exclusively applied to appearance. Parents used a variety of animal-names to comment on appearance. Parents made comments about eating behavior like, "…*[they] were not embarrassed to make pigs of themselves in public…*" (Male, 49, White/Caucasian, California) and "…*My father said that …he needed to make lots of extra food because she was a fat cow…"* (Male, 47, White/Caucasian, New York). The use of animal-names complemented parents' critiques of POA-targets when parents perceived them to be "misbehaving" with their eating behaviors. Parents used pig- and cow-names when discussing eating behaviors; these names were also applied in reference to POA appearance. One participant recounted that her father said "*something [like], 'what a porker'*" after seeing someone on television that she described as "*pretty average, only a little extra weight*" (Female, 27, White/Caucasian, California). Others recalled statements like, "*[my father] called her a fat pig*" (Female, 30, White/Caucasian, Colorado) and "*[my mother] was judging her and calling her a cow*." (Female, 48, White/Caucasian, California). Based on the given information, it seems parents were focused on POA appearance and used name-calling to convey their feelings about their deviance from cultural weight norms. Further, pig-names and cow-names be more widely applied to people, by gender and subject of insult as these were used to degrade men and women, as

well as appearance *and* eating behavior. Notably, these statements were targeted at strangers and extended family members alike.

This contrasts with other animal-names recalled: Though not as frequently reported, hippo-names were used only in reference to appearance, and only applied to women. Parents made comments like, "*she looks like a hippo*" (Female, 35, White/Caucasian, Pennsylvania) and "*…[my father] yelled out 'look at that hippo run' and everyone laughed…*" (Female, 42, Black/African American, Arizona). Furthermore, other animal-names were used (i.e., *beached whale, baboon, beefalo*; 3 messages), and were exclusively to label women's appearance as opposed to behavior (e.g., "*…At one point my dad said that [my sister] looked like a baboon*…": Female, 37, White/Caucasian, Kentucky). Parents were concerned with noting that the person (as a body) just "is" wrong in their appearance and self-presentation. Though most of these names were used to denote deviant appearance, some animal-names were distinct from others in that they also are used to critique POA behavior as well. Though all dehumanized POA, it is necessary to consider how individuals attack others via weight stigma messages, and how these attacks might be altered based on message target, subject of discussion, and severity of attack. Further research on this will allow for a better understanding about weight stigma and how such stigma is transmitted.

Relationship with target. Animal-names were most frequently applied to strangers. When applied to family members, messages tended to be directed towards a person who was removed from the speaker by a generation and/or marriage (e.g., parent-in-law). Targeting people removed from oneself and immediate family would be in line with social identity and social categorization tenets, such that devaluing outgroup or

distant others should bolster the status, cohesion, and norms of the ingroup (Brown, 2000; Hogg et al., 1995; Tajfel & Turner, 1979). According to these reported memorable messages, individuals were more likely to target POA who were unconnected or more distantly connected to speakers[6].

Most memorable messages included name-calling (fat- and/or animal-names), demonstrating the prevalence of these labels in weight stigmatizing conversations and the need for further study of the used and effects of these names. Previously, Puhl et al. (2017) studied the importance of some weight-related labels in describing overweight appearance, showing that label choice was influential on individuals' weight-related perceptions. However, this research was limited in the labels that it could examine (e.g., overweight, weight, curvy), considering the types of labels that people might use to self-identify or describe others' bodies. Individuals clearly expressed different responses to the provided labels (Puhl et al., 2017), demonstrating the perception and impact of weight-related labels. It is necessary to investigate the role and related effects of name type, combination, and frequency in weight stigma transmission. It is likely that not all labels stigmatize equally, and the names reported in the current study need to be further researched. Clearly, there is a difference regarding the level of devaluation and how they are applied. Fat-names reduce a person to a deviant body, whereas animal-names strip away a person's humanity altogether. Additionally, women were more often subjected to dehumanizing name-calling; though men were critiqued, animal-names were generally applied to women. Moreover, the prevalence in parents' messages indicates that name-calling is a key part of stigmatizing others and engaging in negative weight-related talk.

Further research should be conducted to study the use and effects of name-calling, specifically fat- and animal-names, in the weight stigma transmission process.

Warning and Teaching

Parents often attempted to teach or warn children about weight management, both in terms of appearance and physical health outcomes. These messages emerged as a prevalent category: 26 (14.0%) were sorted into this category, with 19 (11.8% of the overall) as "warning" and 7 (3.8% of the overall) classified as "teaching." Warning and teaching subcategories appear to be very similar, as both types seem to be used to encourage children to think about their own (current and future) appearance, specifically the actions that might lead them to have overweight or obese appearance. Teaching messages generally appear to go a step further than warnings by teaching children the steps to take to avoid gaining overweight appearance in the future.

Warning

Parents gave warnings to their children about the potential effects of having overweight/obese appearance. Generally, these statements communicated to children the potential perils of being like POA, including references about what behaviors and outcomes to avoid. Essentially, these messages related that the person or behavior should be avoided "or else" (or as "if you do X, then Y will happen") without explaining why or how the behavior relates to the outcome. Warning messages had roughly three foci: Warnings about 1) appearance (e.g., "looking overweight"), 2) health issues, and 3) "weight."

Warnings about appearance. Several parents offered warnings about having an overweight/obese appearance (12 messages). Though these messages were explicitly

about appearance, parents made references to how eating behavior (8 messages) and exercise behavior (4 messages) brought POA-targets to their appearance-related outcomes.

Warnings about appearance and eating behavior. Parents discussed POA-targets as representations of possible appearance-related outcomes if their advice about eating was not followed. One participant recalled her father offering a warning about her cousin's appearance: "…*She probably weighed about 400 pounds. …He said if you eat like her, you'll end up a whale like her*" (Female, 38, White/Caucasian, Mississippi). Similarly, another participant remembered the following interaction with his mother:

> "[When] I was eating a large amount of Doritos and cheese spread… *my mother said if I kept eating so much I was going to become a big fat slob like "Slobby Bobby"* which was her name for the fat kid in our neighborhood."
> –Male, 33, White/Caucasian, Pennsylvania

Like the examples presented, some parents used POA-targets as models showing what to avoid while parents attempted to curb or maintain their children's eating behavior. In the first, the parents seemed to be promoting the child's current appearance, while in the second the parent seemed provoked by the children's eating chips and aimed to curb this behavior. In these and similar instances, parents were prompted to warn children and used POA as a point of comparison for what the child should avoid looking like in the future.

Though, parents were clearly focused on appearance (e.g., "*you'll end up a whale like her*"), appearance-warnings were linked with eating behaviors (e.g., "*if you eat like her…*") rather than exercise behavior. Thus, these parents communicated that maintaining appropriate eating behaviors is the way in which people should control their weight-

related appearance, not by engaging in exercise and physical activity. This trend was consistent across appearance-related warnings. Messages centered on eating behaviors could promote attitudes that limiting food intake or of "too much" food is the way to manage *appearance*. This could increase one's concern about appearance, food intake, and unhealthy eating habits to maintain appearance (e.g., promoting anorexic behaviors).

***Warnings about appearance and exercise*.** Though less frequent, some parents did refer to physical activity and exercise as a means of controlling one's body shape and size (4 messages). These warnings used POA-targets as models as what to avoid for their future appearance, but specifically referred to physical activity as a necessary part to keep that from happening. One participant recalled an instance of where only exercise was discussed:

> "I remember my mom was talking negative about a woman because she had gained weight. …*She would constantly joke about this woman's weight and tell me that if I don't start exercising, I would soon look like this woman*…"
> –Male, 25, White/Caucasian, North Carolina

It is apparent that parents identified exercise as the way in which individuals avoid gaining overweight/obese appearance. In contrast, the other three messages contained warnings about exercise *and* eating behavior. One participant recalled that his mother discussed his father's weight-related appearance and health issues, connecting it with his eating behavior and physical activity. The participant recalled:

> "…*She was angry with him about being overweight… warned us both to not be like our dad and to have proper control over our diet and to exercise regularly.*"
> –Male, 46, Asian/Asian American, North Carolina

This parent warned children to enact appropriate eating and exercise behaviors to control their appearance and health issues. This type of message communicates to children that

exercise (and eating behavior at times) should be completed to control *appearance* rather than as a tool to attain positive health outcomes (e.g., lower cholesterol, lower stress levels, positive blood pressure levels). Parents clearly are stigmatizing POA to warn children; these warnings implicitly blame POA for their appearance and teach children to do so as well. Additionally, while remaining focused on appearance, individuals may hold the misperception that they are normal and healthy enough so long as they do not have overweight appearance. These warnings could increase the concerns about future appearance, and so could make weight-related appearance a salient issue for children. This salience encourages people to surveil bodies and heightens weight-related anxiety and concerns about self-image (Arroyo & Andersen, 2016b; Thompson & Zaitchik, 2012). Parents warnings are risky (as well as stigmatizing to POA) as children learn to consider how their body appears rather than what their body can do.

Warnings about health issues. Some participants reported that their parents issued warnings to avoid becoming like POA-targets as they experience other health conditions (e.g., avoid respiratory issues) (4 messages). Unlike the warning-appearance messages, these warning-health messages were vague about what behavior precisely to avoid. Parents made statements like "*…don't get as big as my grandmother since she has a lot of health issues*" (Female, age not given, White/Caucasian, New Hampshire). Another recalled:

> "We were playing basketball and *my dad pointed out someone else who was playing on the other side of the court who gave up after five minutes because they were out of breath. He told me not to get fat like that person because that's what happens*."
> –Male, 24, Black/African American, Pennsylvania

Parents communicated concern for their children's future health in these statements rather than appearance, but in so doing stigmatized the POA-targets they used as points of comparison. These messages demonstrate the common, but incorrect and marginalizing, belief that weight and health are always linked—that overweight/obese appearance is the indicator for poor physical health. Warnings to avoid gaining the same appearance as POA is stigmatizing, stating that overweight appearance is physical marker that is wrong or deviant. Messages that also equate overweight appearance with (negative) health demonstrates an additional layer of stigmatization: In addition to their appearance being "wrong," they are also unhealthy people. These messages reinforce that appearance is an indicator of health, focusing on weight rather than actual physical health markers (e.g., cholesterol, strength, flexibility). Despite reinforcing false, stigmatizing, these warning-health messages could have a different (perhaps less negative) impact on the non-POA that hear them. These messages highlight the importance of health issues and taking care of physical health rather than just focusing on appearance. It is possible that these could heighten the peril of weight gain, but perhaps would promote body surveillance and (current) weight anxiety in the same way as appearance-related messages.

Warnings about "weight." Finally, a small subset offered warnings about "weight" more broadly (3 messages). Warnings were vague, with no clear concern like the warning messages discussed above (i.e., appearance, health). There was some consistency in these messages, however, as parents seemed to be provoked by POA-targets' eating behaviors to warn their children and stigmatize POA. These vague messages do not offer insight as to what parents believe the issue with "weight" is:

appearance, health, or both. “Weight” itself holds a negative enough connotation where people are assumed to understand that there is a potential issue.

General warnings like this were also paired with intervention. In two instances, parents made statements when they tried to prevent their other child(ren) from eating. For instance, one recalled his father saying to his (participant’s) sister, “*You really shouldn’t have had the whole bag, you need to be careful with your weight’…”* (Male, 34, White/Caucasian, California). Parents’ vague comments reflected negative connotations attached to “weight” and implicitly stigmatizes those who do not conform to weight-related appearance norms. The effects of witnessing parental intervention on siblings is something to consider in future research. Individuals may perceive their siblings to be more similar than others (e.g., strangers), model similarity increases the likelihood that individuals will reproduce or avoid engaging in the models’ behaviors. As such, parental intervention with siblings might be more impactful on witnesses than when parents discuss more distantly related or unknown others.

Most warning messages were about appearance; appearance-warning messages were likely to include statements about eating behavior in some form. It is interesting that, without prompting to recount messages about one or the other, messages tended to strictly be about appearance as opposed to behavior. If this is considered a generalizable trend, it does seem to reflect the importance and prevalence of appearance (as opposed to concerns about health) in the broader culture and in family communication. Prior research is consistent with this: A large portion of articles and advertisements in health and fitness magazines promote weight loss and appearance-related messages, emphasizing weight loss and control over body shape and tone over health (Boepple &

Thompson, 2017; Willis & Knobloch-Westerwick, 2014). Further, it is common for exercise-related messages to be frame physical activity as a means to gain a thin, attractive body rather than to promote one's physical health (Willis & Knobloch-Westerwick, 2014). This appears to be echoed in the family conversations, particularly in warning messages. Though health behaviors (e.g., eating healthy food, exercise) is mentioned, parents more often communicated that the goal was appearance-related—to keep them from *looking* overweight. (Over)Weight deviance is a mark that cannot be hidden, and parents might then be concerned that their children will have overweight appearance—contrary to the thin ideal, as well as being negatively perceived by society as "deviant." Warning messages generally seem to reflect this view of weight-related appearance, and parents may caution their children to not gain the "mark" that is inconsistent with cultural weight norms.

Teaching

Similar to warning messages, teaching messages incorporated statements about the potential outcomes for engaging (or not) in certain behaviors, using POA-targets to demonstrate possible negative outcomes (7 messages). Parents' teaching messages were directed towards children, and messages used POA-targets as models to teach children about "incorrect" appearance and behavior. Teaching messages offered elaboration on why certain actions should (not) be taken. In contrast, warning messages stated (not) to do an action (e.g., don't eat too much) to avoid an outcome (e.g., you will be like the POA-target) without further information as to why and/or how certain behaviors might affect the body. Teaching statements also did not appear to be overt threats (as with warnings), but rather a transmission of information or experience between parents and

children. Generally, teaching messages communicated lessons about not becoming overweight for 1) personal outcomes and 2) professional outcomes.

Personal outcomes. Parents teaching messages discussed POA appearance and behavior and appeared to be used as a tool to inform and instruct children about the potential effects of weight-related health on personal outcomes. These messages conveyed norms about appropriate appearance and behavior, often incorporating sentiments that children "shouldn't be," it is "unacceptable" to be/do, or how bad it is to have overweight/obese appearance. These were not framed as explicit if-then hazard statements as seen with warning messages. Instead, these messages generally offered advice and explained why certain behaviors or overweight/obese appearance should be avoided.

Some parents reportedly transmitted teaching messages focused on behavioral norms, stating what eating behaviors were deemed (un)acceptable (2 messages), using POA-targets as examples. One participant recounted:

> "My *father was telling me that we don't eat McDonald's every day because it's not healthy and he pointed to an obese person eating their burger in McDonald's*…He talked about how fat they were and how a string of bad decisions led them to be that big."
> –Male, 19, Asian/Asian American, California

The father goes on to say that a "*string of bad decisions led them to be*" overweight. Instead of saying, "do not go to McDonald's every day or else that will happen," in the form of a warning message, this parent noted the potential adverse effects on health if one were to engage in this behavior, counter to their own eating behavior norms. These parents seemed to connect violations of eating behavior norms with negative personal outcomes and used the POA-target as a point of comparison to illustrate what not to

do/be. This was consciously done to teach their children about weight-related appearance and norms. Notably, teaching messages did implicitly blame individuals for their appearance and reflected weight stereotypes about POA lacking self-restraint. If parents offer such statements, they could be teaching children to consider their eating behaviors and *also* passing on blame, weight stereotypes, and bias.

Parents also transmitted teaching messages focused on appearance-related norms (3 messages). Appearance-related teaching messages did not include specifics about what appearance one should have, but parents stated that children should not be overweight, why, and how to avoid this in the future. One participant recalled:

> *"One time she pointed at this fat kid at the mall, and told me to never end up like him. She talked about how to not overeat and to exercise daily right in front of the stranger.*"
> –Male, 27, White/Caucasian, Texas

This parent did not simply warn the participant about being overweight but went into the specifics on appropriate eating and exercise behaviors. This was echoed in similar statements, as parents used POA-targets to model for what not to be in the future in terms of weight-related appearance. The specifics on what constitutes appropriate appearance is not given here (e.g., having a flat stomach), but the messages seemed to generally convey that having overweight/obese appearance is inappropriate and detrimental to their personal future.

Professional outcomes. Some parents attempted to teach their children about the possible negative outcomes in professional contexts that occur when one has overweight/obese appearance (2 messages). This only emerged in teaching messages, distinguishing them further from warning messages. In these instances, parents explained how POA-targets' weight-related appearance affected their position candidacy or their

performance of professional responsibilities, including the risks to others and barriers to professional advancement. One participant recalled his father stating that the POA-target's size was risky to others:

> "… [we] saw a guy who was overweight. *My dad was talking about how "fat people kill people" because he is a career military man. His point was that in his line of work, lack of fitness means someone else has to carry your load and that can lead to casualties.*"
> –Male, 32, White/Caucasian, Washington

Such messages reinforce negative perceptions of POA, promoting ideas that people should be wary of the risks they pose. This is unique as it is in a military setting, it is still applicable to perceptions within civilian-professional life; perhaps there is no risk of death, but there may be a perceived risk of imposition or discomfort.

Parents might also teach about barriers overweight individuals encounter in the workplace in more commonplace, less drastic ways. For instance, a participant recalled a conversation about a family member's difficulty in gaining employment—attributed to her weight-related appearance:

> "*He basically said his niece was having trouble landing a job because she was overweight. If two people were equally qualified and pleasant, natural bias would lead hiring managers to pick the healthier person.* Healthy and fit people are usually preferred in the US, and on top of that, have the perception of being cheaper employees with less health risks."
> –Female, 22, Black/African American, New Jersey

Clearly the parental figure is attempting to convey that encounter prejudice and discrimination in professional contexts (specifically during the hiring process in this case). It is well established that POA are likely to face bias and discrimination in professional contexts (Arroyo & Andersen, 2017; Conley & Glauber, 2005; Fontana et al., 2013; Pingitore et al., 1994), and is a matter that should be discussed if we are to put an end to discrimination. However, it might also be one way that people are taught to

think negatively about the POA's professional performance or be fearful of gaining weight and what it could do to their job prospects. Though, at least with the latter example, it seems like the speaker had good intentions, it is possible that such a statement could negatively affect others' around him; further research should be done to consider the effects of teaching and warning on receivers.

All teaching messages demonstrated that parents made a conscious effort to discuss POA weight and teach children about weight-related norms. This is consistent with prior research: Weight-related attitudes are transmitted from parents to children (e.g., Davison & Birch, 2001, 2004; Ruffman et al., 2015). However, the memorable messages here extended this by demonstrating that some parents were intentionally *teaching* children weight norms and bias. Such statements could teach children to judge and marginalize POA as inherently wrong because of their appearance, as well as reinforce that they should also be concerned with their bodies and manage them to avoid having overweight/obese appearance.

Blame: Eating-Self-control and Exercise-Laziness

Weight is believed to be completely controllable, and that POA are lazy and therefore responsible for their overweight status (Black et al., 2014; Ebneter et al., 2011; Puhl & Brownell, 2003). Echoing these stereotypes, blame was evident in the memorable messages as parents discussed who or what was the cause of POA-targets' weight-related size and appearance. Though other themes inherently include blame (e.g., teaching, in which parents are saying what to do to avoid being like POA), *blame messages* overtly, directly assigned blame for POA's weight-related appearance. Twenty-five (25; 13.4%) messages explicitly blamed POA for their appearance and took the forms of: 1) general

statements of blame (4 messages), 2) blame attributed to self-control and eating behaviors (15 messages), 3) blame attributed to self-discipline and exercise behavior (2 messages), 4) blame attributed to *both* exercise and eating behavior (1 message), and 5) blame attributed to POA's close others for their appearance (3 messages).

General Statements of Blame

General statements of blame were messages that did not specify a source (e.g., characteristic, other person) to be blamed for the POA-targets' weight-related appearance (4 messages). Parents noted that POA are at fault for their body size and shape but did not specify a reason as to why they would have that appearance. Instead, these sentiments conveyed that POA needed to work "*harder to slim down*" (Female, 33, White/Caucasian, Minnesota) or that they "*never took care of himself…*" (Male, 32, White/Caucasian, Florida) and "*let themselves go*" (Female, 34, White/Caucasian, Colorado). The reasons given asserted that POA should have done more, and therefore did not do enough; however, they do not identify *what* they were/were not doing (e.g., not exercising enough) that brought on their weight-related appearance. Though specific critiques are not offered, parents clearly endorsed and transmitted views of weight controllability and so blamed POA for their stigma.

Perceptions of Self-Control and Eating Behavior

Most blame messages conveyed that POA were responsible for their appearance due to their lack of self-control with eating (15 messages). In these memorable messages, parents reportedly made explicit statements about individuals' eating behaviors and self-restraint, such as: POA were eating "too/so much," "how much s/he ate," how they "ate everything in sight," or how they were "taking advantage [of food availability]." For

instance, one male participant reported that his parent said that a target "*should stop eating so much*…" (Male, 22, White/Caucasian, Maryland), while another participant remembered that her mother commented about "…*how much [my brother] ate…that he could eat a whole pizza by himself…*" (Female, 38, White/Caucasian, Louisiana). These messages indicate there is a "correct" level of food consumption without giving information about the appropriate limits. More importantly, it further suggests that individuals lack the self-discipline to eat appropriate amounts or the proper types of food.

Given the consistency, it seemed that speakers relied on common stereotypes about POA—specifically that overweight/obese appearance is caused by a lack of self-restraint (Black et al., 2014; Blaine & McElroy, 2002). POA are often blamed for both stigmatized condition onset (gaining an overweight appearance) and offset (losing overweight appearance). Memorable messages reflected this: When parents saw POA, they noted that their lack of self-control must be the cause to the thin ideal deviations. Parents thus promoted the idea that weight-related appearance are completely controllable, and, by extension, that POA are deserving of judgment and ridicule for their appearance. Notably, these blame messages were often included critiques about maturity and appropriateness, as well as tended to take place in food-related public spaces.

Maturity and appropriateness. Judgments about self-control were paired with views of POA-targets' maturity and appropriateness—or rather immaturity and inappropriateness. In these instances, parents overtly condemned POA-targets for showing inappropriate or immature behavior, making comments about how the POA-target "*didn't eat properly*" and "*doesn't act maturely.*" One participant remembered her parent stated:

> "*That person has no self-control. They should do something about their weight and their inability to control their eating. They are an embarrassment to their family and friends. People have choices and that person doesn't act maturely when making their food choices*."
> —Female, 30, Asian/Asian American, Colorado

Parents pairing of self-control and maturity suggested that individuals who have overweight/obese appearance must not have self-control and, therefore, must be immature and inappropriate. One judgment is linked with negative judgments about individuals, assigning blame to their seemingly poor character.

One way to consider this is through the stereotype content model (Cuddy et al., 2008; Cuddy et al., 2009), which argues that groups (e.g., POA) are viewed in terms of varying levels of competence and warmth (Durante et al., 2014). Durante and colleagues (2014) discuss that groups who viewed with less warmth and seen as having low competence, are regarded with hostility. When stereotyping groups in this way, people will experience emotional responses of contempt and resentment, and engage in behaviors that are attack and exclude those group members (Cuddy et al., 2008; Durante et al., 2014). Parents' blame messages can be viewed as evidence of hostility related to contemptuous prejudice, which would suggest that the group causes harm and imposition to others while having the ability to achieve these goals. For instance, parents are frustrated by POA and blame them for their position, implying that they are competent; parents also believe their choices are on purpose and so POA are actively make decisions that impose and harm the norm or dominant group (appearance) standards (e.g., not engaging in appropriate, "mature" behavior). This evidence considered in conjunction with the stereotype content model allows for the understanding that stereotypes and prejudice should be combatted on two levels, understanding that the weight-related appearance is not controllable and that beauty standards should be inclusive to all body

types. In this way, both forms of prejudice could be reduced and change the overall view and treatment of POA.

Public spaces. Blaming POA-targets' lack of self-discipline and eating behaviors were prevalent in food-related public spaces, specifically in grocery stores. Usually, these were situations in which parents drew attention to POA-targets' purchases of "junk food" or sweets, suggesting that POA were at fault for their condition due to the lacking self-discipline regarding their food selections. One participant recalled that her father "*pointed out an overweight person with a lot of junk food in his cart*…" (Female, 24, White/Caucasian, South Carolina). Another reported that her mother, "…*noticed she had some sweet treats in her cart and then proceeded to tell me that's why she was fat*" (Female, 28, White/Caucasian, Illinois). The evidence suggested that being in food-related spaces made eating and weight-related appearance more salient for individuals, prompting them to make comments or increasing the salience of such weight stigma messages, highlighting the importance of context in weight stigma transmission and recall of weight-related conversations.

In food-related public spaces, weight commentary seemed to focus on self-control and eating behaviors or food choices. It is possible that parents would have made similar comments in other contexts but observing POA buying food seemed to trigger stigmatizing messages and/or message salience. These message exchanges all took place in grocery stores, demonstrating that it is an impactful context in which people consider and communicate about weight-related appearance. It is possible that other food-related locations (e.g., restaurants, fairs) might prompt similar commentary. Prior research has demonstrated that POA face bias and discrimination in public settings, including those in

which weight might be more salient such as in gyms (Cardinal et al., 2014; Schvey et al., 2013). Many POA avoid these places when they encounter stigmatization; thus, they face pressure to exit these public spheres, and so limit their ability to engage in physical activity that could help promote positive health outcomes (e.g., increased strength, decreased cholesterol). Notably, unlike gyms, it is difficult to completely avoid grocery stores, so POA might be more vulnerable and likely to be targeted when buying food more so than when exercising.

Blaming people in this way reinforces cultural misconceptions about weight and condition (onset and offset) controllability, specifically that weight is completely controllable, that POA have diminished character than people with thin or average weight appearance. Reinforcement of these false beliefs constitutes unethical treatment towards weight stigmatized people. People pass on messages that weight is easily controlled through eating "right," which blames POA for their appearance. It also skews our understanding as society that exercise, and healthy eating should be used to promote *health* rather than using these behaviors to control appearance. Thus, blame negatively impacts POA and non-POA alike.

Perceptions of Laziness and Exercise Behavior

Two memorable messages related that POA-targets were at fault for their weight-related appearance due to their perceived laziness and consequent lack of exercise. POA were labeled as lazy, parents linked perceived laziness with sedentary behavior to blame them. One participant recalled, "*My father once told about one of my fat cousins that he is lazy…*" (Male, 31, Asian/Asian American, Illinois). Similarly, another recalled an interaction with her father while at the grocery store:

> "…*We then saw a quite obese person using one of the electric powered cart wheelchair type things. My dad then commented that she was incredibly lazy and should be walking. He said she wouldn't be so fat if she wasn't in that thing and actually tried to move herself.*"
> –Female, 23, White/Caucasian, Georgia

Whereas self-control was paired with eating behavior, exercise behavior appears to be linked with laziness. Blaming POA's laziness or lacking self-control for their appearance is common (Black et al., 2014; Puhl & Brownell, 2003). These sentiments tend to be conflated as the same thing: If one had self-control or self-discipline, they would likely not exhibit laziness and vice versa. The reported memorable messages suggest that sentiments about laziness and self-control carry different connotations and are attached to different actions, such that laziness is linked with exercise and self-control is connected with eating behavior. It is possible that there are different motivations for discussing laziness and/or self-control, as well as the long-term effects when hearing the respective message types. For example, hearing laziness attached to overweight status might make exercise more salient for receivers, whereas messages about self-control might heighten the importance of restrictive eating. Future research should separate these misconceptions and messages conveying them to better understand how the fit in the weight stigma transmission process.

Blaming POA-Targets' Close Others

Under the umbrella of "blame," some parents were recalled as having placed blame on POA-targets' close others for their weight-related appearance, specifically parents or romantic partners. When POA-targets were children, parents were blamed. A participant recalled the following: "Basically, *they look at my friend and said he looks fat. They questioned what kind of parents he has*..." (Male, 25, Black/African American, New York). Though the child was the identified POA and reportedly stigmatized for his

appearance, the blame for his appearance was placed on his parents. It is not uncommon to see messages that blame parents for their children's weight-related appearance and health outcomes (Schwartz & Puhl, 2002; Wolfson et al., 2015). This is particularly common for mothers, such that women tend to face more blame than men for their children's weight-related appearance (Tischner & Malson, 2012). Placing blame on parents is more likely to occur when children are younger and are perceived as having less autonomy. It is unclear where this child-adult cut off is, and when people would begin to blame the POA instead of their parents; however, there does seem to be a difference between child POA-targets and adult POA-targets based on these memorable messages. Further research can make better distinctions on when and why individuals might shift blame from parents to individuals (e.g., as children, young adults).

Not all adult POA-targets received blame, however. Blame could also be routed away from the POA-target and assigned to the POA-target's romantic partner. For instance, one participant recalled:

> "…My cousin had put on an enormous amount of weight and was not the fit guy he had been last time we saw him. …*[my mom] remarked that he looked much better before and that it seemed that his significant other might be the trigger. She was also very obese*…"
> –Female, 31, White/Caucasian, Minnesota

The blame was placed on the cousin's partner, stating that she was the "trigger" to this adult man's current appearance. Usually, adults receive blame for their own "mistakes" – particularly in U.S. culture where the ideals of hard work and resilience are quite prevalent (Kang, 2009; Uhlmann et al., 2011). This was not evidenced here, and instead the man was absolved of perceived blame. It is possible that one's affection for close others could motivate individuals to transfer blame away from message targets. This would show support for loved ones and ensure that one's ingroup is protected from being

"tainted" by stigma. Assigning blame to romantic partners is not readily discussed in research; since there is evidence of this practice in these memorable messages, it should be further investigated. Research could discover when and how romantic partners experience blame for their partners' (weight) stigma. It was demonstrated that blame messages are a commonly transmitted form of stigmatizing message, and such communication reinforces false, problematic views of POA and weight.

Physical Standards: Appearance and Performance

Many participants recalled memorable messages that communicated about the deviations of physical standards for POA, addressing: 1) appearance-related standards and 2) performance-related standards. These types of messages suggested that there is an expectation or standard that is considered normal for individuals' appearance and physical performance, which POA are perceived to be unable to meet. Notably, parents did not precisely describe what the boundaries were between acceptable and unacceptable appearance and performance, but simply noted that POA did not meet appropriate standards.

Standards for Physical Appearance

Firstly, several participants recalled their parents commenting on the way in which POA-targets' physical appearance was a deviation from societal expectations and that negatively affected their physical attractiveness (21 messages, 11.3%). Participants recalled that their parents explicitly stated that female POA-targets had overweight appearance, and so were ugly (e.g., *"… [she's] become 'fat and ugly'*", Male, 20, Asian/Asian American, Arkansas), unattractive (e.g., "*…weight gain has made her very unattractive*", Female, 43, White/Caucasian, North Carolina), and generally undesirable.

In these instances, parents explicitly state that POA-targets' current weight-related appearance has caused them to lose the physical attractiveness they previously had. These and other overt critiques made it clear to children that overweight/obese appearance is considered unattractive and "wrong."

Not all parental messages about physical appearance-related standards were so direct. When talking about weight change (e.g., someone formerly having thin appearance and now has overweight/obese appearance) or when comparing overweight/obese appearance to others' appearance, parents appeared to communicate about these physical standards more indirectly. A parent could state that a person was pretty when they had thin appearance without discussing their current overweight appearance, thereby communicating that thin = pretty and fat = ugly without explicitly labeling someone as ugly or unattractive. For example, in response to a friend's weight change, one participant remembers his mother saying, "*…how surprised she was because she used to be so thin and pretty*" (Male, 43, White/Caucasian, New York). A participant's mother reportedly made a similar comment about a family friend:

> "*…[when I was 8 or so my mom] mentioned… how the other woman was much prettier when she was "smaller." …that her friend's face was getting pudgy and she had a "moon face" now."*
> –Female, 32, Pacific Islander, Washington

In these messages, targets were not directly called ugly or undesirable. Instead, parents noted how bodies or body parts had changed, but imply a loss of attraction by noting how they *were* once so pretty (and thin). Receivers were allowed to draw conclusions from parents' comparisons, but parents clearly seemed to think that POA-targets were once pretty because they were had thin/average weight appearance.

These implicit critiques could be a socially safer way to negatively communicate about weight-related appearance. Framing messages in this way allowed parents to protect their positive face and self-image as they communicated negatively about POA-targets. Speaking ill of others comes with the risk of judgment from others but transmitting negative sentiments in indirect or implicit ways ensures that this risk is minimal (Cupach & Carson, 2002). Though not overtly done, these messages could still reinforce the thin ideal and weight stigma. Whether communicated explicitly or implicitly, parents' statements noted that POA-targets were not meeting appearance-related expectations. There was no boundary noted as to when someone is considered as having average weight versus overweight/obese appearance, but parents seemed to make distinctions in attractiveness based on body size and shape.

Target gender. Notably, there was a pattern in the memorable messages about who received these types of messages: All physical appearance standard messages but one was directed toward POA perceived to be women. Further, the critique leveled at the man were about specific parts, rather than about appearance overall. Women's bodies are treated (in part or total) as objects to be surveilled and appraised (Arroyo et al., 2014; Arroyo & Andersen, 2016b; Frederickson & Roberts, 1997). Though men are facing increased objectification and weight-related expectations in current Western culture (O'Dea & Abraham, 2002), it is to a lesser degree than women. Moreover, when men are objectified, there is generally a greater concern placed on specific body parts (Andersen et al., 2000; McFarland & Petrie, 2012; Ridgeway & Tylka, 2005). It is likely not a coincidence then that most critiques about physical appearance were aimed at women—both at body parts and bodies in general, and the critique leveled at the male target was

about specific body parts. Weight stigma may operate similarly: Women may be judged both by specific parts and holistically, whereas it might be more common for men to be judged on specific parts rather than overall "attractiveness". These examples further illustrate the disproportionality with which women are subjected to appearance/beauty-related criticism.

Standards for Physical Performance

In contrast to considerations about appearance, some parental commentary focused on standards for physical *performance*. Seven participants recalled that their parents communicated their concerns about or expectations for POA-targets' physical performance and health. Moreover, in a few instances, parents' expressions of concern for physical health also extended to include references to targets' mental health, social health, and professional (health-related) performance. These messages generally reflected three concerns: 1) Concerns for individuals' health (physical and other), 2) worries about weight exacerbating physical ailments (e.g., knee problems), and 3) the imperative for individuals to remain healthy (for self and others).

Concern for individuals' health. Participants recalled hearing parental concerns for message targets' health—generally as well as specific types. These messages were communicated about family members (e.g., cousin, grandmother). For instance, one recalled their mothers stating about the participant's cousin: "…*how terrible [my cousin putting on weight] was, especially for his health*..." (Female, 31, White/Caucasian, Minnesota) and "*she had gained a lot of weight recently…[my mother was concerned] for her health—physical and mental…*" (Male, 49, White/Caucasian, Minnesota). Another parent reportedly extended their concern for many aspects of a cousin's health:

"*…[my mother] explained that my grandmother's weight was negatively affecting every aspect of her life, mental, physical, health, social…*" (Trans Male, 29, Asian/Asian American, New York). Though still focusing on appearance, these examples demonstrated some movement towards more productive conversations about health—considering health more wholistically, as opposed to focusing on weight. Prior research indicates that physical health is related to mental and social health (Jaycox et al., 2009; Puhl & Heuer, 2009; Vandervoort, 1999; VanKim & Nelson, 2013). Such sentiments communicated parents' beliefs about the importance of taking care of oneself physically and mentally, particularly because they are inextricably linked. The appearance-oriented statements might have increased recipients' anxiety, however, since it encouraged receivers to link health risks with weight-related appearance.

Exacerbation of physical ailments. Parents also noted concerns for specific health conditions, particularly about how POA-targets' weight might stress their current physical injuries or ailments. In one instance, a participant did not cite a specific condition by name, but noted that the discussion was around a specific health condition:

> "*…a family member who was sick and had problems because of weight. They were obese and this is mostly what was causing the health condition. We discussed how to keep health as related to weight*."
> – Male, 39, White/Caucasian, Florida

As these were current issues that the person was facing, it is likely that the health conditions in question were more pressing than appearance. Though these messages appeared to be more health-focused rather than weight-centric discussions. They are still problematic as they equated health with weight and size promoting this stigmatizing misconception. Blame was not at the forefront of these conversations, yet there were still references to how weight should be managed and controlled—implying controllability. It

is also possible that, like the examples above, it still could have made receivers anxious about their weight and health.

Performance of professional responsibilities. Lastly, some messages conveyed concerns that POA-targets' size could affect their abilities to perform professional responsibilities. One participant remembered hearing his mother talk about their father's weight because it was causing increased knee pain and "*affecting his job performance as a cop*" (Male, 35, White/Caucasian, Florida). Another participant reportedly heard his father state his brother needed to lose weight in order to "*remain healthy for his family as the sole breadwinner*…" (Male, 49, Asian/Asian American, Texas). Parents framed the conversation around health-concerns, demonstrating that health of the POA-target was important; however, this was communicated in a way that connected health and appearance. Rather than being discussed as physical health for the sake of health, the speakers focused on weight-related appearance as it affects professional (and by extension, life) responsibilities. It is easy to imagine that there is an added level of concern for individuals' health when they are first responders and/or sole breadwinners for the family, there are significant monetary and life consequences associated with their physical performance as it relates to their professional duties (e.g., increased chance of survival, financially supporting their family). It is possible that these speakers would not first consider individuals' weight status and professional performance if POA were in other professions or situations (e.g., dual-income household, office work). It still reflects the idea that weight is intrinsically tied to physical health and performance. What is unique in these messages is that there is little concern for appearance (overtly) stated

here, and instead makes salient the issue of POA-targets' physical health as a risk to their performance and responsibilities.

Notably, statements about performance standards were most often about family members (e.g., siblings, cousins, grandparents). While some message types seemed to be used in reference to strangers (e.g., disgust) more often than close others, messages about physical standards were all in reference to family members. It seems highly unlikely for strangers to receive this level of concern in weight stigmatizing messages. Stigma communication is a process that devalues, blames, and creates distance with the stigmatized (Chang & Bazarova, 2016; Ebneter et al. 2011; Goffman, 1963; Smith, 2007a); the devaluation and distance generally make it difficult to experience concern and empathy for stigmatized individuals. These concern-based statements are negative about weight gain, but do not appear to be negative about the person. As such, they are less stigmatizing in nature and, by extension, more easily applied to individuals within speakers' networks as there is no risk of stigma-by-association.

Overall, all physical standard messages denote that there are certain expectations for "health" associated with physical appearance and performance. Parents identified that POA-target did not conform to appearance-related societal norms, and thus are not meeting physical appearance and performance standards. These ideas reinforce that weight and size determine beauty and health, promoting the thin ideal and weight stigma within the family unit.

Comparisons and Restrictions

Parents were also reportedly to have made explicit comparisons to POA (15 messages) or placed restrictions on POA (4 messages). These messages were concerned

with 1) comparing POA-targets with their former body size, 2) comparing targets with their family members or peers, and 3) placing restrictions on POA-targets (19 messages, 10.2%). With few exceptions, comparison and restriction messages were aimed at family members (e.g., sibling). There appeared to be concern, scolding, and/or joy communicated when making comparisons or imposing restrictions, further discussed below.

Comparisons

Comparing POA-target to former body size. Nine participants reported memorable messages in which parents discussed POA-targets' weight change, comparing targets' former and current weight-related appearances. Parents' messages were reported as either 1) general comments about weight change or 2) specific concern for targets' weight change. Most messages were aimed at participants' family members (e.g., siblings, aunts, cousins). While there was some discussion in physical appearance standards about appearance-related changes, *comparison messages* were explicitly stated that there had been weight gain—the focus being on the weight gain rather than upholding weight-related appearance norms.

General comments about weight change. Participants recalled parents making generalized comments about POA-targets' change in body shape and size (hereafter referred to as weight change). Some parents commented vaguely on POA's weight change, with comments like: "*[participant's cousin] had gained all her weight back*" (Female, 45, White/Caucasian, Rhode Island) and "*[participant's aunt] had gained a considerable amount of weight since the last time we saw her*" (Male, 34, White/Caucasian, California). Details in these statements were limited, participants only

recounted that their parents noted POA targets' weight changes from their former, presumably thinner bodies. General comparisons appear to convey implicit disapproval about POA-targets' current size, noting that they were once a more appropriate weight than they are currently.

Concerns about weight change. In some comparison-to-former-self messages, participants recalled details that reflect concern for the targets. Though some might offer implicit criticism, concern-about-weight-change messages tended to be framed as worry about individuals' well-being. These statements then conveyed both positive and negative sentiments about POA. Participants reported hearing messages like "*the girl wasn't always overweight and that my mom was worried about her*…", Female, 27, White/Caucasian, Florida. Another recalled an instance where her father commented to her mother about her sister's weight change:

> *"…he was concerned because my older sister was putting on too much weight. He thought she needed to take action before it was out of hand*."
> –Female, 60, Black/African American, Tennessee

Generally, these messages compare POA-targets' previous body size with their current body size to communicate that overweight/obese appearance is undesirable. Parents' concerns appeared to reflect some level of care and liking for POA-targets, indicating that they hold positive views of the POA-targets. Despite this care and concern, these messages also implicitly reinforce harmful views about the POA-targets and appearance-related norms.

Comparison-weight change messages were generally aimed at POA-family members. It is possible that the parent-target relationship closeness (or at least, network proximity) explains why parents showed more concern and expressed less explicit negative judgments. Offering implicit critiques through a frame of concern mitigates any

threat to loved ones and ingroup members—such messages could protect their prized social identity and to maintain relational closeness. Of course, people have the capacity to make hurtful weight-related comments to their children (Marquez, 2015; Thompson & Zaitchik, 2012), but some research suggests that parents take great care in promoting positive weight communication and body image in their children as well (Berge et al., 2015). Further investigation is needed to understand when and why some parents voice concern and others attack with hurtful messages, but also the ways in which concern can be framed to stigmatize and/or attempt to support.

Comparing POA-target to others. Instead of making comparisons with POA's body size, some parents compared POA-targets with their close others (e.g., siblings, 6 messages). Comparison-with-other messages tended to scold POA-targets and/or state that child-receivers (participants) should be happy with their own appearance by comparison.

In this sub-category, some recalled parents comparing POA with their peers (e.g., sibling, schoolmates). For instance, a participant reported that her mother compared her "*heavy sister*" with the rest of her siblings who were thinner, saying that the POA-target was "*always heavier than the rest of [the sisters]*" (Female, 40, White/Caucasian, California). Another recalled a similar instance wherein he heard his parents scolding his younger brother for "*being overweight compared to his classmates*" (Male, 24, White/Caucasian, Texas). Comparison-to-other messages communicated negative views about POA appearance, as well as implicitly blamed POA-targets. Since POA have siblings or classmates who have average weight appearance, POA must be the reason for their weight-related appearance and not life stage, environment, or genetics. Thus, both

appearance and one's inability to conform are critiqued through these comparisons, absolving parents of any blame and redirects responsibility to their children.

Another reason for offering comparisons appeared to be to tell participants that they should be content with their current appearance since they are unlike POA (2 messages). Parents openly critiqued POA-targets and compared them with their children-receivers. Participants had been encouraged to perceive their bodies positively because they did not look like POA-targets. Reflecting this, one participant recalled:

> "My sister ate a huge hamburger and fries when we were at the beach. *Because she ate a lot, her stomach was larger than normal and could be seen through her suit. My mother made a comment to me… that it was good that I didn't overfill my stomach like my sister or my stomach would look large also*."
> –Female, 45, White/Caucasian, Arizona

Here and in similar statements, children are told to be happy about their current state because they are different from POA-targets. This indicates that not only do they disapprove of POA-targets' weight, but they also offered some level of acceptance to their children since they are being compared as the positive alternative ("at least you're not like that"). Memorable messages like this may be meant to promote the receivers' sense of self by telling them that they should have positive appearance in comparison to POA-targets. This can create two potential issues: Heightened body evaluation and developing appearance-contingent self-esteem. When individuals base their self-esteem on appearance, receiving negative feedback about their appearance adversely affects individuals' self-esteem and promotes negative outcomes (Knee et al., 2004). Hearing these messages could promote a positive sense of self, but appearance-contingent self-worth could lead to negative outcomes, including anxiety about their bodies in the future.

Restrictions

Lastly, there were four messages that were categorized as restriction messages, often as to why children should be restricted. Restriction messages were those that attempted to control POA-targets' behaviors, in some cases these messages included comparisons to family members to support their point. This was often communicated when they perceived that POA-targets were engaging in poor eating habits (e.g., eating sweets), and were used to prevent weight gain or promote weight loss. One participant recalled:

> "*My sister asked for ice cream for dessert and my mom told her no because she was too fat. My sister is two years older than me… about ten years old…*"
> –Male, 35, White/Caucasian, Oklahoma

Similarly, another person remembered that his mother, in response to his eating "too much", said, "…*dont eat like that or you will look like aunt Gina**" (Male, 34, White/Caucasian, Pennsylvania). Restriction messages demonstrate the ways in which parents can encourage children to (attempt to) control their bodies. Unfortunately, these messages have the capacity to teach individuals unhealthy relationships with their food and bodies. Previous research suggests that restrictive eating is related to fear of fat, negative body talk, and weight stigma victimization (Brewis, 2014; Puhl & Heuer, 2009, 2010; Wellman et al., 2018; Westermann et al., 2015). Restrictive messages such as this could aid in teaching individuals to restrict their eating to control their body but also encourage weight-related anxiety and the reproduction of similar messages. Though the participants are not the victims, they are witnessing restrictions on eating, negative body talk, and weight stigma victimization. Finally, restriction messages were similar to comparison messages, such that parents seemed to communicate concern for POA-

targets. Like other comparison messages, they offer body critiques, blame, and highlight the importance of appearance; however, they were used to intervene and control POA**.**

Social Control: Presentation and Space

The theme of social control, in presentation and space, emerged in participants' memorable messages. Though the subject of physical place is previously discussed in blame as influencing weight messages (i.e., grocery stores), social control messages are distinct due to the focus on POA's public self-presentation and spatial imposition (18 messages, 9.6%). Social control messages reflect parents' desire to regulate and restrain others' bodies when in the public arena. These messages tended to take the form of should-should not statements (e.g., "*she shouldn't be wearing a bikini*") or proclamations about how people must dress and act. Three subcategories emerged: 1) public presentation as a reflection on oneself, 2) public presentation as a reflection on others, and 3) (desire to control) bodily impositions in space. Notably, embarrassment is prevalent in this category. Participants remembered about how targets and their close others should be embarrassed of their appearance and behaviors, and/or feel shame for being impositions.

Control of Public Self-Presentation

Public self-presentation. One primary discussion of control was the desire for POA-targets to follow social norms and control their self-presentation in public settings. One form was focused on self-presentation as a reflection of self. Specifically, parents commented that POA-targets should alter their appearance to conform to societal expectations and feel embarrassed about their current public self-presentation (10 messages). Social control messages focused on: 1) dress and appearance and 2) eating

behaviors in public spaces. There was some variance as to what constitutes "public" space, such that some considered public space to be areas in which any person could visit, whereas others seemed to consider it as any space that could be visible by others. Despite the variance, parents generally noted that POA-targets who violate perceived norms should experience shame and embarrassment for committing such deviant acts.

Self-presentation while dressing in "public" space. Participants recalled comments about how POA-targets were not adhering to social norms for appropriate appearance and dress in public. These messages were framed in such a way as to imply that if POA *did* dress appropriately, then they would be accepted. Self-presentation about dress messages stated what the speakers believed POA should be doing and wearing within the public space, and so delineated what was considered "public" space. Firstly, a prevalent critique seemed to be that overweight individuals *should not be wearing X* (e.g., tube top, short shorts) in public, as it does not properly conceal their body (6 messages). Participants seemed to recall these messages being transmitted in public spaces where people wear bathing suits (i.e., water parks, beaches)—offering further evidence that context may influence weight stigma communication. While at a water park, for example, one father reportedly stated that a woman "*shouldn't be wearing that around kids. Her fat is hanging out…*" (Female, 28, White/Caucasian, Arkansas). Another participant's mother echoed this desire for concealment while at the beach with her children:

> "…As we laid on the beach towel in sand we saw a very obese man trying to get a tan. *My mother said something like, "people that fat shouldn't be allowed to take their shirt off"* and for some reason that line always stuck with me. *It made me think that very obese people should be ashamed to be in the company of other people in public places like the beach.*"
> –Male, 23, White/Caucasian, New Jersey

Parents seemed to convey that it is acceptable for certain bodies to be (somewhat) exposed in these public contexts and, by extension, it is unacceptable for larger bodies to do the same (e.g., taking off a shirt at the beach). There is also a sense that targets were inconsiderate of the welfare of others when making their "lifestyle decisions" (e.g., wearing a bathing suit), an expectation not readily imposed on smaller bodies. In this way, these speakers seemed to claim that the "public" is for "normal" people rather than something to be enjoyed by the entire public (including POA). If they are in public (e.g., shared community spaces), POA should control their behavior and follow appearance-related norms.

What constituted a "public" space varied according to speakers to some degree. It seems like public space should be considered anywhere that all people could enter or inhabit (e.g., park, beach), whereas private space would be occupied by the "owner(s)" of the space, such as one's property (e.g., house, yard). This view of space was reflected at times, with parents referring to public spaces in this way (e.g., water park, beach as public space). In contrast, some parents seemed to conflate the meaning of public spaces to include any spaces that were visible to them (e.g., target's private lawn). One participant recalled:

> "Our next door (*sic*) neighbor… [her] weight never bothered her and she dressed in a manner that showed a lot of skin. *She wore tube tops, short shorts, and even bathing suits in her yard all the time. My mother hated that she dressed that way and would always make comments about how inappropriate it was with her body size. I will never forget her making comments about her legs and arms and how she shouldn't be flaunting them about*."
> –Female, 41, White/Caucasian, Kansas

At first, it seemed like a comment simply about how an individual is not dressed "appropriately" while in public, similar to the comments above. However, the comment

about how she would "wear bathing suits in her yard," distinguished this from the above. One's yard is considered private property and so the expectations for a public space would not apply. Yet it seems that because the person was *visible*—at all, to anyone, the space became public and is subject to public rules/norms about dressing (i.e., "shouldn't be flaunting" her legs and arms). The domains of public and private are not clearly delineated; perhaps what is public is more restricted for the stigmatized individual. Visibility seems to constitute the public arena (for weight stigmatized individuals), and some parents appear firm on how others *should-should not dress* when they are visible. Regardless of the view of "public" space, parents seemed to expect that POA-targets should conceal their bodies in public and adhere to social norms of appearance and dress.

Self-presentation while eating in a public space. Other messages addressed self-presentation in terms of individuals' eating behaviors exhibited while out in public. These messages tended to make clear reference about how individuals should be embarrassed or should not be eating (or eating in a particular way) in public (4 messages). Similar to body concealment, these memorable messages suggested that some behaviors (from stigmatized people at least) should be concealed from public view; targets are expected to be embarrassed about their behavior in public and, by extension, self-presentation. For instance, participants recalled such statements as "*…those fat slobs were not embarrassed to make pigs of themselves in public…*" (Male, 49, White/Caucasian, California) and "*I don't know how people can live eat that [eat like that], at least do it in your house not showing everyone*" (Female, 29, Asian/Asian American, New York). Parents critique the behaviors being committed, yet there seemed to be greater focus on the *visibility* of the performed behaviors: Not necessarily that it happened, but that other people *saw* it

happen. There is some implication that it would be acceptable so long as others could not see it in action—though it is more likely the stigmatizing messages would not stop but would instead change to another type of stigma message (e.g., blame).

Expectations for embarrassment were common with messages about self-presentation surrounding eating behaviors. These messages exhibit beliefs that all POA should be embarrassed to be so visible in the public space. Sentiments such as "at least do it in your house" and they "were not embarrassed" made it clear that there was an expectation that people should be aware and ashamed of how they are acting in public and being perceived by others. Thus, people are judged against social expectations on multiple levels, at times simultaneously: 1) They should not look overweight/obese in general, 2) they should not look overweight/obese and inhabit public spaces, 3) they should not eat in certain ways, and 4) they should not eat in those ways when they are visible to others.

Public self-presentation reflecting on others. At times, parents voiced concerns about POA self-presentation and how their public appearance reflected poorly on others (e.g., family, friends; 3 messages). POA-targets were perceived to reflect poorly on others, in real or hypothetical instances, and included references to the expectation or experience of embarrassment, shame, and blame because of association with POA-targets. Parents reflected on how POA-targets cause embarrassment for others due to their weight-related appearance (including the speaker). One participant heard her mother state that *"she was embarrassed by his [her husband's] weight*" (Female, 39, White/Caucasian, California), whereas another mother mentioned that she was at times "embarrassed to be seen in public" with her daughter's "obese" friend (Female, 45,

White/Caucasian, Missouri). Another participant recalled that her parent stated, "*That person has no self-control… They are an embarrassment to their family and friends…*" (Female, 30, Asian/Asian American, Colorado). The incorporation of the POA-target into a social network (even if somewhat removed) appears to be perceived as a threat to all others in the network. Individuals are motivated to protect their social group's positive image, as well as expect other group members to follow those norms (Brown, 2000). POA deviated from group expectations, as well as reflected negatively on the speaker by association. This seemed to indicate that the social pressure to be thin affected their relationships with others, causing people to feel embarrassment for having POA in their networks and desire to maintain distance from them. Research suggests that children with overweight appearance tend to be pushed to the periphery of their peer networks (Gray et al., 2009). It is possible that embarrassment from being associated with a stigmatized person that causes POA to be pushed to the periphery or excluded from social groups.

Control of Physical and Social Space

Several participants remembered messages that implied or stated directly that POA-targets' bodies imposed upon and created issues within others' physical space, suggesting that *they shouldn't be such an imposition in this shared space* (5 messages). Memorable messages tended to communicate that POA-targets were somehow mistreating, misusing, and/or disrupting the space while causing problems for others. These concerns appeared to focus on physical space, as well as social space.

Physical space. When discussing physical space, parents communicated that POA-targets were disrupting the physical space and those within that space by extension. These statements were commonly made within the context of confined spaces, such as

grocery store aisles. Though shared spaces, there was a sense that POA-targets were infringing upon the rights or area of others sharing the space. One memorable message recounted how a parent stated, "*how disgusting it was that an overweight lady took up the whole aisle*" (Female, 37, White/Caucasian, Texas) and that the person prevented them from moving freely down the grocery aisle. Similarly, another participant recalled that her parent stated that the person should "*just get a wheelchair if you cannot carry yourself properly*" to a woman in the grocery store when the parent thought the woman was moving too slowly (Female, 37, White/Caucasian, Oregon). One can infer from these types of messages that some people expect that all bodies, regardless of size or ability, should act like bodies with average weight appearance in physical spaces. This rejects the fact that bodies come in all shapes and sizes, and further reinforces views that people must move/be as others expect and thin-average weight bodies have a greater right to public space.

Parents attributed the perceived imposition (e.g., slower pace) on the POA-targets rather than on external circumstances. For instance, instead of blaming the grocery store for having narrow aisles, parents might blame POA. Prior research suggests that individuals make negative internal attributions about others' behaviors based on perceptions that individuals hold negative qualities (Johnson, 2013). Stigmatized individuals, like everyone, are navigating the world as necessary, yet onlookers judged their weight-related appearance and responded to their actions as threatening or disruptive. Ultimately, these negative judgments reflected and reinforced views that there is a way that people should act, regardless of body shape and size.

Social space. Physical space was not the only form of "space" addressed. In addition to imposition on physical space, one participant reported hearing parents' concerns about POA-targets causing discomfort to others in shared social space. One participant recalled his mother discussing her potential discomfort:

> "My mother was talking about a woman on the plane sitting across the aisle from us. *She described her as being too big and that it looks uncomfortable for the people around her.* She also mentioned that *she's glad she didn't have to sit next to her because it would be very uncomfortable and awkward.*"
> –Male, 31, Asian/Asian American, Texas

The parent acknowledged the perceived imposition on others' physical space, similar to the previously discussed examples. It also conveyed the potential for discomfort and awkwardness to share social space (forced by limitations to physical space) with POA. Stigma-based social discomfort has been noted in prior research (Grove & Werkman, 1991; Hebl et al., 2000), such that people might be anxious around or avoidant of stigmatized others. Consistent with this, some parents reported more difficulty being around POA due to weight stigma perceptions and uncertainty about how to navigate the interaction. Physical discomfort to others seemed to be the more prevalent issue presented in the memorable messages; however, it is also important to consider how perceptions of social awkwardness might keep people from bridging social divides with weight stigmatized individuals.

Disgust and Disbelief

Parental expressions of disgust and disbelief were discovered as a theme in the memorable messages, specifically the disgust and disbelief about POA-targets' weight-related appearance and/or general appearance (13 messages, 7.5%). Disgust is a common response to stigmas, causing people to feel unsettled or perceive the stigma is gross

(Goffman, 1963; Smith 2007a, 2011). Research suggests that an "unsettling" response may be communicated verbally, through direct statements, or nonverbally, through avoidance and rejection (Mackie & Smith, 2002; Smith, 2007a). Messages of disgust and disbelief included: 1) explicit descriptions of disgust, 2) nonverbal expressions of disgust, and 3) sentiments of disbelief and shock.

Explicit (Verbal) Statements of Disgust

Most disgust messages took the form of explicit verbal statements. Parents' explicit verbal statements conveyed that they were disgusted with POA-targets due to POA's perceived deviations from social norms, usually in public settings (7 messages). These messages contained adjectives in which people or behaviors were described as deviant and "disgusting" or something similar (e.g., "disgusted," "gross"). Participants recalled that their parents made comments while out in public (e.g., grocery store, water park), including statements such as "…*how disgusting it was that an overweight lady took up the whole aisle…*" (Female, 37, White/Caucasian, Texas) and "*…Her fat is hanging out it's disgusting…*" (Female, 28, White/Caucasian, Arkansas). Parents left little ambiguity with the explicit statements: POA-targets' appearances and actions in public are perceived to be disgusting, and so are deviant, unsettling, and wrong. Research in stigma communication suggests that disgust is inherently tied to conversations around stigmatized marks (e.g., weight-related appearance) (Smith, 2007a). Individuals may be disgusted about various aspects of the physical stigma (e.g., it is present, not properly concealed), and are motivated to devalue and avoid those physical attributes which cause them to feel disgust (Smith, 2007a). Clearly, POA and their weight-related appearance are being degraded via disgust messages, and likely teach children to avoid being around

or like the POA-targets. Since prior research demonstrates that disgust is often used in tandem with discussions of stigmatized physical marks (Goffman, 1963; Smith 2007a, 2011), it is unsurprising that parents reported disgust in response to seeing stigmatized conditions (i.e., overweight appearance).

Implicit (Nonverbal) Expressions of Disgust

Not all disgust messages were overt. Instead, some participants recalled their parents using nonverbal behaviors to convey disgust, such as through tone of voice, gestures, and expressions (4 messages). Nonverbal behaviors were categorized as disgust messages if participants described it as such. For example, one participant recalled her parent communicating disgust despite little verbal communication transmitted: "…she didn't say much, *her tone and gesture were of disrespect and disgust*." (Female, 26, Asian & White, Tennessee). Another participant remembered and described that her parent implicitly expressed disgust (i.e., "…*seemed disgusted by her*…", Female, 38, White/Caucasian, Pennsylvania). Though these might be inferred by adult children rather than intentionally transmitted, these nonverbal disgust messages were clearly impactful if included in participants' memorable messages.

Notably, the sample of nonverbal messages is limited, but this could be due to the focus and method of the current study. Since this project is focused on memorable messages, participants were primed to consider verbal communication rather than nonverbal. Despite this, some participants incorporated descriptions of nonverbal behaviors, indicating that nonverbal behaviors could play a larger role in "memorable messages" and stigma communication than previously considered. Future research would

benefit from considering the role and effects of nonverbal communication in the transmission of stigmatizing messages, particularly when communicating disgust.

Disbelief

Disbelief messages emerged in the memorable messages (4 messages). Statements of disbelief shared similarities with disgust messages and often appeared alongside them. Disbelief messages were exhibited through direct references (e.g., can't believe), as well as clear descriptions of incredulity (e.g., "wow"). Parents' direct statements of disbelief conveyed feelings of incredulity over POA-targets appearance. One woman recalled her dad said that "…*he can't believe how fat my sister had gotten*..." (Female, 37, White/Caucasian, Kentucky), while another remembered her mother saying, "*wow I can't believe how heavy she is*" (Female, 42, White/Caucasian, Pennsylvania). Similar to disgust messages, disbelief messages communicated unsettlement about others' weight and appearance and rejection of POA-targets. For instance, a participant reported:

> "We were at Walmart and we saw an overweight lady riding around in the motorweight cart. *My mother remarked… sad and disgusting this person was*. …*how she can't believe they're not embarrassed to not only be seen in public, but also having to use a motorized cart*…"
> –Female, 22, White/Caucasian, Massachusetts

This and like messages reflect a relationship between disbelief and disgust. Notably, disbelief and disgust messages were often used in tandem; when appearing together in the same message, disbelief emphasized the disgust communicated and vice versa. Disgust and disbelief messages were distinct, yet disbelief messages did not seem to evoke feelings of avoidance as with disgust. Whether used in tandem or separately, parents' disgust and disbelief communicated feelings of being unsettled and a rejection of POA.

Stereotypes: Reinforcing and Contradicting

Lastly, a group of messages emerged in the memorable messages that directly addressed stereotypes (11 messages, 6.0%). Stereotype messages reflected and reinforced common weight-related stereotypes and demonstrated that parents 1) equated POA-targets' negative behavior with overweight appearance or 2) juxtaposed POA-targets' (negatively perceived) overweight appearance with their positive achievements. Notably, there were few messages that addressed sociocultural stereotypes, which attempted to counter harmful weight-related stereotypes.

Projecting Stereotypes and Bias

Connecting weight with negative traits and behaviors. Parents transmitted messages about stereotypes—and bias by extension—by linking POA-targets' negative behavior with overweight appearance (5 messages). These negative weight-trait/behavior messages focused on POA-targets' inability to act appropriately, including 1) negative emotional responses (e.g., anger) and 2) exhibiting laziness and lacking self-discipline (e.g., not helping around the house, watching others work). At times, individuals recalled interactions in which parents critiqued others because of poor emotional responses (e.g., short-tempered, lacking restraint). For example, while one participant's cousin was being discussed, her parent stated that the cousin "*…had to be the first to get food, or she'd be angry…*" (Female, 36, 5, New York). The parent associated negative behaviors with appearance here: The cousin needed to be first (first negative behavior) or she would have a negative emotional reaction (second negative behavior). Moreover, this barred her from being associated with positive behaviors as her weight status is linked to negative behaviors, regardless of the (predicted) outcome. These messages linked negative

behavior with overweight appearance and promoted harmful stereotypes, suggesting that their emotional responses are intrinsically tied to overweight appearance.

Parental messages also incorporated stereotypes by connecting targets' weight with laziness and lacking self-discipline, one of the most common weight-related stereotypes (Blaine & McElroy, 2002). What constituted laziness varied across behaviors (e.g., poor parenting, not helping with work). One participant recalled that her father connected her aunt's (POA- target) poor parenting with her overweight appearance, saying that she kept her son from going to Chuck-E-Cheese with the family because she "*is extremely overweight and would not be able to do that with her child when they return home alone."* The participant further clarified this by reporting, *"... [her father] essentially called her a bad parent because she is obese*…" (Female, 21, Hispanic/Latina, Florida). Similarly, another reported that a visiting family member did "*nothing but eat and complain… no help cleaning up …or watching the kids. …she was hiding large quantities of snacks in her bedroom…*" (Female, 54, Native American, Washington). Perceived laziness and inability (e.g., poor parenting, not helping with chores) was linked to weight-related appearance, despite these behaviors being unrelated to weight and having multiple causes for them (e.g., punishment for child, concerns about money, health issues). Multiple negative behaviors are noted here, clustering them together without reference to positive attributes or behaviors. People often associate overweight/obese appearance with other negative traits and behaviors (Bento et al., 2012; Black et al., 2014; Blaine & McElroy, 2002; Mond, 2013; O'Brien et al., 2013); these messages reflect prior research and offer insight into how people specifically

communicate these linkages to others. Ultimately, this is one way that weight stigma is transmitted, learned, and reinforced in the family.

Juxtaposition of overweight status and positive outcomes. Moreover, when information is clustered in negative categories, it diminishes the likelihood that positive behaviors and outcomes will be attributed to the person. In the case of weight stigma, people will not expect positive behaviors from or outcomes for POA. This is reflected in previous examples where negative behaviors were connected to POA-targets' weight-related appearance. However, some messages transmitted stereotypes by juxtaposing weight-related critiques with positive outcomes (e.g., wealth, celebrity), calling attention to parents' surprise when they saw POA experience positive outcomes (2 messages). One male participant reported that, while watching T.V., his mother stated: "…*Look at that guy. How does a fat slob like that get to be so famous*?" (Male, 26, White/Caucasian, Missouri). Another participant reported that her father expressed confusion about her aunt was successful and wealthy but still have overweight appearance, saying how could she have "…*nice things but was OK being so fat*" (Female, 46, White/Caucasian, South Carolina). Parental messages generally incorporated confusion or disbelief about the combination of negative attributes with positive ones, reflecting views that POA should have negative qualities and/or experience negative outcomes.

These messages generally indicated that POA are (expected to be) unable to be successful in a given context (e.g., work, parenting). Prior research suggests POA are often stereotype as not as good, successful, or capable as people with average weight appearance (Blaine & McElroy, 2002); thus, individuals should work to attain a thin appearance to gain positive life outcomes. Consistent with this, parents expressed

"confusion" when seeing POA received positive outcomes. These messages reinforced views that overweight/obese appearance is wrong and *should* lead to negative outcomes. Considering positive outcomes at least recognizes the capability and success of the *person* being targeted with stigmatizing messages. This type of can promote bias toward POA, but also demonstrate that POA can be efficacious and successful.

Addressing and Contradicting Stereotypes

Though minor in comparison, there was a small sample (4 messages) that contradicted weight stereotypes and bias, specifically about how people treat overweight individuals and the causes of obesity. To clarify, parents' messages did not completely support all bodies and weight groups, but they seemed to counter some reductionist stereotypes. For instance, one participant recalls that his mother attempted to counter cultural bias: When he made assumptions about an individual, his mother responded by stating, "*there would also be the possibility that the person's weight may not have been a result of food consumption but thyroid problems*" (Male, 72, White/Caucasian, Massachusetts). This parent does not discourage the discussion of bodies and appearance, so no contradiction is made about negative weight-related perceptions. Similarly, one participant recalls that his parent both contradicts control stereotypes and critiques POA-targets' appearance, saying, "*Ms. S---- was very ugly but couldn't help it because she probably had a 'gland problem*'" (Male, 69, White/Caucasian, Texas). Parents generally challenged stereotypes; however, as evidenced in the second example, these challenges might not fully dispel negative stereotypes or could include negative views. As such, challenging stereotypes about weight might not be *only* positive and may instead (intentionally or unintentionally) reinforce weight-related stereotypes and bias.

CHAPTER 6

QUANTITATIVE ANALYSIS & RESULTS

Quantitative Analysis

To answer the remaining research questions and hypotheses, memorable messages were codified through content analysis (n = 185). Two coders independently read and systematically rated each memorable message to determine: 1) message relevance (e.g., removing a case where a participant copied the question into the answer the box) and 2) what and how many mark (e.g., "…said he looks fat…", label (e.g., "…referred to a women on the street as a 'beefalo'"), peril (e.g., "... [could not come] with us because she would busy the wheels of…"), and responsibility cues (e.g., "…should be working harder to slim down…") were present. Inter-coder reliability was measured for each of the cues; analysis revealed sufficient agreement.

To answer Research Question 2, descriptive analysis was conducted to identify the frequency with which mark, label, peril, and responsibility cues appear in each message separately and in combination (noted as 0+ for each cue type). Memorable messages had the capacity to have only one stigma cue, and, by extension, be absent of the other stigma cue types simultaneously. Therefore, when conducting analysis with stigma cues, only cases wherein the particular stigma cue type was present were retained for analysis. For instance, when analyzing associations with peril cues, the analyses only included the cases in which peril was exhibited in the memorable messages. Table 4 reflects the full correlation table of variables accounting for this process, and reports the

correlation coefficient, *p*-value, and degrees of freedom to reflect the cases used in analysis.

Additionally, to provide context around message transmission, more general descriptive information about memorable messages was ascertained as well, including: 1) message targets, 2) message senders, 3) type of message confirmation, 4) message context (e.g., public, private), 5) stigma frequency, and 6) stigma magnitude. Frequency and magnitude of communicative behavior is often impactful to individuals, and so were also included in Table 4 to provide additional information about the parent-child weight stigma communication process. Analysis for Hypotheses 1-4 and Research Question 3 were conducted using bivariate and partial correlation analysis to examine the relationships between stigma cue type(s) and weight-related perceptions and behaviors.

Quantitative Results

Individuals were free to identify a memorable message from any parent/parental figure. Participants (n = 185) provided context about the memorable messages, such as speaker information, target information, and whether and how many people were present.

Contextual Information

Message speaker and target. All participants identified the speaker as their parent or parental figures; however, the reported label of the speakers varied: fathers (53.5%), mothers (41.1%), grandparents (4.3%), and stepparents (1.1%). Participants recalled POA-targets' gender, with POA-targets reported as: 1) female (67.2%), 2) male (30.2%), 3) don't know/unsure (1.6%), and 4) mixed group of people or other (1.1%).

Group composition. Participants provided information about the immediate context of the situation. To address this, participants first recounted who was present

when the message was transmitted. Most weight messages were said in private, such that only the parent and child were present when the messages were transmitted (45%). Other participants recalled times in which: 1) child/participant and sibling(s) present (42%), 2) child/participant and extended family present (5.8%), 3) child/participant and non-family members present (3.7%), and 4) unspecified/did not answer (3.2%). Thus, most participants recalled that their parent(s) made their weight stigmatizing comments in front of immediate family members only.

Children's responses. Participants also reported on the situation context by providing information about the *message confirmation*, or their responses to the parent/speaker. Individuals reported that they: 1) agreed with parent(s) (15.7%), 2) did not reply to parents (64.3%), tried to change the subject (13.5%), and replied with objection or disagreement (6.5%). Thus, participants seemed to respond with indirect or avoidant strategies. Though these responses would not overtly accept or support parents' stigma messages, these avoidant responses could be viewed as being complicit with the stigmatization of POA-targets.

Message frequency and magnitude. Individuals were asked how often they recalled their parents making similar statements, or *stigma frequency*, and their perceived magnitude of the recalled memorable message, or *stigma magnitude*. Stigma frequency and magnitude correlated with weight-related outcomes: weight anxiety, fear of fat, and restrictive eating. Stigma magnitude significantly related to exercise behavior (Table 3).

Research Question 2

Few studies have codified of recalled weight stigma messages, and, to my knowledge, none that has used Smith's stigma cues to assess participants' memorable

messages. Following the MSC (Smith, 2007a), stigma messages must incorporate at least *one* type of cue (e.g., mark). A cue may be used multiple times in one message, yet not appear in other messages; it is also possible for multiple different types of cues to be used in the same message. It seemed prudent to first determine the prevalence of stigma cues, or frequency of use, in participants' memorable weight stigma messages before moving into further analysis (RQ2). Frequency of appearance (whether the cue appeared in a message) and cue amounts (total of each cue type) were determined to answer RQ2 (Table 2).

Cue frequency. Mark cues were the most frequently occurring cue type in memorable messages (74%), followed by responsibility (44%) and label cues (28%) and peril cues (15%) of messages included at least one peril cue.

Cue amount. The amount of cues was noted in order to determine how many times each of the four stigma cues were present in each memorable weight stigma message. After coding the four stigma cue types, analysis was run to determine the total amount of each cue type used in parental weight stigma messages. There were 418 cues in total present in the 185 memorable messages. Similar to frequency, mark cues yielded the highest amount within the sample (200 cues), followed by responsibility (122 cues) label (68 cues), and peril (31 cues). All bivariate correlations are presented in Table 4.

A bivariate correlation analysis was conducted on stigma cue amounts to investigate stigma cue relationships. Mark cues were positively related to label cues (r = .47, $p < .05$, df = 22), but neither mark nor label were significantly related to peril or responsibility cues. Peril and responsibility cues were significantly, positively associated (r = .57, $p < .05$, df = 14).

Table 2. *Stigma Cue Frequency & Amount*

	Cue Frequency (*n* = 185 messages)		**Cue Amount** (*n* = 418 cues)		
Stigma Cue Types	*#*	*%*	*#*	*%*	M (SD)
Mark	136	74%	200	48%	1.08 (0.88)
Label	51	28%	68	16%	0.37 (0.65)
Peril *(adjusted)*	28	15%	31	7%	0.17 (0.42)
Responsibility	81	44%	122	29%	0.66 (0.93)

Memorable Weight Stigma Messages and Weight-related Outcomes

Hypotheses 1-4 and Research Question 3 were concerned with investigating the relationship between memorable weight stigma messages, specifically stigma cues and receivers' weight-related outcomes. BMI was significantly related to all weight-related outcomes and age significantly related to eating attitudes, and so age and BMI were controlled for in the data analyses when appropriate. All partial correlations are reported in Table 3.

Table 3. *Partial Correlations between Stigma Cues and Outcomes*

	Stigma Attitudes	Weight Anxiety	Fear of Fat	Restrictive Eating	Exercise Frequency	Degrees of Freedom
Mark	-0.01	0.20	0.03	-0.04	-0.01	133
Label	0.28*	*-0.20*[b]	0.06	0.18	*0.23*[a]	48
Peril	0.44*	-0.11	0.27	0.23	0.12	24
Responsibility	0.10	0.01	0.04	*0.16*[b]	-0.05	78
Cue Total	0.13*	-0.00	0.10	*0.11*[b]	0.03	180

Note. *$p < .05$, **$p < .001$, [a]$p = .06$, [b]$p = .08$ (one-tailed). BMI and age were controlled in analysis with restrictive eating (df = listed-1). Only BMI was controlled in all other analyses.

Table 4. *Bivariate Correlations of Stigma Cues, Outcomes, and Control Variables*

	1	2	3	4	5	6	7	8	9	10
Stigma Cues										
1. Mark	--									
2. Label	**0.47*** (21)	--								
3. Peril (adjusted)	-0.81 (17)	0.39 (10)	--							
4. Responsibility	-0.15 (58)	-0.16 (12)	**0.57*** (13)	--						
5. Cue Total	--	--	--	--	--					
Outcomes										
6. Stigma attitudes	-0.01	**0.25***	**0.45***	0.10	*0.12*[a]	--				
7. Weight anxiety	**0.21***	-0.16	-0.18	0.00	0.02	**-0.22****	--			
8. Fear of fat	0.07	0.09	0.23	0.04	**0.13***	**0.15***	**0.55****	--		
9. Restrictive eating	-0.04	0.17	0.18	*0.16*[b]	**0.12***	*0.10*[b]	**0.43****	**0.57****	--	
10. Exercise	0.64	0.23	0.19	-0.05	**0.13***	**-0.16***	**-0.19***	0.06	**0.23****	--
BMI	*0.13*[b]	0.11 (50)	-0.17 (26)	-0.02 (79)	0.09	**-0.15***	**0.22***	**0.22***	**0.22***	**0.26****
Age	*-0.13*[a]	**0.23***	0.13	0.02	0.05	0.05	0.05	0.05	**0.13***	0.01
Stigma Frequency	*0.12*[b]	-0.05	0.19	0.12	**0.17***	0.07 (80)	**0.32****	**0.32****	**0.23****	0.08
Stigma Magnitude	0.94	0.16	-0.22	-0.01	-0.00	-0.13 (80)	0.30**	0.30**	0.23**	0.11**
Degrees of freedom	137	51	27	80	184	184	184	184	184	184

Note. *$p < .05$, **$p < .001$, [a]$p = .06$, [b]$p = .08$ (one-tailed). The df for correlations with BMI are (1, 183) unless otherwise stated.

Hypothesis 1. All four stigma cues were predicted to be positively associated with weight stigma attitudes. Partial correlations were run to test the relationship while controlling for BMI. As expected, label (*partial r* = .28, $p < .05$, *df* = 48) and peril cues (*partial r* = 0.44, $p < .01$, *df* = 24) significantly related to weight stigma attitudes. Counter to predictions, mark cues (*partial r* = -.01, $p = .28$, *df* = 138) and responsibility cues (*partial r* = .19, $p = .20$, *df* = 77) did not associate with weight stigma attitudes. Thus, Hypothesis 1 received partial support.

Hypothesis 2. Mark and label cues were predicted to be related to weight anxiety, such that mark cues would positively and label cues would negatively relate to weight anxiety. Controlling for BMI, mark cues did indeed yield a positive relationship with weight anxiety (*partial r* = .20, $p < .05$, *df* = 133). Label cues demonstrated a trending relationship with weight anxiety (*partial r* = -.20, $p = .08$, *df* = 48). Hypothesis 2 was partially supported.

Hypothesis 3. Stigma cues were predicted to relate to fear of fat: Mark, label, and peril cues were predicted to be positively related to fear of fat, while responsibility cues were predicted to be negatively related to fear of fat. Counter to predictions, results showed that mark cues (*partial r* = .03, $p = .36$, *df* = 133), label cues (*partial r* = -.06, $p = .35$, *df* = 48), and responsibility cues (*partial r* = .04, $p = .37$, *df* = 76) were not associated with fear of fat. Peril cues demonstrated a positive, trending relationship (*partial r* = .27, $p = .09$, *df* = 24). Results overall did not support Hypothesis 3.

Hypothesis 4. Parental stigma cues were also expected to be associated with individuals' restrictive eating behavior (i.e., dieting, food awareness) and exercise behavior, such that: Mark cues will be positively related to restrictive eating and exercise

behavior, peril cues will be positively related to restrictive eating behavior, and responsibility cues will be positively related to exercise behavior. Due to their significant relationships with dependent variables, BMI and age were controlled during analysis of cue relationships with eating behavior, while BMI was controlled during analysis of stigma cue relationships with exercise. Restrictive eating was not related to mark cues (*partial r* = -.04, *p* =.31, *df* = 132) or peril cues (*partial r* = .23, *p* = .14, *df* = 24). Responsibility cues yielded a positive, trending relationship with restrictive eating (*partial r* = .16, p = .07, *df* = 77). Mark cues did not predict exercise behavior (*partial r* = -.01, *p* = .48, *df* = 133). Hypothesis 4 was unsupported.

Research question 3. A research question was advanced as a guide to investigate how the total amount of cues associate with weight-related outcomes. Cue total positively associated with weight stigma attitudes (*partial r* = .13, *p* < .05, *df* = 180), but not with weight anxiety (*partial r* = -.00, *p* = .49, *df* = 180) or exercise (*partial r* = .03, *p* = .35, *df* = 180). The relationship with fear of fat (*partial r* = .10, *p* = .09, *df* = 180) and restrictive eating (*partial r* = .11, *p* = .08, *df* = 179) was trending.

CHAPTER 7

DISCUSSION OF RESULTS

The current study aimed to 1) investigate the types of messages that individuals recalled their parents transmitting about others' weight-related appearance, 2) codify messages using the MSC, and 3) examine how stigma cues embedded in their memorable messages related to individuals' current weight-related outcomes. As demonstrated, these questions were investigated using mixed methods approach, using both qualitative and quantitative methods. As there were two disparate investigations to examine participants' memorable messages, the discussion below reviews qualitative and quantitative results separately. Thus, the discussion section below is structured as follows: 1) discussion of qualitative results, 2) discussion of quantitative results, 2) limitations of the study, and 4) conclusion.

Discussion of Qualitative Results

From the memorable messages, eight thematic categories emerged: *degrading remarks*, *warning and teaching*, *blame*, *physical standards*, and *comparisons and restrictions*, *social control*, *disgust and disbelief*, and *stereotypes*. These thematic categories are distinct, yet patterns were discovered across themes that connected the various groups at times. These primarily emerged as factors influencing the form and transmission of parents' stigmatizing messages.

Influential Factors Appearing Across Categories

There were several factors that repeatedly appeared as influencing message transmission, including 1) gender, 2) relationship type, 3) identity, 4) and power. Though

not an influential factor, the use of nonverbal messages also emerged as important in memorable messages. It is difficult to identify whether these factors are related to parents' commentary or adult children's memories; however, these patterns do seem to reflect appearance-related expectations, messages form, and motivations for weight stigmatizing message transmission.

Perceived gender of message targets. POA's perceived gender appeared to be an important factor influencing when and how individuals were weight stigmatized. Across thematic categories, women tended to be addressed with dehumanizing labels (e.g., animal names), viewed with more disgust, and were critiqued more often for appearance (as opposed to performance of responsibilities). These messages seemed to reflect views that women's value is inherently connected to their perceived body shape, size, and overall appearance. Moreover, these messages highlight the different cultural expectations for men and women, particularly about individuals' appearance and appropriate responses to men's and women's appearance-related deviations. Though men and women can experience body objectification and weight stigma (Bucchianeri et al., 2014; Harper & Tiggeman, 2008; Lewis et al., 2011; Ridgeway & Tylka, 2005), prior research suggests that women tend to experience stricter sociocultural body-related expectations (Frederickson & Roberts, 1997), face harsher critiques, and greater negative responses for their weight (Pingitore et al., 1994; Roehling et al., 2008; Schvey et al., 2013). Furthermore, some men have reported that overweight appearance can be used as a beneficial interpersonal tool (Millman, 1980), something that is unlikely for women. The current study offers some support to prior research by demonstrating how women's

appearance were more often recalled as the subject of critique and tended to experience harsher critique than men.

One such difference was in the use of disgust messages, such that women were more often the subject of parents' disgust (perceived or stated). In the stigma literature, disgust is an emotional state in response to seeing the stigma mark, in this case overweight appearance (Goffman, 1963; Smith, 2007a, 2011); though it can be in response to any marked person, women were more often the subject of disgust. Disgust was more easily evoked when observing women deviating from weight ideals due to persistent, rigid appearance-related expectations (e.g., "*how disgusting it was that an overweight lady took up the whole aisle*," Female, 37, White/Caucasian, Texas). Moreover, only women were the subject of messages about physical appearance-related standards, suggesting that they were not measuring up to what they should look like and so should be critiqued and degraded (e.g., "*…weight gain has made her very unattractive*", Female, 43, White/Caucasian, Maryland-North Carolina). Lastly, fat-names (e.g., fatty) were applied to both male- and female-targets, but animal-names (e.g., pig) were applied to female-targets (e.g., "*…if you eat like her, you'll end up a whale like her…*" Female, 38, White/Caucasian, Mississippi). Though fat-names were demeaning and reductionist, animal-names completely dehumanized the target; instead of identifying targets as bodies, they are simply not recognized as human. Women are often viewed as only bodies (Frederickson & Roberts, 1997)—so it would be an easy jump to use fat-names that reduce people to bodies. To degrade women's bodies further requires women POA-targets to be stripped of humanity entirely, and, thus, some people may draw on animal-names more readily than fat-names to describe women. This reflects stricter

appearance-related standards for women and how people may respond to women who deviate from weight-related norms specifically. It is not my intention to minimize the experience of being labeled with fat-names (as opposed to animal-names) or the experiences of men specifically. Being the recipient of weight stigmatizing communication and actions is degrading and detrimental to individuals; however, it is necessary to examine the trends of both weight stigma communication and stigma victimization to better understand the entire process and effects of weight stigma.

Messages about appearance- versus performance-related standards, disgust, and labels reflect cultural expectations for men and women's appearance and value. As such, these messages reinforce cultural, heteronormative, gendered norms about the roles of men and women and reflect what types of conversations about POA are exchanged in the family. Expectancy violation theory (Burgoon, 1993; Burgoon & Hale, 1988) would suggest that when deviations are perceived as being more negatively valenced, it will result in heightened negative states. Since women have stricter appearance and weight expectations (Milman, 1980; Pingitore et al., 1994), their appearance-related deviations would garner stronger reactions. These reinforce distinctions between thin/average weight appearance and overweight appearance, as well as divide POA according to their perceived gender. Stigma research has suggested that women tend to face harsher weight stigma-related punishment (Bento et al., 2012; Puhl et al., 2008). This echoes previous research, demonstrating that there could be a difference in treatment between women-POA and men-POA. Research on weight stigma should continue to consider and research such gender differences to understand the similarities and differences of weight stigma experience for (cis- or trans-) men, women, and non-binary individuals.

Relationship type. Relationship type was a factor that emerged across thematic categories, specifically in relation to degrading remarks (e.g., name-calling), teaching, and warning messages. The degree to which parents communicated concern or admonishment for POA-targets seemed to reflect the relationship parents had with POA-targets (i.e., close or in-network relationships, strangers). Generally, POA-targets who were close, in-network connections tended to be discussed with greater concern, worry, and/or empathy. This type of concern dominated comparisons and restriction messages, and also was a notable trend in degrading remarks, warning, teaching messages. Participants generally recalled that parents discussed close family members (e.g., siblings, aunts, cousins). When discussing in-network members, parental messages were communicated some level of caring and concern for POA-targets' perceived physical health and appearance (e.g., "*he was concerned because my older sister was putting on too much weight…*" Female, 60, Black/African American, New York-Tennessee). Messages usually avoided degrading language and were framed more positively in comparison to messages about strangers. Messages promoted problematic views about weight and health; however, people demonstrated positive feelings (e.g., concern about welfare) about POA-targets when they were close, in-network relationships. Thus, though these messages were negative, they included some positive sentiments for POA. Note, "closeness" as psychological intimacy was not established in the survey, instead close relationships refer to proximal relationships within social networks.

There were times in which targets presumably shared an extensive relationship history with parents and were still subjected to dehumanizing messages. In these instances, POA-targets held more distant positions from parents in familial or social

networks (e.g., in-law relationships, friends' children: "*…'fat ass' [brother-in-law] wasn't shoveling food in his mouth so fast he wouldn't have made such a mess*"; Female, 37, White/Caucasian, Ohio). Parents seemed to have previous experience with POA-targets, as with in-laws, but POA-targets could be viewed as more removed, distant than other family members in their families-of-origin. Generally, being known and closer in the parents' networks prompted more caring, concerned messages, while strangers and distant others were the target of more degrading messages.

When discussing strangers, however, parents used hostile, derogatory messages that offered little care or concern (e.g., "*damn she's fat*", "*the news anchor looks like she had eaten another news anchor*", "*…'what are you looking at fat ass"*"). This was particularly prevalent in degrading remarks, disgust, and social control messages. When parents targeted strangers or less well-known others, messages offered little concern or empathy for POA-targets, and instead were aggressive and degrading. These messages were generally transmitted within a public context (e.g., beach: *"people that fat shouldn't be allowed to take their shirt off";* Male, 23, White/Caucasian, New Jersey), seemingly as a means to denote who was similar or dissimilar to parents and children. These statements created social distance with targeted POA and POA in general. People neglect to view unknown others as multi-dimensional individuals, and instead treat them as an object to be used or removed for their purposes (Buber, 1958; Fife, 2016). Thus, they may be less likely than close others to receive empathy or positive attributions. Ultimately, viewing POA-strangers as objects or not recognizing them as multi-dimensional beings could make it easier to attack POA, particularly when POA are seen as interfering via their appearance-related deviations. It is logical (even if unethical) that

speakers would use these forms of degrading comments more often on unknown (or less well known) others (e.g., strangers, neighbors from down the street). These messages act to separate POA from non-POA, but also further reinforce distance between strangers.

This can be explained in part by research on social identity and categorization. Individuals are motivated to protect their valued social groups (e.g., family, social group), and should be less likely to disparage those within the group if it could reflect poorly on themselves or group as a whole (Brown, 2000). Additionally, when individuals fall towards the center of the social network, they hold more power and status, and POA tend to be positioned toward the periphery of group networks (Gray et al., 2009). Non-stigmatized people are motivated to keep stigmatized people (e.g., POA) out or toward the edges of their network but will be motivated to protect people within their network. As such, they may use a blend of stigmatizing and positive comments with in-network members and more degrading communication with strangers or acquaintances. In either instance, non-stigmatized people can then reinforce social distance from POA and also protect themselves and/or the dominant social group. Along with this, though not assessed in this study, these in-network relationships might also be *close* relationships in terms of psychological intimacy. Such intimacy with someone would relate to the potential ability to experience and express empathy with and toward the person. For instance, people tend to better understand and empathize with friends' feelings in comparison to strangers (Stinson & Ickes, 1992). Experiencing empathy could impact the use of disparaging and degrading weight-related comments towards that same person.

It is also possible that parents' relationships with POA-targets impacted adult children's recall and retelling of the events. It is well known that participants may skew

their reporting in research to manage their identity and social desirability (Adams et al., 2005; Bernstein et al., 2001; Brenner & DeLameter, 1996), and this could be occurring in the study. Though disgust messages might be seen as more often applied to strangers, it is possible individuals felt there was less risk to their social desirability or social identity when recounting disgust messages targeted toward strangers. More in-depth interviews might be useful in fully understanding recall and impact of memorable weight stigma messages; this method would allow researchers to probe further as to why it was memorable, how it was impactful, and to ascertain whether this was a unique experience (e.g., calling a stranger disgusting once) or a pattern of behavior with their parents (e.g., calling strangers, friends, and family members disgusting). This would help clarify how and when individuals use various types of weight stigma messages. Until then, preliminary evidence suggests there were differences in how weight stigma messages might be applied and/or remembered depending on speakers' relationships with targets.

The data suggests that in-network relationship type factors into the message production process, possibly closeness by extension as well. Weight messages about in-network relations offer more concern, worry, and care, whereas messages targeting strangers were more severe and less concerned with POA-targets' welfare. It is unclear how people determined which individuals belong to their network and to what extent, as well as how psychologically close they feel about others. Participants might alter their reports to protect loved ones. Considering this, it is a factor that should be further studied qualitatively and quantitatively in relation to weight stigma message production, perception, and reception, including examining the role of both closeness (psychological intimacy) and proximity of in-network relationship.

Identity. Parents' and POA identity and identity management also appeared across themes as a possible factor influencing weight stigmatizing messages, particularly identity management, labeling, and face saving.

Social identity management. Parents' weight stigmatizing messages suggested that there may be concern with distinguishing social identity groups and reinforcing these distinctions. Messages indicated the various ways of looking at weight group differences based on descriptions of POA (implication that they are different from non-POA). Parents reportedly made these distinctions in different ways, considering weight groups in terms of dichotomous groups (i.e., normal/average weight versus deviant/overweight), range of weight deviance (i.e., normal/average weight, deviant/overweight, deviant/obese), and between human and less than human (i.e., normal/multi-faceted human, deviant/body-only, deviant/animal). These distinctions were prevalent in degrading remarks (specifically name-calling), warning and teaching, blame, physical appearance, comparisons, social control messages. The broader takeaway is that these messages reinforced social group distinctions, privileging "normal" bodies (encompassing thin and average weight individuals) over and to the exclusion of overweight-appearing bodies.

Parents' messages focused on different aspects or motivations for exclusion, with some messages relying on simple derogatory labels and others communicating that people should not be as they are. This type of communication ultimately labeled and discredited POA-targets as deviant. Further, this protected parents' own weight group and social identity by stating that deviant people are not doing/being how they should, and by extension are not acting as *the parent is*. This suggested that parents are in the right

(appearance and/or behavior) as they critique others, firmly reinforcing their positions in "normal" or average weight identity and excluding deviant bodies into other lesser, discredited social identity groups. Consequently, these messages trained children to 1) recognize that weight-related appearance is culturally and socially important and 2) identify which weight groups are considered (un)acceptable.

In reinforcing weight group identity differences, outcomes both favor the ingroup and against the outgroup. People are motivated to support someone who shares the same group identity, and avoid or exclude those from different, lower-status groups (Brown, 2000; Levine et al., 2005), which can lead to discrimination in personal and professional contexts (Fontana et al., 2013; Gray et al., 2009; Lewis et al., 2011; Pingitore et al., 1994; Schvey et al., 2013). These messages reflected and reinforced perceived group distinctions, leading to positive outcomes for ingroup members and discrimination to deviant outgroup members. Though limited to speculation about parents' motivation, evidence suggested that these messages communicate the importance of weight-related appearance by labeling and excluding POA.

Labeling: Types and levels of dehumanization. A portion of the memorable messages demonstrated that labeling was prevalent in weight stigma messages. Labels are affixed to stigmatized individuals to focus attention on the stigma, identify, and separated normal individuals/groups from deviant individuals/groups, and dehumanize labeled persons (Smith, 2007a, 2007b), and can both represent POA negatively and be a form of aggression against POA. Labeling was most obvious in the degrading remarks via overt negative descriptions and name-calling to label POA-targets ("*… 'Damn, she's fat!*'": Female, 26, White/Caucasian, California; "…*look at that hippo run*": Female, 42,

Black/African American, Arizona). These explicit labels denoted specific qualities about POA-targets and distinguish POA as different, deviant, and negative due to their weight-related appearance. Labeling was prevalent in disgust, blame, and warning and teaching messages, though not as overtly.

At times, disgust and blame messages also incorporated labels, which further stigmatized and distanced POA. Blame and warning messages often utilized name-calling when using labels (e.g., "whale", "fat"). In disgust messages, labels or descriptions of weight (e.g., "fat") were paired with labels (e.g., "gross"), enhancing the negativity and aggressiveness of weight stigmatizing messages. These messages blended various message functions with labeling (e.g., warning and name-calling) to heighten the negative evaluation and stigmatization of targets. A participant's father said, "*…if you eat like her, you'll end up a whale like her…*" (Female, 38, White/Caucasian, Mississippi). These types of messages carried negative sentiments about POA, but the incorporation of labels seemed to further devalue and dehumanize POA-targets. By including the label, there is an additional level of stigma that emphasizes the importance of heeding parents' warnings. This reflects what has been discussed in the stigma communication literature: Smith (2007a, 2014) argues that one or more stigma cues—including labels—may be evident in stigma messages. Thus, parents' messages drew on multiple ways to stigmatize POA in their weight stigma communication. There are not only a variety of labels and types of weight messages evidenced in the memorable messages, but also that these types (e.g., blame, name-calling) may be used simultaneously.

The use of labels is somewhat expected since it has been discussed in the stigma literature (Goffman, 1963; Smith, 2007a, 2011). Prior research has investigated the

perceptions about and preferences for a variety of weight-related labels, demonstrating that there are many labels that have been used to describe POA (e.g., overweight, fat, curvy) (Puhl et al., 2013; Puhl et al., 2017). For instance, Wadden and Didie (2003) investigated weight-related labels in the physician-patient contexts, demonstrating that certain terms (i.e., fatness, excess fat, obesity, large size) were appraised more negatively than other labels (i.e., weight, heaviness, BMI, excess weight, unhealthy body weight, weight problem, and unhealthy BMI). Such research indicates that labels carry different connotations and may be viewed as more or less favorably. For POA-targets, being incorrectly or negatively labeled can be related to negative outcomes for individuals (Lewis et al., 2011; Smith, 2007a, 2011; Stets & Carter, 2011). Further, for recipients of weight stigma messages, individuals' perceptions and responses are influenced by the labels used in conversation. Results of the current study suggested that labeling is pervasive in weight stigma message transmission and can take a variety of forms to identify stigmatized individuals. This extends the extant literature by offering first-hand accounts of the variety of labels and names targeted at POA in weight stigmatizing messages.

What was novel about parents' messages is how degrading and dehumanizing labeling varied in type and severity. In fact, one avenue of future research is to explore the levels of severity for stigmatizing labels. Prior research has argued that aggression can be conceptualized and operationalized on a continuum (e.g., none to extreme: Slotter et al., 2012; mild, moderate, severe: Curtis et al., 2015; Katz et al., 2002; Lawrence & Bradbury, 2001). Based on participant responses, it seems that labels could be mapped on a similar continuum, such that results differently degraded and dehumanized targets by

both type and severity. Some labels (e.g., fat-names, disgust labels) regarded targets as deviant bodies, individuals breaking various societal norms but nonetheless regarding targets as *humans*. Other labels (e.g., animal-names) regarded targets as less than bodies, barring them from even being considered human. This broad distinction is apparent in the current study, although the degree of severity within these dimensions is difficult to determine in the current study. Considering that labels provoke different corresponding connotations and responses (Puhl et al., 2013; Puhl et al., 2017; Stets & Carter, 2011; Wadden & Didie, 2003), the severity of degradation and dehumanization of labels could differently impact targets' personal responses and outcomes. For instance, being the target of animal-names could produce more severe negative outcomes in comparison with being targeted with fat-names. This also could extend to the witnessing stigmatizing messages, such that some labels might provoke more severe personal outcomes or promote stronger anti-fat attitudes in observers.

This avenue of inquiry could be helpful with understanding weight-related verbal aggression and possible predictability of weight group associations—both within-group and between-groups. Often when researching weight stigma aggression and victimization, participants are asked to recount their experience with verbal victimization (e.g., teasing), cyberbullying, physical victimization, and relational victimization (e.g., social exclusion) (Puhl & King, 2013; Puhl et al., 2013; Westermann et al., 2015), and how frequently they experienced the behavior(s) (e.g., teasing) (Bucchianeri et al., 2013; Bucchianeri et al., 2014). This is important information, however, does not account for the severity of behaviors. Understanding the variance in label severity would also allow for a better understanding of how individuals perceive and interact with other weight

identity groups. Individuals' social identities motivate them to act and interact within and between identity groups (Brown, 2000; Hogg et al., 1995; Hogg & Reid, 2006; Levine et al., 2005). Individuals may monitor and attempt to manage fellow in-group members to maintain in-group status and norms. It is apparent that parents use various labels to categorize POA-targets as belonging to deviant, lesser weight groups that evoke disgust, use name-calling, and assign blame for POA-targets' weight-related appearance to position them within a deviant weight group. These statements are communicated to fellow in-group members and may also be used to reinforce group differences and teach their children how to remain in the "correct" positive in-group (i.e., average weight, non-POA). The results of the current study indicate that there are varying levels of degradation and dehumanization of labels and illustrate the importance of further investigation and classification of weight stigmatization.

Lastly, these results suggested that perhaps the conceptualization and operationalization of labeling should be expanded in the MSC. According to research on the MSC, labels are used to identify and separate stigmatized people from non-stigmatized people, using stereotypes, marks, or threats (Smith, 2007a, 2012). Further, MSC research investigating the effects of labeling have generally been tested by providing specific label for testing (e.g., cavers versus people with CAV; Smith, 2014). The labels used in this study demonstrate clear connections with the conceptualization and operationalization in previous research, particularly with name-calling. A narrow view of labeling was expanded in this study to incorporate other forms of identification, separation, and depersonalization to include messages labeling targets as disgusting, lazy, and lacking in self-control. This does not explicitly counter or fall outside the scope of

the conceptualization of "labels" as described above, but it is broader in terms of how labels have been operationalized and tested previously. Implications from these results reinforces that labeling is used to separate and devalue targets and extends prior research by demonstrating the variety and levels of dehumanization of labels in weight messages. Clearly, there is a greater breadth and depth of research investigating labels is needed to determine what and when a variety of labels are used and the related effects.

Face (identity) management. Throughout the data, it appears that face management was an important part of the weight stigma communication process. Individuals generally wish to project their ideal version of self in social interactions to be looked upon favorably (Goffman, 1967). Following politeness theory (Brown & Levinson, 1987), individuals are motivated to manage their positive and negative faces, or their desire to maintain others' approval and avoid imposition from others respectively (Brown & Levinson, 1987; Cupach & Carson, 2002). When attempting to maintain and promote one's social image, an individual will alter their communication to compensate according to their desired outcome (Cupach & Carson, 2002). For instance, a person who is asked to help with a task may wish to avoid the imposition of having to assist while also being seen in a positive light. Thus, they may politely decline or offer an excuse for why they cannot help at this time, but vaguely offer future assistance; whatever the response, it will only be completed after considering their potential face risks.

Positive face. In line with this theory, parent-child interactions often seemed to include some consideration of positive and negative face management. Though only possible to speculate about parents' cognitive processing, it was apparent that adult children perceived that their parents were concerned with maintaining social approval

and compensated during the interaction accordingly. This was often seen in the subcategory of humor and snide commentary. Participants reported that when parents made jokes about POA, they were generally received with approval and laughter from one or more people (including participants at times). Parents might be employing weight stigma through jokes to receive approval and/or maintain perceived social propriety by making these statements more covertly. For instance, some parents reportedly made humorous comments privately to close others in lowered voices (e.g., **"**…*a very fat man sat at the table next to us. Instantly my dad made a comment under his breath. …The guy got up to go to the salad bar and my dad made several fat jokes…*"; Male, 43, White/Caucasian, Pennsylvania). In such cases, parents receive approval from others through their laughter and implicit agreement—they can degrade stigmatized others while being perceived as humorous. Moreover, parents considered the potential for negative feedback from others, indicated by their attempt to speak in hushed tones or to close others only. It can be risky to make negative comments about others, as others may consider it poor reflection on the speakers' character rather than on POA. This is particularly risky if people unfamiliar to speakers happen to be around, such as strangers or acquaintances. Thus, telling jokes garners social approval, while speaking in hushed tones and/or to close others limits parents' risk of being contradicted and perceived negatively by others.

Furthermore, using jokes may help to limit the risk to positive face as well. Making explicit negative comments could be seen as impolite, particularly in public settings and without warrant. Individuals then might avoid doing this to maintain their positive faces. Weight stigmatizing others through joking may offer a layer of protection:

If individuals make negative statements and receive negative responses, they can fall back on the idea that statements weren't serious and should be taken as only fun (e.g., "I was just joking"). In fact, humor can be used as a face corrective strategy, such that individuals can laugh off a misstep or faux pas that they committed to regain positive face (Guerrero et al., 2017). Parents are not compensating in these interactions, but using humor further limits the risk when weight stigmatizing others. In fact, it possible that they are using humor as a preemptive measure to self-protect from potential criticism. Should people respond with the laughter, they can receive praise and promote their positive face. If people respond negatively, then they use the humorous remark as the faux pas itself and pass it off as acts to be ignored or even as others' faux pas for not understanding humor. Thus, humor can be used as preventive strategy to commit negative, aggressive weight-related remarks with limited face risk.

It is possible that positive face management was attempted in other interactions. Parents may make weight stigmatizing comments, even if not humorous, due to social pressure or desire for support (e.g., receive parental approval). It is also possible that the context in which people make the comments was partially determined by positive face maintenance strategies. Parents seemed to consider how loudly they were speaking and to whom at times, which would be indicating of positive face maintenance in social interactions. Though it seems that parents' positive faces appear to be promoted, maintained, and/or protected through some stigma messages, specifically through humorous statements, future research should consider the ways in which face maintenance affects the weight stigma communication process. It is clear from the evidence that some parents were concerned with positive face maintenance, but it is

unclear to what degree and in what ways parents compensated to maintain and promote their ideal image in social interactions with close and unfamiliar others.

Negative face. Parents also seemed to use weight stigma communication as negative face management and avoid social imposition from POA. Negative face is one's desire to remain autonomous and avoid imposition from others (Cupach & Carson, 2002). Generally, these messages reflected some consideration of social or physical space and appeared in disgust, teaching, and social control messages.

Some parents discussed how POA were imposing on their physical space in some way, including taking a larger portion of food, being a physical danger to others (e.g., putting lives at risk), creating more work for others (e.g., POA not doing chores), and committing some spatial interference as parents moved through public spaces (e.g., POA was blocking the aisle at a grocery store). Research on politeness theory generally discusses imposition as being direct overtures that impose on the person's negative face directly (Brown & Levinson, 1987; Cupach & Carson, 2002). For instance, asking a person for money would be face threatening, as the person is making a direct request (imposition) to a person. In the reported memorable messages, these actions did directly burden the parent (and potentially others) in some way. For instance, a person blocking the aisle could prevent parents from walking through the grocery store, or by taking a larger portion of food means could reflect that parents perceived that POA took something that was rightfully theirs instead. These were not direct requests as often discussed in research (e.g., Cupach & Carson, 2002), but do reflect the POA as committing some physical imposition of autonomy on people.

One physical imposition that frequently occurred was the perceived burden due to POA not dressing "appropriately" in public spaces. This physical imposition is different from the others described, as it was not directly or solely committed against the speaker. Instead, these sentiments reflected a sense that the POA-targets had transgressed on everyone in the area, or all those to whom the POA-targets were visible. For instance, parents stated when POA were wearing clothing that they deemed to be too revealing, such as wearing a bathing suit at a water park or a shirt that did not completely cover one's stomach (e.g., they shouldn't be wearing that in public). These types of messages generally seemed to suggest that POA should not be permitted in the public space or would be welcomed if they followed appropriate norms regarding their bodies and dress. Furthermore, one person suggested that a person in their own yard should cover up—calling into question what constitutes "public space." Overall, these messages suggest that POA's presence and appearance, the mere visibility of them, is a physical imposition—for parents and the rest of society.

This is somewhat removed from the traditional view of negative face management, such that parents seemed to care that POA were imposing on them *and others*. Recalled messages indicated that parents believed POA were harming or affecting *others* by being visible to others, reflecting a sense of entitlement that parents were allowed to be in the public space in such a way but not POA. This sentiment reflects the endorsement of thin privilege, or views that thin and average weight bodies are to be accepted and/or praised (Arroyo, 2015). In these instances, parents desired to bar or control POAs' bodies for not appearing thin. By not conforming to these ideals though,

individuals experience the feeling of discomfort and imposition despite there being the no direct request or imposition from POA.

Additionally, parents expressed potential or actual social burdens committed by POA-targets. These social impositions were reflected in complaints about having the be around and interact with (sometimes hypothetical) POA. This is somewhat removed from the original intent of negative face, which is the desire to retain autonomy (Brown & Levinson, 1987; Cupach & Carson, 2002); however, the concept of negative face management can still be used to understand parents' messages, such that individuals still do wish to avoid perceived social imposition from POA. Non-stigmatized individuals can experience uncertainty and fear of interacting with stigmatized people, including people with overweight appearance (Goffman, 1963). Being forced to manage the uncertainty and discomfort may feel burdensome, and so parents still perceive that social burdens from POA are impositions as well. As such, negative face management seems to be suitable frame by which to understand parents' expressed feelings about POA-targets. Parents feel social burdens when interacting with POA, as well as will transmit such sentiments to others to warn about and protect them from experiencing this discomfort. Though a broader take of "face management," results seem to indicate that people consider their face when transmitting weight stigmatizing messages. They seek social approval, self-protect from disapproval, and seek to avoid various forms of imposition from stigmatized POA. Future research should consider the connection between face management, weight stigma, and thin privilege, considering the ways in which people might experience the type (e.g., physical, social) and level of imposition (e.g., individual,

social) and the motivations and strategy considerations for message transmission (e.g., positive face, negative face management).

Following politeness theory, individuals are expected to respond directly to the source of the imposition to manage the face threat (e.g., avoidance of the transgressor, rejection of request) (Brown & Levinson, 1987; Cupach & Carson, 2002). POA did not commit impositions on parents directly, and parents did not usually respond directly to POA. In fact, parents seemed to have little recourse to reconcile the spatial and personal imposition because the event occurred in the past or were not motivated to speak directly to strangers. Since they cannot or will not manage the face threat with POA-targets directly, parents relied on stigmatizing comments to assert their position and compensate for negative face loss. This is not wholly unexpected since face maintenance can incorporate the use of aggressive or hostile comments (Guerrero et al., 2017), and weight stigma can be employed in overtly aggressive communication (Bucchianeri et al., 2013; Lewis et al., 2011). Further, weight stigmatizing comments and relationship aggression can be used to protect one's identity (Klostermann et al., 2015). Thus, it is logical that individuals would use stigmatizing messages for negative face maintenance. Though these compensatory actions seem to be connected to parents' perceived power (discussed below), these results reflected a different way in which to consider face threatening acts and responses.

Considerations should be made about the roles and effects of face and face maintenance in weight stigmatizing communication and weight-based aggression. Though it might require a broader reading of face management—particularly negative face management, it appears that POA are often considered social and physical

impositions on others. Parents repeatedly demonstrated that they considered their positive face when communicating weight stigma messages, and that perceived imposition from others often promoted the transmission of weight stigmatizing messages. This a distinctive way to consider POA that, to my knowledge, has not been discussed in the (weight) stigma literature. This view further prompts other considerations about the cultural views we have around weight-related appearance and public space, including: Who is allowed to enter public spaces, when and how can people operate public spaces, and what even constitutes "public space" for stigmatized people? In these instances, it appears that POA are allowed *if* they follow all the rules but will be subjected to stigmatizing messages regardless of if they follow such norms. Moreover, there are different views about what constitutes public spaces—for some it is shared community space, others believe it is if the space is visible to them (e.g., POA's backyard). These questions should be further investigated in future research, for weight stigma and regarding other forms of stigma. In so doing, we can better determine the nuances of cultural views of weight stigma and thin privilege, as well as how individuals' own face and identity management can influence the transmission of weight stigma communication.

Power. Identity management (e.g., face saving, social identity) is demonstrated throughout weight stigma messages in this study and is also intrinsically connected with power. Power is the ability to control or influence individuals, relationships, and/or events and is always operating during interactions and in relationships (Dunbar, 2015; Roloff & Soule, 2002). Individuals and groups may derive or maintain power from having more resources, expertise, the ability to punish or coerce, or withhold resources

(Roloff & Cloven, 1990; Roloff & Soule, 2002; Solomon & Samp, 1998). Generally, individuals with status are more capable of reaping greater resources and hold more influence in interpersonal interactions.

Stigma relies on unbalanced power dynamics: Non-stigmatized individuals hold more power and influence than those who are devalued and discredited due to their stigmatized status (Lewis et al., 2011; Link & Phelan, 2001). Goffman (1963) addressed that non-stigmatized people hold higher status and power than those who are stigmatized or tainted. Smith (2007a) discussed power in terms of individual value, such that stigmatized persons are devalued and discredited. When applying this to weight stigma, thin or average weight (non-stigmatized) individuals hold more social power because their bodies fit societal norms. In contrast, POA (stigmatized) hold less power and social standing because society has determined that these bodies are not in line with societal standards for appearance. Weight stigma research demonstrated that non-stigmatized people receive or maintain measurable positive outcomes that translates to more power and status (e.g., greater social approval, more central position in peer network, better representation in the media; better legal outcomes, better professional support and advancement) (Ashmore et al., 2008; Conley & Glauber, 2005; Glass et al., 2010; Lynagh et al., 2015; Pingitore et al., 1994; Schvey et al., 2013). Therefore, despite it not being directly assessed in previous research, it is apparent that power is an important part of the stigmatization process, both in the formation and maintenance of (weight) stigma.

Stigmatizing others requires that you have some level of social power and status that others do not (within a given context) (Goffman, 1963; Link & Phelan, 2001). It could then be argued that *every* memorable message demonstrated that parent-speakers

transmitting weight stigma messages inherently held more social power than their chosen message targets. Aside from merely reinforcing group separation, these results also indicated that parents may also have used weight stigma messages strategically to (re)gain interpersonal and social power. When parents perceived that they received negative actions from message targets, they used weight stigmatizing messages in retaliation to regain power.

Retaliation as a compensatory measure was prevalent in the name-calling subcategory, such that parents reportedly used names (e.g., "fat ass", "fat bitch") to degrade message targets only after experiencing negative effects (e.g., being cut off in traffic, being stared at by target). For instance, when being cut off in traffic, one parent reportedly yelled "fat ass" and "fat bitch" at the offending driver (Female, 23, White/Caucasian, Massachusetts). Another reported that his mother called a woman "fat ass bitch" after receiving what was perceived to be rude commentary (Male, 30, White/Caucasian, Georgia). Notably, these label-based verbal attacks were directed toward POA-targets directly, unlike in other situations where negative statements were made about targets but directed toward others. This created a situation in which intentionally pointing out the person's weight was the way in which to degrade in retaliation to a perceived slight and loss of power. In a couple of other reports, however, parents made similar retaliatory attempts without directly addressing and unbeknownst to message targets (e.g., addressing their children saying, "*Will this fatty fat guy hurry up?!*"; Male, 26, Middle Eastern, New Jersey). It is impossible to know why individuals chose these names in response, but these reports suggested that parents: 1) acknowledged

that message targets' weight-related appearance is considered deviant and to be criticized and 2) sent these messages as a compensatory measure.

These implications are somewhat consistent with the literature on weight stigma and aggression. Firstly, weight is salient in our culture, evident in the promotion of the thin ideal and weight-based aggression as a form of bullying (Bucchianeri et al., 2013, Bucchianeri et al., 2014; Puhl et al., 2013; Westermann et al., 2015). When parents used weight as a point of critique, they are demonstrating and reinforcing the social importance of weight and that overweight appearance is deviant and shameful. Moreover, since these attacks occurred after perceived slights or impositions from POA-targets, it is possible that retaliatory weight stigma messages could be used to protect one's power and identity. Specifically, degrading remarks and name-calling seem to empower parents by portraying POA-targets as unattractive, inept, and thus lower in social standing. Weight stigma messages could be used to relegate individuals to lower social and power positions and put them "in their place" when they perceived to be threatened or attacked. Prior research supports this, indicating that people may use aggression to protect or promote their identity, perceived relational power, or to improve their mood (Klostermann et al., 2015; Marshall, 1994; Roloff & Soule, 2002). Though not considered abuse or violence, stigma communication is demeaning, degrading (Lewis et al., 2011; Meisenbach, 2010), and can be considered aggressive in nature (Bucchianeri et al., 2013, Puhl et al., 2013; Puhl & Heuer, 2010; Westermann et al., 2015). Weight stigmatizing messages then can be viewed as similar to verbal and/or psychological aggression, in which individuals might use degrading jokes and expressions to reduce the position of others and elevate their own status.

By extension, this indicated that weight stigma messages may be used as a dominance behavior during interpersonal interactions. Dominance is the manifestation of power that increases the sender's power standing over the other conversational partner (Dunbar, 2015; Dunbar & Burgoon, 2005). Dyadic power theory (Dunbar, 2004) asserts that individuals use acts of dominance to maintain or gain power in the relationships (Dunbar, 2015). Despite not being in relationships (in these specific instances), speakers appeared to still wield stigmatizing messages as attacks to gain power in social interactions. Note, these results were not necessarily in line with the scope of dyadic power theory as the theory generally focuses on sustained relationships; however, it does offer some insight on these behaviors and an avenue of research to be pursued in future research.

Nonverbal Communication

Lastly, several participants specifically noted their parents' nonverbal communication in their recalled memorable messages. The inclusion of these behaviors would suggest that nonverbal behaviors in memorable weight stigma messages were both important and impactful. Parents reportedly enacted a variety of nonverbal behaviors to underscore messages, including facial expressions (e.g., smirking, negative looks), gestures (e.g., using motions to illustrate size), vocal tone (e.g., negative, disrespectful tone), and animal noises (e.g., pig snorts). These nonverbal behaviors amplified verbal stigmatizing messages and, considering these were recalled in detail, influenced how receivers understood parents' weight stigma messages. One person directly stated that, though words could have been vague or innocuous, their parents' tone clearly conveyed a more negative meaning (i.e., "…she didn't say much, *her tone and gesture were of*

disrespect and disgust…"; Female, 26, Asian & White, Florida-Tennessee). This participant specifically recounted her mother's nonverbal communication and noted it was main component of the negative memorable weight message.

Interpersonal communication is reliant on nonverbal communication to understand the meaning of verbal messages, as approximately 60-90% of message meaning is derived from (perceived) nonverbal communication (McCornack & Morrison, 2019). There is some research to indicate that weight stigmatization may be enacted through nonverbal communication, but much of this has been discussed in terms of media depictions and effects (e.g., Greenberg et al., 2003; Eisenberg et al., 2015; King et al., 2006; Pearl et al., 2015). Not all participants reported nonverbal behavior, but results indicate that nonverbal behaviors have an important, but perhaps somewhat overlooked, role in weight stigma messaging and transmission. These results offer insight into how nonverbal communication might be enacted in weight stigma transmission. Research on nonverbal communication in the context of (weight) stigma is limited. However, these results are limited due to the nature of the study and method of data collection. Future research should directly question individuals about their observations of nonverbal weight stigma communication and/or how nonverbal communication promotes or inhibits weight stigma communication and related outcomes.

Future research should focus on investigating and better incorporating nonverbal communication into Smith's model of stigma communication. Smith's (2007a) model revolutionized how the communication discipline thought about and researched stigma by focusing on stigma *communication*. Smith (2007a) advances that stigma communication is constituted by *verbal messages* transmitting stigma attitudes between non-stigmatized

people using at least one of four stigma cues (i.e., mark, label, peril, responsibility). While a brilliant explication of *stigma communication*, this does limit our view of message transmission to spoken word. Specifically, stigma communication research does not account for or examine nonverbal behaviors as important in transmitting stigma attitudes between non-stigmatized people. Results of the current study suggests that nonverbal behaviors are an important part of message transmission between non-stigmatized individuals. As such, further examination is necessary to understand how nonverbal communication is used to communicate labels, perils, marks, or blame to stigmatize POA.

Considering the role of nonverbal behaviors in memorable messages is also unique to this study, as the main aim of memorable message research is to understand what verbal messages are most prominent in the minds of participants. Scholars in the field advance that memorable messages are salient phrases or sayings that are influential in shaping self- and other-perceptions and often occurring in instances where individuals learned about specific rules, norms, and values (Barge & Schlueter, 2004; Knapp et al., 1981). Thompson and Zaitchik (2012) appeared to take a broader view, asking participants to recount memorable messages about weight from their parents: “What, if anything, does your parent say to you about overweight/obesity” (p. 43). Thus, while researchers may ask for require more specific discursive units or collect broader statements and situations, all are considered memorable messages so long as message fit the frame of phrases or statements that prescribe rules, norms, or values. Thus, verbal messages are the priority when studying memorable messages, but results demonstrate

that researchers should consider nonverbal behaviors as important to memorable messages and weight stigma communication.

Despite showing some consistency with prior research, the memorable messages reported in this study provide a unique look at individuals' experiences with weight stigma messages. Participants recalled a variety of negative weight messages, offering nuanced view of weight stigma messages transmitted by parents in front of children. To my knowledge there has not been a study that has investigated message types. Thus, this study is the seminal point for future investigation into weight stigma communication, particularly in family relationships. This qualitative analysis is paired with quantitative results that offers further insight into weight stigma messages received by children; results are discussed below.

Discussion of Quantitative Results

Descriptive Information: Group Composition and Interaction Details

Prior research has examined weight via memorable messages (e.g., Barge & Schlueter, 2004; Thompson & Zaitchik, 2012) and the model of stigma communication (e.g., Anderson & Bresnahan, 2013; Smith, 2007b, 2012) separately, yet has not used the MSC to codify memorable messages, particularly parental weight stigma messages. As formative research in this area, descriptive information needs to be evaluated to better understand weight stigma communication used in interpersonal interactions alongside the intended analysis of stigma cues and weight-related outcomes. This included reviewing information on speakers, message targets, group composition, and receivers' responses.

Speakers and group composition. Firstly, the recalled speakers were examined: Most often participants recalled hearing statements from fathers (approx. 53%) and

mothers (approx. 41%), though many participants reported receiving messages from their stepparents or grandparents. That the results revealed that mothers and fathers were the primary speakers is unsurprising given that participants were asked to specifically report about parents/parental figures. However, it is a clear reminder that parental figures other than mothers and fathers can operate as parents and greatly impact children's views on weight and health.

Participants were asked to also report on the group composition when the message was transmitted. According to reports, parents generally made these statements in front of immediate family: Either when 1) only participants were present (45%) or 2) participants and siblings were present (42%). This is in contrast with the minority of participants who reported that the statements were transmitted when extended family (6%) or non-family members (4%) were around. Though weight stigma messages can be transmitted in any context, it appears that participants more often recalled their hearing their memorable weight stigma messages when they were alone with their parent-speaker or with their parent-speaker and siblings.

One explanation for this is that children spend most of their time around parents, specifically away from extended family and non-family members, prior to adulthood. That there is more time spent with immediate family members increases the chances that people would experience and recall weight stigma messages in situations where only immediate family are present. Parents spend more time with and have a direct influence in the socialization of children (Laursen & Collins, 2004; Miller & Lane, 1991). This time in isolation is often when children learn communication patterns, behaviors, and attitudes from their parents. Further, because they spend time with and look up to parents

as sources of information, children are motivated to listen to their parents when hearing information that helps them better understand their social world (Bandura, 2001; Bandura et al., 1963). As such, participants' memorable weight stigma messages are a snapshot into the primary caregiver socialization process, specifically into how individuals learn weight-related attitudes and behaviors. Regardless of whether parents register that they are teaching children societal weight norms, these interactions are occurring during normal day-to-day interactions that are impactful on their children.

It is also possible that these messages are mostly circulated around the immediate family as a face management strategy. Circulating weight stigma messages within the family unit by a way in which to protect one's face to the rest of society. Individuals generally want to be seen in a positive manner (Brown & Levinson, 1987; Cupach & Carson, 2002), and will avoid communication that might make others think negatively about them. Making negative weight-related comments are common in society, but it could be viewed as risky when communicated in front of acquaintances and peers as there is less predictability about how they might respond or evaluate such statements. Within the unit, parents hold power and dictate communication norms (Botta & Dumlao, 2002; Cox & Paley, 1997; Koerner & Fitzpatrick, 2002), and children would be less likely to contradict or judge parents' communication. Thus, parents experience may view the immediate family context as a less threatening one in which to transmit weight stigma messages, but self-monitor in front of extended family and non-family members.

This also could reflect how families establish and maintain communication privacy boundaries, particularly when the information is sensitive. Privacy boundaries are established for the family unit (e.g., by dyad, triad, entire unit), and dictate what

information can be shared outside of the family or specific relationship set (e.g., siblings) (Petronio, 1991). These boundaries can be rigid, establishing norms and rules for which statements or topics are appropriate and shareable in certain contexts (Petronio, 2001). In this case, it is possible that weight stigma messages may not be shared outside the confines of the immediate family unit. Thus, whether these actions are intentional or unintentional, parents may be following and reinforcing privacy boundaries by limiting their negative weight communication to contexts that include close family. It is difficult to determine if the motivation is to preserve face, privacy, or both. Evidence does seem to suggest, however, that parents are comfortable speaking weight stigma messages in front of immediate family (e.g., children). This considers the *most memorable* message, and as such it neglects the frequency of transmission of such messages or the regularity with which parents would make such statements. It does indicate that most people recalled messages as impactful or memorable when their parents made the statements around immediate family more often than when others were present. Future research concerned with behavioral patterns should also consider group composition and context in which messages are generally transmitted.

Message target. Participants were asked to report the (perceived) gender of the POA-message targets that their parent(s) were discussing. Participants more often recalled a situation in which the targeted POA appeared to be women. Specifically, 67% of participants recalled that the memorable weight stigma messages were about women, whereas 30% of POA-targets were reported as men. Of course, gender identity is exceedingly complex and not determinable by an observer—only the target can know and report their true gender identity. It is still important to note the disparity present in

perceived gender of stigmatized targets, as it demonstrates that, from observers' perspectives, the subjects of stigmatizing messages were more often reported as women. In the context of this study, these could be explained as: 1) women are more likely to be attacked for weight-related appearance and behavior or 2) adult children *remember* instances in which women were attacked to a greater degree.

It seems that being perceived as a woman *and* having overweight appearance may place individuals at greater risk of receiving appearance-related judgment and attacks. This is somewhat consistent with the qualitative results of this study, such that women seemed to incur harsher criticism than men (e.g., disgust messages, animal-names). Women face stricter appearance-related standards than men (Schvey et al., 2013), and treat their bodies as objects that should fit ideal beauty standards (Arroyo et al., 2014; Fredrickson & Roberts, 1997). Though men experience objectification and evaluation (Daniel & Bridges, 2010; Oehlhof et al., 2009; Smolak et al., 2005; Strelan & Hargreaves, 2005), women are objectified and criticized at disparate levels compared to men (Calogero, 2009; Fredrickson & Roberts, 1997; Schvey et al., 2013). This is evidenced in this study, with results indicating that perceiving a POA to be a woman could prompt individuals to evaluate the POA with stricter body-related expectations and transmit more—and possibly harsher—weight stigma messages about her (Calogero, 2009; Fredrickson & Roberts, 1997; Schvey et al., 2013).

It is also possible that evaluations of women are more salient, rather than just being transmitted more often. Hearing constant messages about evaluating women's bodies could influence individuals to recall parental messages criticizing women with overweight appearance more easily. Cultivation theory (Gerbner, 1969) suggests that

prolonged exposure to (media) messages impacts individuals, such that people will be more likely to endorse the attitudes transmitted and use these views to shape their social reality. Given the pervasiveness of weight talk and body objectification in Western culture, it is possible that individuals have had prolonged exposure to body-related critiques, particularly ones aimed at women. Therefore, if people often hear messages in which women are evaluated more often (from family, peers, media), they would be likely to endorse and recall messages consistent with these views. It is possible then that parents to have made negative comments—perhaps many—about men, but the greater frequency of women-targeted critiques prompts individuals to recall and provide memorable messages about women with overweight appearance. This difference in POA-target (perceived) gender, as well as potential reasons for it, should be considered in future research from memory, culture, and communication perspectives. Regardless of reason, targeting women does reinforce sociocultural norms about critiquing and objectifying women's bodies.

Responses to messages. Though the study is primarily concerned with parents as the speakers of weight stigma messages, participants were also asked to provide information about their responses to parents' comments. A variety of responses were reported, with only a small minority recalling that they overtly objected to or disagreed with the statement (6.5%) or overtly agreeing with their parents' weight stigmatizing comments (15.7%). Most participants reported passive responses to parents' statements: 64% did not reply and 14% attempted to change the subject. Thus, most responses seemed to convey implicit agreement through their silence. Changing the subject can relate discomfort or disagreement (Andersen et al., 2016; Caughlin & Huston, 2002;

Christensen & Heavey, 1990), but not overtly rejecting the messages can be construed as tacit agreement. When parents tend to have more power, the silence or lack of contradiction could indicate agreement or acceptance (Botta & Dumlao, 2002; Schrodt et al., 2008). Though perhaps not intentional, this could still be the result: For as Elie Wiesel state, "Neutrality helps the oppressor, never the victim" (Nobel Prize Acceptance Speech, December 10, 1986).

Children's passivity or silence (at the time of the event) could largely be attributed to expectations to concede to parental authority. Family systems are often structured in such a way that children are expected to adhere to strict rules and norms, specifically that children must listen to and follow their parents without objection (Botta & Dumlao, 2002; Koerner & Fitzpatrick, 2002). Underlying this type of structure are strong, unbalanced power dynamics in which children have significantly less power and ability to voice contradictory opinions. When faced with punishment or withheld rewards, individuals are unlikely to overtly disagree (Samp & Abbott, 2011; Solomon & Samp, 1998). It is perhaps possible then that these individuals, as children, did not have the power or space to contradict parents. Instead, children intentionally used strategies other than explicit contradiction to show disapproval (e.g., changing subject, remaining silent) in response to their parents' weight stigma messages. Future research should investigate the effects of such quiet complicity and overt agreement, as well as the cognitive processing and motivations for these response types.

Memorable Weight Stigma Message Cues

Prior to examining relationships between stigma cues and outcomes, the patterns of use and relationships between stigma cues was established (Research Question 2).

There has been limited research codifying weight stigma messages. Determining the prevalence of the four stigma cue types in parents' weight stigma messages (i.e., the frequency, amount, and relationships between stigma cues) allows for a better understanding of weight stigma message content. Following the MSC, stigma messages must incorporate at least one type of cue, but could incorporate any of the four independently or in tandem. Thus, the first step was to determine the frequency (i.e., whether the cue appeared in a message) and amount (i.e., total number of cues in each message, by type) of the four stigma cues recalled in memorable weight stigma messages.

Mark cues. In participants' memorable messages, mark cues were reflected in statements like: "*I can't believe how heavy she is*" , "*…Her fat is hanging out and it's disgusting*", and "*…she was wondering why the woman's stomach almost touched the floor*…". Parents' mark cues were the most frequently occurring (136 messages, 74%) and the highest total number of cues (200 messages with mark cues, 485 cues total). This prominence of mark cues could be due to the nature of weight stigma. Unlike some stigmatized conditions that are invisible (e.g., sexual orientation, depression) or may be at times partially or fully hidden (e.g., cancer diagnosis, bulimia), weight stigma is concerned with the *visible* deviance of individuals' weight-related appearance (Arroyo & Andersen, 2017; Puhl & Brownell, 2001; Puhl & Heuer, 2009; Tomiyama, 2010). As such, it is highly likely for a message about weight-related appearance to include references to visible marks. This is also consistent with what is known about the process of perception and evaluation: Visual cues are used to quickly assess whether strangers belong to viewers' ingroups or not—essentially, calculating the risk of others (Hogg & Reid, 2006; Rice, 2007; Ruffman et al., 2016; Tajfel, 2010; Westermann et al., 2015).

Individuals' visible traits are evaluated, and individuals are subsequently categorized based on those evaluations; this is the basis of the stigmatization process (Goffman, 1963; Puhl & Heuer, 2010; Smith, 2007a). Mark cues relate the visible traits associated with a stigmatized condition (Smith, 2007a), so discussion of physical traits is extremely likely when communicating about a visible, physical stigma like weight stigma.

Responsibility cues. In participants' memorable messages, responsibility cues were reflected by statements like: "…*they should stop eating so much*…", "*he is lazy… and that has made him an (sic) overweight kid*…", and "…*my dad mentioned that my cousin really let himself go*…". Responsibility cues were the second most frequently occurring cue in the data (81 messages, 44%) and second highest total (122 cues, 29%), though appearing distinctly less frequently than mark cues. The focus on responsibility and blame (including assertions that individuals are lazy or lack self-control) could reflect the pervasiveness of weight stereotypes in the U.S., and Western culture more broadly. The U.S. culture is deeply rooted in the puritanical values of hard work and self-control (Kang, 2009; Uhlmann et al., 2011), advancing the ideal (and misconception) that anyone can succeed with dedication, effort, and sacrifice. Thus, while U.S. culture views a strong work ethic and self-control as virtues, laziness signals moral corruption. These same views are applied to and perpetuate weight stigma: Common weight-related stereotypes are that POA are lazy, lack self-restraint, and are completely to blame for their weight-related appearance (Black et al., 2014; Ebneter et al., 2011; Puhl & Brownell, 2003). Weight stigmatized individuals are blamed for their body size and shape because of this, whether in weight gain and/or or lack of weight loss. These stereotypes are in line with the belief that hard work and determination is the only way to achieve positive

outcome—in this case, thin appearance. As such, responsibility cues should be well represented in weight stigma messages.

People might use responsibility cues as a way to denote deviance with minimal risk to one's positive face and moral standing. Individuals are concerned with protecting and preserving their positive face, and may be more positive, agreeable, or polite than they would wish in order to do so (Brown & Levinson, 1987; Cupach & Carson, 2002). Direct verbal attacks on others, which are counter to the expectations of morality and civility, would reflect poorly on an individual's character and thus be threatening to positive face. Weight is viewed as completely controllable (Black et al., 2014; Blaine & McElroy, 2002; Ebneter et al., 2011; Puhl & Brownell, 2003; Tischner & Malson, 2012), promoting the idea that POA could change their appearance if they just worked harder. Moreover, connecting weight to morality ensures that speakers retain their moral high ground in their attacks against POA. Thus, *blaming* POA for their stigmatized condition minimizes risk to speakers and justifies their attacks on POA. Though prior research has considered stereotypes around responsibility (e.g., Black et al., 2014; Ebneter et al., 2011; Himmelstein & Tomiyama, 2015; Puhl & Brownell, 2003), further research should be conducted to examine how identity management affects individuals' communication of weight stigma, specifically blaming POA for their appearance. Investigations could offer insight into why individuals may use responsibility more than other forms of cues, and how public health practitioners and advocates can target misperceptions and reduce weight stigma.

Label cues. Label cues were used less frequently than mark or responsibility cues and took a variety of forms (e.g., *fatty*, *fat ass*, *pig*, *fat cow*). These were embedded in

statements such as: "…*my mother called her a fat ass bitch*…", "*My dad insulted a stranger… by asking him, 'What are you looking at fat ass'*", and "*she turned to me and said, 'Jesus, she is a fatty.*" These degrading remarks were the minority: Label cues were present in 51 messages (28%) and there were 68 cues (or 16%) used in these messages.

These results could reflect the use of stigma cues in weight stigma communication. Specifically, that mark and responsibility cues take the forefront of the conversation around weight and weight stigma, while label cues might not be as prevalent or important. As stated, responsibility-based stereotypes are commonly applied to POA (Arroyo & Andersen, 2017; Black et al., 2014; Ebneter et al., 2011; Puhl & Brownell, 2003; Puhl & Heuer, 2010; Puhl et al., 2015) and it is likely that physical marks—via mark cues—will be referenced when communicating about a physical stigma like overweight appearance. Since these are commonly used in relation to weight and weight stigma, it is also more likely that people will hear and recall these mark and responsibility messages in the future. Though labels are clearly present, this study suggests that they might not be as prevalent in weight stigma communication. This clarifies that the two most important points of intervention is to counter perceptions of weight, beauty standards, and responsibility—specifically the physical deviance and views of blame. Creating targeted strategies to bring awareness and understanding to weight-related appearance and health could change misperceptions and biases, shifting the cultural discourse and thereby reducing weight stigma.

The lack of labels (as conceptualized by the MSC) could simply reflect a skew in reporting. Label messages were overtly, severely degrading and dehumanizing (e.g., fatty, fat ass, fat cow, porker). Despite taking steps to ensure participants' comfort with

reporting, it is likely that some participants strategically withheld information if they considered it to be a risky disclosure. Research demonstrates that individuals will not disclose information if they perceive it to be risky to do so for self or others (Dillow et al., 2009; Joseph & Afifi, 2010; Slepian & Greenway, 2018; Sorsoli et al., 2008). Labels are degrading to message targets, and participants could feel that such statements would reflect poorly on their parents. Also, unlike responsibility statements that provide justification for comment, many of these label messages were overt attacks without the cover of POA "deserving it." As such, participants could have selected more appropriate, less risky messages or left out details from their memorable message to protect their parents. Unfortunately, it is impossible to determine, but it should be considered when drawing out the implications of these results.

Peril cues. Though evidenced in the data, peril cues rarely appeared in memorable weight stigma messages: only two messages (roughly 1%) evidenced peril cues, and these were only found in specific contexts: The danger is that which weight stigmatized people pose within a military context to the other soldiers and when utilized in a disparaging joke.[7] Thus, peril, following a strict reading of the MSC, was generally not utilized in parents' weight stigma messages. Because of this, what constituted peril was expanded in these analyses to better capture the form of stigma communication in the context of weight stigma. It was apparent in the data that parents *did* believe there was a level of peril regarding weight stigma, such as 1) *being like* the person and 2) experiencing discomfort when with overweight individuals. If one considers the spirit of Smith's (2007a) explication, these types of statements could represent peril cues in weight stigma communication. This adapted version of peril was reflected with

statements like: "…*you don't want to be bloated like him do you*?" and "*He told me not to get fat like that person because that's what happens*" [referring to a person being out of breath while playing basketball]. Including these types of remarks as peril cues increased the prevalence of peril in weight stigma communication in both frequency (28 messages, 15%) and amount (31 cues, 7%). These results suggested that peril cues do play a role in weight stigma communication, but generally reflect cultural views and individual concerns about weight and appearance rather than fear of threat of stigma transmission (as with communicable diseases). Communicating concerns about what might happen if children ever looked like or acted like POA-targets (e.g., "become bloated") reflects cultural views about appearance and personal responsibility: If children adhere to the warnings, then they could avoid becoming like POA.

One prevalent form of peril that emerged in the data were parents' reports of perceived threat and discomfort when interacting with overweight individuals, as participants expressed that they felt threatened or anxious at the prospect of having to interact with POA. Feeling discomfort does not seem to be consistent with threat of physical harm, but individuals expressed fear of anxiety as if those interactions were threatening or dangerous in some manner. Hebl et al. (2000) reported that anxiety and avoidance are common when facing the possibility of engaging in mixed interactions (interactions between non-stigmatized and stigmatized individuals). This could possibly be tied to experiencing (and desire to avoid) fear and uncertainty. Anxiety about interacting with stigmatized others is connected to discomfort and fear, and motivated by perceived danger, lack of efficacy with social interactions, and concerns that individuals will be offended (Goffman, 1963; Hebl et al., 2000; Ickes, 1984). When individuals make

a mistake, they may experience face loss with regards to their positive face (Brown & Levinson, 1987). Thus, individuals may experience anxiety and discomfort when encountering a situation in which they will have to interact with stigmatized POA due in part to uncertainty about how to properly navigate the social situation without offending others or losing face. Since peril in weight stigma could include perceived social threats and loss of face, it seems that the conceptualization of peril in the MSC should be expanded to address the variety of threats and increase the utility of the theory. This expansion seems particularly important for visible, physical stigmas—ones where individuals cannot pretend that the person is stigmatized and are confronted with it directly (e.g., weight, tattoos, physical disabilities, marks on skin).

Stigma cue correlations. Analyses were conducted to identify the relationships between the four stigma cues in parents' weight stigma messages. While many messages used a combination of cues, it was revealed that stigma cues did significantly correlate with all other cues. There were two significant relationships: Mark and label demonstrated a positive relationship, and responsibility and peril were positively associated with each other. However, there were no other significant relationships between stigma cues.

The significant association between mark and label cues could reflect the common focus on weight-related appearance. Whereas mark cues bring attention to a physical attribute, label cues represent a person *as* the stigmatized attribute (Smith, 2007a, 2007b). Though not the case with all stigmas, in the context of weight stigma, both mark and label cues will then bring attention to weight-related appearance. Mark cues were used in descriptions of people (e.g., they are fat) while label cues replaced the

person entirely (e.g., calling someone “fatty”); however, this is largely a distinction without a difference in this context. Mark and label cues then are used to discuss bodies in different ways. The significant correlation could reflect that when individuals discuss appearance, they are likely to only discuss bodies and so rely on mark and label cues.

In contrast, when the focus of the conversation is on the risks of weight change and overweight identity, it is more useful to utilize responsibility (blame) and peril (warning) cues. It is common for people to blame POA for their weight-related appearance (Black et al., 2014), and parents reportedly used POA as points of comparison to both blame POA and warn their children about becoming like POA. Therefore, it makes sense that these two cues would be used in tandem: Peril offers implicit blame in the context of weight stigma, while blame can be used in warnings to others. Further, using blame and warnings about risk can be effective in garnering attention and persuading others to act in certain ways. It is possible that, as these were parent-child discussions, parents were using responsibility and peril cues to underscore the importance of children listening to parents’ advice so as not to become like POA-targets. Future research should be conducted to more thoroughly examine the context surrounding parents’ transmission of weight stigma messages to children and investigate the motivations for using different stigma cues (e.g., merely commenting on others’ appearance versus teaching children to stay away from “fattening” foods). Clearly, there are different motivations for using the various cues, and, as result below suggest, the cues used could differently impact individuals’ outcomes.

Message composition varies, as people alter their communication depending on who is present, salient perceptions, and perceived attributions regarding others’ behaviors

(Grabe et al., 2005; Granberg, 2011; Lammers, 1991; Sillars et al., 2010). This variability of influence and lack of range in reporting could limit the patterns that could emerge between stigma cues in weight stigma messages. Perhaps rather than focusing on patterns within messages, future research should investigate the antecedent factors that influence the selection and use of certain stigma cues over others when crafting weight stigma messages.

It is possible that these patterns also might change if participants were prompted to offer multiple messages or a broader discussion of weight—not just negative messages. Memorable messages were about 54 words on average; these short messages allow for only sentiments to be reported and narrow the examination to negative messages only. It is possible these relationships a reflection of a methodological limitation, and that participants could have recalled more information that would reflect a different pattern of use for stigma cues. In these instances, it is possible that messages would include a greater amount and more diverse information. For instance, in Thompson and Zaitchik (2012), participants offered positive or negative messages, including critiques about their own weight and parental encouragement to appreciate their bodies as they are. Thus, if participants are allowed to offer more accounts about their parent-child weight conversations, results might yield different patterns and a fuller picture about what messages parents transmit about others in front of, to, and about their children. Future research should solicit multiple messages, allow for positive and negative messages, and/or use the thought listing method to gain a more expansive view of weight stigma communication transmitted in the family and better identify stigma cue patterns in such messages.

Memorable Messages and Weight-related Outcomes

Another major aim of the current study was to investigate the connection between weight stigma cues and receivers' weight-related outcomes (e.g., weight stigma attitudes, weight anxiety, fear of fat, and health behaviors). Discussion of these results is sorted according to hypotheses, or outcome variables, below.

Weight stigma attitudes. It was hypothesized that weight stigma cues would be positively correlated with weight stigma attitudes. Results were somewhat consistent with this prediction, such that label and peril cues were positively related to weight stigma attitudes. Mark and responsibility cues, however, did not significantly predict weight stigma attitudes.

Results indicated that peril and label cues may be more effective at intergenerationally transmitting weight stigma attitudes, perhaps by highlighting the need to distance, avoid, and dehumanize stigmatized POA. Peril cues promote views of stigmatized people as risky and people to be avoided (Smith, 2007a). When confronted with a threatening source, individuals will experience fear, uncertainty, anxiety, may attempt to avoid the threat (Hebl et al., 2000; So, 2013; Witte, 1992), and view the stigmatized individuals as not being ingroup-members (Grove & Werkman, 1991; Levine et al., 2005). It is possible that communicating the dangers or risks of stigmatized people was particularly effective at noting group differences and offering justification for judgment and social distance. Also, peril cues could operate as implicit blame: When parents warn children about gaining weight, they implicitly convey that people have a *choice* and should be blamed for choosing incorrectly. Thus, responsibility and peril could be conceptually related in the context of weight stigma (and perhaps in other

visible, “voluntary” stigmas). Future research should investigate the nuances of peril cues, identifying what subtext might be communicated or perceived with each type. This will ensure a better understanding weight stigma communication and how best to minimize weight stigma transmission.

Labels also significantly related to weight stigma attitudes. Labels tend to be dehumanizing and overtly hostile (e.g., fatty), more so than other stigma cues. Following social learning theory (Bandura et al., 1963), when children hear such blatant disregard for POA is likely to encourage individuals to learn these attitudes and model the aggressive behaviors. Additionally, this could reflect a greater openness with reporting, such that individuals with greater weight stigma attitudes were not inhibited in reporting that their parents made such dehumanizing, hostile statements about POA. At times, participants may feel compelled to present a more socially acceptable answer (Bernstein et al., 2001; Brenner & DeLameter, 1996). However, in this instance, if one believes that POA are worthy of stigmatizing attitudes and communication, there is no need to present a revised, socially desirable answer. As such, it is possible that this reflects their current attitudes and reporting rather than message effects from a memorable message. Future research should investigate when and to what extent individuals might tailor their recall and reporting of weight stigma messages, and particularly examine the possible influence of their current weight-related perceptions in their reporting.

In contrast, mark and responsibility cues did *not* demonstrate a significant relationship with adult children’s weight stigma attitudes. It is possible that these forms of weight stigma communication are commonplace outside of stigmatizing POA. People commonly believe that weight-related appearance is controllable (Arroyo & Andersen,

2017; Black et al., 2014), and so may express blame about anyone's body shape and size. Along with this, weight conversations are pervasive, and often people are critical of themselves and others' bodies (Arroyo & Andersen, 2016a; Arroyo & Harwood, 2014; Becker et al., 2013; Lee et al., 2013). Mark cues are used to highlight body related deviances, similar to other forms of weight communication (e.g., fat talk). Since body talk is commonplace, it is possible that, to non-stigmatized individuals, mark cues are like other forms of weight commentary. Instead of just stigmatizing POA specifically, these ideas may be expressed in everyday conversations about anyone. Therefore, you may not hold strong stigma attitudes, but still could engage in weight talk as a normal practice or endorse the common belief that weight is controllable. Considering this, weight stigma attitudes are more likely to be transmitted when concerns are more focused on POA, as with label and peril cues.

Furthermore, results indicated that individuals learn weight stigma attitudes from their parents. Previous studies have demonstrated that there is a connection between parents' and children's negative weight perceptions and bias (Davison & Birch, 2001, 2004; O'Bryan et al., 2004; Ruffman et al., 2016). The current study demonstrated that parents' *communication* of blame (i.e., responsibility) and warnings to avoid others positively associated with their adult children's weight stigma *attitudes*, indicating that communication is the mechanism by which attitudes are transmitted. Similar findings have been evidenced outside of the context of stigma: Mothers' communication of care mediated the relationship between mothers' and children's cognitive flexibility (Curran & Andersen, 2017), and mother-daughter communication about weight partially mediates the relationship between mothers' and daughters' self-objectification (Arroyo &

Andersen, 2016b). A full mediation is not possible to establish in this study; however, weight stigma communication may be seen as the manifestation of their weight bias. Since the results of this study identify one link in the chain, future research should examine the intergenerational transmission process and the factors affecting the process—in and out of the family unit. This would help ascertain the transmission process for other stigmas and allow for a better understanding about the promotion of weight-related perceptions and communication.

Weight anxiety. Parents' mark and label cues were predicted to positively correlate with their adult children's weight anxiety, or present-oriented weight-related concerns. Results demonstrated partial support for this prediction: Though not significant, label cues yielded a trending relationship to weight anxiety. Mark cues significantly, positively associated with weight anxiety. In line with predictions based on objectification theory, memorable messages with mark cues positively related to weight anxiety. Framing weight stigma communication as simply *weight communication* seems to offer some explanation about this relationship. Weight communication is used as a tool to critique and comment on own and others' bodies and reinforces the practice of surveilling and objectifying bodies (Arroyo & Harwood, 2014; Becker et al., 2013; Nichter, 2000). Talking and hearing about bodies and body parts has been shown to relate to negative weight-related cognitions, including body dissatisfaction, poorer body image, drive for thinness, and internalization of the thin ideal (Arroyo & Andersen, 2016a; Arroyo et al., 2014; Gapinski et al., 2003; Lee et al., 2013; Salk & Engeln-Maddox, 2011). Parents' messages are discussions of bodies similar to other forms of weight communication. Though the messages in this study stigmatize others for appearance-

related deviations, they communicated that individuals should be concerned with their appearance and must maintain a thin/average-sized body to be regarded as beautiful and worthy. By extension, messages with mark cues could promote evaluation and anxiety about maintaining such standards. Though further research is needed, results indicated that mark cues operate similarly to other forms of weight communication.

It had been previously argued that hearing people being negatively labeled would drive individuals to question and be anxious about current weight and related group status, yet results do not support this. Being exposed to weight communication can increase the awareness of and concerns about one's body (Arroyo et al., 2014; Daniel & Bridges, 2010; Shannon & Mills, 2013); however, weight stigma labeling does not appear to contribute to this process. In part, this could be due to this study's method: Individuals are asked to recall memories, often from years prior. Perhaps individuals could feel weight anxiety as a result of hearing the message in the moment, but the message may not contribute to individuals' experience of weight anxiety generally. This would make sense as individuals recalled and responded to memorable messages for different reasons and in different ways (Knapp et al., 1981; Thompson & Zaitchik, 2010). Unfortunately, it is not possible to determine this when studying participant recall. In the future, investigations should examine the immediate and long-term effects of weight stigma communication, specifically labels to establish a more direct—ideally causal—connection with more confidence. These similarities and differences between weight communication and weight stigma communication should be explored, while investigating the causes and consequences of weight stigma communication.

Fear of fat. In addition to present-oriented concerns, future-oriented concerns or fear of fat, were assessed. It was hypothesized that parents' mark, label, and peril cues would positively correlate with adult children's fear of fat, while responsibility cues would negatively relate with fear of fat. This hypothesis was not supported: Mark, label, and responsibility cues did not significantly relate to fear of fat. Peril cues yielded a trending relationship (p = .08) with fear of fat in the predicted direction; though nonsignificant, this trending relationship is promising when considering the small sample size of peril cues in this data set.

Results suggest that individuals' concerns about having overweight appearance in the future are unrelated to hearing parental messages that stigmatize others' weight and appearance. One explanation for this could be attributed to how the probability of future weight-related appearance is calculated. Research suggests that individuals are more likely to reproduce behaviors when models are perceived to be similar to the observer (Bandura, 2009), and individuals look to their parents for what they might be like in the future (Arroyo & Andersen, 2016a; Tannen, 2006). Arroyo and Andersen (2016a) demonstrated that mothers' old talk affected their daughters' health related outcomes, arguing that daughters may look to their mothers as an indicator for future appearance. Concerns about aging and weight might be partially rooted in their observations of family members' aging processes or, more broadly, how similar they are to the message target (e.g., gender, age). However, messages about others' bodies might not be as important or impactful to individuals' self-related body concerns when they are not directly related or close to them (e.g., strangers). Though influential in other ways, messages about others

do not seem to impact individuals' fear of fat, and instead messages about close or similar others may be more impactful points of comparisons.

Results yielded a trending positive relationship between peril cues and fear of fat, which is a significant finding when considering the limited sample of peril cues. It is possible that given a larger sample of peril cues, results would demonstrate a significant, positive relationship with fear of fat. This then could indicate that peril cues relate to greater fears about gaining weight and/or having a stigmatized identity in the future, indicating that peril cues are indeed prompting individuals to attend to the warnings given. When hearing about the dangers of a stigma, people are more likely to hold negative views of the stigma and stigmatized people, including greater stigma attitudes, social distancing, and fear of the stigmatized condition (Link et al., 1987; Smith, 2007a, 2014). For weight stigma, it is possible the stigma-related fear could be reflected in individuals' fear of fat. In part, weight gain is tied to the aging process (Arner et al., 2019), making weight gain and appearance more likely for future selves. Individuals might be unconcerned with their current appearance and weight identity but could instead look to the future with uncertainty about how the aging process will affect them (and their weight-related appearance by extension).

It is also possible that results are only trending due to the variety of factors that influence health risk appraisal—in this case risk of having overweight appearance. For instance, individuals might be affected by perceived vulnerability to health risks and existential threats (Burningham et al., 2008; So, 2013), (in)ability to manage or cope with risks, social class (Burningham et al., 2008), or using specific models (e.g., parents) to predict their aging and weight gain (Arroyo & Andersen, 2016a). When investigating risk

denial in smokers, for example, Peretti-Watel and colleagues (2007) reported that smokers were likely to engage in risk denial if they believed that they smoked at a low enough frequency to avoid negative outcomes or if their manner of smoking protected them from the risk of disease. Much of the aforementioned research has been demonstrated outside of the context of weight and weight stigma (e.g., smoking, flooding), but this does suggest that risk appraisal about future events, and the factors that influence that appraisal process, may complicate the relationship between weight stigma communication and fear of fat. These and other factors should be considered as potentially influences that contribute to individuals' risk appraisals of (appearance-related) body changes, and fear of fat by extension.

Health behavior outcomes: Restrictive eating and exercise. Another aim of the study was to investigate the connection between weight stigma cues and adult children's exercise and restrictive eating behaviors (i.e., dieting, food awareness). It was hypothesized that: 1) parents' mark cues would positively relate to individuals' exercise and restrictive eating, 2) peril cues would positively relate to restrictive eating , and 3) responsibility cues were hypothesized to relate to exercise. These hypotheses were largely unsupported: Mark and peril cues did not significantly relate to restrictive eating, responsibility cues were unrelated to exercise behavior, but mark cues demonstrated a trending relationship with exercise behavior ($p = .08$).

***Restrictive eating behaviors*.** Participants' restrictive eating was not predicted by parents' mark and peril cues. Taken in conjunction with the results, it appears that despite peril relating to individuals' fear of fat, it is unrelated to individuals' restrictive eating behaviors that may be used to manage their weight-related concerns via appearance

management. The extended parallel process model (Witte, 1992) argues that there is extensive cognitive processing that connects fear-based messages and individuals' behavioral responses. For instance, individuals may assess the threat severity and individuals' self-efficacy to engage in behaviors to manage the threat (Popova, 2012). It could be difficult, therefore, to capture a *message → behavior* relationship without accounting for cognitive processing that might be (re)occurring when appraising (weight stigma) peril cues. In support of this, research has shown that fear of fat is related to restrained eating behavior (Calugi et al., 2018; Chow et al., 2017). There is evidence to suggest that fear of fat is one factor that mediates the relationship between weight stigma and restrained eating behavior (Wellman et al., 2018). Though not assessing weight stigma *communication*, this research highlights the importance of the complex weight stigma process. As such, further research should consider the full path between weight stigma communication, cognition appraisals, and health behaviors.

Parents' mark cues did not relate to individuals' restrictive eating as well, which further calls into question the influence of weight stigma communication on individuals' eating behaviors. Research has shown that negative body talk relates to negative eating behaviors (Arroyo & Andersen, 2016a; Chow et al., 2017). Though mark cues showed some similarities with other forms of weight communication, the discussion of bodies via mark cues seemed to deviate from weight communication with regards to its relationship with eating behaviors. These results suggest that the body of focus in the conversation might be particularly influential on individuals' behaviors. It is possible then that it is not simply hearing negative talk about bodies, but rather it is receiving messages about *certain* bodies that is influential on individuals' health outcomes—namely those that are

closer in relation to the receiver (e.g., parents' bodies, peers' bodies, own bodies) (e.g., Arroyo et al., 2017; Houldcroft et al., 2014). Thus, individuals' health outcomes could be affected by the speaker *and* the target, rather than just by body talk generally. Despite the influence of weight stigma messages on individuals' attitudes and biases toward POA, it is possible that hearing and recalling weight stigma messages does not greatly affect receivers' own health behaviors. Further investigation is needed to identify various cognitive processes that might affect the *message → behavior* relationship (e.g., body objectification).

Exercise. Parents' weight stigma cues generally did not relate to participants' exercise behavior: Peril did not relate to exercise, but the relationship between mark cues and exercise was trending. Since memorable messages teach people about prescribed behavior and then are catalogued as important information (Barge & Schlueter, 1995; Knapp et al., 1981), it was expected that ones with peril cues would have conveyed weight-related dangers and so motivate individuals to enact body-control measures, specifically exercise behavior. This hypothesis was unsupported by results, however. Weight stigma communication did not directly predict health behaviors, exercise behaviors specifically. Other cognitive processing and external factors may influence the relationship between message processing and health behaviors (e.g., efficacy).

One consideration is that peril cues are better predictors of cognition rather than behavior. Smith (2014) demonstrated that generally peril messages predicted greater perceived severity, dangerousness, and frustration about the stigma (of a hypothetical disease), but behavioral outcomes were not assessed. Therefore, there is evidence to suggest that peril relates to or prompts further cognitive processing but might not share a

direct relationship with eating behavior and exercise. Moreover, POA's weight-related appearance does not pose immediate, direct threats, and so have very few *immediate* behaviors to minimize perceived threat. When people feel inefficacious in behavior change to avoid threat, they may deny the danger is present or minimize the perceived risk (Witte, 1993; Popova, 2012). Individuals may have learned to navigate peril and perceived danger by engaging in internal processes, and so it is possible there are mediating factors that remain undiscovered. Future research should consider potential mediating and moderating factors that might impact the relationship between weight stigma communication and behavioral outcomes.

Though not quite reaching significance, the relationship between mark cues and individuals' exercise behavior was trending. This trending relationship could be explained by mark cues and the methodology used in this study. Body talk is common and has been shown to be associated with individuals' health outcomes (Arroyo et al., 2017; Becker et al., 2013; Chow et al., 2017; Nichter, 2000). Considering the commonplace nature of these discussions, the chosen memorable messages could be salient as a reflection of the messages heard most often while growing up. Individuals are greatly impacted by their parents during childhood (Cox & Paley, 1997; Davison & Birch, 2001; Laursen & Collins, 2004), there is evidence to show that message repetition is also important, such that more frequent exposure to interpersonal conversations about weight and bodies yielded more negative outcomes (e.g., Arroyo & Andersen, 2016a; Arroyo et al., 2017). If some mark cues presented here are reflective of the most common type of message they heard—rather than just the most memorable, it would explain why mark cues demonstrate a trending relationship with exercise.

Considering the relationship between weight stigma communication and weight control behaviors generally, it seems that memorable messages are not *direct* predictors of weight control behaviors—instead, other factors and/or frequency of message may be more impactful. Weight communication and weight stigma research demonstrates that receiving single statements from others can be impactful (Reno & McNamee, 2015; Thomas et al., 2008; Thompson & Zaitchik, 2012). For instance, Reno and McNamee (2015) reported that approximately 18% of individuals who received and recalled memorable weight messages from their peers changed their health behaviors and/or appearance. Perhaps, like weight communication, it is more important to hear messages more frequently than hearing one impactful weight stigma communication from parents, particularly with respect to weight control behaviors. It is also possible that the relationship is more complicated than what has been captured in this study. For example, research demonstrates that perceived efficacy is an effective predictor of behavior performance (Cheng et al., 2019; Nabi et al., 2002; Schifter & Azjen, 1985), which was not assessed in this study. Future research should investigate the effects of hearing and speaking weight stigma communication on health behaviors, as well as to parse out the various factors that might influence the weight stigma communication-weight control behaviors relationship.

Cue Total and Weight-related Outcomes

Lastly, the total amount of cues in memorable messages relate to individuals' weight-related cognitions and behaviors was considered. In this way, stigma cues were treated as relatively equal in influence, while examining whether there was an additive property to stigma cues' influence. Stigma cue total predicted weight stigma attitudes and

food awareness and yielded a trending relationship with fear of fat. Stigma cue total did not associate with weight anxiety, dieting, or exercise behavior.

Weight stigma attitudes. Smith (2007a) stated that stigma communication is used to transmit stigma (attitudes and stereotypes) between non-stigmatized people. Consistent with this, parents' stigma cue total in their weight messages, regardless of type, positively related to adult children's weight stigma attitudes. This is partially consistent with prior research: Children learn weight stigma early in childhood (Davison & Birch, 2001, 2004; Ruffman et al., 2016), and adults' and children's weight-related views are positively associated (Davison & Birch, 2001, 2004; Gagnon-Girouard et al., 2020; Holub et al., 2011; O'Bryan et al., 2004;). Holub and colleagues (2011), for instance, reported that mothers' fear of fat was related to children's negative weight-related stereotypes. Similarly, Gagnon-Girouard and colleagues (2020) reported that mothers' and daughters' weight bias were positively related. Though there is evidence of attitudes being related, far less is known about the transmission process of weight stigma attitudes. Davison and Birch (2004) reported that young girls were more likely to endorse "fat" stereotypes when they were exposed to more parent-child interactions about appearance and weight loss. These interactions were focused on their own bodies, whereas the current study focused on conversations about *others'* weight-related appearance (e.g., a vehicle for transmitting weight bias) is associated with the endorsement of negative attitudes. Therefore, the current study extends what is currently known by demonstrating that parents' weight stigma communication can relate to individuals' weight stigma attitudes, indicating that this could be a potential mechanism by which stigma attitudes are transmitted.

Fear of fat (trending). Though fear of fat was not significantly related to individual stigma cues, it did demonstrate a trending relationship with peril. Similarly, cue total yielded a nonsignificant, but trending relationship with fear of fat. Since peril cues were in this analysis, however, it is likely that the results presented here are merely reflecting the trending relationship between peril cues and fear of fat. Therefore, there is some confidence in the supposition that hearing weight stigma communication via memorable messages does not increase the likelihood that one will experience fear of fat. This is only one avenue, however; perhaps individuals who experience greater fear of fat will report that they transmit more weight stigma communication. What is clear is that it is necessary to consider how stigma cues work individually and in tandem. Though other outcomes seem to be better predicted by cue combinations, these results also indicated that individual cue types might possess unique relationships with individuals' cognitions.

Nonsignificant results. As stated, cue totals did not predict weight anxiety, restrictive eating, and exercise behavior. Previously it was reported that weight anxiety demonstrated a significant positive relationship with mark cues and a trending, negative relationship with label cues. When adding all cues together, however, there was no longer a significant relationship present. Since mark and label cues demonstrated opposing relationships (positive and negative, respectively), it is likely that the nonsignificant relationship of cue combinations has simply confounded those results. The relationship between cue total and health behaviors were generally consistent with previously discussed results: Restrictive eating and exercise behavior were generally not predicted by stigma cues.

Instead of examining the nonsignificant relationship, it is perhaps better to consider the nonsignificance itself. These nonsignificant results indicate that cues should be primarily considered individually, rather than treating them as equitable factors with additive effects. Prior research on stigma communication has considered cues individually or with interaction effects (e.g., Smith, 2012, 2014), showing that cues at times can work in tandem. This study supports this approach and demonstrates the importance of analyzing cues individually to gain a clear picture of stigma communication consequences. For example, with weight anxiety, if only addition of cues were considered, results would demonstrate nonsignificant relationships with weight stigma communication rather than the significant relationship between with mark cues; the nuance would be lost. Cue combinations should not be ignored as multiple cues can be embedded in messages simultaneously. Thus, it would be prudent to consider potential interaction and additive effects on these relationships.

Weight Stigma: Connections and Future Directions

Weight stigma cues in memorable messages tended to relate to individuals' weight-related attitudes and concerns, but generally not to eating or exercise behavior. It would seem then that memorable weight messages might affect and be affected by individuals' weight-related cognitions but are not *directly* related to their weight control behaviors. This study bridges distinct literatures together and challenges what is currently known about weight, stigma, and body image.

Weight Communication Versus Weight Stigma Communication

This research set out to investigate weight stigma communication at the intersection of the stigma communication, body image and weight communication, and

social identity literatures. Research on body image and weight communication investigates the factors, communication processes, and outcomes about weight and health, including how weight-related views and communication affects individuals' self-views, eating behaviors, and psychological well-being (e.g., Annis et al., 2004; Arroyo et al., 2014; Chow et al., 2017; Frederick et al., 2008; Jones & Buckingham, 2005; Lee et al., 2013; Strahan et al., 2006; Wertheim et al., 2002). Weight stigma has often been separated from this literature and focused on the experience of stigmatized persons. This study seeks to extend the body image and weight communication literature to demonstrate that weight *stigma* communication can be considered as a communication form that would influence individuals' weight-related views, concerns, and behaviors. Though there is little evidence to suggest a direct relationship between weight stigma communication and health behaviors, results do indicate that there might be similarities between weight and weight stigma communication, as well as ways in which weight stigma communication might affect individuals body image.

This study demonstrated that weight stigma communication might share some similarities with other forms of weight communication, including having a relationship with weight-related cognitions. Parents' mark cues significantly associated with adult children's weight anxiety, and parents' peril cues yielded a trending relationship with adult children's fear of fat. This seems to indicate that individuals exposed to these forms of weight stigma messages may learn to consider and be concerned with the bodies and weight-related appearance. Research from the weight communication and body image literature indicates that weight views and discussions are related to weight concerns and dissatisfaction due to increased body surveillance and comparisons (Arroyo et al., 2014;

Jones & Buckingham, 2005; Lee et al., 2013). Fat talk is recognized as learned and transmitted through peer groups and family members as a way to discuss body-related attitudes and concerns (e.g., Arroyo et al., 2017; Nichter, 2000; Salk & Engeln-Maddox, 2012). Weight stigma communication is similarly transmitted, reinforces weight and beauty ideals, and promotes negative weight-related cognitions. Though distinct from weight communication, evidence suggests that weight stigma communication shares similarities with weight communication, such as motivations for message production and personal outcomes.

This study is preliminary research that demonstrates only basic connections between weight stigma communication and weight-related cognitions. This evidence suggests that weight stigma and weight stigma communication researchers should look to the body image literature for some insight into the processes and outcomes. There has been extensive work examining weight communication that can guide weight stigma research. Future research should consider the similarities when investigating the causes, consequences, and factors influential to the process of weight stigma communication.

Social Identity Theory and Weight Stigma

This study also drew on sociological perspectives of identity when considering the form and effects of weight stigma communication. Many of the hypotheses were based on social identity theory (Brown, 2000; Turner & Tajfel, 1986), arguing that individuals would be aware of and want to maintain their position within an ideal social group, in this case the ideal, “normal” weight group. Having the proper weight status acts as being having a “normal” social identity, whereas others outside of this would be considered deviant (e.g., underweight, overweight, obese). As such, they would have

cognitive and behavioral reactions to ensure their prized position within the non-stigmatized group.

Hypotheses of the current study were partially based on social identity theory and were somewhat supported by results. For instance, peril and responsibility cues relate the danger of stigma and blame stigmatized people for their condition respectively (Smith, 2007a, 2007b), and so it was predicted that these cues would promote the separation between stigmatized and non-stigmatized persons and increase negative weight views related to weight status distinctions. Consistent with this, when individuals heard and recalled peril and responsibility cues, individuals were more likely to report greater weight stigma attitudes toward POA. This can be partially explained through social identity theory: It has been theorized that individuals wish to be in the most positive, high-powered social groups and will follow group norms to maintain their status (Tajfel, 2010). In the context of weight-related appearance, following group norms and protecting the group might take the form of maintaining rigid weight norms, warning others about weight-related dangers (e.g., peril cues), or stating why others deserve to be excluded from the high-status group (e.g., responsibility cues). Thus, hearing parental peril and responsibility cues might reinforce weight group and identity differences, and teach children that it is appropriate to hold negative views of POA to remain consistent with the high-status group.

Mark and label cue relationships did not support social identity theory, such that label cues did not significantly predict weight-related cognitions or behaviors and mark cues only predicted weight anxiety. Labels distinguish group membership – us versus them, while marks denote how individuals' physicality—in this case weight-related

appearance—differs from “normal” people (Smith, 2007a). Social identity theory would likely view the use of labels to reinforce what social groups or identities are and who associates with each group. Similarly, marks would represent the physical distinctions of these groups, and pointing out these differences would also reflect group membership. Results were inconsistent with this, however; implications suggest that mark and label cues as evidenced in this study do not reflect group distinctions as expected by social identity theory. Instead, mark and label cues do not act as messages that teach or reinforce group distinctions, nor do views of weight group distinctiveness seem to provoke memorable messages in which mark or label cues are embedded.

As stated, the prevalence of discussion about bodies and body parts in society could be limiting the impact of hearing these types of weight stigma messages. It is also possible that the physical marks and labels are not reinforcing of one’s social identity as peril or responsibility-based messages are. Research demonstrates that social identity membership, including perceived differences, can be changed based on context (Levine et al., 2005), which would alter how labels are perceived and utilized. Additionally, individuals respond differently to various weight labels (e.g., fat, overweight, heavy, curvy), such that individuals are perceived as being more positive than others (Brochu & Esses, 2011; Himmelstein et al., 2017; Puhl, 2020). Brochu and Esses (2011) report that individuals report greater weight bias toward individuals labeled as “fat” than those labeled as “overweight.” Thus, there seems to be fluidity in social group identity associations, as well as different responses to weight-related labels. As such, weight group status and labeling might be more a more complex process than what was predicted in this study. Future research would need to further investigate the role and effects of

labels in weight stigma and stigma transmission. Though further research is clearly needed, it is apparent that peril and responsibility are distinct from superficial names and body critiques (mark and label cues). Each cue differently predicts receivers' outcomes, but also may be used differently to reinforce—or not—weight group identities.

Future research should investigate if and how stigma cues are used for social and personal identity creation and management—it is likely that, in the case of weight stigma at least, cues are utilized for a variety of different means and ends. Since stigma is inherently tied to identity and group norms, it is necessary to better understand how group perceptions and dynamics are affected by weight stigma communication broadly, and by cues more specifically. Further investigation should determine the influence of identity management processes and objectification. This research suggests that both social identity and objectification theories are applicable, and identity and body evaluation could contribute to individuals' weight stigma communication and weight-related outcomes. Investigation that better delineates the influence of identity and objectification on weight stigma communication will help us to better understand weight stigma, stigma communication, and how we can curb weight stigma in the broader society.

Interpersonal Transmission of Stigma: Future Considerations

There is a breadth of research on stigma outside of the communication discipline that has laid a foundation for understanding the ways in which people experience weight stigma victimization and perpetration. Smith (2007a) pioneered research on stigma communication and has advanced communication-based research, particularly to understand message composition and effects from an observer viewpoint. Relatedly,

Meisenbach (2010) discussed the personal experience of stigmatization, such that bias and discrimination are better determined by the recipient rather than the speaker or observer. This and related research have been instrumental to the development of communication-based research on stigma.

However, the area of weight stigma communication is underexplored (see Anderson & Bresnahan, 2013 for known exception). One major avenue of exploration should be interpersonal communication, as much of the research has been conducted outside of interpersonal contexts. One known exception is Smith (2014): Though this research investigated interpersonal stigma communication, it did not examine weight stigma communication. Weight stigma is distinct from other types of stigma, and so the applicability of these results might be limited without further investigation. Future research should consider the breadth of weight stigma communication and discrimination, identifying the motivations and predictive factors for perpetration, perceptions of weight stigmatizing messages and interactions, and the outcomes related non-stigmatized and stigmatized persons.

The current study seeks to explore this avenue by investigating parent-child communication of weight stigma messages, particularly from the receiver standpoint. Very few people could not recall negative, stigmatizing messages. This alone demonstrates the prevalence of interpersonal transmission of weight stigma in U.S. society. Results also demonstrated that parents' weight stigma communication can relate to weight stigma attitudes and weight anxiety, as well as trending relationships with fear of fat and some health behaviors. This extends what is currently known about weight stigma communication in families, by offering a look into the form of weight stigma

communication from parents and a first look as to how it affects individuals' weight-related cognitions and behaviors. Though some hypotheses were unsupported, the nonsignificant relationships also some understanding about weight stigma or direction for further investigation. Further specific areas of inquiry are discussed below.

Relationship types. The current study was particularly concerned with parent-child communication of weight stigma using retrospective accounts to examine the concrete messages. Parents are particularly important to the socialization of children (Cox & Paley, 1997; Laursen & Collins, 2004; Miller & Lane, 1991), and children learn bias and stereotypes early in life (Davison & Birch, 2001; Holub et al., 2011; Jaffe & Worobey, 2006). The parent-child relationship is an ideal starting point to understand the transmission and effects of interpersonal transmission of weight stigma communication. Parental responsibility and peril messages relate to adult children's weight stigma attitudes, indicating that weight stigma messages transmit these attitudes between parents and children.

Research should investigate weight stigma communication further across close relationship contexts. In addition to families, research shows that friends and romantic partners also impact on individuals' appearance-related self-views and communication (Boyes & Latner, 2009; Burke et al., 2012; Chow et al., 2017; Dailey et al., 2010; Dailey et al., 2011; Jones & Buckingham, 2005; Markey & Markey, 2013; Reno & McNamee, 2015). The effects of weight bias affect peer group dynamics, and weight communication is common in female peer groups (e.g., Nichter, 2000). For instance, Strauss and Pollack (2003) report that, as children, POA were more likely to be socially marginalized by their peers. Chow and colleagues (2017) reported that weight-related conversations among

peers, in conjunction with fear of fat, predicted greater restrained eating. Additionally, weight stigma and weight communication are prevalent in and affect romantic relationships. Boyes and Latner (2009) reported that weight stigma was so pervasive that it even affects romantic partners perceptions and relationship choices. For instance, overweight women reported to have lower quality relationships and were more likely to be judged by their partners as unattractive.

Peers are likely to be fundamental in the creation and reinforcement of weight-related identity, self-image, and attitudes in adolescence (e.g., Nichter, 2000; Strauss & Pollack, 2003), while romantic partners might be more influential in middle and late adulthood as seen in other contexts (e.g., Boyes & Latner, 2009; Markey & Markey, 2013). These relationships influence our perceptions about relational and group norms, including what can be said, how we should act, and what attitudes are appropriate to have. Many of these norms and attitudes could act as predictive factors that affect individuals' weight-related views and behaviors, particularly how and when it is appropriate to stigmatize others or respond to hearing others be stigmatized. A better understanding about these relationships and their influence on individuals' weight stigma views and communication might allow us to find a better answer to the question: Why and when do we stigmatize others?

Power. One potential powerful factor that has been underexplored is the role of interpersonal and social power in (weight) stigma communication. Of course, non-stigmatized individuals inherently have greater social power than stigmatized individuals (Goffman, 1963; Strauss & Pollack, 2003), since they are consistent with societal norms and considered "normal." In support of this, research indicates that POA have less social

power, such that individuals experience professional and personal discrimination because of their weight status (Korn, 2009; Schvey et al., 2013; Strauss & Pollack, 2003). However, this research does not indicate how 1) speakers perceive their own power before and after transmitting weight stigma communication, 2) receivers perceive the speakers' power, their own standing, and relational dynamics, and 3) if the target is known, how weight stigma communication might affect social power dynamics (e.g., within a peer group). Social and interpersonal power dynamics are powerful to the relationship communication and dynamics (Dunbar, 2015; Solomon & Samp, 1998), it is necessary for future research to examine how power affects and is affected by weight stigma in interpersonal relationships.

One avenue of research that is important to consider weight stigma as a weapon to regain or maintain one's power. Weight stigma communication is negative and often dehumanizes the target(s). This is similar to psychological aggression, which are verbal and nonverbal messages used to inflict emotional pain, socially isolate, and control a partner (Peloquin et al., 2011). These behaviors are often used to gain power at the cost of the victim-target at times when they perceive to be losing control over the partner and/or relational power (Bushman et al., 2001; Draucker & Martsolf, 2012; Marshall, 1994). In the context of weight stigma, individuals also might use weight stigma communication as a power play to gain or maintain control in their close relationships, peer networks, and workplaces.

Perceptions of power might also be reflected and reinforced in how individuals make attributions about others' weight and weight-related appearance. The attributions or judgments made about others' behavior can affect perceptions of and responses to others

(Lennon et al., 2011; Scott, 2008). Lennon and colleagues (2011) discussed how internal attributions, or judgments about how a person's situation is due to their character, are more likely to prompt individuals to use negative or aggressive behavior to protect and maintain our own position when being wronged. Though not in the context of stigma, it seems that attribution and power could be operating similarly. When individuals make judgments about others' weight and attribute their status to their own character (i.e., blame), they should be more likely to engage in weight stigma communication with others or even commit weight stigma aggression against others. Results of this study support this, such that responsibility cues—representing blame—were significantly related to weight stigma attitudes. The distinction here is that it is parents' communication and adult children's attitudes; however, it is possible that children would then continue this cycle when holding weight stigma attitudes towards overweight people. Future research should investigate power and power dynamics, as well as how perceptions of individual and social power are related to the attributions made about overweight individuals.

Despite the similarities, weight stigma communication is clearly distinct from other forms of weight communication. Weight stigma communication reinforces social group differences, power disparities, and tends to utilize greater hostility and aggression against stigmatized POA. With this in mind, investigation should limit investigations to weight contexts, but consider how these messages inform individuals views of self and others in society and interpersonal relationships (e.g., peer relationships, professional relationships). Weight stigma communication could be utilized in to minimize one's own body image or self-esteem issues, as well as reinforce one's own power and standing

within a peer network. As this is formative research on weight stigma communication and its relationship to body image issues, this is a small first step that needs to be pushed further in future research.

Weight stigma, including bias and discrimination, are learned and dangerous to the stigmatized in our society. POA, as weight stigma targets (also referred to as victims), are at higher risk of negative psychological and health outcomes (Phelan et al., 2015; Puhl & Heuer, 2010; Schafer & Ferraro, 2011; Sutin & Terracciano, 2013; Tomiyama, 2014), poorer educational and professional outcomes (Glass et al., 2010; Paul & Townsend, 1995; Roehling, 1999; Swami et al., 2008), and experience social inequity and health disparities (Bucchianeri et al., 2013; Bucchianeri et al., 2014; Gray et al., 2009; Hunger et al., 2015; Phelan et al., 2015; Puhl & King, 2013; Schvey et al., 2013; Vanhove & Gordon, 2014; Westermann et al., 2015). Stopping the reproduction of weight stigma in families will aid in the disruption of weight stigma and limit the social inequity. The aim is that research examining weight stigma communication such as this will indicate the ways in which the process might be prevented and minimize risks to weight stigma targets.

Practical Applications

Future avenues for research have been discussed, but it is also important to consider the potential practical uses for this research. These findings can be used to: 1) minimize the effect of stigma transmission in the family and 2) offer advice on message strategies for warnings to public health specialists. First, similar to past research (Ruffman et al., 2016), results demonstrated that peril and label cues in the messages related to adult children's weight stigma attitudes, suggesting that parental weight stigma

communication is one way in which individuals may learn weight bias. Considering this, public health practitioners should form health interventions that curb the transmission of stigma attitudes across generations, specifically targeting individuals in early adolescence. Indeed, adolescence might be an ideal time as children tend to desire distance from parents and look to peers/peer groups for support and information (McCornack & Morrison, 2019). Tailoring interventions to influence adolescents, particularly in peer groups, might be one promising way of minimizing the effects of stigma transmission in the family before such attitudes strengthen.

Moreover, any health interventions should not use peril cues, or at least fully consider the costs and benefits of using such communication strategies. Peril cues demonstrated the strongest relationship with weight stigma attitudes. Considering this, public health professionals should be encouraged to avoid crafting public health intervention peril cues. Though people might believe that fear-based messages could help change behavior, results suggest that it will encourage the endorsement of weight stigma. Since weight stigma leads to a host of negative outcomes for the stigmatized and possible non-stigmatized, it is important to limit the use of peril cues in public health messaging so as to minimize the promotion of weight stigma in our culture.

Limitations

Implications should be considered in relation to the limitations of the study. There is some concern about using M-Turk for research, due to some limitations with population available for recruitment and sample quality. Theoretically, M-Turk workers may come from any country, meaning that it is possible to recruit a diverse sample; however, evidence suggests that workers tend to be from the U.S. and India as

compensation is offered in U.S. dollars and Indian rupees (Mason & Suri, 2012; Shank, 2016). This study was focused on conversations that could represent weight stigma that is promoted by Western ideals. To ensure that this was captured, participants had to be living in the U.S. to participate.

Additionally, some assert that M-Turk may not be the most appropriate method for survey research, such that the sample might be somewhat limited. Research has reported that workers from the U.S., workers tend to be White females, as well as younger, liberal, and more educated than the general population (Berinsky et al., 2012; Paolacci et al., 2010; Shank, 2016). Research often relies on college-aged participants from a single region in the U.S.; though the study's sample was largely White/Caucasian, using M-Turk did provide a means to sample people from across the U.S. Participants ranged widely in terms of age and region of the country.

Lastly, there are concerns about the quality of work from M-Turk participants (Shank, 2016). Research suggests that response quality is not significantly different from offline studies, nor does it vary greatly across compensation levels (Shank, 2016). The current study required that participants have a solid record of producing quality results in prior M-Turk-based research. Thus, there is some confidence in participants' responses. Further limitations specific to the qualitative and quantitative method are discussed below.

Qualitative Method and Data

An important limitation of the qualitative method employed to consider is that thematic analyses are largely up to the interpretation of the reviewers. Though the results were systematically reviewed, organized (multiple times), and then analyzed in depth, the

author's bias could influence the analysis process. Despite this, it is possible that other reviewers might identify different organizational structures in which to sort and refine data groupings. There can still be confidence in the data, as these are individuals' experiences are being presented and are not being used for prediction but rather description of individuals' experiences of parent-child weight stigma communication.

It is important to consider the sample of participants in this discussion. The aim was to recruit a more diverse sample by using online participant recruiting via M-Turk; however, the majority of men and women in the sample reported being White/Caucasian (81.6%). And though other races and ethnicities were represented (Asian/Asian American: 8.1%, Black/African American: 4.9%, Hispanic/Latino: 3.2%, Native American: 0.5%, Other: 1.6%), these results are skewed and mostly reflect White/Caucasian individuals' experiences. Western beauty ideals have been transferred across the globe and affected many cultures treatment of weight-related appearance and beauty; however, appearance-related expectations can differ across ethnic groups (Swami & Tovee, 2007). As such, the expectations discussed in conversation are also likely to vary across cultural and ethnic groups. This has been shown in research: Despite Western ideals affecting beauty norms of other cultural groups, the non-Western standards are upheld and expected of others when the community is larger and/or more insulated (Brewis & McGarvey, 2000; Frederick et al., 2008; Rguibi & Belahsen, 2006; Swami & Tovee, 2007). Thus, it is vital that future research investigates the weight messages of a more diverse sample or according to specific cultural/ethnic groups.

One limitation of online survey in the qualitative method is that there was no means by which the researcher could follow-up with participants for clarification. In

other more traditional means (e.g., focus groups, one-on-one interviews), researchers are better able to understand the views of their subjects. The designs of the study barred any follow up. Although the researcher has taken great care to present individuals' experiences as stated in their survey, there are limitations to understanding the experience through the one message. For instance, further clarification might allow us to understand that the participant did not mean to convey that their parent communicated disgust, but rather intended to communicate concern or anxiety. This might seem a negligible difference, but it is one that could vastly change the organization and interpretation of the qualitative results. It could change our perceptions about the motivations for communicating weight stigma messages. Conducting more in-depth interviews with individuals will allow for a better understanding of individuals' weight stigma transmission experiences, particularly the transmission of messages in the family.

Quantitative Method and Data

Any results and consequent implications should be considered carefully as there was low statistical power in some of the analysis—particularly regarding the analysis of peril cues. Though messages might be *powerful* on an individual level, there is not enough statistical power in the current sample (peril frequency: $n = 28$, amount: $n = 31$) to be secure with the results or conduct more rigorous analysis. Ideally, there would be higher count of peril cues –something that can be completed in future research, however, there was no way to ensure this given the current study's survey method and aims. This research was meant to gauge what was often communicated in weight stigma messages and potential related influence on weight-related outcomes. There was little information guiding this study on what cues might be most readily apparent in parental messages

(though, as discussed previously, mark and responsibility were likely to appear as the most common cultural stereotypes). It is imperative for researchers to further extend the current study to better understand how peril cues are used and influence others in the context of weight stigma.

In part, the lack of power is tied to the method of self-report and content analysis methods utilized in this study. This is limiting because self-report, cross-sectional survey 1) relies on individuals' *perceptions* of behavior and 2) makes us unable to determine the causality of relationships. Firstly, the use of cross-sectional survey methods, though informative into individuals' felt experiences, have limited ability to ensure objective behavior is being assessed. Utilizing some observational method would allow for greater confidence in knowing what and how messages are being transmitted in the family and would also allow for the assessment of causal relationships between messages and outcomes. This study was interested in past experiences, and so recall and content analysis was considered an appropriate method. However, it is imperative for future research to use observational methods to investigate how families discuss weight-related appearance to ensure a better understanding of the communication processes surrounding weight, stigma, and health. Such methods would also enable researchers to consider behaviors that cannot be captured by survey, such as nonverbal immediacy (or lack thereof) or conflict behaviors utilized during the discussion with close others.

Utilizing longitudinal—whether short or long term—would be helpful in establishing causality in the reported relationships between weight stigma messages and weight-related outcomes. The results suggest there is a connection between hearing third-party directed weight stigma messages; yet because this study utilized cross-sectional

survey methods, there is no way to support a causal relationship or even the directionality of this suggested relationship. These results could be viewed in different ways: For instance, hearing messages with mark cues may in fact influence one's future weight anxiety or perhaps increased weight anxiety increases the salience of such messages in one's memory (particularly when prompted to recall parents' weight messages). Though this is a good first step in the codification of weight messages and the potential influence of parental weight stigma messages, future research should further investigate potential causality and directionality of influence using longitudinal methods.

Along with this, the theory or concept of "memorable messages" assumes a sense of causality (that, as stated previously, could not be determined here). Memorable messages are thought to be transmitted to people to teach them something or pass on some wisdom; this message then helps individuals make sense of their reality in some way (Barge & Schlueter, 2004; Knapp et al., 1981). As such, there is a presumed directionality of *memorable message → perception and behavior* attached when drawing on this approach. Of course, memorable messages that are reported are/were impactful—it is why they were recalled and discussed by the participants. However, other factors in our lives can make some messages more salient than others in a given moment. For instance, our current, salient social identities prompt us to notice and consider information and memories relevant to the group (Maitner et al., 2009). In fact, Maitner and colleagues (2009) reported that participants would differently processed information according to their salient social identity, and that influencing identity salience could result in different outcomes. Participants of this study were told that they would be asked to recount a memorable message in which a parent critiqued an overweight person.

Without meaning to, this could have 1) increased the salience of the participants' own weight identity and 2) could have been viewed as us distancing participants from people with overweight/obese appearance due to the language used (i.e., asking about "them" and not assuming that participants could share in that identity). This could implicitly prime them to think of their current weight identity, which in turn could affect their recall of a "memorable message." As just one way in which message recall can be affected, the various factors that might influence recall and, by extension, question the causality implicitly ascribed to "memorable messages" should be considered. Though clearly memorable, it is a potential limitation of using the memorable message approach, and results should be interpreted cautiously with this limitation in mind.

This was further limited by potential issues with participants' recall of messages. To remain consistent, participants were asked to report on messages they heard prior to the age of 18 in order to ensure they were in their formative years and likely still living with their parent(s). Though this did help to keep information consistent across a very diverse sample, ages ranged from 18-74, with a mean age of 38. This indicates that *many* participants had quite some distance from their formative years when they were living with their parents. Of course, memorable messages are labeled as such because they are so salient and recalled easily (Barge & Schlueter, 2004), but that still does not quite ensure that recall is *perfect*. Such a diverse sample does give us confidence in stating that weight stigma transcends generations and regions of the country, but researchers would do well in future studies to either limit the sample age range or ask participants to report a current instance to limit potential issues with participant recall.

Moreover, this study purposely skewed the focus to participants' memorable *negative* messages and did not identify whether stigma messages were *actually* the most memorable weight message. As formative research in weight stigma messages, participants were only asked to report memorable negative messages that they heard/received from their parent(s) to ensure a larger sample of negative, stigma messages to review and examine. It is possible that participants had more memorable messages that were positive but were not allowed to report those instances due to the constraints of the study. It would be useful to allow for participants to report positive or negative messages to determine the degree to which negative messages are recalled over positive, as well as the composition and potential effects of recalling positive weight messages.

Following the memorable message literature, this study assumes that because a message is memorable, that it is also impactful to the receiver and influence them to think similarly to the speaker. In the context of this study, it was then assumed that because an individual heard a negative weight message from a parent, that it would be received and influence the individual to negatively view the target and overweight appearance more generally. As stated, this is partially consistent with the conceptualization of memorable messages (as verbal statements that have been told to you that transmit values or beliefs and were in some way influential: Barge & Schlueter, 2004; Thompson & Zaitchik, 2012), yet many participants reported overtly or internally disagreeing with parents' negative weight messages. Future research should consider not just whether messages were received but also to what extent these messages were endorsed and repeated by receivers. This could indicate the strategies that individuals and/or factors that predict

whether individuals can and will disregard and buffer against such negative weight communication from others.

Finally, the limitations and implications of the coding method used should be considered. Generally, memorable messages are analyzed using qualitative methods; however, this study utilized a mixed methods approach in order to consider the themes of the messages in addition to quantitative coding and analyzing stigma message cues. Memorable messages are short discursive units that convey important information (Barge & Schlueter, 2004); since these are short units, it seemed most appropriate to treat the message as the unit of analysis. Prior research has shown other forms of coding, arguably more systematic than this approach. For instance, Shen and colleagues (2017) sorted participants' messages into small units of analysis called thought units, and subsequently coded each thought unit within the message as positive, negative, or neutral. In this way, individuals' *responses* were systematically broken down and assessed, recognizing that one message can have multiple thoughts connected (e.g., multiple positive, negative, and neutral sentiments all embedded in the same message). Results can then offer a more nuanced view of message content, allowing for messages that have both positive and negative aspects to it.

The current study was concerned with negative, stigmatizing messages, and so it made senses to consider only stigma (or negative) cues in the messages. However, qualitative results suggest that many messages incorporated caring and concern, or positive sentiments, along with the negative expressions about weight-related appearance. Therefore, though the focus was negative messages, it is possible that this method of coding is neglecting to account for the role of positive messages that are embedded in

weight stigma messages. It is possible too that categorizing neutral and positive thoughts would help us better understand how such sentiments might moderate the effects of stigma messages on individuals' outcomes. Future research should consider using thought units as the unit of analysis to address this gap. Despite this, it seemed prudent to consider the "message" as one memory or interaction to be analyzed, and from there determine what stigma cues were working in tandem within the memory. This is more faithful to the concept of memorable messages and better focuses our examination on stigma communication.

Conclusion

Prior research has demonstrated that parent-child communication about weight is impactful to children's views of self and others, particularly on body image, satisfaction, and health (Arroyo et al., 2017; Haines et al., 2016; Wertheim et al., 2002). Moreover, there is evidence to support that being stigmatized is harmful to the receiver (Bucchianeri et al., 2013; Bucchianeri et al., 2014; Lewis et al., 2011; Tomiyama, 2014). Despite this, research has not investigated whether parents' messages about others (received by children) might also affect individuals, particularly their weight-related outcomes. This study aimed to investigate 1) the memorable weight stigma messages that individuals recall their parents saying during their formative years and 2) the potential relationships that these memorable messages have with individuals' weight-related outcomes. Results indicate that individuals remember a wide variety of messages from their parents, such as messages concerned with appearance, physical health, eating, exercise. Using MSC, messages can be codified to better assess the prevalence of stigma cues in parental weight stigma messages. Though all were present in the data set, mark cues were particularly

prevalent, consistent with the research on weight stigma-related stereotypes and bias. The current study extends this by investigating weight stigma messages in parent-child relationships where messages are about *others*. From this, it appears that messages about third parties do seem to have some connection with individuals' weight-related outcomes.

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APPENDIX A: QUESTIONNAIRE MEASURES

I. AMAZON MECHANICAL TURK RECRUITMENT INSTRUCTIONS

Recruitment introduction and instructions: Hello! We are conducting a survey through the Department of Communication Studies at the University of Georgia. Your responses will be used to better understand how parents communicate to their children about weight-related appearance, including one's weight, shape, and size, as well as how individuals form attitudes about weight and weight-related appearance. This survey should take about **12-15 minutes** (depending on your read and response time) and you will be **compensated $0.75** for your participation.

Click the link below to complete the survey. It will route you to the Consent form of the study, which will offer more information about your rights as a participant. At the end of the survey, you will receive a code to paste into the box below in order to be considered for receiving credit.

Make sure to leave this window open as you complete the survey. When you are finished, you will return to this window page to paste the code into the box. If you do not do this, you will not receive credit for your participation. Thank you for your time and consideration.

II. MEMORABLE MESSAGES

A. General Information about Memorable Messages

Part A: It is common for people to look back on their childhood and recall something their parent(s) said to them that had an important effect on their life. Our parents have

communicated to us a lot of messages, but the interest here is on those messages we vividly remember because they seemed to have a sizable impact on how we behave, think, and believe about ourselves today.

We consider these "memorable messages" – which we define as verbal statements that have been told to you that you may remember for a long period of time or has stuck with you in some way. These statements may also have influenced your life in some way.

First, we would like you to **recall a memorable message you received from your parent(s) in which they NEGATIVELY discussed AN OVERWEIGHT or OBESE PERSON'S body, weight, shape, and/or size.** Please think of ONE SPECIFIC TIME before you begin. When you have identified a specific time, please move on to the next set of questions.

B. Lead in Questions

General instructions: Please answer the following questions continuing to think about the memorable message you received from your parent(s) in which they NEGATIVELY discussed AN OVERWEIGHT OR OBESE person's body, weight, shape, and/or size to your or in front of you during your childhood.

1. Message Sender

a. Who/which parent said this?

(i.e., *mother, father, guardian, grandparent, other*).

b. If other, specify.

2. Message Target (from Reno & McNamee, 2015)

a. Who was being discussed? (e.g., sibling, extended family member, stranger, celebrity) (open-ended).

3. Target Gender

a. Based on your knowledge, what was the gender of person being discussed? (e.g., *male, female, don't know/unsure, group of people/other*).

b. If group/other, please specify.

4. Message Receiving – Interpersonal Context

Who was with you when you said this? (e.g., *siblings*, *friends*).

C. Memorable Messages Prompt

Question 1: Now that you have had time to think about this time more in-depth, we would like you to tell us about it. Please describe the specific message/interaction when your parent(s) NEGATIVELY discussed AN OVERWEIGHT OR OBESE person's body, weight, shape, and/or size. This message cannot be about you. Provide as much detail about the message or interaction as possible so that we can better understand your experience. Don't worry if you can't remember everything word for word.

**Used for quantitative coding/analysis.*

Question 2: Next, please briefly describe how this influenced you (e.g., attitudes, behaviors).

**Used for qualitative analysis, not in quantitative coding/analysis.*

D. Follow-up Questions

1. Prediction of Future Behavior (following Smith's, 2007a theoretical model)

In the future, how likely are you to: a) say something similar to friends, b) say something similar to family, c) say something similar to acquaintances.

(1-5: *1 = Very unlikely, 2 = somewhat unlikely, 3 = Neutral, 4 = Often, 5 = Always*)

2. Frequency of Similar Statements

a. ***Frequency of parents' stigma communication***: How frequently did you hear messages like this from your parent *about other people*?

(1-5: *1 = Never, 2 = Seldom, 3 = Sometimes, 4 = Often, 5 = Always*)

b. ***Perceived parent stigmatization***: How frequently did you hear messages like this from your parent *about you*?

(1-5: *1 = Never, 2 = Seldom, 3 = Sometimes, 4 = Often, 5 = Always*)

3. Magnitude of Perceived Stigmatization

To what extent would classify this statement as stigmatizing? (*1-5: 1 = Not at all stigmatizing, 2 = Slightly stigmatizing, 3 = Moderately stigmatizing, 4 = Very stigmatizing, 5 = Extremely stigmatizing*).

4. Message (Dis)Confirmation

What was your response to your parent(s)/parental figure(s) when hearing this? (i.e., *1 = verbally agreed with what s/he said, 2 = didn't reply, 3 = tried to change the subject, 4 = verbally disagreed with what s/he said*).

III. WEIGHT-RELATED PERCEPTIONS

A. Weight Stigma Attitudes: Revised Anti-Fat Attitudes Scale (Crandall, 1994), shortened

Instructions: The following questions are concerned with how you perceive yourself across a variety of issues. For each statement, choose the number that best represents your agreement with that statement (1-5: *1= Strongly Disagree, 2 = Somewhat Disagree, 3 = Neutral, 4 = Somewhat Agree, 5 = Strongly Agree*).

Subscales: Antifat Attitudes Scale (AFAS; 1-5 & 13-17) and Dislike of Fat People subscale (DFPS; 6-12 & 18-24); subscales have been shortened to remove redundancies and lower the risk of participant fatigue.

1. (1) Fat people are less sexually attractive than thin people.
2. (2) I would have no problem dating someone overweight.
3. (3) On average, fat people are lazier than thin people.
4. (4) A person's weight is a genetic issue, so fat people are not to blame for their weight.
5. (5) It is disgusting when a fat person wears a bathing suit at the beach.
6. (15) On average, fat people are just as active as thin people.
7. (16) Fat people have only themselves to blame for their weight.
8. (10) *I have many close friends who are overweight.*
9. (11) *Fat people make me feel somewhat uncomfortable.*
10. (18) *I really don't like fat people much.*
11. (19) *I have no problems trusting overweight people.*
12. (20) *Although some fat people are surely smart, I think they tend not to be quite as bright as normal weight people.*
13. (21) *I take overweight people seriously.*
14. (24) *If I were an employer looking to hire, I might avoid hiring a fat person.*

B. Weight Anxiety: Social Physique Anxiety Scale (SPAS; Hart et al., 1989)

Instructions: Please rate the following statements. (Scale 1-5: *1 = Not at all characteristic of me, 2 = Slightly characteristic of me, 3 = Moderately characteristic of me, 4 = Very characteristic of me, 5 = Extremely characteristic of me*).

1. I am comfortable with the appearance of my physique or figure.
2. I would never worry about wearing clothes that might make me look too thin or overweight.
3. I wish I wasn't so up-tight about my physique or figure.
4. There are times when I am bothered by thoughts that other people are evaluating my weight or muscular development negatively.
5. When I look in the mirror, I feel good about my physique or figure.
6. Unattractive features of my physique or figure make me nervous in certain social settings.
7. In the presence of others, I feel apprehensive about my physique or figure.
8. I am comfortable with how fit my body appears to others.
9. It would make me uncomfortable to know others were evaluating my physique or figure.
10. When it comes to displaying my physique or figure to others, I am a shy person.
11. I usually feel relaxed when it's obvious that others are looking at my physique or figure.
12. When in a bathing suit, I often feel nervous about how well proportioned my body is.

C. Fear of Fat: Fear of Fat Scale (Goldfarb et al., 1982)

Instructions: Please read each of the following statements and select the number that best represents your feelings and beliefs (*1-4: 1= very untrue, 2= somewhat untrue, 3= somewhat true, 4= very true*). The full scale is listed below for reference purposes; however, a few items were removed for data collection due to inconsistencies with the conceptual definition of "fear of fat". Items retained for data collection are denoted with a double asterisk (**). Items were removed if they were not explicitly future-oriented and/or showed behavior rather than specific cognitive appraisals.

1. My biggest fear is of becoming fat.**
2. I am afraid to gain even a little weight.**
3. I believe there is a real risk that I will become overweight someday.**
4. I don't understand how overweight people can live with themselves.
5. Becoming fat would be the worst thing that could happen to me.**
6. If I stopped concentrating on controlling my weight, chances are I would become very fat.
7. There is nothing that I can do to make the thought of gaining weight less painful and frightening.**
8. I feel like all my energy goes into controlling my weight.
9. If I eat even a little, I may lose control and not stop eating.
10. Staying hungry is the only way I can guard against losing control and becoming fat.

IV. WEIGHT MANAGEMENT BEHAVIORS

A. Restrictive Eating Behaviors: Eating Attitudes Test -16 (EAT–16; Ocker et al.,

2007), Dieting and Awareness of Food subscales

Instructions: Please rate the following items. (1-5: 1 = *Never,* 2 = *Seldom,* 3 = *Sometimes,* 4 = *Often,* 5 = *Always*)

Factor/Subscale 1: Dieting (D)

1. I engage in dieting behavior.
2. I feel uncomfortable after eating sweets.
3. I like my stomach to be empty.
4. I think about burning up calories when I exercise.
5. I feel extremely guilty after eating.

Factor/Subscale 2: Awareness of Food Contents (AFC)

1. I particularly avoid foods with high carbohydrate content.
2. I avoid foods with sugar in them.
3. I eat diet foods.
4. I am aware of the calorie content of foods that I eat.

B. Exercise Behaviors: Health Practices Scale, Exercise Subscale (Jackson, 2006)

Instructions: Please consider how often you do the following and then use the scale to rate your responses (1-5: 1 = *Never,* 2 = *Seldom,* 3 = *Sometimes,* 4 = *Often,* 5 = *Always*).

1. Exercise vigorously
2. Perform stretching exercises
3. Have a physically active home life
4. Do exercises that are good for you
5. Go for regular walks

6. Do physical exercises you enjoy

7. Exercise so you are breathing heavily

8. Avoid exercising**

9. Get daily aerobic exercise

10. Make sure you are physically active

11. Walk or run for a mile or longer at least three times per week

V. PARTICIPANT DEMOGRAPHIC INFORMATION

1. What is your gender?
    a. Male
    b. Female
    c. Decline to respond
    d. Other, please specify.
2. What is your race/ethnicity?
    a. Asian
    b. Black/African/African American
    c. Hispanic/Latino(a)
    d. Native American
    e. White/Caucasian/European
    f. Other, please specify
3. What is your age?
4. What is your height:
    a. Ft.
    b. In.

5. What is your weight (lbs.):

6. In which U.S. state did you primarily reside before the age of 18?

7. In which U.S. state do you reside currently?

APPENDIX B: CODING MANUAL

Round 1: Code Relevant, Irrelevant Messages

Messages will first be coded as relevant or irrelevant, denoting that messages refer directly to weight, exercise, and/or appearance. Memorable messages that do not refer to this subject matter explicitly will be removed (this is not expected, but a simple check of the data).

Code: Irrelevant = 0; Relevant = 1

For example, a memorable message that contains sentiments such as, "When I was young, my parents would say being overweight when young could be related to other diseases or illnesses" will be considered relevant to this study due to the focus on weight and appearance. In contrast, an example of an irrelevant statement is, "I think I'm going to go to the movies with my friends later" since it is not focused on parent's/parents' discussions of weight and appearance.

Round 2: Positive v. Other (Negative/Neutral) Messages

This round will separate obviously positive or body positive messages from the sample; positive messages are counter to stigma messages and so are not included in this study. Stigma messages are negative in nature, and will note physical imperfections, negatively label others, and/or endorse stereotypes and anti-fat biases associated with weight stigma. As such, these messages will not be positive in any way; messages that are deemed to be positive or supportive will be marked as such and removed from data analysis for this immediate project.

Code: Positive = 0; Negative/Neutral = 1

The following are examples of negative (and also stigmatizing): "My mom once said while watching *My 600lb Life* that it was *no wonder they weighed so much because they eat three portions of fast food for every meal*…" and "My parents do not really discuss about overweight when it comes to other people. My mom actually encourages me to eat, even when I am not hungry. My sister is a little obese, so my dad calls her "*'fatty*' or '*piggy*'". However, if someone simply says something to the effect of, "My mother always told us we were beautiful and that we should look at everyone as beautiful regardless of their weight", then it is something that is positive and so will also not evidence weight stigma. Although it does focus on weight, this is very clearly a positive sentiment and negative/pejorative references to person's/people's weight, weight management, or appearance.

Round 3: Code Stigma Communication Cues (Smith, 2007)

1. Mark Cues: Statements drawing attention to the stigmatized "mark" (in this case weight). Such messages will refer to the visible appearance of the individual's weight, appeals that the weight should "be concealed", negative comments that the weight can be seen, and/or descriptions made about the excess weight on the person (relating the aspect of concealment). Regarding the component of disgust, statements regarding the mark may also refer to how "gross" or "disgusting" one's excess weight or visible appearance might be (e.g., I think it's gross when you can see someone's love handles", such that it's relating disgust of and desire to conceal the mark). *Note:* The weight is not describing the person *as their weight or appearance* (e.g., fat people) as is seen with labeling, which is described below.

Code: This will be a simple count of cues within the message. If mark cues are not present, it will be noted as 0; the amount of cues present will be 1+.

For example, sentiments such as, "One time my parents were *criticizing this girl for having a larger lower body*. They said *it didn't look right* and that *it wasn't proportionate*." and "The only time I can recall [my dad] saying something bad about another person's weight size was after my cousin's freshman year of college. *He mentioned to my mom that 'she had really gained that 15 they talk about.'* My mom immediately gave him a lecture on body shaming…" demonstrate a focus on the physical cues.

2. Label Cues: Labeling cues are embedded in messages to denote a person's or people's group membership, in this case, by their weight status/appearance. Specifically, labeling terms demonstrate that someone is part of a separate social entity that is separated from the rest of the community (i.e., "normal" or non-deviant others) – separating *us* from *them* (e.g., we, they, us, them, those people). These statements may explicitly reflect a separation by using these pronouns and group-terms, however, messages may be more implicit in nature (e.g., no overt comparison, but direct labeling of someone as "that type" of person so that a difference is demonstrated). Specifically, a labeling statement would reflect that the person *is* the illness/attribute rather than stating that the person *has* an illness/attribute (e.g., that fat person/that fatty, the obese man, the tiny girl).

Code: This will be a simple count of cues within the message where label cues not present will be noted as 0, and the amount of cues present will be 1+.

For example, group label might be demonstrated with sentiments such as: "…Another memorable discussion is when my dad was telling my mom about the prospective teachers that came into his office to look for a job. When describing the candidate, he said one of them *'definitely wasn't getting a second interview' because 'he didn't want a fat bitch wandering around his halls all day.'* He said he'd rather have a skinny teacher working for him, because people would pay more attention to her and like her more..." and "[My parents] have made one-off remarks like, **'***Check out that hippo in aisle 3'* or **'***I'm legitimately concerned about that elephant trying to use the elevator. They do have weight limits.*'"

3. Peril Cues: Messages cues denoting peril relate the danger of stigmatized people that is posed to everyone else. This might take the form of:

1. *Signal words*: single words or short phrases that gain attention and ready the person to some sort of danger
2. *Hazard statements*: cues relating the quality of the danger
3. *Hazard avoidance*: messages that convey advice to avoid the stigmatized person
4. *Consequence statements*: statements that explain what will happen if someone does not attend to the warning.

Generally, these statements are relating how stigmatized people are dangerous to non-stigmatized others; however, such stigmatizing statements might also relate the peril of "being" that kind of person, and so relate the peril that overweight people might face for their overweight status. For this project, peril will be coded as 3a and 3b, where 3a is Peril to Self, or the peril overweight people face for their status, and 3b is Peril to others, or the peril non-stigmatized people face from weight stigmatized overweight people. In

this way, it will offer a better idea as to what forms of peril are more common in the memories of this sample collected.

Code: This will be a simple count of cues within the message where peril cues not present will be noted as 0, and the amount of cues present will be 1+.

For example, something threat or peril to the overweight/obese person: When I was young, my parents would say *being overweight when young could be related to other diseases or illnesses.*" Additionally, an example of threat or peril to close others of the critiqued person might be, "I believe that *being overweight is not only harmful to you*, but it could *also harm those around you*." Lastly, an example of threat to the general population might be, "'*I'm legitimately concerned about that elephant trying to use the elevator. They do have weight limits.*'"

4. Responsibility Cues: Responsibility cues reflect the control and choice over the onset and offset of their stigmatized condition/attribute. These messages will make a statement regarding a person's ability to control the onset, offset, or management of their weight ("it's their own fault"), control over exercise behavior, and may make reference to views of stigmatized people's immorality and character flaws (e.g., "people are lazy, they could lose the weight if they wanted to do so"). Because there is perceived weight controllability with condition onset and offset, the messages will be coded the different cue framings: general/unspecified, onset, and offset.

Code: This will be a simple count of cues within the message where responsibility cues not present will be noted as 0; the amount of cues present will be 1+.

For example, messages reflecting a sense of responsibility (unspecified) might be: "…Whenever my parents would see an overweight person, they would *say that's what*

happens from eating too much McDonald's. If we saw a family of obese people they would often get upset and *blame the parents for their family's obesity*. Some of these comments have led me at times to say the same things my parents have" and "He said that it was no wonder this teacher was overweight *because of her poor food choices*."

Cue combinations. Cue combinations are not mutually exclusive and so multiple types of cues may be present at one time, either in one broad memorable message or in one thought unit. For example, if it is reported that, "My parents used to talk about how overweight my aunt was. I remember them saying *how much she weighed [mark]* and *her eating habits [responsibility]*. *…My mom would say she needed to lose the weight, not for herself, but the rest of her family [peril]*. This made me realize your actions, not just affect you, but everyone around you", then there are multiple cues embedded throughout the entire memorable message recitation. There may also be cues present in the same sentiment or thought unit. For example, if someone says *"'I'm legitimately concerned about that elephant trying to use the elevator. They do have weight limits [peril, group label]*'", it demonstrates both peril and group label operating in tandem. Cue combinations are not coded separately from messages with only type of stigma cue (e.g., mark versus mark and label), but coders are made aware that multiple cues can be present and cue combination frequencies will be reported in results.

ENDNOTES

[1] Though the current study will at times use the terms "stigmatize" or "stigmatizing" in this study, it will refer to weight stigma specifically. The process of stigmatizing others may look differently depending on stigma, and the author acknowledges that not all stigmas/stigmatization operates the same. The absence of "weight" is only for conciseness and readability.

[2] It should be noted that there appears to be some latitude in research regarding the length and type of message that constitutes a memorable message. For instance, in Thompson and Zaitchik's (2012) participant interviews, memorable *interactions* appeared to fall under the umbrella of messages, rather than just concise statements or sentences. As such, this study considers "memorable messages" to be salient message transmission, which could be housed under a broader interaction that is memorable to an individual. Additionally, though people may attempt to intentionally transmit or teach people norms and values (Barge & Schlueter, 2004), memorable messages are largely constituted as such by the receiver (e.g., Thompson & Zaitchik, 2012) and so intentionality of sender is not necessarily as relevant to consider, as well as impossible to determine within this data set.

[3] Studies often refer to weight stigmatized individuals as "obese individuals" or "overweight people" in order to reference those being weight stigmatized. In other areas of stigma research, similar references of stigmatized people have been altered to be consistent with person-centered language and thereby limiting the stigma from being perpetuated through stigmatized labeling. For instance, people previously referred to as "autistic(s)" are now generally referred to as "individuals with (or having) autism/autism spectrum disorder." Similarly, "schizophrenics" are now more commonly referred to as "people with schizophrenia," "diabetics" as "people with diabetes," and "addicts" as "people with a substance use disorder." This arguably changes perceptions, placing the person (and their humanity) first in order to avoid dehumanizing and further stigmatizing individuals. However, this change has not happened in the context of (over)weight stigma and, without a different label, researchers have continued to refer to people as overweight or obese people. Though it is understandable to use the commonly agreed upon term in research, it is my wish to further perpetuating potentially stigmatizing labels. In order to be clear and concise as well as being respectful, further discussion in this study will refer to weight stigmatized people as *people with overweight/obese appearance* (POA). There might be other issues with this terminology, but the aim in this current study is to be a little more consistent with person-centered language.

[4] Asked but not included in this study were questions about whether the participant would be likely to act similarly in the future (following the Smith's, 2007a theory: "In the

future, how likely are you to: a) say something similar to friends, b) say something similar to family, c) say something similar to acquaintances?") and frequency of hearing parents say similar *messages about the participant* (i.e., "How often did you hear your parents say similar statements about you?").

[5] This may take the form of *signal words* or phrases that gain others' attention (e.g., "watch out!"), *hazard statements* that relate the type of danger (e.g., that's extremely risky"), *hazard avoidance* that offer advice on how to avoid stigma/stigmatized (e.g., "don't go to that bar"), and *consequence statements* that relate potential outcomes from not heeding these warnings (Smith, 2007a; Smith, 2007b).

[6] Of note, there was an instance in which a close family member was the target. One participant reported, "*my dad said that [my sister] looked like a baboon*…"; Female, 37, White/Caucasian, Kentucky). This obviously does degrade a close relation and deviates from previous uses of family name-calling seen in the dataset. This is surprising as degrading close family members is often counterproductive to protecting one's valued group identity (Brown, 2000; Turner et al., 1979), particularly as the family members' negative attribute could then taint the speaker by association (Goffman, 1963; Pryor et al., 2011). These results might suggest that individuals may degrade other group members in order to demonstrate that their deviation is not a reflection of the group and needs to be corrected. Essentially, the act of dehumanizing a daughter by calling her a baboon appears to be unusual but may be a way to weaken group association and protect the speaker.

[7] The following are the two instances of peril demonstrated in the data:

> (1) "*We were at the store. Saw a guy who was overweight. My dad was talking about how 'fat people kill people' because he is a career military man. His point was that in his line of work, lack of fitness means someone else has to carry your load and that can lead to casualties*."
> (2) *My father told my aunt, his sister, that she was (sic) too fat to come in our car with us because she would bust the wheels off*."