



“The most hurtful thing I've ever experienced”: A qualitative examination of the nature of experiences of weight stigma by family members

Samantha E. Lawrence^{a,b,*}, Rebecca M. Puhl^{a,b}, Marlene B. Schwartz^{a,b}, Ryan J. Watson^a, Gary D. Foster^{c,d}

^a Department of Human Development and Family Sciences, University of Connecticut, Storrs, CT, USA

^b Rudd Center for Food Policy & Health, University of Connecticut, Hartford, CT, USA

^c WW International, Inc., New York, NY, USA

^d Center for Weight and Eating Disorders, Department of Psychiatry, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA, USA

ARTICLE INFO

Keywords:

Family
Weight stigma
Teasing
Women

ABSTRACT

Family members are some of the most common sources of weight stigma reported by youth and adults with higher body weight; however, little is known about the ways in which weight stigma manifests from different family members. To better understand the nature of weight stigma by family members, the current study qualitatively examined women's retrospective accounts of these experiences. Participants were 410 U.S. adult women engaged in a commercial weight management program who described an experience of weight stigma by a family member in response to an open-ended survey question. Using an inductive qualitative coding approach, we identified 11 forms of weight stigma experienced across 15 family sources. For childhood experiences of stigma from family members, weight teasing was most common. In adulthood, participants most commonly described critical weight comments from family members. Overall, mothers were the most common source of weight stigma, followed by spouses/romantic partners, and references to ‘family’ generally. Across diverse family sources, participants described these stigmatizing experiences as having lasting negative ramifications. Together, these findings can inform interventions to reduce weight stigma in familial relationships.

Weight stigma is a global issue with myriad ramifications for health and well-being (Brewis et al., 2011, 2018; Puhl et al., 2015). Whereas implicit and explicit biases against individuals with other stigmatized identities (e.g., racism, homophobia) have decreased over the past decade, the stigmatization of higher weight (i.e., “weight stigma”) endures—and may even be increasing (Charlesworth & Banaji, 2019). Even with substantial evidence documenting that multiple complex factors underlie body weight, including many outside of personal control (e.g., environmental, developmental, biological, and genetic factors; Schwartz et al., 2017), high weight is often perceived as a personal shortcoming. Attributing high weight to individual behavior and personal responsibility in this way can facilitate weight stigma and prejudice (Crandall, 1994; Puhl & Brownell, 2003).

An emerging body of research indicates that *family members* are among the most common sources of weight stigma among youth and adults with higher weight (Neumark-Sztainer et al., 2010; Puhl & Brownell, 2006; Puhl & Himmelstein, 2018; Vartanian et al., 2014). Given established links between close interpersonal relationship quality and health outcomes (Pietromonaco & Collins, 2017), weight stigma encountered in familial

relationships is concerning. Weight stigma enacted by family members (from here on referred to as ‘family-based weight stigma’) can be expressed as stereotypes, teasing, name-calling, rejection, or hostile treatment (Puhl & Heuer, 2009; Puhl & King, 2013), and may be more negatively consequential than weight stigma by other, non-family sources (Hunger & Tomiyama, 2018). Although considerable research has documented the presence of family-based weight stigma and its links to poor health, little is known about the nature of these experiences and how they manifest across different family member sources. The present study aimed to examine the nature of weight stigma experiences with different family members, using qualitative data from a large sample of women engaged in weight management.

1. Family-based weight stigma

1.1. Prevalence of family-based weight stigma

Family members are common sources of weight stigma for youth and adults of diverse body sizes (Berge et al., 2016; Eisenberg et al., 2019;

* Corresponding author. Rudd Center for Food Policy & Health, University of Connecticut, One Constitution Plaza, Suite 600, Hartford, CT, 06103, USA.
E-mail address: samantha.lawrence@uconn.edu (S.E. Lawrence).

Puhl et al., 2017; Puhl & Brownell, 2006; Puhl & Himmelstein, 2018; Quick et al., 2013; Vartanian et al., 2014). For instance, in community samples of racially/ethnically diverse youth (i.e., the majority of participants were Black or African American, Latinx, and/or Asian American), reports of family weight teasing ranged from 14 to 38% (Berge et al., 2016; Eisenberg et al., 2019; Puhl et al., 2017; Quick et al., 2013). For many individuals, these stigmatizing family experiences persist throughout adulthood. For instance, in a community sample of adult men and women, parents and spouses/romantic partners were among the most frequent perpetrators of weight stigma, with family members collectively accounting for more than a third of all their stigmatizing experiences in the last two weeks (Vartanian et al., 2014). Notably, parents were most commonly described as enacting participants' most "significant stigmatizing event" (Vartanian et al., 2014).

Reports of family-based weight stigma are particularly high among women and girls (15–29%; Puhl et al., 2017; Quick et al., 2013), sexual and gender minority individuals (40–70%; Puhl et al., 2019a; Puhl et al., 2019b), and individuals with high body weight (33–87%; Himmelstein et al., 2018; Pearl et al., 2019; Pearlman et al., 2019; Puhl et al., 2008; Puhl et al., 2019; Puhl & Brownell, 2006). For example, from an early age, individuals with higher weight experience more weight-based mistreatment than their peers with lower weight, in general (Haines et al., 2008; Spahlholz et al., 2016) and by family (Neumark-Sztainer et al., 2010). Likewise, women and girls may experience more weight stigma in general (Dutton et al., 2014; Hatzenbuehler et al., 2009), and in the family/home environment in particular (Dutton et al., 2014; Puhl et al., 2017; Quick et al., 2013), than men and boys. Indeed, recent evidence from a large multinational study ($N = 13,996$) of women engaged in weight management found that as many as 88% reported weight stigma from a family member (Puhl et al., 2021).

1.2. Health consequences of family-based weight stigma

A range of adverse consequences are associated with family-based weight stigma. Cross-sectional studies consistently link experiences of family weight teasing and weight-related remarks to body dissatisfaction, poor self-esteem, depressive symptoms, unhealthy and extreme weight control behaviors, and binge eating in adolescence and young adulthood (Bauer et al., 2013; Eisenberg et al., 2019; Fulkerson et al., 2007; Kluck, 2010; Neumark-Sztainer et al., 2010). Longitudinal findings further underscore the detriments of family-based weight stigma for mental health and well-being. Evidence from the Project Eating and Activity in Teens and Young Adults (EAT) longitudinal cohort study found that experiencing family weight teasing in adolescence was associated with maladaptive outcomes in adulthood, including greater body dissatisfaction among women and men at a ten-year follow-up, regardless of baseline weight status (Quick et al., 2013), and, among women (but not men), more extreme unhealthy weight control behaviors and greater odds of having obesity, eating to cope, and body dissatisfaction, at a 15-year follow-up compared to those who had not been teased by family for their weight (Puhl et al., 2017). These health consequences may be in part attributable to self-blame and the internalization of weight stigma, processes which have been documented to be detrimental for mental health (Pearl & Puhl, 2018). Recent evidence among weight-loss seeking adults found that those who more frequently experienced weight stigma from a family member had higher levels of weight self-stigma (i.e., apply negative weight-based stereotypes to themselves and engage in self-devaluation because of weight; Pearl et al., 2019).

1.3. Weight stigma across different family members

Despite substantial evidence that highlights the prevalence and consequences of family-based weight stigma, considerably less is known about how weight stigma manifests across diverse family member sources. The measurement of family-based weight stigma rarely considers distinct family members and, instead, "family sources" of stigma are

often grouped together in study survey questions. To date, only a handful of studies have assessed the prevalence of weight stigma by specific family member sources or groups of family members (e.g., Berge et al., 2016; Keery et al., 2005; Kluck, 2010; Puhl et al., 2008; Valois et al., 2019). Together, these findings highlight members of one's family of origin (e.g., parents and siblings) as especially common sources of weight stigma—more common than stigma by one's acquired family (e.g., spouses or children) or extended family (Pearl et al., 2019). However, findings pertaining to the relative prevalence of stigma by parents and siblings are somewhat inconsistent, and limited by the frequent collapsing of "parents" and "siblings" (e.g., Berge et al., 2016; Dahill et al., 2021; Keery et al., 2005; Kluck, 2010; Puhl & Brownell, 2006; Puhl et al., 2008). Thus, while these findings suggest that there may be meaningful differences in the prevalence of weight stigma experienced from different family members, the inconsistencies across studies underscore methodological limitations (e.g., collapsing of family member sources) and may be indicative of age-related differences in experiences with family-based weight stigma.

Studies that assess the nuanced nature of these experiences of family-based weight stigma, such as examining different types of weight stigma (e.g., teasing, harsh comments, exclusion) from different family members, are even more scarce. In many previous studies, participants were asked, "Have you ever been teased or made fun of by family members because of your weight?"—not only amalgamating family sources, but presenting only one manifestation of weight stigma (Eisenberg et al., 2012, 2019; French et al., 2018; Himmelstein & Puhl, 2019; Neumark-Sztainer et al., 2010; Puhl et al., 2019). One exception is a study by Berge et al. (2016); findings from interviews with parents of pre-adolescents demonstrated that, whereas mothers' negative weight talk with their child focused on their child's weight status or concerns for their child's health, fathers' negative weight talk focused on the appearance of children's body parts (e.g., thighs), and siblings' negative weight talk (reported by parents) focused on body shape/size and used humor and/or teasing (Berge et al., 2016). These findings suggest that the nature of weight stigma could vary across family member sources. However, given the dearth of literature, many questions remain about the nature of family-based weight stigma, and it is unclear how individuals experiencing weight stigma perceive these experiences from different family sources. Accordingly, qualitative exploration of the nature of weight stigma across specific family member sources is warranted.

1.4. Current study

Understanding the nuanced nature of weight stigma experienced by diverse family sources has important implications for reducing weight stigma within familial relationships and informing tailored family-based intervention efforts. In the current exploratory study, we aimed to address these gaps in the literature by assessing (1) how people characterize their experiences of weight stigma from different family members, and (2) whether/how experiences of weight stigma by different family members are similar/different. Based on the extant literature, we hypothesized that the nature of weight stigma would vary by family member source, but we did not make specific predictions for the different ways in which weight stigma would manifest across different family sources.

2. Methods

2.1. Procedures and participants

We analyzed a subset of data collected as part of a larger survey study of weight stigma among adults enrolled in WW (formerly Weight Watchers), a commercial weight management program. WW is an empirically validated behavioral weight management program focused on healthy habits pertaining to food, physical activity, mindset, and sleep (Ahern et al., 2017; Gudzone et al., 2015). Between September 2017 and

August 2018, WW circulated email invitations to an anonymous, voluntary, online survey about “experiences related to body weight and health, and challenges that come with these experiences such as stress, self-confidence, and stigma” to 1,155,000 randomly selected members. WW members who received an email invitation and were interested in participating could click the link in their email and be taken to a website reviewing the study details and consent information. The University of Connecticut institutional review board approved all study procedures.

Among the WW members who received invitations, 23,432 eligible individuals (i.e., who were at least 18 years of age, lived in the United States, had been WW members for at least three months) entered the survey and provided informed consent. Of these individuals, 4663 participants were excluded for completing less than 50% of the survey ($n = 2728$) or because they were missing key demographic and anthropometric information (i.e., weight, height, sex, race; $n = 1935$), thus resulting in a final sample of 18,769 individuals ($M_{age} = 52.2$, $SD = 12.9$; 94.6% women; 91.1% White, non-Hispanic/Latinx) who completed a series of close-ended quantitative survey questions. Additional information pertaining to study recruitment and procedures has been published elsewhere (Pearl et al., 2019).

Participants were also asked to respond to an open-ended qualitative question at the end of the survey. In the current study, we focus on participants who responded to this optional open-ended question ($N = 4065$), which invited them to share any additional information about their experiences with weight stigma. A preliminary round of inductive qualitative coding was conducted, in which a trained graduate research assistant read through all 4065 responses and identified specific interpersonal sources of weight stigma present in participants’ written responses (e.g., mother, medical professional, peer) using NVivo 11, a qualitative data management software package. In total, 412 participants ($n_{women} = 410$) referenced a family member. Participants in this qualitative subsample did not significantly differ from the overall sample in their education level [$X^2(1, N = 18,056) = 8.09, p = .15$], race/ethnicity [$X^2(1, N = 18,056) = 1.81, p = .77$], or BMI [$t(18,054) = -1.5, p = .14$], but were older [$M_{age} = 55.82, SD = 11.36$ versus $M_{age} = 51.89, SD = 12.87$; $t(18,529) = -5.791, p < .001$] and more likely to be women [99.5% versus 94.7%; $X^2(1, N = 18,769) = 23.74, p < .001$]. Because only two men qualitatively reported family-based weight stigma, we excluded these participants. The analytic sample was therefore composed of 410 women who described an experience of weight stigma by a family member in the open-ended survey item. These women were primarily White, non-Hispanic/Latina, heterosexual, and had an average BMI of 32.45 (see Table 1).

2.2. Measures

2.2.1. Qualitative question

At the end of the quantitative survey, participants were asked the following open-ended question: *Is there anything about your experience with stigma that you would like to share with us?* Participants had unlimited space in which to write their responses. ‘Weight stigma’ was described for participants at the beginning of the survey, as follows: “We live in a society that is quick to judge and blame people because of their body size or body weight. Some people may experience teasing, bullying, unfair treatment, or discrimination due to their weight – experiences known as *weight stigma*. People can experience weight stigma in different aspects of their lives, such as relationships with friends and loved ones, in the workplace, at school, in health care, or even in public from strangers.”

2.3. Analysis

To examine the nature of participants’ experiences of weight stigma attributed to different family sources, the first author further coded and analyzed the 412 participant responses which referenced a family member source of weight stigma, using Creswell and Poth’s (2018) data analysis strategy. Specifically, the first author read all qualitative

Table 1
Sample characteristics.

	<i>M</i>	<i>SD</i>
Age	55.82	11.36
BMI	32.45	6.75
	<i>N</i>	%
Race/Ethnicity		
White, non-Hispanic, non-Latina	379	92.4
Black or African American	8	2.0
Asian or Pacific Islander	2	0.5
Latina, Hispanic, or Mexican-American	13	3.2
Other	8	2.0
Sexual Orientation		
Heterosexual (straight)	398	97.1
Homosexual (gay or lesbian)	5	1.2
Bisexual	6	1.5
Education		
High school/GED	18	4.4
Vocational/technical school (2 years)	17	4.1
Some college	87	21.2
College graduate	137	33.4
Postgraduate degree	151	36.8

Note. *N*s range from 407 to 410 due to missing data.

responses that referred to family-based weight stigma (e.g., stigma by a mother, father, aunt, spouse/romantic partner, sibling, grandparent, ‘family’ generally, etc.), and noted patterns and potential emergent themes across responses to develop a preliminary codebook. The codebook was then reviewed and discussed with the research team, after which agreed-upon clarifications and updates were made. The first author and a graduate research assistant then used the updated codebook to independently code an initial subsample of 50 participant responses. The coders met to discuss coding discrepancies and revise the codes and their definitions/inclusion criteria as needed. Using the finalized, agreed upon codebook, the first author and trained graduate research assistant double-coded an additional 50 participant responses.

The coders achieved a high level of interrater reliability (>0.80) on all but two codes (average kappa coefficient = 0.81), both related to the time of life in which family-based weight stigma was described (childhood: kappa = 0.56, adulthood: kappa = 0.61; McHugh, 2012). The first author and a trained graduate research assistant again reviewed the codebook and independently double-coded another random 10% of responses and achieved a high level of interrater reliability (childhood: kappa = 0.90, adulthood: kappa = 0.96), bringing the average kappa coefficient to 0.93 (kappa range = 0.81–1.00). After establishing interrater reliability, the first author coded the remaining participants’ responses, applying as many codes as were relevant to each written passage. For instance, if a participant referred to weight stigma by a mother and father, their response would be classified in both the ‘mother’ and ‘father’ source codes. Similarly, participants’ responses often referred to more than one type of stigma enacted by a given family member and, accordingly, multiple different ‘type’ codes applied, such as being both teased and excluded because of their weight.

3. Results

In their articulations of their experiences with family-based weight stigma, women highlighted several specific family member sources and nuanced manifestations of these weight stigmatizing experiences. The most common family member source of weight stigma reported overall was mothers ($n = 141$) followed by spouses/romantic partners ($n = 112$), general references to ‘family’ ($n = 100$), fathers ($n = 84$), extended family members (i.e., aunt, uncle, cousin, grandmother, grandfather, niece, in-laws; $n = 51$), brothers ($n = 40$), and sisters ($n = 20$; see Table 2). Exemplar quotes included throughout the results section are all from different participants’ responses.

3.1. Expressions of weight stigma

Using inductive analysis of participants' responses, we identified 11 types of weight stigmatizing communication and behaviors enacted by family members (see Table 2). The most common type of weight stigma from family that participants described was *critical weight comments*, defined as any negative, judgmental, and/or comparative remarks family members made about participants' body weight, shape, or size (e.g., “[My] stepfather and father-in-law made disparaging remarks about my weight when I was in my 20’s” [64-year-old White, non-Hispanic/Latina woman]; $n = 203$). The second most common type of family-based weight stigma described was *teasing*, encompassing weight-related derogatory humor, taunting, bullying, name-calling, or making fun of (e.g., “I loved my mother very much but she called me names about my size ... Still hurts. I think my struggles have extended to my children, and that makes me sad.” [61-year-old White, non-Hispanic/Latina woman]; $n = 142$). Third most common were *general references to ‘stigma,’* which included vague and/or broad references to weight-related mistreatment (e.g., “I think that most of the stigma comes from my family and childhood and myself.” [63-year-old White, non-Hispanic/Latina woman]; $n = 128$). The fourth most common type of weight stigma was *critical diet comments and behaviors*, such as scrutiny, restriction, comparison, and/or critique of one’s eating habits (e.g., “My sister has always been smaller in stature than I am and has always weighed at least 20 lbs less than I do. She is mostly very kind about it, but obliquely makes comparisons or comments on our different diets. I always feel less attractive when I am with her and she contributes to that feeling.” [64-year-old White, non-Hispanic/Latina woman]; $n = 82$).

Though not as common, a sizeable subsection of women described an experience of family-based weight stigma that involved weight labeling, weight shaming, and unsolicited weight loss advice. *Weight labeling* entailed participants being labeled ‘fat,’ ‘huge,’ ‘big,’ or another similar label implying they have high weight by a family member (e.g., “When your grandpa says you are too fat to play volley ball, you don’t forget it.” [59-year-old White, non-Hispanic/Latina woman]; $n = 73$). By comparison, *weight shaming* involved being made to feel shamed, ashamed, or humiliated for their weight (e.g., “The shaming from family has stuck with me my entire life.” [58-year-old White, non-Hispanic/Latina woman]; $n = 48$). Participant reports of *unsolicited weight loss advice*

pertained to family members' encouragement of weight loss and/or weight control (e.g., “Had a husband who would say that if I just lost 10 lbs he would love me more.” [71-year-old White, non-Hispanic/Latina woman]; $n = 42$).

The remaining, less common types of family-based weight stigma reported by participants included passive aggressive weight-related remarks, insults, social exclusion, and verbal abuse. *Passive aggressive weight-related remarks* included back-handed compliments, sarcastic comments, and other passive aggressive behavior or remarks that implied disdain for higher weight (e.g., “My current sister-in-law who made a comment that if I spent as much time on my body as I did on my hair, I could look so pretty.” [56-year-old White, non-Hispanic/Latina woman]; $n = 28$). *Insults* reflected specific put downs such as being called ‘unattractive,’ ‘weak,’ or ‘disgusting’ for their weight (e.g., “My ex husband told me I was unattractive when I gained weight.” [52-year-old White, non-Hispanic/Latina woman]; $n = 23$). *Social exclusion* entailed being left out, overlooked, ignored, or disregarded because of their weight (e.g., “My family, especially my brother devalues me because of my weight. He has refused to introduce me to people, has ignored my presence at times.” [57-year-old White, non-Hispanic/Latina woman]; $n = 18$). Finally, *verbal abuse* reflected any explicit references to verbal abuse for weight (e.g., “The stigma I experienced was abuse from a former spouse.” [63-year-old White, non-Hispanic/Latina woman]; $n = 17$). Results pertaining to these different types of weight stigma are summarized below according to specific family sources of stigma.

3.2. Parental sources of weight stigma

In their retrospective reflections, women in the current study most commonly described their parents as sources of family-based weight stigma in childhood or adolescence. In fact, more than half of all early experiences of weight stigma were attributed to a parental source (see Table 3). As summarized by one woman:

My parents were awful when I was a teenager. They told me that I could get a job as a fat lady in the circus or they would say that I looked like Mrs. Zink who was a morbidly obese woman. Of all the people who made fun of me, my parents were the worst. I can never forgive them for that. [80-year-old Hispanic/Latina woman]

Table 2
Sources and types of family-based weight stigma.

Types of Weight Stigma from Family Members											
	Critical Weight Comments	Teasing	General Stigma	Diet Comments	Weight Labeling	Shaming	Unsolicited Weight Loss Advice	Passive Aggression	Insults	Exclusion	Verbal Abuse
Family Source (N participants who reference source)	n (n/N)	n (n/N)	n (n/N)	n (n/N)	n (n/N)	n (n/N)	n (n/N)	n (n/N)	n (n/N)	n (n/N)	n (n/N)
Mother (141)	62 (0.44)	24 (0.17)	35 (0.25)	31 (0.22)	19 (0.13)	13 (0.09)	8 (0.06)	11 (0.08)	3 (0.02)	3 (0.02)	3 (0.02)
Spouse/Partner (112)	45 (0.40)	16 (0.14)	22 (0.20)	14 (0.12)	16 (0.14)	5 (0.04)	12 (0.11)	6 (0.05)	13 (0.12)	4 (0.04)	11 (0.10)
General ‘family’ (100)	33 (0.33)	25 (0.25)	27 (0.27)	10 (0.10)	11 (0.11)	12 (0.12)	7 (0.07)	6 (0.06)	1 (0.01)	3 (0.03)	0 (0.00)
Father (84)	34 (0.40)	30 (0.36)	22 (0.26)	12 (0.14)	10 (0.12)	10 (0.12)	4 (0.05)	3 (0.04)	4 (0.05)	1 (0.01)	3 (0.04)
Extended family (51)	17 (0.33)	15 (0.29)	11 (0.22)	6 (0.11)	12 (0.24)	2 (0.04)	8 (0.16)	1 (0.02)	2 (0.04)	2 (0.04)	0 (0.00)
Brother (40)	6 (0.15)	24 (0.60)	8 (0.20)	5 (0.12)	1 (0.02)	4 (0.10)	3 (0.08)	0 (0.00)	0 (0.00)	5 (0.13)	0 (0.00)
Sister (20)	6 (0.30)	8 (0.40)	3 (0.15)	4 (0.20)	4 (0.20)	2 (0.10)	0 (0.00)	1 (0.05)	0 (0.00)	0 (0.00)	0 (0.00)
Total References to Types of Weight Stigma	203	142	128	82	73	48	42	28	23	18	17

Note. The sum of ns for types of stigma enacted by a given family member source may exceed the total number of references to a given source because a source may have engaged in multiple types of stigma. The sum of proportions (n/N) within a given source may exceed 100% for this same reason.

Although parental sources of weight stigma were most prevalent in childhood, parental weight stigma—especially maternal weight stigma—and/or the consequences of those childhood experiences persisted across the lifespan, with lasting effects for many women. As one woman described:

My parents were who stigmatized me, primarily and currently, about my weight. They have very unhealthy attitudes about food and appearance that were passed on to me and overcoming those bad thoughts and feelings, that I have been immersed in since childhood, has been a huge challenge that I still struggle with. [42-year-old White, non-Hispanic/Latina woman]

Another participant described how her parents' stigmatizing statements in adolescence remain salient, even as an adult:

During my adolescence my parents talked a lot about my weight and how unattractive it was. I don't think that has ever left me. [60-year-old White, non-Hispanic/Latina woman]

Participant reports of weight stigma by mothers and fathers shared a number of similarities; both mothers and fathers were more commonly described as sources of stigma in childhood than in adulthood, and participants described mothers and fathers as engaging in different types of weight stigma, such as exclusion, general stigma, verbal abuse, insults, and unsolicited weight loss advice, at similar rates (see Table 2). However, the nature of maternal and paternal weight stigma did differ in several key ways, summarized below.

3.2.1. Mothers

One-third of women ($n = 141$) referred to their mother as a source of weight stigma in their responses, making mothers the most common family source of weight stigma reported overall and, particularly, in childhood (reported by 98 women; see Table 3). One woman described the lasting effects of these experiences:

I feel that the teasing and harassment I experienced as a child and adolescent, and the constant criticism from my mother about my weight led to issues of self-confidence I have struggled with all my life. [65-year-old White, non-Hispanic/Latina woman]

Table 3
Types and sources of family-based weight stigma in childhood and adulthood.

	Childhood	Adulthood
Family Sources of Weight Stigma		
Mother	98	51
Spouse/romantic partner	0	112
General family	46	30
Father	60	24
Extended family	31	23
Brother	32	9
Sister	13	7
Types of Weight Stigma		
Critical weight comments	63	76
Teasing	68	32
General stigma	47	35
Diet comments	38	24
Weight labeling	26	26
Shaming	18	12
Unsolicited weight loss advice	17	16
Passive aggression	13	10
Insults	4	15
Exclusion	6	6
Verbal abuse	3	11

Note. Because some participants described multiple instances of weight stigma from a given source across the lifespan, the sum of childhood and adulthood experiences of weight stigma from a source may exceed the total number of participants who referenced that source. In some cases, the time of life a certain type of stigma was experienced was unknown and, thus, the sum of childhood and adulthood experiences of a given type of stigma may be less than the total number of references to that type of stigma in Table 2.

Transitioning to adulthood did not necessarily mark an end to maternal weight stigma. Rather, for many women, maternal weight stigma, like stigma across family member sources, persisted across their lives. For instance, one participant described how, even as an adult, her mother was critical of her weight, resulting in great distress:

Even though I am 63 years old, my mother can still get to me. Her comments about my weight & “being fat” constantly hurt me and affect my mood. My mother is really the only one who ever negatively comments on my weight—yet her comments overwhelm me. I immediately fall into a state of mild depression. [...] [63-year-old White, non-Hispanic/Latina woman]

Additionally, mothers were the most common source of several different types of weight stigma. For instance, mothers were the most common source of critical weight comments (both overall and proportionally). Nearly half (44%) of participants' descriptions of maternal sources of stigma described their mothers as making judgmental and critical comments about their body weight (e.g., “My mother is “fat phobic” and verbally critical of me.” [68-year-old White, non-Hispanic/Latina woman]). As one woman explained:

Most of my issues stem from my mother who is highly critical and judgmental. Has been that way my entire life. When I was younger and not overweight, she made me feel overweight because I was not skinny. [49-year-old White, non-Hispanic/Latina woman]

Mothers were also described as the most common source of critical diet comments overall and proportionally, with about a quarter (22%) of mothers described to have been critical or controlling of their child's diet (e.g., “I still have a problem eating in front of my mom. She always criticized my eating and weight starting from when I was 6. Maybe even before.” [49-year-old White, non-Hispanic/Latina woman]). Although less common, mothers were likewise the most common source of weight labeling (overall) and passive aggressive comments about weight (overall and proportionally), accounting for 26% of all weight labeling and 39% of passive aggressive remarks reported by participants. Weight labeling by mothers entailed being explicitly called “fat,” “heavy,” “big,” or other such labels that imply large body size (e.g., “My mother told me from the time I was little that I was fat.” [67-year-old White, non-Hispanic/Latina woman]). In contrast, passive aggressive remarks were more covert messages of mothers' displeasure with their daughters' body size. As one woman described:

Mom always headed for the rack in the department store that was 4 times too small for me to even get over my head ... and then the angry looks and disappointed looks when nothing she picked out would fit. Then the heavy sighs and the “Well, I guess we have to look over there in the Big Girl's rack” There was never anything colorful or cute there ...ever ...black is so slimming you know. To this day, I refuse to try on clothing while at the store ... even if I'm shopping alone. [65-year-old White, non-Hispanic/Latina woman]

Across these different types of weight stigma, maternal weight stigma was also unique in its particular focus on appearance. Specifically, participants recounted their mothers' hurtful messaging that higher weight was less attractive:

My mother ... is VERY into appearances and social standards. She was always telling me that my clothes were “snug” or “If you would only lose a few pounds.” [58-year-old White, non-Hispanic/Latina woman]

My physical appearance is something she ALWAYS says something to me about ... Even as an adult, I can always count on her to speak boldly about something she doesn't like about my physical appearance. She also was concerned about what I ate and used to tell me that I would never find anyone to marry being fat; that I shouldn't wear nicer clothes because they don't look good on me. I know she acted

out of love and concern, but the scars run deep. [45-year-old Asian or Pacific Islander woman]

Likewise, some women described their mothers prohibiting certain clothing (e.g., two-piece bathing suits, bright colors, “nice” clothes) or having them wear a girdle because of their body weight:

My mom is very thin and she let me know that I was a disappointment because I was considered heavy ... My mom only let me wear dark colors, she told me that I would look like a beach ball if I wore bright colors. I love bright colors and now will wear them every once in a while. No matter how much weight I lose I will never see myself as thin. [61-year-old Hispanic/Latina woman]

I think having female relatives especially a mother who had these issues had a very detrimental effect on me. My mother put me on diets at 10 and in a girdle at 12 ... My feelings of my lack of attractiveness will probably never go away and have been with me all my life even when I was thinner. It is very painful. [61-year-old White, non-Hispanic/Latina woman]

Numerous women also reflected on their mother's own body image issues (but did not mention body image of other family members), positing that—in making weight stigmatizing remarks—their mothers were projecting their own self-consciousness and body dissatisfaction onto their daughters:

My mother told me when I was about 4 that I couldn't wear a two piece bathing suit because my tummy stuck out. This stuck with me and make me feel that I was very fat, though when I look at pictures I see that I was a normal, healthy little girl, though above average in height and weight for my age. I felt self-conscious about my size for many years but I have forgiven my mother who was projecting her own insecurities onto me. [49-year-old White, non-Hispanic/Latina woman]

I experience more stigma from my mother, who is vocal about her own insecurities with her weight, although she is not overweight. She is very weight conscious and makes cutting remarks without thinking she is being mean, but frames it out of concern for one's health. She is 84 years old, and wears a size 10 to 12. [54-year-old White, non-Hispanic/Latina woman]

3.2.2. Fathers

By comparison, fathers were less common sources of weight stigma than mothers were, with about one-in-five women describing paternal weight stigma. When participants did describe paternal weight stigma, it was more likely to be teasing in nature; indeed, fathers were the most common family source of teasing overall. Whereas mothers were described as focusing their comments on dieting (e.g., “my mother tried to put me on diets in my early teens” [64-year-old White, non-Hispanic/Latina woman]), appearance, and attire, fathers were often described as bullies who engaged in name-calling and taunting that focused on body shape, weight, and size:

His nickname for me was “Fat Ass” - ironic, given that I was 5'7" and 113 pounds in seventh grade, and 5'10" and 135 pounds when I graduated from high school. One time, in front of all of my friends, when they came to pick me up for a school dance, he told me to ‘bend over’ and when I did, he kicked me in the rear end and said, “Change your pants, Fat Ass, those are too tight.” [53-year-old White, non-Hispanic/Latina woman]

In some instances, childhood weight teasing was described as a family norm, in which a parent—especially a father—engaged in teasing with siblings (e.g., “... my father and brothers used to hum the “baby elephant walk” tune when I was around 8–11 years old.” [68-year-old White, non-Hispanic/Latina woman]) or incited teasing that siblings joined in with:

When I was in my early teens, my father (now long gone) told me he was going to paint me silver and blue like the Goodyear blimp. My sister caught on and chased me around the house repeating it. It is really wacky how now, 40+ years later it is still such a strong memory. [57-year-old White, non-Hispanic/Latina woman]

Notably, even when women described their experiences of weight teasing by fathers as being “gentle,” “well-intentioned,” or “just a joke,” they reported these experiences to be hurtful nonetheless:

When I think about the gentle teasing from my father when I was young, I realize that he never intended the effect it had on me. Nevertheless, it has affected me throughout my life. [65-year-old White, non-Hispanic/Latina woman]

Taken together, these findings highlight the salience and lasting impacts of parental weight stigma, while elucidating the nuanced gender differences in the nature of weight stigma enacted by mothers and fathers.

3.3. Spouses

Nearly a third of women (27%) described a spouse/romantic partner source of weight stigma, making spouses/partners the second most common source of weight stigma overall. Spouses/partners were also the most common source of weight stigma experienced in adulthood and the most common sources of several types of weight stigma, including some of the most severe types of stigma described (i.e., verbal abuse, insults). Indeed, participants described more verbal abuse and insults from spouses/partners than from all other family member sources combined, with nearly two-thirds (65%) of all references to verbal abuse and more than half (57%) of all insults attributed to spouses/partners. Although only about 10% of participants described past or present spouses/partners as being verbally abusive, these experiences were clearly articulated (e.g., “First husband was verbally abusive in regard to my weight.” [63-year-old White, non-Hispanic/Latina woman]). Similarly, about 12% of spouses/partners were described as making weight-related insults:

My husband tells me I am fat, ugly and pathetic ...so I eat more so he has no control over me! It is a vicious cycle. [White, non-Hispanic/Latina woman]

The putdowns and insinuations that only skinny and slender types could be attractive has affected me emotionally my entire life. I married a narcissistic guy when we were both 18 and only divorced him four years ago. He was very subtle with his insults and manipulation about many things, including my weight and attractiveness to him. [54-year-old White, non-Hispanic/Latina woman]

Spouses/partners were also the most common sources overall of unsolicited weight loss advice, responsible for just over a quarter of such remarks. Unsolicited weight loss advice included encouragement of weight loss or “watching one's weight” and was typically perceived to be unmotivating and contributed to feelings of inadequacy:

Even at my thinnest, my husband told me I would be “perfect” if I would just lose 10 more pounds. I never achieved this to his satisfaction. [64-year-old White, non-Hispanic/Latina woman]

I felt that way [stigmatized] about my husband (3rd) when he would ask me to lose weight. I told him I was fine the way I was, and he just had to love me the way I was. [56-year-old White, non-Hispanic/Latina woman]

3.4. Extended family sources of weight stigma

Just over one-in-ten participants (12%) reported weight stigma from at least one extended family member, including a grandmother ($n = 17$),

in-law (mother-in-law, $n = 9$; father-in-law, $n = 7$; sister-in-law, $n = 4$), grandfather ($n = 9$), aunt ($n = 8$), cousin ($n = 6$), uncle ($n = 3$), grandchild (granddaughter, $n = 1$; grandson, $n = 1$), or niece ($n = 1$). Similar to sources of weight stigma from one's family of origin (i.e., parents, siblings), extended family sources of weight stigma were somewhat more common in participants' descriptions of childhood experiences, with 57% of references to extended family members attributed to a childhood experience of weight stigma. Even those experiences early in life had lasting ramifications for participants. As one woman described:

I was body/weight shamed by my grandfather at age 10 and it has contributed to life long weight problems. [46-year-old White, non-Hispanic/Latina woman]

Weight stigma by extended family members most commonly manifested as critical weight comments or teasing—consistent with overall prevalence rates across family sources:

It has played a major role in my 72-year development and started in infancy. I was an only child, but older family members (especially my paternal grandmother and her 5 sisters) teased me about and pinched my chubby face, arms, and legs as far back as I can remember! [72-year-old White, non-Hispanic/Latina woman]

The worst thing that ever happened to me was my grandmother making a hurtful comment about my weight and no one sticking up for me. [49-year-old White, non-Hispanic/Latina woman]

Weight labeling was the third most common manifestation of weight stigma from extended family members. Notably, a greater proportion of extended family members were described to have weight labeled than any other source, with nearly a quarter (23.5%) of all extended family member sources being described as having done so:

I also had a great aunt at my wedding tell me that I looked fat in my wedding dress. [46-year-old White, non-Hispanic/Latina woman]

I had a lot of weight stigma while pregnant. My mother in law was the worst! She would tell me I am gaining too much and that I looked huge. [46-year-old Native American woman]

Another noteworthy pattern identified in participants' responses was that twice as many female extended family members ($n = 42$) were described by participants as sources of weight stigma than male extended family members ($n = 21$). This trend may be indicative of a broader perception that it is acceptable or permissible for women to critique and ridicule the weight of another girl/woman in their family—or even that it might be helpful (though future research with gender diverse samples is needed to further explore this possibility):

Just recently my grandmother said she'd pay me \$1,000 to lose weight which I did. She gave me a check, and in the memo she indicated "fat girl contest." [37-year-old White, non-Hispanic/Latina woman]

3.5. Sibling sources of weight stigma

Participants' descriptions of weight stigma from brothers and sisters shared several commonalities, with more similarities than differences in the most common types of stigma from siblings. Similar to parents, siblings were more prevalent in participants' retrospective recollections of weight stigma in childhood, with 80% of references to weight stigma from brothers and 65% of references to sisters taking place in childhood. Further, although fewer participants referenced weight stigma by siblings compared to other family sources (10% referred to weight stigma from a brother, 5% referred to weight stigma from a sister), women in this study who described sibling stigma experiences found them very distressing in both the short- and long-term, affecting their eating behaviors, self-worth, and contributing to feelings of anger and depression:

My brothers teased me unmercifully about my weight as a child. It just made me eat more. When I got older and was working and building my career, I felt better about myself and was able to control my eating. And although I lost a lot of weight during that time, my brothers would still make fun of my appearance. The incessant teasing all these years really messed up my life. I really have never felt beautiful or worthy. [62-year-old White, non-Hispanic/Latina woman]

I received considerable bullying from my sister during pre-teen years. I didn't think I had any emotional response to that until I was in my mid-20s and entered therapy. I discovered that I was a depressive with much anger that I have not expressed to this day. I just keep eating. [64-year-old White, non-Hispanic/Latina woman]

Of note, weight stigma by both brothers and sisters most commonly took the form of teasing (e.g., "At a young age, because my stomach was larger than the rest of my body, my older sister teased me." [59-year-old White, non-Hispanic/Latina woman]). For some participants, sibling weight teasing ended with their sibling's maturation (e.g., "I had 2 older brothers who picked on me unmercifully until they became human in their teens (thank the dear Lord!!!)" [65-year-old White, non-Hispanic/Latina woman]). However, in other cases, weight teasing from siblings persisted throughout the participant's life (e.g., "My brothers have teased me about my weight my entire life" [53-year-old White, non-Hispanic/Latina woman]), or weight stigma took a different form in adulthood (e.g., "My brothers teased me until I cried when I was a kid and still make comments about my weight." [53-year-old White, non-Hispanic/Latina woman]). Thus, although most common in childhood, weight stigmatizing experiences by siblings spanned the lifespan for some participants.

4. Discussion

This study is the first to qualitatively examine the nature of women's retrospective accounts of weight stigma from different family sources in childhood and adulthood. Women in our study described experiences of weight stigma from a wide range of family member sources, referencing 15 specific sources from their families of origin, acquired families, and extended families, as well as referencing their 'family' generally. Notably, mothers and spouses emerged as particularly prevalent/salient sources of weight stigma in childhood and adulthood, respectively. Further, our findings suggest that weight stigma from family members manifests in myriad ways; we identified 11 types of weight stigma across participants' responses, with teasing being most prevalent in childhood experiences and critical weight comments being most prevalent in adulthood experiences. Across different sources and types of family-based weight stigma, participants overwhelmingly perceived stigmatizing interactions with family members to have lasting negative ramifications for their emotional well-being and eating behaviors, even if they believed statements were well-intentioned.

4.1. Diverse manifestations and perpetrators of weight stigma

For women in our study, numerous family members were described as sources of weight stigma, and we identified several patterns in the nature of weight stigma within and across different family sources. For instance, whereas critical weight comments were prevalent across most family member sources, certain forms of weight stigma were predominantly attributed to a single source. Namely, spouses were responsible for the majority of insults and verbal abuse, mothers were responsible for nearly 40% of all passive aggressive responses and diet comments, brothers were responsible for nearly a third of all experiences of exclusion, and fathers were responsible for nearly a quarter of all experiences of weight teasing. These findings suggest that weight stigma not only manifests in diverse ways, but the prevalence of different types of weight stigma can vary depending on the familial source. Gender differences may underlie

some of these patterns, and a priority for future research in this area should be to clarify the ways in which gender plays a role in family targets and perpetrators of weight stigma.

Consistent with previous research (e.g., [Berge et al., 2016](#)), the nature of weight stigma by mothers and fathers differed in several ways. For instance, just as [Berge et al. \(2016\)](#) found that mothers' negative weight-based talk focused on weight status and health, critical weight and diet comments were among the most common manifestations of maternal weight stigma as described by women in the current study. Women in our study also reported that their mothers were concerned with how they would be perceived by others (e.g., their "attractiveness") and what types of attire were or were not appropriate. As for fathers, [Berge et al. \(2016\)](#) found that fathers' comments focused on body parts and shape/size in a manner similar to siblings. Women in our study described fathers similarly, elaborating to highlight the prevalence of paternal teasing in general, and *with* siblings. Thus, not only were there qualitative differences in the specific types of weight stigma enacted by mothers and fathers, but parents cultivated different norms around weight stigma in families, especially when participants described their experiences in childhood. For example, participants perceived that their mothers' messages about attire and attractiveness were projections of their own appearance and body insecurities onto daughters. In comparison, motives for fathers' bullying and taunts—independently or with siblings—were less clear or salient.

Although sibling sources of weight stigma shared a number of similarities (e.g., the most common type of weight stigma by a sister or brother was teasing), preliminary differences emerged that warrant further examination. For example, while brothers were one of the most common sources of exclusion, no participants described sisters as excluding them for their weight. Similarly, in participant responses about sisters, 20% described their sisters ascribing negative weight labels to them, as compared to less than 3% of brothers. Reasons for these differences are unclear, and it will be informative for future research to further explore the manifestations of weight stigma by brothers and sisters to determine the extent of similarities and differences in their expressions of weight stigma toward siblings.

Importantly, this study was one of the first to examine the nature of weight stigma by extended family sources. The women in our study more often described female extended family members, such as grandmothers, mothers-in-law, and aunts, as sources of weight stigma than male extended family members, although stigmatizing experiences from both male and female extended family sources were reported to be hurtful. Whether there is increased tolerance or unspoken norms of stigmatizing weight communication among female family members compared to male family members is an important question for future work with gender and racially/ethnically diverse samples, as there may be different perceptions of body weight and weight-related messaging cross-culturally ([Berge et al., 2015](#); [Romo & Mireles-Rios, 2015](#)). Our findings also indicate the need to further explore the potentially differential health impacts of weight stigma by extended family member sources, and how these compare to more immediate members of one's family of origin and acquired family. Findings from one cross-sectional study suggest that more proximal family sources of weight stigma (i.e., members of one's family of origin and acquired family) have stronger links to weight bias internalization and weight self-stigma than stigma from one's extended family ([Pearl et al., 2019](#)). However, whether these patterns hold true across specific family member sources and health/well-being outcomes is unknown, underscoring the need for future assessments of the consequences of weight stigma in childhood and adulthood to enumerate specific family member sources, including extended family members.

4.2. Weight stigma as a lifelong challenge within family relationships

Our findings highlight family-based weight stigma as a lifelong challenge for women with substantial impacts on perceived health and well-being. Participants' recollections of family-based weight stigma

spanned the lifespan, with slightly more experiences taking place in childhood. That these adult women, many in their 50's and 60's, clearly articulated hurtful experiences from their childhoods—not only remembering them, but, in some cases, still feeling distressed by them—underscores the long-term impact of these early-life experiences of weight stigma from family members. In fact, the perceived short- and long-term implications of experiences of weight stigma across the lifespan were repeatedly and clearly conveyed by participants, and included internalization of weight bias (i.e., self-stigma), depressive symptoms, binge-eating, and issues with self-esteem and body satisfaction, among many others. This is consistent with previous cross-sectional and longitudinal evidence of the negative health consequences of weight stigma in childhood and adulthood (e.g., self-stigma, body dissatisfaction, poor self-esteem, depressive symptoms, unhealthy and extreme weight control behaviors, binge eating; [Eisenberg et al., 2019](#); [Fulkerson et al., 2007](#); [Hunger & Tomiyama, 2018](#); [Kluck, 2010](#); [Neumark-Sztainer et al., 2010](#); [Pearl et al., 2019](#)). Given cross-sectional evidence that the magnitude of the impact family-based weight stigma has on one's weight bias internalization and weight self-stigma may vary depending on the source (i.e., family of origin, acquired family, or extended family; [Pearl et al., 2019](#)), further examination of the health/well-being consequences of weight stigma by specific family member sources is warranted. Specifically, longitudinal research should explore the potentially differential impacts of weight stigma by different family sources on youth and adults' physical and mental health.

Our findings show that the manner in which weight stigma manifested varied depending on the time of life in which the experience occurred. For instance, teasing was the most common type of weight stigma described in childhood whereas critical weight comments were most prevalent in adulthood. These findings align with previous research which finds that many youth, especially those with higher body weight, endure family weight teasing (e.g., [Puhl & Himmelstein, 2018](#)). However, weight teasing may be perceived to be less age-appropriate in adulthood and, accordingly, weight stigma may take new, more covert forms, such as critical weight comments, which were described by participants in our study. This is similar to previous qualitative work suggesting that offensive comments are one of the most common manifestations of interpersonal weight discrimination among adults ([Gerend et al., 2021](#)). Family members may express critical weight comments with an intention of motivating weight loss in their loved ones, when, in fact, evidence indicates that weight stigma may instead induce maladaptive eating responses ([Nolan & Eshleman, 2016](#)).

Although our findings align with previous evidence that weight teasing and weight comments are prevalent among youth and adults, respectively, we also identified numerous other manifestations of family-based weight stigma in both childhood and adulthood, such as critical diet comments, weight labeling, weight shaming, and exclusion. These findings provide evidence to support the inclusion of *diverse* manifestations of weight stigma in future measurement of family-based weight stigma. For instance, many measures of family-based weight stigma in youth ask participants about their experiences of "family weight teasing" (e.g., [Eisenberg et al., 2019, 2012](#); [French et al., 2018](#); [Himmelstein & Puhl, 2019](#); [Neumark-Sztainer et al., 2010](#); [Puhl et al., 2019](#)). Knowing that weight stigma manifests in childhood in ways other than just teasing, more comprehensive measures of weight stigma should be developed to better understand the nature, prevalence, and consequences of this detrimental phenomenon.

4.3. Strengths and limitations

This study has a number of strengths and offers novel insights to the existing literature on family-based weight stigma. As one of the first qualitative examinations of the nature of weight stigma from diverse family members among women in a weight management sample, our findings advance the currently limited understanding of the nuanced manifestations of stigma from different family sources. Our large sample

size and rich qualitative data facilitated inductive coding and the identification of patterns within and across family sources. However, our findings should be interpreted in light of the following limitations. First, we had only one qualitative question and no opportunities to follow-up with participants to probe for further information or clarification (e.g., to see whether participants believed that the experiences they articulated were, in fact, examples of weight stigma). Second, our subsample focuses only on those who mentioned family members in their response to our qualitative prompt about stigma broadly. Because these participants' experiences of weight stigma by family members may have been particularly salient/impactful—and because we do not have comparable descriptions of family-based weight stigma from participants who did not mention family in their qualitative responses—our data may provide a less representative depiction of family-based weight stigma. Future qualitative research should specifically inquire about family-based weight stigma among both weight management and community samples to address this potential response bias. Furthermore, the framing of our retrospective open-ended question was such that our results captured primarily negative weight-related experiences with family members. Future research should examine weight-related communication more broadly to capture neutral and positive experiences, and leverage observational research strategies to minimize bias in participants' subjective recollections of weight-related communication and experiences in families.

Third, the broader survey response rate was low and there may have been response bias in that those who experienced weight stigma may have been more likely to volunteer to participate. Finally, given our sample demographics, our qualitative findings pertain predominantly to White, non-Hispanic/Latina adult women engaging in weight management. Although informative, future research should take an intersectional approach in examining the nature of family-based weight stigma among more diverse populations with respect to gender identity, racial/ethnic background, socioeconomic status, and sexual orientation. For example, evidence suggests that weight stigma is prevalent among individuals of diverse races/ethnicities, sexual orientations, and gender identities (Himmelstein et al., 2017; Puhl et al., 2019), and that it may manifest or be perceived in different ways depending on one's social identity (e.g., Berge et al., 2015; Romo & Mireles-Rios, 2015).

4.4. Conclusions and implications for intervention

Our qualitative study offers novel insights about the nature of weight stigma by diverse family member sources. The 11 types of weight stigma and nuanced patterns of prevalence across different family member sources highlight the complex nature of weight stigma within family relationships. Although mothers and spouses emerged as particularly prevalent/salient sources of stigma, participants were overwhelmingly distressed by their experiences with weight stigma regardless of family member source. Given the negative health and well-being impacts these women describe (e.g., depressive symptoms, binge eating), comprehensive assessment of the ways in which weight stigma from different family members impacts emotional and physical health is warranted. Additionally, future research should further examine gender differences in the manifestation of family-based weight stigma—particularly among sibling and extended family member sources, as well as the nature of family-based weight stigma among socioeconomically and racially/ethnically diverse samples.

In light of increasing calls for efforts to reduce weight stigma, and evidence highlighting family members as especially prevalent sources of weight stigma, our findings can inform initiatives to address weight stigma in family relationships. For instance, these women's experiences demonstrate that weight stigma by family members, especially parents, can start very early in life, take myriad forms, and have lasting perceived effects. Parents, facing associative weight stigma (i.e., perceived devaluation for their association with someone whose identity is stigmatized; Bos et al., 2013; Goffman, 1963) and societal pressure to manage their

children's weight (Gorlick et al., 2021; Jackson et al., 2007), may engage in stigmatizing weight communication with their children in a misguided effort to promote weight management (Berge et al., 2016; Puhl & Suh, 2015). Thus, when talking to parents about their child's weight, it may be beneficial for doctors and other health professionals to describe the forms weight stigma can take, explain that even weight stigmatizing remarks intended to be harmless or encouraging can have lasting consequences, and offer tips for communicating about health with their children in ways that are not weight stigmatizing. Raising parents' awareness in this way may help reduce parental weight stigma, encourage supportive communication in the home, and potentially reduce siblings' enactment of weight stigma as well.

Furthermore, given the benefits of social support for well-being in general (Santini et al., 2015; Thoits, 2011) and for weight management in particular (Elfhag & Rössner, 2005; Lemstra et al., 2016), it is troubling that these women not only felt an absence of support from family members, but felt actively stigmatized for their weight. Indeed, for some women, stigmatizing experiences from family members were so severe they were described as 'unmerciful,' 'incessant,' and even 'abusive.' Future research should assess what forms of social support women with higher weight desire in the context of their familial relationships, as these preferences would be informative for addressing weight stigma in family-based interventions and therapeutic practice. Research has begun to address weight stigma as a component of clinical behavioral weight management interventions to combat weight bias internalization among adults with a history of experiencing weight stigma (Pearl et al., 2020). However, no interventions have yet addressed weight stigma in the context of familial relationships. There may be opportunities for weight management programs to provide educational resources or tools to help individuals cope with family-based weight stigma and mitigate its consequences, such as incorporating resources on positive self-talk, self-compassion, and opportunities for increased social support. Our study findings underscore the need to prioritize research in this area and identify the most effective ways to support individuals facing family-based weight stigma.

Ethical statement

Ethical clearance for the current study was obtained from the University of Connecticut (IRB reference no. X15-216). Prior to beginning the online survey, participants provided informed consent to participate and proceed with the survey.

CRediT authorship contribution statement

Samantha E. Lawrence: Conceptualization, Methodology, Formal analysis, Writing – original draft, Visualization. **Rebecca M. Puhl:** Conceptualization, Investigation, Supervision, Resources, Writing – review & editing, Funding acquisition. **Marlene B. Schwartz:** Writing – review & editing. **Ryan J. Watson:** Writing – review & editing. **Gary D. Foster:** Resources, Writing – review & editing.

Funding

This study was funded by a grant from WW International (formerly Weight Watchers) to the University of Connecticut on behalf of Rebecca Puhl. Ryan Watson acknowledges the National Institutes of Drug Abuse under grant K01DA047918. The views expressed in this paper are those of the authors and not the National Institutes of Health.

Declaration of competing interest

The authors declare the following financial interests/personal relationships which may be considered as potential competing interests: This study was funded by a grant from WW International (formerly Weight Watchers) to the University of Connecticut on behalf of Rebecca Puhl. Gary Foster is an employee and shareholder of WW International.

Acknowledgements

We would like to thank WW members who participated in this study and shared their experiences of weight stigma. We would also like to thank Ellen V. Pudney for her assistance coding qualitative responses. This article reflects research that was conducted as part of the first author's Ph.D. dissertation.

References

- Ahern, A. L., Wheeler, G. M., Aveyard, P., Boyland, E. J., Halford, J. C. G., Mander, A. P., ... Jebb, S. A. (2017). Extended and standard duration weight-loss programme referrals for adults in primary care (WRAP): A randomised controlled trial. *The Lancet*, *389*(10085), 2214–2225. [https://doi.org/10.1016/S0140-6736\(17\)30647-5](https://doi.org/10.1016/S0140-6736(17)30647-5)
- Bauer, K. W., Bucchianeri, M. M., & Neumark-Sztainer, D. (2013). Mother-reported parental weight talk and adolescent girls' emotional health, weight control attempts, and disordered eating behaviors. *Journal of Eating Disorders*, *1*(1), 45. <https://doi.org/10.1186/2050-2974-1-45>
- Berge, J. M., Hanson-Bradley, C., Tate, A., & Neumark-Sztainer, D. (2016). Do parents or siblings engage in more negative weight-based talk with children and what does it sound like? A mixed-methods study. *Body Image*, *18*, 27–33. <https://doi.org/10.1016/j.bodyim.2016.04.008>
- Berge, J. M., Trofholz, A., Fong, S., Blue, L., & Neumark-Sztainer, D. (2015). A qualitative analysis of parents' perceptions of weight talk and weight teasing in the home environments of diverse low-income children. *Body Image*, *15*, 8–15. <https://doi.org/10.1016/j.bodyim.2015.04.006>
- Bos, A. E. R., Pryor, J. B., Reeder, G. D., & Stutterheim, S. E. (2013). Stigma: Advances in theory and research. *Basic and Applied Social Psychology*, *35*(1), 1–9. <https://doi.org/10.1080/01973533.2012.746147>
- Brewis, A. A., SturtzSreetharan, C., & Wutich, A. (2018). Obesity stigma as a globalizing health challenge. *Globalization and Health*, *14*(1). <https://doi.org/10.1186/s12992-018-0337-x>
- Brewis, A. A., Wutich, A., Falletta-Cowden, A., & Rodriguez-Soto, I. (2011). Body norms and fat stigma in global perspective. *Current Anthropology*, *52*(2), 269–276. <https://doi.org/10.1086/659309>
- Charlesworth, T. E. S., & Banaji, M. R. (2019). Patterns of implicit and explicit attitudes: I. Long-term change and stability from 2007 to 2016. *Psychological Science*, *30*(2), 174–192. <https://doi.org/10.1177/0956797618813087>
- Crandall, C. S. (1994). Prejudice against fat people: Ideology and self-interest. *Journal of Personality and Social Psychology*, *66*(5), 882–894. <https://doi.org/10.1037/0022-3514.66.5.882>
- Dahill, L., Mitchison, D., Morrison, N. M. V., Touyz, S., Bussey, K., Trompeter, N., ... Hay, P. (2021). Prevalence of parental comments on weight/shape/eating amongst sons and daughters in an adolescent sample, 2021 *Nutrients*, *13*(1), 158. <https://doi.org/10.3390/NU13010158>. Page 158.
- Dutton, G. R., Lewis, T. T., Durant, N., Halanych, J., Kiefe, C. I., Sidney, S., Kim, Y., & Lewis, C. E. (2014). Perceived weight discrimination in the CARDIA study: Differences by race, sex, and weight status. *Obesity*, *22*(2), 530–536. <https://doi.org/10.1002/OBY.20438>
- Eisenberg, M. E., Berge, J. M., Fulkerson, J. A., & Neumark-Sztainer, D. (2012). Associations between hurtful weight-related comments by family and significant other and the development of disordered eating behaviors in young adults. *Journal of Behavioral Medicine*, *35*(5), 500–508. <https://doi.org/10.1007/s10865-011-9378-9>
- Eisenberg, M. E., Puhl, R., Areba, E. M., & Neumark-Sztainer, D. (2019). Family weight teasing, ethnicity and acculturation: Associations with well-being among Latinx, Hmong, and Somali Adolescents. *Journal of Psychosomatic Research*, *122*, 88–93. <https://doi.org/10.1016/j.jpsychores.2019.04.007>
- Elfhag, K., & Rössner, S. (2005). Who succeeds in maintaining weight loss? A conceptual review of factors associated with weight loss maintenance and weight regain. *Obesity Reviews*, *6*(1), 67–85. <https://doi.org/10.1111/j.1467-789X.2005.00170.x>
- French, S. A., Wall, M., Corbeil, T., Sherwood, N. E., Berge, J. M., & Neumark-Sztainer, D. (2018). Obesity in adolescence predicts lower educational attainment and income in adulthood: The Project EAT longitudinal study. *Obesity*, *26*(9), 1467–1473. <https://doi.org/10.1002/oby.22273>
- Fulkerson, J. A., Strauss, J., Neumark-Sztainer, D., Story, M., & Boutelle, K. (2007). Correlates of psychosocial well-being among overweight adolescents: The role of the family. *Journal of Consulting and Clinical Psychology*, *75*(1), 181–186. <https://doi.org/10.1037/0022-006X.75.1.181>
- Gerend, M. A., Patel, S., Ott, N., Wetzel, K., Sutin, A. R., Terracciano, A., & Maner, J. K. (2021). A qualitative analysis of people's experiences with weight-based discrimination. *Psychology and Health*. <https://doi.org/10.1080/08870446.2021.1921179>
- Goffman, E. (1963). *Stigma: Notes on the management of spoiled identity*. Prentice Hall.
- Gorlick, J. C., Gorman, C. V., Weeks, H. M., Pearlman, A. T., Schvey, N. A., & Bauer, K. W. (2021). I feel like less of a mom": Experiences of weight stigma by association among mothers of children with overweight and obesity. *Childhood Obesity (Print)*, *17*(1), 68–75. <https://doi.org/10.1089/CHI.2020.0199>
- Gudzune, K. A., Doshi, R. S., Mehta, A. K., Chaudhry, Z. W., Jacobs, D. K., Vakil, R. M., & Clark, J. M. (2015). Efficacy of commercial weight-loss programs. *Annals of Internal Medicine*, *162*(7), 501–512. <https://doi.org/10.7326/M14-2238>
- Haines, J., Neumark-Sztainer, D., Hannan, P. J., Van Den Berg, P., & Eisenberg, M. E. (2008). Longitudinal and secular trends in weight-related teasing during adolescence. *Obesity*, *16*(SUPPL. 2), S18–S23. <https://doi.org/10.1038/oby.2008.447>
- Hatzenbuehler, M. L., Keyes, K. M., & Hasin, D. S. (2009). Associations between perceived weight discrimination and the prevalence of psychiatric disorders in the general population. *Obesity*, *17*(11), 2033–2039. <https://doi.org/10.1038/OBY.2009.131>
- Himmelstein, M. S., & Puhl, R. M. (2019). Weight-based victimization from friends and family: Implications for how adolescents cope with weight stigma. *Pediatric Obesity*, *14*(1). <https://doi.org/10.1111/ijpo.12453>
- Himmelstein, M. S., Puhl, R. M., & Quinn, D. M. (2017). Intersectionality: An Understudied Framework for Addressing Weight Stigma. *American Journal of Preventive Medicine*, *53*(4), 421–431. <https://doi.org/10.1016/j.amepre.2017.04.003>
- Himmelstein, M. S., Puhl, R. M., & Quinn, D. M. (2018). Weight stigma in men: What, when, and by whom? *Obesity*, *26*(6), 968–976. <https://doi.org/10.1002/oby.22162>
- Hunger, J. M., & Tomiyama, A. J. (2018). Weight labeling and disordered eating among adolescent girls: Longitudinal evidence from the national heart, lung, and blood institute growth and health study. *Journal of Adolescent Health*, *63*(3), 360–362. <https://doi.org/10.1016/j.jadohealth.2017.12.016>
- Jackson, D., Wilkes, L., & McDonald, G. (2007). If I was in my daughter's body I'd be feeling devastated": Women's experiences of mothering an overweight or obese child. *Journal of Child Health Care*, *11*(1), 29–39. <https://doi.org/10.1177/1367493507073059>
- Keery, H., Boutelle, K., Van Den Berg, P., & Thompson, J. K. (2005). The impact of appearance-related teasing by family members. *Journal of Adolescent Health*, *37*, 120–127. <https://doi.org/10.1016/j.jadohealth.2004.08.015>
- Kluck, A. S. (2010). Family influence on disordered eating: The role of body image dissatisfaction. *Body Image*, *7*(1), 8–14. <https://doi.org/10.1016/j.bodyim.2009.09.009>
- Lemstra, M., Bird, Y., Nwankwo, C., Rogers, M., & Moraros, J. (2016). Weight loss intervention adherence and factors promoting adherence: A meta-analysis. *Patient Preference and Adherence*, *10*, 1547. <https://doi.org/10.2147/PPA.S103649>
- McHugh, M. L. (2012). Interrater reliability: The kappa statistic. *Biochemia Medica*, *22*(3), 276. <https://doi.org/10.1007/s12010-012-0002-0>
- Neumark-Sztainer, D., Bauer, K. W., Friend, S., Hannan, P. J., Story, M., & Berge, J. M. (2010). Family weight talk and dieting: How much do they matter for body dissatisfaction and disordered eating behaviors in adolescent girls? *Journal of Adolescent Health*, *47*(3), 270–276. <https://doi.org/10.1016/j.jadohealth.2010.02.001>
- Nolan, L. J., & Eshleman, A. (2016). Paved with good intentions: Paradoxical eating responses to weight stigma. *Appetite*, *102*, 15–24. <https://doi.org/10.1016/j.appet.2016.01.027>
- Pearl, R. L., Himmelstein, M. S., Puhl, R. M., Wadden, T. A., Wojtanowski, A. C., & Foster, G. D. (2019). Weight bias internalization in a commercial weight management sample: Prevalence and correlates. *Obesity Science & Practice*, *5*(4). <https://doi.org/10.1002/osp4.354>. osp4.354.
- Pearlman, A. T., Schvey, N. A., Neyland, M. K. H., Solomon, S., Hennigan, K., Schindler, R., ... Tanofsky-Kraff, M. (2019). Associations between family weight-based teasing, eating pathology, and psychosocial functioning among adolescent military dependents, 2020 *International Journal of Environmental Research and Public Health*, *17*(1), 24. <https://doi.org/10.3390/IJERPH17010024>. Page 24.
- Pearl, R. L., & Puhl, R. M. (2018). Weight bias internalization and health: A systematic review. *Obesity Reviews*, *19*(8), 1141–1163. <https://doi.org/10.1111/obr.12701>
- Pearl, R. L., Wadden, T. A., Bach, C., Gruber, K., Leonard, S., Walsh, O. A., Tronieri, J. S., & Berkowitz, R. I. (2020). Effects of a cognitive-behavioral intervention targeting weight stigma: A randomized controlled trial. *Journal of Consulting and Clinical Psychology*, *88*(5), 470–480. <https://doi.org/10.1037/ccp0000480>
- Pietromonaco, P. R., & Collins, N. L. (2017). Interpersonal mechanisms linking close relationships to health. *American Psychologist*, *72*(6), 531–542. <https://doi.org/10.1037/AMP0000129>
- Puhl, R. M., & Brownell, K. D. (2003). Psychosocial origins of obesity stigma: Toward changing a powerful and pervasive bias. *Obesity Reviews*, *4*(4), 213–227. <https://doi.org/10.1046/j.1467-789X.2003.00122.x>
- Puhl, R. M., & Brownell, K. D. (2006). Confronting and coping with weight stigma: An investigation of overweight and obese adults. *Obesity*, *14*(10), 1802–1815. <https://doi.org/10.1038/oby.2006.208>
- Puhl, R. M., & Heuer, C. A. (2009). The stigma of obesity: A review and update. *Obesity*, *17*(5), 941–964. <https://doi.org/10.1038/oby.2008.636>
- Puhl, R. M., & Himmelstein, M. S. (2018). Adolescent preferences for weight terminology used by health care providers. *Pediatric Obesity*, *13*(9), 533–540. <https://doi.org/10.1111/ijpo.12275>
- Puhl, R. M., & Himmelstein, M. S. (2018). Weight bias internalization among adolescents seeking weight loss: Implications for eating behaviors and parental communication. *Frontiers in Psychology*, *9*, 1–9. <https://doi.org/10.3389/fpsyg.2018.02271>
- Puhl, R. M., Himmelstein, M. S., Pearl, R. L., Wojtanowski, A. C., & Foster, G. D. (2019). Weight stigma among sexual minority adults: Findings from a matched sample of adults engaged in weight management. *Obesity*, *27*(11), 1906–1915. <https://doi.org/10.1002/oby.22633>
- Puhl, R. M., Himmelstein, M. S., & Watson, R. J. (2019a). Weight-based victimization among sexual and gender minority adolescents: Findings from a diverse national sample. *Pediatric Obesity*, *14*(7). <https://doi.org/10.1111/ijpo.12514>
- Puhl, R. M., Himmelstein, M. S., & Watson, R. J. (2019b). Weight-based victimization among sexual and gender minority adolescents: Implications for substance use and mental health. *Health Psychology*, *38*(8), 727–737. <https://doi.org/10.1037/hea0000758>
- Puhl, R. M., & King, K. M. (2013). Weight discrimination and bullying. *Best Practice and Research: Clinical Endocrinology and Metabolism*, *27*(2), 117–127. <https://doi.org/10.1016/j.beem.2012.12.002>
- Puhl, R. M., Latner, J. D., O'Brien, K., Luedicke, J., Danielsdottir, S., & Forhan, M. (2015). A multinational examination of weight bias: Predictors of anti-fat attitudes across

- four countries. *International Journal of Obesity*, 39(7), 1166–1173. <https://doi.org/10.1038/ijo.2015.32>
- Puhl, R. M., Lessard, L. M., Pearl, R. L., Himmelstein, M. S., & Foster, G. D. (2021). International comparisons of weight stigma: Addressing a void in the field. *International Journal of Obesity*, 45(9), 1976–1985. <https://doi.org/10.1038/s41366-021-00860-z>, 2021.
- Puhl, R. M., Moss-Racusin, C. A., Schwartz, M. B., & Brownell, K. D. (2008). Weight stigmatization and bias reduction: Perspectives of overweight and obese adults. *Health Education Research*, 23(2), 347–358. <https://doi.org/10.1093/her/cym052>
- Puhl, R. M., & Suh, Y. (2015). Health consequences of weight stigma: Implications for obesity prevention and treatment. *Current Obesity Reports*, 4(2), 182–190. <https://doi.org/10.1007/s13679-015-0153-z>
- Puhl, R. M., Wall, M. M., Chen, C., Bryn Austin, S., Eisenberg, M. E., & Neumark-Sztainer, D. (2017). Experiences of weight teasing in adolescence and weight-related outcomes in adulthood: A 15-year longitudinal study. *Preventive Medicine*, 100, 173–179. <https://doi.org/10.1016/j.ypmed.2017.04.023>
- Quick, V., Eisenberg, M. E., Bucchianeri, M. M., & Neumark-Sztainer, D. (2013). Prospective predictors of body dissatisfaction in young adults: 10-year longitudinal findings. *Emerging Adulthood*, 1(4), 271–282. <https://doi.org/10.1177/2167696813485738>
- Romo, L. F., & Mireles-Rios, R. (2015). Latina immigrant mother–daughter communication about their body self-esteem and weight dissatisfaction: An exploratory video-observational study. *Journal of Latina/o Psychology*, 4(1), 18–31. <https://doi.org/10.1037/lat0000044>
- Santini, Z. I., Koyanagi, A., Tyrovolas, S., Mason, C., & Haro, J. M. (2015). The association between social relationships and depression: A systematic review. *Journal of Affective Disorders*, 175, 53–65. <https://doi.org/10.1016/J.JAD.2014.12.049>
- Schwartz, M. W., Seeley, R. J., Zeltser, L. M., Drewnowski, A., Ravussin, E., Redman, L. M., & Leibel, R. L. (2017). Obesity pathogenesis: An endocrine society scientific statement. *Endocrine Reviews*, 38(4), 267–296. <https://doi.org/10.1210/ER.2017-00111>
- Spahlholz, J., Baer, N., König, H.-H., Riedel-Heller, S. G., & Luck-Sikorski, C. (2016). Obesity and discrimination – a systematic review and meta-analysis of observational studies. *Obesity Reviews*, 17(1), 43–55. <https://doi.org/10.1111/OBR.12343>
- Thoits, P. A. (2011). Mechanisms linking social ties and support to physical and mental health. *Journal of Health and Social Behavior*, 52(2), 145–161. <https://doi.org/10.1177/0022146510395592>
- Valois, D. D., Davis, C. G., Buchholz, A., Obeid, N., Henderson, K., Flament, M., & Goldfield, G. S. (2019). Effects of weight teasing and gender on body esteem in youth: A longitudinal analysis from the real study. *Body Image*, 29, 65–73. <https://doi.org/10.1016/j.bodyim.2019.02.009>
- Vartanian, L. R., Pinkus, R. T., & Smyth, J. M. (2014). The phenomenology of weight stigma in everyday life. *Journal of Contextual Behavioral Science*, 3(3), 196–202. <https://doi.org/10.1016/j.jcbs.2014.01.003>