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EMPIRICAL STUDIES

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Understanding family functioning in mothers and daughters with obesity

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ABSTRACT

Purpose: This study sought to understand family functioning surrounding weight in Mexican American women with obesity.
Methods: Semi-structured in-depth interviews were conducted with mothers and adult daughters ($N = 116$).
Results: Thematic analysis identified five themes. 1) The communication process drives perception of supportive messages. Messages perceived as non-supportive consist of directives as interventions, confirmation of faults, and critical compliments whereas supportive consist of compliments, encouragement, empathetic listening, and disclosure. 2) Acculturation differences interfere with intergenerational alliance. Differences involve dissonance in communication, behavioural expectations, and weight-related practices. 3) Maladaptive conflict responses contribute to relational strain. These responses include avoidance, withdrawal, and defensiveness. 4) Role transformations alter the generational hierarchical relationship. Daughters serve as role models, caregivers, or collaborators. 5) Low communal coping heightens psychological distress. It does so by challenging family roles, increasing social isolation, and compromising social support.
Conclusion: Obesity interventions for Mexican American women may benefit from targeting relational skills to improve family functioning.

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Mexican American; family functioning; obesity; acculturation; mother-daughter

Introduction

Intergenerational obesity

Intergenerational obesity is prominent in Mexican American families (Tschann et al., 2015). Maternal obesity increases the likelihood of obesity in children, particularly female children (Hernandez-Valero et al., 2007; Olvera et al., 2007). Because Mexican American females are at increased risk for obesity when they transition into adulthood and are disproportionately affected by obesity thereafter, learning how familial and cultural factors influence eating and physical activity among mothers and daughters can serve to better meet the needs of women seeking obesity treatment (Avery et al., 2016; Health, 2021).

Family-based obesity treatment

Family involvement in treatment of adult obesity has been used to promote weight loss in Mexican Americans with mixed outcomes. In *Cuidando El Corazón*, women received printed health education materials or attended one of two weight loss programmes individually or with family (spouse and child) (Cousins et al., 1992). Participants in the family programme learned partner support techniques and parenting skills focused on eating and exercise habits. Whereas greater weight loss was achieved in both the individual and family-based programmes compared to the comparison group, changes were similar in both programmes perhaps because the low participation by the husbands minimized differences between the two treatments. In *Unidas por la Vida*, women with type 2 diabetes and their adult daughters received health education materials or a weight loss programme based on the *Diabetes Prevention Program* at community health centres (Sorkin et al., 2014). Both mothers and daughters lost more weight than those in the comparison group providing preliminary support for targeting adult female family members.

Although obesity in childhood tends to continue into adulthood, family-based interventions are not the gold standard when treating obesity in adults. Generally, a parenting model is used in treatment of childhood obesity where caregivers learn ways to reinforce the child's healthful eating and activity behaviours (Kitzmann & Beech, 2006). However, it is parental weight loss that is consistently the strongest predictor of weight loss in children supporting the importance of parental modelling (Boutelle et al.,

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2021). Interestingly, family-based interventions are more successful in young children than in adolescents likely due to normative stage related increase in family conflict. In early adulthood, family conflict declines and this may provide another opportunity for intervention even though adulthood raises other issues such as greater autonomy and less hierarchical relationship with parents. These issues may be further heightened in Mexican American families as a result of intergenerational differences in cultural orientation.

Acculturation gap

Different level of acculturation between parent and child is associated with increased risk for childhood obesity in Latinos (LeCroy et al., 2021). It may also interfere with ability of family members to communicate effectively as they cope with the psychological stress involved in lifestyle change efforts to manage weight. Parent-child acculturation difference is linked to lower fruit and vegetable intake in families with poor communication (Leite et al., 2023). This could be especially relevant to immigrant families where U.S. born and/or raised children adhere more to American attitudes and behaviours compared to their foreign-born parents (Cano et al., 2016). Conflict between parent and child can arise due to differences in language proficiencies and education resulting in challenges to the traditional parent-child hierarchy as well as cultural expectations and norms of communication, gender roles, and familism (Manzo et al., 2022). Because most of the lifespan is devoted to a parent-child relationship in adulthood, more is needed to be learned on the impact of intergenerational acculturation differences in adult children.

Family functioning

Intervention approaches focused on improving family functioning may hold promise for treatment of adult obesity in Mexican American families. Family functioning represents the relational dynamics between family members (Lebow & Stroud, 2016). Well-functioning families are characterized by open communication, emotional closeness, low conflict, clear roles, and adaptability (e.g., ability to change). Patterns of family interactions are predictive of weight-related behaviours in children (Berge et al., 2013; Ornelas et al., 2007). Thus, family functioning may serve an important focus of intervention for conditions such as obesity (Halliday et al., 2014). For example, high family functioning predicts greater decrease in body mass index in adolescent Mexican American girls (Heredia et al., 2019). The relationship between family functioning and obesity is likely bidirectional but longitudinal data suggests that poor family functioning in childhood is associated with obesity later in adolescence and early adulthood among females (Poulsen et al., 2018).

Although obesity is associated with impaired family functioning in both children and adults, much of what we know comes from studies on children. Whereas impaired family functioning such as poor communication, low cohesion, high conflict, and low parental authority is associated with obesity, improvement in family adaptability is linked to weight reduction in children (Halliday et al., 2014). Among adults participating in weight loss programmes, those that report higher family conflict or undermining are less successful at losing weight (Phillips et al., 2017; Wang et al., 2014). Evidence suggests greater efforts to address relational patterns are warranted as parent-child communication can worsen when participating in a weight management programme (Pratt et al., 2021).

Communal coping

Improving family functioning may strengthen communal coping that occurs when family members view a health concern as a shared stressor and participate in collective action to mitigate risk (Lyons et al., 1998). When there is a sense of joint responsibility to address the stressor, family members perceive a health condition as “our problem” rather than “your problem” and engage in collaborative efforts to manage the health condition as evidenced by references to “we” when communicating their actions. Higher levels of communal coping in couples are associated with more favourable outcomes (e.g., lower psychological distress and greater self-care behaviour) for individuals with chronic illnesses such as type 2 diabetes (Helgeson et al., 2017). Family members with close relationships, higher communication quality, and similar experiences or identities are more inclined to cope communally (Afifi et al., 2020). Conversely, higher conflict families may participate less in communal coping. Positive family functioning facilitates communal coping in Mexican American families as family members are more likely to discuss diabetes risk with other family members they feel close to (Lin et al., 2019). Moreover, those at risk for diabetes are more likely to encourage physical activity, healthy eating, and weight control to younger generation family members. Parent-child closeness has also been found to be important for co-engagement in health behaviours such as physical activity in Mexican American families (de la Haye et al., 2014). These findings suggest leveraging intergenerational family relationships to increase cooperation for health promoting behaviours.

Present study

The family systems perspective views family members as interdependent where each one contributes to

how well or how poorly it functions. It describes how families operate or work together to adjust to changes (i.e., stressors). Hence, addressing relational functioning may be important for fostering cooperation and collaboration as it could help moderate existing conflict and buffer new discord arising from the psychological demands related to weight management. The purpose of this study is to better understand family functioning in Mexican American mothers and daughters with obesity. These findings could help describe aspects of family interactions that impede and enable communal coping and therefore provide a basis for future obesity treatment programmes for Mexican American families.

Methods

Design

This qualitative descriptive study was part of the Con MIHA (Communication on Mothers Inspiring Healthy Actions) study. The Con MIHA study used a mixed-method design to collect formative data for the development of an obesity treatment programme for Mexican-American women. The objective of the qualitative interviews was to describe aspects of family interactions that impede and enable collaboration for eating and physical activity behaviours that support weight-management.

Participants

Participants were a community sample of Mexican American mothers and adult daughters who were recruited through mass and social media and outreach at community events. To be eligible, mother-daughter dyads had to self-identify as Mexican or Mexican American, be 18 to 65 years old, have a body mass index (BMI) of 25 to 50 kg/m^2, be English or Spanish language literate, and reside in San Diego County. Dyads attended an assessment where they provided written informed consent and participated in a face-to-face interview. Dyads received $30 upon interview completion to compensate for their time.

Data collection

Participant characteristics

Participant background was collected from self-reported age, marital status, education, and employment. Acculturation was assessed via history in the U.S., language proficiency, and the Acculturation Rating Scale for Mexican Americans-II (Cuellar et al., 1995). Mother-daughter relationship was assessed with questions regarding place of residence, family size, and emotional closeness. Health information was assessed by asking participants if they had been diagnosed by a physician with physical (i.e., diabetes, high blood cholesterol, high blood pressure, heart attack, stroke, or cancer) and mental (i.e., depression) health conditions. Participant height and weight were objectively measured using a stadiometer and digital scale, respectively, and BMI was calculated in kg/m^2.

On average, mothers were 49 ± 7 and daughters were 24 ± 5 years of age (Supplement 2). Most mothers were married (56%) and did not graduate high school (65%). About half of mothers were employed (50%) or homemakers/retired (48%). Most daughters were single (55%) and had graduated high school (84%). Almost a quarter of daughters were college students (24%) and half were employed (46%).

The majority of mothers were born in Mexico (89%) and Spanish language dominant (74%). The majority of daughters were U.S. born (66%) and bilingual or English language dominant (88%). Acculturation scores classified mothers as traditional Mexican (MOS 4.1 ± 0.6/AOS 2.6 ± 0.8) and daughters as integrated bicultural (MOS 3.8 ± 0.6/AOS 3.7 ± 0.4).

More than half (60%) of mother-daughter dyads resided in the same home. The average family size was 4 persons per household. About 56% of daughters had children of their own. Most mothers (77%) and daughters (63%) characterized the mother-daughter relationship as extremely or very close.

Diagnosed physical health conditions were reported by 71% of mothers and 12% of daughters. The most common conditions were diabetes, high blood pressure, and high blood cholesterol. Diagnosed depression was reported by 25% of mothers and 8% of daughters. Average BMI (kg/m^2) for mothers was 35 ± 7 and 33 ± 6 for daughters.

Interviews

Semi-structured in-depth interviews were conducted individually with each dyad member ($n = 116$) in Spanish and/or English at a research site in San Diego, California. The interview guide focused on understanding family functioning and weight-related behaviours in Mexican American mother-daughter dyads with obesity (Supplement 1). Interviews were completed in approximately an hour. All interviews were conducted in person (face-to-face) by a PhD-level female researcher, audio recorded, transcribed, and analysed. Spanish-language interviews were translated into English by a bilingual and bicultural research assistant and reviewed by the Principal Investigator.

Data analysis

Interview transcripts were reviewed for thematic outcomes by two independent coders (Saldana, 2021).

Analysis involved line-by-line review of transcripts for patterns in accounts. Deductive coding and descriptive research approaches were used where predetermined categories based on family functioning constructs were applied and themes and subthemes were generated under each construct. Family functioning constructs consisted of *communication* (What and how are the messages exchanged between family members?), *cohesion* (How emotionally connected are family members?), *conflict* (How are problems or disagreements addressed between family members), *roles* (What responsibilities are assumed by family members?), and *adaptability* (How do family members respond to changes in the family system?) (Olson et al., 2019; Walsh, 1994).

Ethical considerations

The study was approved by the Human Research Protections Program (#120327S) at the University of California, San Diego. The research conformed to the ethical principles for medical research on human beings set out in the Declaration of Helsinki (World Medical Association, 2013). The research fulfilled the requirements for participant information, consent, confidentiality and safety. The research was guided by the ethical principles: autonomy, beneficence, non-maleficence, and justice. All participants received verbal and written information about the study and that they could withdraw at any time without any explanation. All participants provided verbal and written informed consent. All data collection were confidential.

Table I. Summary of emergent themes.

Categories, themes, and subthemes
I. **COMMUNICATION**
Communication Process Drives Perception of Supportive Messages
Impaired Messages
1. Critical compliments
2. Confirmation of faults
3. Directives as interventions
Positive Communication
1. Compliments
2. Encouragement
3. Listening to understand and speaking to disclose
II. **COHESION**
Acculturation Differences Interfere with Intergenerational Alliance
1.Dissonance of communication needs
2.Dissonance of behavioural expectations
3.Dissonance of eating and physical activity behaviours
III. **CONFLICT**
Maladaptive Conflict Responses Contribute to Relational Strain
Sources of Conflict
1.Eating habits
2.Parenting/Child rearing
3.Weight
4.Romantic partner
5.Exercise habits
Conflict Resolution Strategies
1.Avoidance
2.Withdrawal
3.Defensiveness
IV. **ROLES**
Role Transformations Alter the Generational Hierarchical Relationship
1.Daughter as mentor and role model
2.Daughter as caregiver
3.Daughter as collaborator
V. **ADAPTABILITY**
Low Communal Coping Heightens Psychological Distress
1.Challenges family roles (What is my role in the family?)
2.Increases social isolation (Where do I belong? Who accepts me?)
3.Compromises social support (Who cooperates with me?)

Results

Based on the accounts of mothers and daughters, five major themes on family functioning surrounding weight and weight-related behaviours emerged (Table I; Supplement 3): 1) the communication process drives perception of supportive messages 2) acculturation differences interfere with intergenerational alliance 3) maladaptive conflict responses contribute to relational strain 4) role transformations alter the generational hierarchical relationship 5) low communal coping heightens psychological distress.

Communication: the communication process drives perception of supportive messages

Whether or not communication on weight-related matters was perceived as supportive (helpful) depended more on how these topics were talked about (process) and less on what was talked about (content). Communication on the topic was predominantly described as "negative" or "not supportive" by both mothers and daughters. Daughters were most often the recipients of these messages. The well-meaning intention of these messages was lost due to concomitant criticism, which impaired the message. Although less common, messages deemed supportive were those that were consistent with positive communication. These components included compliments, encouragement, empathetic listening, and disclosing.

Impaired messages

Both mothers and daughters discussed a desire to support one another but acknowledged distortion of messages resulted in ineffective expression of caring and subsequent emotional distancing. Mothers in particular described frustration with the disconnect between good intentions and desired impact. Impaired messages consisted of compliments laced with criticisms, confirmation of faults vs validation of efforts, and directives intended as interventions.

Critical compliments were comments that consisted of both praise and insult. One daughter described these types of comments as "*Even when [mom] is giving positive stuff it's like back to the bashing.*" Mothers often provided "critical compliments" as examples of their attempts to support daughters. *"I tell [daughter], 'You*

are fat but pretty. You are a little too chubby but you will always be strong.'" Daughters shared similar examples, *"[Mom] says, 'You are not too fat but for your health you should lose more.'"* Mothers noted their motivation had good intentions in their messages. As one mother stated, *"I tell her, 'It's for your own good. It is for your sake and besides, I am not telling you that you look ugly but you can look much better.'"*

Confirmation of faults occurred when comments on weight and lifestyle behaviours were delivered in an accusatory tone to a dyad member struggling to manage her weight. Comments generally involved miscommunication and misattunement when daughter expressed dissatisfaction with her appearance as an indirect bid for support and mother did not meet her emotional need.

> [Daughter] told me that she had pre-diabetes and that she was gaining weight, and I asked her, "Why do you think you're having diabetes? You are eating too many sweets!" (Mother, age 43)

Daughters stated that their mothers' responses emphasized what they were doing "wrong" and lacked recognition (validation) of their efforts. This resulted in daughters feeling blamed or penalized for being vulnerable or seeking support.

> [Mom] goes like, "But you need to know the truth, you are fat." And then, I get really mad sometimes. And then, I just like you know, "It's not fair you tell me this and then you tell me that I'm so fat when you know that I try to eat healthy. I try to do exercise." (Daughter, age 19)

Directives as interventions consisted of advice giving with the goal of stimulating appraisal and action. Commonly mothers used themselves as examples of bearing illnesses that could arise when one does not "care for oneself" as a warning. Mothers also compared themselves to daughters to highlight that obesity at a young age was not "normal". Mothers' messages were direct and blunt. Mothers generally acknowledged their "strong character" prevented daughters from listening to their advice and described efforts to soften messages to increase receptivity.

> [Daughter] gets annoyed that I tell her these things but I say, "Don't get mad, I'm telling you for your own good, because look at me, I have already become ill. I don't want that to happen to you." I tell her in the morning, "Make yourself an oatmeal or a smoothie instead. Put yogurt or something but don't eat cereal every day, or make yourself something else." So then, she gets annoyed and we argue. Maybe my character is too strong. I mean she talks to me well but I have to be finding a way for her to not get upset. (Mother, age 46)

Daughters reacted to their mothers' "demands" with feelings of hurt, anger, and defiance.

> [Mom] says, "You're going to eat that?" and "Eat less!" I know they tell you for your own good but a lot of times those little things hurt, they bother you, and so instead of saying, "You know what, okay, I'll listen to you," it's like one does the opposite. It's bad because you're hurting yourself. [Mom] irritates me because I'm not taking it as constructive anymore. I take it more as, if you can call it, negative. Instead of helping you or that you think "Oh, well yes, okay." You do the opposite. (Daughter, age 28)

Positive communication

Examples of supportive messages between mothers and daughters on weight or weight-related behaviours were described as compliments, encouragement, listening to understand, and speaking openly. Even if they did not already exist, these communication characteristics were also more readily provided as examples of what they needed from each other to feel better supported in their weight management efforts.

Compliments were most often given as examples of supportive communication by mothers and daughters. Daughters provided examples of compliments from their mothers focused on their appearance and activity such as, *"Wow, you're looking good. Eating good is helping you and going for that walk, it's good for you."* Mother provided examples of compliments from their daughters focused on their cooking such as, *"Oh! It came out really good. How did you make it? The vegetables were crispy. Oh! This is really good!"*

Encouragement was the second most common type of supportive communication. Examples of encouragement offered by mothers were framed as directives. Daughters were more likely to provide statements containing praise.

> [Daughter] says, "If we don't go together then you go alone. Walk mom! Don't be watching so much television, laying down or sitting down on the sofa." And I tell her, "Well it's because I feel tired, mija." She says, "Well you are going to feel less tired if you do it. If you walk, it is fun." She's right. (Mother, age 53)

> [Mom] said, "Oh good job! You are making a change and it'll probably help you not just with your weight but with stress and just be healthier." That felt good and, like, motivated me more to keep on going. She always motivates me, you know, and encourages me to try and do new things and I go for it. (Daughter, age 20)

Listening to understand and speaking to disclose were most cited as unmet needs in mother-daughter communication. Mothers and daughters revealed wanting each other to listen with the purpose of understanding as well as to share without the risk of judgement in order to build trust. Asking about each other's points of views was also mentioned as an important part of supportive communication. The concept of "acceptance" was prominent among

daughters who stressed the value of being "open-minded" and receptive to differences. The concept of "respect" was most commonly mentioned by mothers when they described learning how to give daughters autonomy.

> To learn to listen to [daughter], what she has to tell me. And not interrupting her and saying, "No, it's because this … " In other words, letting her make her own decisions and that she also learns because I have a different mindset. (Mother, age 49)

> For [mom] not to be so opinionated and just be accepting cuz I don't feel like I want to tell her stuff when she's over here just nagging and complaining all the time. It's like, "You are not encouraging me to talk to you at all." It's two sided communication, open minded, you have to be able to listen even though you do not agree with it, you should still listen to the person and then say, "Hey, well I don't really agree with you … " (Daughter, age 20)

Cohesion: acculturation differences interfere with intergenerational alliance

Mothers and daughters had distinct views on communication styles, norms of conduct, and approaches to weight control that they attributed to their cultural orientations. These differences contributed to "clashes" that interfered with their ability to work together towards weight management goals.

Dissonance of communication needs

Differences in communication was a common barrier to emotional connection.

The use of different languages was a source of frustration especially for mothers that described difficulties understanding their children.

> I don't think I do it intentionally because of the language I speak more Spanish than English and [daughter] speaks more English than Spanish and sometimes I mix up my words and [daughter] is like, "What do you mean? Ah, ok, this is what it means. Express yourself in this way. Ah, now I understand you." Because we come from a different country. The culture is different, totally opposite of here. The outside ideas are very … what I mean is that our kids get Americanized or they get depressed. Because of the house, the parents, the culture, because we don't speak English. So it would be something good for them to be united in communication. (Mother, age 43)

Mothers described using an authoritarian tone and mentioned struggling to adapt to the American use of praise (e.g., "good job!") to encourage daughters.

> I would like for [daughter] to understand that it is not a critique because I am worried about her. She says, "It's because one has to say, 'Oh look how great you did that! Look how great you are doing!'" She says that I never tell her that. The Americans are "Good job!" and all of that. One doesn't get used to it. And she says that I have to use those words that "Oh good job, good!" And I don't. And she says that everything I say is to criticize. (Mother, age 60)

Daughters attributed their mothers being "close minded", "strict", "judgmental", "opinioned", and "blunt", to their Mexican way of parenting and contrasted it to their own "open" style of communication.

> I feel like she is very old school and that is like a big conflict we have. She is very old school. You know? Mexican raised in Mexico so she is a certain way. And I am very open and just like, 'ahh … whatever' you know, about things. And so that really is what we crash on a lot … I feel like Mexican moms are very judgmental and they are very opinionated and they don't care what they say. They are going to tell it to you anyways. (Daughter, age 20)

Dissonance of behavioural expectations

Different expectations regarding parental authority, familism, and gender roles were a source of dissolution. Mothers and daughters who believed they did not fulfil expectations cited guilt, insecurity, rejection, and resentment.

Mothers indicated that assertiveness or lack of deference by daughters meant they had less power or control over their behaviours which challenged their "duty as a mother" and parenting efficacy because they drew from maternal models of their own upbringing.

> "In the past, one did almost everything the parents said and I just remember my mom would send us to get tortillas, 'Here is the money, go for the tortillas.' And now if you tell your children to go for the tortillas, they don't want to go or 'Tell my brother to go.' It's very different here because one isn't able to if one wants to give them a slap. One can't because they are going to call the police. So then I think that it's different". [sniffling] (Mother, age 46)

Daughters described internal and external conflict when they did not conform to the norms of familism (i.e., prioritizing family over individual needs) and traditional gender roles.

> I consider myself a good mom, but sometimes I am selfish. Sometimes, I think about myself and then, my children. My mom thinks about her children and then, about herself. And that may be why she stopped taking care of herself. She didn't think about herself a lot. She thought more about being with us and that is something she tells me, "Think about your children. Don't be thinking about yourself" and then I say, "Ugh!" (Daughter, age 26)

Daughters also spoke of differential treatment by mothers of male siblings. Some specifically recalled mothers discouraging sports participation due to gender.

> I was a really big tomboy, and I wanted to join basketball in third grade. But, because I was the only girl in

> the team, [mom] didn't want me to be in there. It was always my idea, and in sixth grade I just went up to my coach and told her, "My mom won't take me anywhere, to the games, I'll help you after school as long as you're kind of my ride" (Daughter, age 20)

Dissonance of eating and physical activity behaviours

Differences in lifestyle behaviours led to criticism and judgement between mother and daughter. Mothers indicated their daughters' preferences for American food and sedentary behaviour contributed to their weight gain. Daughters attributed their mothers' preference for traditional Mexican foods, that were heavy in fat, and not working out for their excess weight. Mothers and daughters also spoke of using different weight management practices with a particular reference to "natural" weight loss in their narratives. Mothers reported use of plant-based products (e.g., Sensa, Svelte, India seeds, chia seeds) or homemade smoothies to control hunger or break down fat. They also emphasized non-sedentary behaviour and walking. Daughters reported organic food, food restriction, portion control, and vigorous activity or gym workouts to burn calories or fat. Information on weight control was learned through internet research by daughters and social networks or television by mothers. While daughters were more likely to prepare and eat "healthy" meals separately from the household or family, mothers expressed reluctance and guilt over implementing this individual "dieting" approach.

> I'm not used to everybody having their own meal. It was difficult for me because [daughter] would come home and ask, "Can you buy me some almond milk?" "But there is milk." I stopped wanting to take Herbalife. And it helps us a lot. I don't know if it's good or bad, but because I say, "How will I take it, how will I be eating well and taking Herbalife and not my daughters?" (Mother, age 45)

> To the Mexican culture, it's a lot where they come out with herbal supplements. Like right now, it's the fiber, the chia, the alpiste. It's like all that stuff that [mom] actually believes that they work. And because I grew up here, I don't believe in it. (Daughter, age 19)

Conflict: maladaptive conflict responses contribute to relational strain

Sources of conflict

Mothers and daughters identified several conflictual issues between them. These issues were often characterized as long-standing problems that were difficult to discuss because they triggered frustration and anger. The most commonly disclosed issues centred around eating habits, parenting/child rearing, weight, romantic partner, and exercise habits.

Eating habits conflict stemmed from scolding the other for "unhealthy" eating choices such as eating fast food or sweets. When daughters were the recipients, they rebuked mothers' attempts to control their eating behaviour.

> I have a lot of conflict with [daughter] on that matter because she has Jack in the Box for breakfast, McDonalds, all those things. I mean I tell her it has lots of calories, lots of sodium, lots of sugar, like Starbucks. I mean all those things. She really likes fries, soda. I mean that's where I have conflict with her nutrition. She doesn't eat fruits, she doesn't eat vegetables. (Mother, age 45)

> I'm eating and I serve myself something and suddenly she says, "Oh, you got too much of that" or "It's too much sugar" or "You're eating another one of those?" when I grab a cookie or some bread. And when I take another one. And sometimes she tells me, "Okay, that's it, you're going to eat another one? You're getting a second one or a second cookie?" And that bothers me. (Daughter, age 28)

Parenting or child rearing conflict consisted mostly of mothers disapproving of daughters for either permissive feeding practices (e.g., fast food) and screen time allowances (e.g., video games) or enforcement of eating restrictions for grandchildren. Daughters' complaints to mothers centred on objections to weight-based teasing or overfeeding of young siblings or grandchildren.

> I was like, "No. The little girl is hungry. Give her more!" [Daughter] "No mom, stop! The doctor said that she should get full with that amount and with that it's enough." I said, "No, but she is still hungry." "No mom," she said, "because she already has in her genes there that she could be overweight and I don't want her to be overweight or to be obese." (Mother, age 43)

> [Mom] will even tell my sister, "You are fat!", you know, and it's like "Mom, she's only 10, you're gonna damage her in the head!" I can't be in a room with my mom for too long because I have different opinions as a woman, as a mother. (Daughter, age 26)

Weight conflict involved mothers' persistent pressure for daughters to lose weight. Mothers expressed feeling concerned yet ineffective in reaching daughters. Daughters voiced resentment of the verbal attacks from mothers.

> I have become to my daughter an annoyance. I have fought a lot with her about her weight. Now, genetically she has genes of obesity … Since she was young she has always struggled with her weight. She has always had a tendency to be chubby. But now she is exaggeratedly overweight. I have become a nuisance to her and she does not listen to me. (Mother, 64 years old)

> "You're fat!" [Mother] was always talking crap about my butt and my thighs. She is always like, "They are

> so big! You need to lose them." She always tells me I am fat. (Daughter, age 20)

Romantic partner conflict appeared when mothers blamed daughters' spouse/partner for her poor eating habits and weight gain or daughter more generally opposed her mother's disapproval or criticism of her relationship.

> I tell [daughter] about her boyfriend. Well if he does not want to take care of himself, you take care of yourself. If you go out to eat, well, for example if you go to eat a hamburger, eat it at a good hour so you do not get home and go to bed. If it already is very late, well choose something lighter, right. These are our conflicts. (Mother, age 62)

> Just the whole relationship thing, [Mom] 'No! I don't approve of it. This that.' And I am just like, 'Just be accepting of it.' You know? 'If there is going to be some trust issue or breakup or something like that, let me go through it. Not just like nag about it all the time, it's like regardless I'm still gonna do it, so you might as well be accepting of that!' (Daughter, age 20)

Exercise habits conflict was based on insistence from mothers that daughters manage their weight by increasing physical activity. Daughters often pushed back by pointing out that mothers themselves had overweight and were inactive.

> I tell [daughter], "You have to do at least one hour of exercise, walk." And she says, "No, because my legs hurt a lot." Or she always gives me an excuse. And sometimes she says, "No!" And what worries me is that I see her gaining more and more weight. Sometimes she gives me the impression that we don't have very good communication. In that aspect, we clash. When we get to that of diet or weight, we clash. (Mother, age 60)

> My mom says, "Go take a walk! Don't just sit there!" [Daughter] 'Okay, when I see you out there going around doing your laps maybe then I'll tell you, "I'll go with you to do the same." But don't tell me "Go because you need it" when I know you need it just the same. That bothers me sometimes and maybe makes me say, "You know what, forget it!" I get angry. (Daughter, age 28)

Conflict resolution strategies

Mother and daughter accounts concurred that conflict on various topics including those related to weight tended to lack resolution. This meant that problems were recurring due to the use of avoidance, withdrawal, and defensiveness. The lack of resolution created a wedge between mother and daughter. One mother recalled, *"She always says that I don't change. That I am still the same and I try to get closer to her. I don't know. Sometimes I would like to get help to be more of a mother to her."* [crying]

Avoidance consisted of ignoring or minimizing a problematic issue. Often certain things went unsaid and there were active efforts to refrain. The experiences recounted indicated that with enough time, the problem became less intense or forgotten for some time. As one mother reflected, *"It is not that [the problem] gets resolved. Just that later on the feeling of being mad goes away and I go to her house and I don't say anything because, well, for what?"*

Mothers and daughters explained that avoidance was used to prevent a loss of emotional control that could further damage their relationship.

> So that I don't hurt [daughter], I better stay quiet, and go to my room, and close the door. Because I told her, I don't want to get angry with you, so in order not to hurt you, I'd better be quiet and go to my room, and close the door, because I don't want to say things that probably tomorrow I'll have to, how do you say, I will regret. (Mother, age 52)

They acknowledged the existence of problematic interactions but described not having the communication tools to de-escalate the conflict.

> [Mom] "'You shouldn't be eating that, it's greasy!' I'm just like whatever—I block negative energy. That's what I try to do. [Mom] will be eating something healthy. I'm like, 'Ugh, that's nasty!' She's just, like, 'No it's not!' She gets defensive. We're just, like, 'Whatever!' you know? That's the type of people we are, like, we'll just ignore it. 'Whatever—if you don't like it, don't bother me.'" (Daughter, age 18)

Withdrawal involved shutting down by not responding or engaging. Typically, it consisted of periods when mother and daughter ceased speaking temporarily (e.g., silent treatment) or became estranged. When the relationship resumed there was a lack of amends.

As one mother explained, the communication cut-off was how hurt was revealed.

> I did tell [daughter], 'Look at yourself, you are gaining a lot of weight … She stopped talking to me for hours. I called her and she didn't respond and that's when I said to myself, "I said something wrong here." (Mother, age 47)

One daughter described how avoidance of difficult conversations led to build up and outburst of emotions, which resulted in temporary alienation.

> The other day I did tell [mom], "Hypocrite!" But I didn't mean to tell her like that. I blurted it out. Oh no, my mom wouldn't forgive me for it. She didn't even want to answer me when I called her and I was crying and crying. I had been carrying that word a lot. (Daughter, age 23)

Defensiveness was a reaction to a perceived criticism with aggressive language or behaviour. Mothers and daughters indicated that daughters more commonly reacted defensively when they were offended by weight-related comments from mothers.

We were at Burger King and we were eating and we were sharing some large fries, chicken fries and I told her, "Go ahead you can have the last one." She goes, "What! Yeah, give it to the fatass." (Mother, age 28)

When we would come back from the party [mom] would say to me, "Oh, my friends told me that I look younger than you. That you look like the mom and I the daughter." And I told her, "Who asked you?" Like, it was my way of talking back at her. She was always there, nagging and nagging so then I think that's when people mess with you so much, like if they say, "If you eat that you will gain weight" so then you eat it, like, on purpose! (Daughter, age 35)

Roles: role transformation alters the generational hierarchical relationship

Mothers and daughters described daughters in three major roles. Two of these roles involved a role reversal where the daughter served to lead mother in health-related areas. The third role represented a more balanced relationship where daughter and mother showed greater attunement to each other's needs.

Daughter as mentor and role model

Mothers relied on daughters to research information regarding diets, weight loss methods, places to be active, and management of health conditions.

Daughters took the role of teachers in brokering English-language information particularly from online sources.

Well, [daughter] is the type to be on the internet a lot. She is always learning and she actually informs me about it as well. She tells me, "Mom, look this food is good for you so that you feel better." When I tell her I cannot sleep sometimes she suggests a lot of things as well. "And look, that is good, let's go do it" and well, okay I follow her. Since she uses the internet a lot I am a little bit dumb using the internet, quite dumb, I trust her a lot. (Mother, age 53)

I think that is why my mom comes to me for, like, advice because I can go into the computer and find her answer because she doesn't know how to use a computer that much and she doesn't know how to use it in Spanish. So she doesn't get information because a lot of the information about healthy things are in English. (Daughter, age 23)

Daughters commonly took the lead in physical activity by providing instruction, coaching, and encouragement. Daughters introduced mothers to higher intensity exercise that often took place at a gym.

[Daughter] is the one that says, "Come on mom, do the insanity with me. Come on! We will do it earlier if you want." And so that's one way she's supportive and very encouraging. "Come on, let's exercise!" (Mother, age 42)

We were in Zumba, and [mom] said, "Oh, I want to get rid of these flabby arms!" And I was like, "Mom, if you actually do weights, or actually close your fists and tightened it, you know, when you're supposed to do something, after a while you notice it's muscle. It looks good." And one time, we were in class and she was like doing this arm exercise we were supposed to do, she was really into it and I was just like, in my head, "What is she doing? She's doing what I told her to!" (Daughter, age 24)

Daughters encouraged mothers to eat "healthier" by exposing them to organic food markets, educating them on reading food labels and "natural" ingredients, and inviting them to try new recipes or foods.

[Daughter] advises me instead. She's the one who tells me because she's always taking care of everything I eat. "I'm watching you. You can't eat that. You have to eat better." For example, today they made pozole which uses pork meat and she made us pozole using chicken so I wouldn't eat the other one. If they make steak, she makes salad for me to eat, she gives me my portion of meat. The beans are almost always boiled, with just a bit of salt to have the full nutrients. The same with tortillas, she looks for the ones made of cactus, others with wheat flour. (Mother, age 52)

"Oh mom, I'm going to Sprouts. I'll get whatever you want.'" [Mom] will pick up some things and I'm like, "Why don't you do this or not cook it this way, eat it this way, or don't use this oil and use this one instead, avoid the dressings." I even try to find her organic stuff or non GMOs or read the labels, read the sugars, read the ingredients. I'm trying to switch her over to Trader Joes because most of their stuff is very natural, like if you read the ingredients, it's stuff that you can identify." (Daughter, age 30)

Daughter as caregiver

Mothers relied on daughters to assist in their management of health conditions. Daughters' caregiving behaviours included accompanying mothers to medical appointments, explaining medical instructions, and monitoring their medical adherence. This often involved daughters supervising their mother's eating and physical activity behaviours.

[Daughter] scolds me. She scolds me a lot because I eat a lot of sugar. She tells me, "Mom, stop eating that!" when she sees I am eating cake when there is a party and I go for another piece of cake. "Keep it going, let's see how your diabetes is going!" (Mother, age 47)

Because I know [mom] has high cholesterol and I know she shouldn't be eating some things, I nag her about it. I'm like "Mom, you can't be eating that! No, mom you don't eat that, you already know the doctor told you not to do that." And she knows it, sometimes it's really hard for her because right now she's having health problems and she shouldn't be eating specific things. I'll be like, "Mom you already know you shouldn't be eating this!" (Daughter, age 19)

Daughters serving a parenting function sometimes left mothers feeling disrespected and daughters feeling frustrated.

> I admire [my daughter] a lot because she does yoga every day I think and she does do her shakes. I think that she focuses more on taking care of herself, in doing exercise and she is always telling me that I have to do more exercise. Sometimes I tell her that I feel that she is the mom because I am sitting down watching the television and I hear that she gets home, and I get up in a hurry [laughing]. Like I am like this [reenacting] doing something so that she does not see me just sitting there and I feel worried because she's going to say, "Why didn't you go to the gym?" That it's not good for me to be sitting down just watching television and well yes I am gaining a lot of weight. I love her a lot and I know she loves me a lot too but I sometimes feel that the way that she talks to me I feel that she does not treat me like I am her mom. What I see is that she sometimes offends me and doesn't respect me. (Mother, age 60)

> I asked [mom] to come to Zumba class once, actually several times, but she kept saying, "No!" because she didn't want to join. She thought she would be the biggest one there. Every time we talk about making a plan to lose weight or buy something, I've gotten her the Sensa stuff, I paid for the Herbalife, I paid for just different things, different books, the cooking books, snack books. And then I would read them with her, I didn't just buy it for her to use, I would read it to her, and just encourage her to use it every day, but for some reason she'll use it for the first three days and then it just kind of wears off. (Daughter, age 20)

Daughter as collaborator

Collaboration between mother and daughter often centred around food—grocery shopping and cooking. These activities consisted of planning and dividing responsibilities based on each other's strengths. The process involved consulting or inviting ideas. Daughters contributed ideas on modifying recipes and participated in food preparation and mothers helped with cooking. Health conditions or postpartum were noted as motivators for cooperation in meal planning and sharing.

> We have an agreement. It's like [daughter] does the cleaning and I do the cooking. If I am making the meat, she's steaming vegetables so we can eat. She always starts setting the table while I am serving it or she'll serve like the rice and the vegetables and I am serving the pasta, meat, and make sure everybody has a fork. So we do it together a lot of the time. (Mother, age 42)

> When [mom] was diagnosed with [cancer] for like 4 months we ate a lot of chicken and vegetables, fish and vegetables … I started doing a ton of research on what feeds it and what foods to avoid, and what foods are good, and what foods kind of fight it, so we started putting a lot of green vegetables and antioxidants, like foods with that. And so, meat we don't buy, we only get organic eggs. And just try to limit the meat intake. (Daughter, age 33)

Adaptability: low communal coping heightens psychological distress

Relational distress developed when an individual was unable to access support for eating and activity behaviours for weight management from family members (e.g., spouses, siblings, children). New behaviours were perceived as deviations from normalcy and rejected. The inability of the family to adapt to the lifestyle changes created a stressful environment. Without the sufficient relational resources, coping with the behavioural demands of weight management became increasingly difficult over time. Several mothers used the term "trauma" to describe the experience of living with obesity because of its negative impact on social relationships and view of self. Narratives corroborated the idea that obesity disrupts family structure and cohesion in three major ways: challenging roles, increasing social isolation, and compromising social support.

Challenging family roles (what is my role in the family?)

When family members resisted mother's attempts to adhere to health behaviours motivated by management of obesity and related chronic health conditions, mothers felt less secure in their role.

> I do try to [lose weight] and more than anything it's to prepare food like for me because at times they don't want that, what I made. That is a little difficult when there is one family and you want to try to change a habit that for many years you have done it a certain way and all of a sudden you try to change. (Mother, age 38)

The role of mother as the primary provider of meals was also called into question by spouses and children.

> "You don't even eat anymore!" says my older son. "What diet? No diet! You don't eat anymore now that you are on a diet." I mean, he gets mad because he wants to take me out to a buffet to eat a lot, a lot. I don't want to. They get mad. It's because they think that the mom is only there to be fat. It makes me sad because sometimes I say, "Well I would like to please them." But I say, "No, not anymore!" I prefer that they get mad than being how I was before–sick. Like saying, "My mom doesn't make food like before." No, not anymore! I have left that custom. Yes, I do it sometimes. I'm not going to say no, but I have retired from that. My mom died of a heart attack, a stroke. My mom was like this [extending arms outward] like about four hundred pounds and she fell and stayed there. (Mother, age 57)

Daughter's efforts to control her own children's eating and weight were undermined by her mother.

> I'll be like, "Mom, no you can't do that!" or "Don't give [my daughter] that. It's like already 9." She's like, "No, so what!" You know, like, who cares. I hate to say it in front of my daughter but I'm like, "Do you see how big she is?" And my daughter just looks at me and I'm like "I'm sorry, I have to be honest like I'm not trying to be mean and I'm not saying this in front of other people to embarrass you. But look, do you think you need that?" It'll start an argument between me and mom when she used to live with me and that's why I was like, "Yeah, it's time for us to separate." Yeah, it was a constant fight with food with my kids. (Daughter, age 29)

Increasing social isolation (where do I belong? Who accepts me?)

Criticism or judgement on lifestyle behaviours led to retreat. The sense of rejection resulted in reduced contact with family and ultimately pressure to give up lifestyle goals.

> It was weird because my family, my friends ask, "Well, what are you going to eat? You are going to eat that?" Oh, it was so weird, but it was fine. I mentally prepared myself for that. I'm tired of being weird, so then that's when I started slowly gaining weight. (Mother, age 35)

Lack of agreement on food led to reduction of shared family meals and poor body image contributed to mental health issues that were dealt with individually.

> Me and my mom had a lot of arguments about what we should both eat and we decided that I will cook my own food and that she'll cook for herself … I was really depressed about myself because I just thought I was never going to be pretty and I was never going to be skinny … To my parents when somebody is suicidal they think that person is crazy. And I didn't want my parents to think that I was crazy so I didn't want to tell them about it. So I mean to this day they still don't know this, so it's something I still don't open up about to them. (Daughter, age 19)

Compromising social support (who cooperates with me?)

Negative interactions were experienced when those in the position to provide emotional or instrumental support discouraged lifestyle behaviours through disparaging remarks and non-accommodating or sabotaging actions. Some mothers and daughters commented that spouses or romantic partners failed to facilitate eating and activity habits for weight management.

> [Husband] doesn't support me. He never has. He is always mad when I go to Zumba. I have problems with him because he is an alcoholic. So, he gets mad and it doesn't interest me that he gets mad. I go. When I get back he is happy. I give him lunch and that's it. But he is always saying, "What are you going to do? Why do you go?" He gets mad. "You don't lose weight." (Mother, age 57)

> One reason is because the father of my son always wants me to make him so many meals and well, one craves it and wants to eat that way, right? So, I tell him, "Hey, motivate me. Do the diet with me and we'll all improve." Then, I ask him to take care of our son because I have always wished to go for morning walks or for a morning run. But I can't because he leaves early or he doesn't want to take care of my son during that time. So then well I always dedicate all of my time to my son. So I ask myself, "How can I do this?" I can make time to do it but I need support from the father of my son. (Daughter, age 25)

Discussion

The purpose of this study was to better understand family functioning in Mexican American mothers and daughters with obesity. Accounts reveal that family functioning on weight or weight-related behaviours was influenced by the way the topic was talked about, cultural relatedness, ability to confront disagreements, degree of mutuality based on role structure, and collective cooperation for behavioural changes to support weight management. These findings identify intervention targets focused on improving relational patterns to promote eating and activity behaviours conducive to weight management.

Communication: communication process drives perception of supportive messages

Non-supportive communication involved well-meaning statements that were overshadowed by the perceived negativity attached which impaired the good intention underlying the message. These impaired messages consisted of compliments conjoined with criticisms (critical compliments), invalidations of efforts (confirmation of faults), and demands delivered as unsolicited advice (directives as interventions). Although daughters were more commonly the recipients of these messages, both mother and daughter identified the counterproductive result. Maternal use of "controlling" styles regarding eating have been linked to lower compliance and unhealthy eating in young female children (Arredondo et al., 2006; Olvera-Ezzell et al., 1990). Parents tend to exert greater control of children's eating practices when they perceive their child as overweight, which may inadvertently promote poor eating behaviour. Therefore, mothers' communication approaches in this study may be reflective of "protective parenting" used by first generation Latino particularly Mexican immigrants which consists of high levels of warmth and demandingness and low level of autonomy

granting (Domenech Rodríguez et al., 2009). In fact, Latino parents are more likely to describe themselves as "overprotective" than non Latino parents (Pew Research Center, 2015). Mexican American mothers report advice giving as a form of encouragement tied to their belief in parental guidance of children's decision making (Yau & Watkins, 2018). Hence, concerned mothers appear to use directives to provide unsolicited advice on weight-related matters that daughters experience as criticisms.

Supportive communication involved positive communication strategies including compliments, encouragements, empathetic listening, and disclosing (Mirivel, 2014). Receiving emotional support in the form of compliments was previously associated with increased physical activity in Latinas (Marquez, Norman, Fowler, Gans, & Marcus, 2018). Moreover, verbal encouragement by family has been identified as a facilitator of physical activity with parent-child dyads describing more support from each other than spousal dyads (Heredia et al., 2019). In our study, mothers viewed directives and daughters identified praise as forms of encouragement. Both, however, revealed a need to feel heard and understood. Daughters emphasized wanting greater "open mindedness" and "acceptance" from mothers to facilitate sharing without fear of judgement. Mothers focused on the need for "respect" and trust from daughters but acknowledged that allowing more autonomy was needed for there to be greater intimacy. Previous studies have described respect as a prominent cultural value that parents instil and expect from children (Calzada, 2010). For example, Latina mothers report more intense arguments with their daughters when perceived respect is low compared to White mothers (Dixon et al., 2008).

Cohesion: acculturation differences interfere with intergenerational alliance

Although both mothers and daughters lived with obesity, differences in cultural orientation interfered with formation of a lifestyle alliance. Some disengagement occurred due to misunderstandings related to use of different languages. Lack of shared language between parent and child has been associated with communication difficulties, reduced parental competence, lower parent-child attachment, and increased conflict (Cox et al., 2021). Moreover, parents that speak a different language from their children report having fewer discussions and perceiving lower cohesiveness (Tseng & Fuligni, 2000). Contrasting communication styles were attributed to differences in socialization. Daughters voiced their preference for maternal verbal support in the form of praise and encouragement (e.g., "Good Job!"). However, mothers noted struggling to adapt to this American communication norm. Generally, Latino parents in the U.S. are more likely to report feeling they "praise too much" compared to White parents which may reflect discomfort with positive reinforcement strategies typical of Western parenting models (Pew Research Center, 2015). Mexican American mothers are shown to rely less on inquiry and praise and more on modelling and directives when teaching their young children compared to White mothers (Olvera-Ezzell et al., 1990). Less emphasis on praise and rewards and more on physical affection or discipline may be due to concerns over undermining parental authority (Dumas et al., 2010). Immigrant parents describe feeling a loss of control of their children's behaviour and "disempowered" to discipline children in the U.S. because of different cultural norms and laws (Cardona et al., 2009). Moreover, parents who feel less competent in controlling their children are more likely to use harsh or authoritarian tactics which may explain stricter parenting strategies reported by women of Mexican-origin in the U.S. compared to those in Mexico (Varela et al., 2005). Among Mexican immigrant parents, attempts to adapt to the American way of parenting involves more English speaking, open communication, and use of reasoning and understanding in place of physical discipline (Gonzalez & Méndez-Pounds, 2018). This fostering of biculturalism has important health implications as children of immigrant parents consume less fruits and vegetables when they differ in acculturation and have less positive communication with parents (Leite et al., 2023).

Opposing cultural beliefs and values regarding expectations of deference to parents, familism, and gender roles created distance in dyads. Mothers interpreted their daughters' assertiveness and distinct points of view as defiance because it differed from their own upbringing. This is consistent with the literature showing that immigrant parents cite child assertiveness and independence as signs of rebellion and express feeling anxious over children adopting American values and behaviours (Perreira et al., 2006). Among Mexican Americans, self-assertion is higher and family interdependence is lower in adults compared to adolescents which may coincide with increased conflict (Phinney et al., 2005). In addition, Mexican American adults describe feeling shame in not meeting parent behavioural expectations (Hofmann & Steeves, 2020). Young adults in particular may feel conflicted because their U.S. education encourages and expects self-expression while their cultural upbringing emphasizes respect and obedience (Covarrubias et al., 2019). Greater conflict may arise between mothers and daughters because Mexican American parents apply more control and less permission for individual expression for daughters than sons (Domenech Rodríguez et al., 2009). Daughters in the current study described resistance to traditional gender norms including marianismo

(i.e., purity and self-sacrifice) and machismo (i.e., male privilege) as a result of observing the discrepancy in treatment of male siblings by mothers. This is in line with studies showing that U.S. born or English speaking Mexican Americans are more likely to endorse egalitarian gender roles than Mexican immigrants (Leaper & Valin, 1996; Parra-Cardona et al., 2008). In fact, daughters discussed challenges in pursuing interest in childhood sports participation due to parental discouragement. Mexican American mothers tend to provide less support for physical activity for their daughters than sons (Allen et al., 2016). Immigrant women have noted that engaging in leisure time or structured physical activity was not part of their own upbringing but acknowledge that exercise is more accepted for females in the U.S (Evenson et al., 2002). This issue is further complicated by feelings of guilt and shame when deciding to dedicate time to self-care instead of family because the act of putting family first (familism) thwarts physical activity (D'Alonzo, 2012).

Distinct eating and physical activity preferences prevented concordant weight management approaches. While mothers and daughters both cited use of "natural" methods for weight loss, daughters relied on eating organic foods and limiting certain foods and mothers used plant-based products (e.g., pills or meal-replacements) or homemade smoothies. Daughters were also more likely to report gym workouts and mothers noted non-sedentary behaviour (e.g., staying busy) and walking. These lifestyle differences make sense in light of age and acculturation differences. A previous study found that compared to their mothers, Mexican American adult daughters were more acculturated and concerned with their weight but mothers consumed more fruits and vegetables and less fat (Garcia-Maas, 1999). Our findings agree with studies showing that weight loss strategies differ by acculturation among Latinas. Specifically, weight loss attempts and use of behavioural strategies aimed at increasing energy expenditure through physical activity and reducing energy consumption through reducing calories are associated with higher acculturated Latinas (Marquez et al., 2015). Moreover, use of home remedies, pills, supplements, and commercial weight loss products are commonly used methods among immigrant Latinas for reasons such as viewing "dieting" as too divergent from traditional meals and needing "quick and easy" methods to avoid interfering with family responsibilities and relationships (Agne et al., 2012; Lindberg et al., 2020; Stein et al., 2019). Women may also feel they have limited eating choices since American food may be perceived as unhealthy or bland (Davis et al., 2015; Taverno Ross et al., 2018). In contrast, despite young English speaking Mexican American women similarly valuing intimacy surrounding family meals, they are more willing to forego traditional foods and ways of eating because of a belief that they are "unhealthy" in comparison to the American diet (Ramírez et al., 2018). Hence, cultural conflict based on lifestyle behaviours may hamper joint efforts.

Given the cultural differences in communication, behavioural expectations, and weight-related practices, family-based obesity treatment would benefit from improving biculturalism. Biculturalism is the ability to enact customary behaviours from a dominant culture to adapt to and succeed in that culture while simultaneously maintaining one's own cultural identity, norms and values (Szapocznik & Hervis, 2020). Bicultural families are considered more balanced and optimal in adaptive functioning (Miranda et al., 2000). Families characterized as bicultural have egalitarian leadership where parents negotiate with children and roles are fluid to meet the needs of the family. There is also high emotional support among family members. For example, Mexican American bicultural families are lower in conflict and higher in cohesion than low or high acculturated families. Bicultural Mexican American youth are more likely to be female, perceive family as more adaptable, and participate in family leisure activities (Christenson et al., 2006).

Conflict: maladaptive conflict responses contribute to relational strain

Although most mother-daughter dyads characterized their relationship as close, long-standing issues were sources of conflict. Disagreements regarding weight-related issues were primarily directed from mother to daughter and conflict arose when daughter objected. Daughter's opposition to mother's monitoring and scolding of lifestyle habits and weight often stemmed from not viewing mothers as role models for weight management. This speaks to the importance of mothers serving as real-life examples to inspire well-being in adult children. In fact, adult daughters with overweight are more likely to seek and follow their mother's lifestyle advice when mother's themselves engage in weight management practices regardless of mother's weight status (Marquez, 2015). Dyads in the current study revealed greater conflict related to weight management when mothers and daughters did not have concordant lifestyle behaviours. Conflict tended to go unresolved due to avoidance, withdrawal, and defensiveness. Avoidance of conflict, less expression of feelings during conflict, and denial as forms of coping are not uncommon among Mexican Americans (Farley et al., 2005; Flores et al., 2004). Mothers believe they are responsible for managing children's emotions and guide their emotional expression to achieve interpersonal harmony (Perez Rivera & Dunsmore, 2011). Even among young adults, avoidance is cited as a means to prevent upsetting

and angering parents (Phinney et al., 2005). However, intergenerational family conflict and use of indirect conflict coping such as ignore, denial, and suppression of negative feelings is associated with increased psychological distress (Lee & Liu, 2001). Similarly, families in this study explained that fear of loss of emotional control prevented problems from being adequately confronted which ultimately led to anger outbursts, hurtful exchanges, and subsequent distancing. Hence while problem avoidance may ease tension temporarily, it has a cumulative detrimental effect on the parent-child relationship (LaFreniere & Ledbetter, 2021)

Roles: role transformations alter the generational hierarchical relationship

Daughters tended to take the lead in weight management efforts, which was facilitated by their English speaking skills, education, and access to the internet. As mentors and role models, daughters provided mothers with learning opportunities regarding food (e.g., alternative "healthier" ingredients) and more vigorous intensity activity (e.g., gym workouts). In a previous study, young Latina women were less likely to have role models that exercised and instead viewed themselves as role models for their families (D'Alonzo & Fischetti, 2008). They also conceptualized exercise support as someone who joins them at the gym. Other studies such as lifestyle interventions have shown that Latinas with greater social support for physical activity especially from adult children and other women are more likely to exercise and experience weight loss (Marquez et al., 2016, 2018). As caregivers, daughters monitored mothers' eating and activity for management of illnesses such as diabetes. Daughters were more likely to describe serving a parenting role or role reversal when mothers were not adherent to weight management behaviours. Caregiving by daughters is not uncommon among Latinos. In fact, informal care for parents is most often done by daughters at a younger age compared to non Latinos (Evercare and National Alliance for Caregiving, 2008). Although Mexican American females report a greater sense of caregiving obligation, they also experience greater stress for language brokering for their mothers (Shen et al., 2020; Weisskirch, 2013). Tension may arise when daughters feel overburdened with brokering high-stakes content such as health-related matters and/or mothers perceive reduced parental authority (Anguiano, 2018; Roche et al., 2015). As collaborators, daughters worked with mothers to coordinate responsibilities in order to achieve mutual goals. Mothers and daughters consulted and planned on eating and activity. In essence, their roles consisted of joint contributions to shared goals and transactions were bidirectional. Hence, the relationship dynamic resembled more of a partnership where dyads acknowledged that each one served a valuable (e.g., mutual respect) and unique role (e.g., mothers cooking traditional meals with alternative "healthier" recipe ingredients that daughters selected based on online research). Previous research showed that supportive communication consisting of encouragement, empathy, and validation is important for fostering collaborative efforts in weight management in mothers and daughters with overweight (Marquez et al., 2015).

Adaptability: low communal coping heightens psychological distress

Beyond the dyad level, other family members influenced weight-related behaviours. Chronic disease prevention and management were strong motivators for changes in eating, physical activity, and weight. There were many references to inherited disease risk and being impacted by witnessing family members suffer from poor disease management. The lack of family support for lifestyle changes contributed to stress which some women described as "trauma" because it threatened a women's role as a selfless nurturer when she no longer provided meals that appeased and bonded the family, it invited criticism and rejection of her lifestyle choices causing her to socially withdraw or succumb to pressure, and it exposed her to hostile interpersonal interactions that destabilized her lifestyle efforts making her vulnerable to social isolation and psychological distress. These findings are consistent with group norms and interpersonal relationships in collectivist cultures. Specifically, an individual's eating and activity behaviours are largely determined by group norms and because norm deviations can result in dissolution of interpersonal relationships, behavioural conformity will likely be maintained to preserve relationships (Triandis, 2001). Hence, improving communal coping in families with obesity is more likely to be effective for longer-term changes.

Several studies on Latina women have reported related themes of family relevant barriers to healthy eating and physical activity. Mexican American women describe unsuccessful attempts to change eating habits at home due to opposition from children and spouses (Hammons et al., 2020). Because mothers are generally responsible for food shopping and meal preparation, having to prepare separate meals to please family members becomes taxing and a deterrent (Diaz et al., 2007). There is also the fear of disrupting family time by implementing changes in meals eaten together. Women report feeling obligated to participate in family traditions surrounding food which is viewed as an essential part of their ethnic identity and family cohesion (Ramírez et al.,

2018). Spouses can present a major challenge when they encourage and temp food consumption to avoid eating alone (Hammons et al., 2020). Insufficient spousal support also makes engagement in physical activity difficult when partners are unavailable for childcare or express discouragement (Congello & Koniak-Griffin, 2018). Although studies show that greater family and friend support for healthy eating and activity is important for weight loss, garnering this support may be especially hard for immigrant women. For example, immigrant Latinas explain that loss of support from close social networks with the move to the U.S. contributes to poor lifestyle habits and obesity when they do not have others to be active with and/or use food to cope with negative emotions associated with acculturation stress (Agne et al., 2012; Larsen et al., 2013; Sussner et al., 2008). The Latino immigrant experience is not homogenous, however, cumulative adverse experiences, such as discrimination, deportation fear, language barriers, job insecurity or economic hardship, and family separation, are proposed to contribute to obesity risk through increase in allostatic load (D'Alonzo et al., 2012). A cyclical pattern is also described where pressure to lose weight leads to failed attempts which affects their psychological health (Stein et al., 2019).

Intervention implications

The Mother-Daughter Attachment Model proposes three main areas of considerations for understanding and strengthening the mother-daughter relationship (Hasseldine, 2017). First, the "culture of female service" may lead to the neglect of mothers' emotional needs that daughters are expected to meet via "reverse nurturing" and sets up daughters to silence their own voice. Second, the mother-daughter relationship transitions according to life stage from asymmetrical (caregiver-child), to symmetrical (adult-adult), and back to asymmetrical (mother-caregiver). The flow of support is directed to the daughter during her childhood, becomes more reciprocal in her adulthood, and is redirected to her mother during her later years. Third, intergenerational relationship patterns repeat and manifest in a transmission of psychological and physical symptomatology. Based on our present findings, integration of the role of acculturation discrepancy in relational functioning into this conceptualization indicates that acculturation differences between mother and daughter may fuel interpersonal conflict when more acculturated daughters protest the traditional gender roles and ways of communicating modelled by mothers, experience adaptive role reversal and power imbalance that alter the developmental stage timeline and support dynamic, and respond to "protective parenting" (e.g., monitoring, directives, advice giving) with pursuer-distancer interactions which influence decisions on health behaviours. Hence, although mothers' protective parenting may be a coping strategy to manage their own stress, it can contribute to daughters' psychological distress as well as ineffective attempts to move away from normative and shared behaviours to pursue personal health goals.

Findings from this study emphasize the need to address intergenerational family dynamics that contribute to poor eating and insufficient activity associated with obesity. Traditional obesity treatment focused on individual level behavioural changes in eating and activity should incorporate family counselling approaches involving practice-based teaching of relational skills to improve emotional well-being especially in immigrant or bicultural families. Communication skills should target positive communication to increase empathetic listening, disclosing, asking open-ended questions, compliments, and encouragement. These elements appeared to be essential to feeling understood and accepted whereas critical compliments, confirmation of faults, and directives were viewed as invalidating and ineffective at conveying support. Bicultural skills should emphasize perspective taking and viewing the benefit of both cultures. For mothers these skills may include communicating more openly, speaking in English, inviting and allowing self-expression (e.g., opinions), providing praise, granting more autonomy and independence, and flexibility with traditional gender roles. For daughters these skills may include communicating deference and respect, speaking in Spanish, consulting family in decision making, providing family instrumental support, and engaging in family activities and traditions. Conflict resolution skills should aim to improve emotional expression (e.g., speaker-listener techniques), emotional regulation (e.g., coping strategies), emotional attunement (e.g., empathy), and problem solving (e.g., negotiating, compromising). Working with families to confront disagreement and cope with negative emotions in place of avoidance can build self-efficacy in managing differences and increase emotional connectedness. Communal coping skills should focus on assertive communication, seeking and providing social support, and collaborative planning and problem solving. At the dyad level, responsibilities can be negotiated based on strengths to allow each to lead (i.e., mentor) in distinct ways so that individual actions culminate in meeting joint health behaviour goals. At the family level, modelling through family meals and leisure physical activity can normalize healthful eating and exercise, family discussions that link the importance of healthy habits with collective (i.e., "our") health can promote stake in compliance,

and family involvement in decision making regarding healthy eating and activity options can improve cooperation and engagement.

Limitations

This study has limitations to note. Findings are based on accounts from Mexican American women with obesity that cooperated as mother-daughter dyads to participate in the study which may limit transferability to other ethnic, age, and weight status groups as well as to families with more conflictual dynamics. The study focused on the perspectives of mothers and their adult daughters and did not extend multivocality to consider narratives from additional family members (e.g., fathers, siblings) which could provide greater insight into family functioning.

Strengths

The study has strengths that are in accordance with qualitative research standards (Tracy, 2010). A worthy topic was examined among a high-risk group that experiences a disproportionate burden of obesity and related conditions. Rigor was supported through the conduct of in-depth interviews guided by family theory constructs with a sample allowing for thematic saturation. Credibility was achieved by data triangulation involving two independent coders and multivocality consisting of narratives from two family members. Significant contributions of findings include extension of knowledge on relational factors affecting families with obesity and practical implications for family-based interventions.

Conclusion

Enhancing family functioning may improve relational patterns to support eating and physical activity behaviours conducive to weight management in Mexican American women. An intergenerational obesity intervention focused on positive communication, biculturalism, conflict resolution, and communal coping could help buffer stress associated with adoption of lifestyle changes thereby maintaining health promoting behaviours longer-term.

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