A Study of Weight Stigma, Body Appreciation, and Disordered Eating Behaviors among Promotores and **Community Health Workers in Texas**

Background

- Weight stigma, a form of discrimination, affects around 40% of the US population.¹
- Previous research suggests that weight stigma is:
 - negatively associated with body appreciation, an indicator of positive body image.
 - positively associated with disordered eating behaviors.
- Due to systemic inequities, racial and ethnic minority groups, including persons of Mexican heritage, may be more vulnerable to weight stigma.²
- Promotores and community health workers (CHWs) serve a dual role as healthcare provider and community member, particularly in Hispanic communities in Texas (TX).
- A formative study of weight stigma among promotores and CHWs is important to developing systems level, destigmatizing communityengaged interventions in TX.

Research Questions

- 1. Are there racial or ethnic differences in weight self-stigma, disordered eating or body appreciation?
- 2. Is weight self-stigma associated with disordered eating or body appreciation among persons of Mexican heritage?

Methods

- Cross-sectional study of preliminary data
- Multiethnic sample of promotores and CHWs ≥ 19 yrs old living in TX (n=83)
- Online survey included the Weight Self-Stigma Questionnaire, a measure of internal weight stigma, the Body Appreciation Scale-2, a measure of positive body image, and the Eating Attitudes Test, a measure of disordered eating behaviors.
- Mann-Whitney U tests compared weight stigma, body appreciation and eating attitudes scores of Mexican respondents to non-Hispanic white, non-Hispanic Black and other Hispanic heritage respondents.
- Spearman's rank correlation assessed associations of weight stigma with body appreciation and disordered eating among respondents of Mexican heritage.
- Results considered statistically significant at p≤0.05

Results

- kg/m² (Table 1).
- 2).
- 1.1) (Table 2).
- (Figure 1).

Age	n	%
19-39 years	30	36.1
40-59 years	41	49.4
≥ 60 years	12	14.5
Race and Ethnicity		
Non-Hispanic White	5	6.1
Non-Hispanic Black	18	22.0
Mexican Heritage	49	59.8
Central American Heritage	1	1.2
South American Heritage	3	3.7
Spanish Heritage	4	4.9
Other Hispanic Heritage	2	2.4
Gender		
Female	78	94.0
Male	5	6.0
Body Mass Index (BMI) Category kg/m ²		
BMI <18	1	1.2
BMI 18-24	8	9.9
BMI 25-29	23	28.4
BMI 30-34.9	18	22.2
BMI 35-39.9	14	17.3
BMI≥ 40	17	21.0
Education		
< High School	2	0.01
HS Diploma or Equivalent	15	20.7
Completed Some College	28	34.3
Earned College Degree	37	45.1

looponaoi	
n	%
30	36.1
41	49.4
12	14.5
5	6.1
18	22.0
49	59.8
1	1.2
3	3.7
4	4.9
2	2.4
78	94.0
5	<mark>6</mark> .0
1	1.2
8	9.9
23	28.4
18	22.2
14	17.3
17	21.0
2	0.01
15	20.7
28	34.3
37	45.1
	n 30 41 12 5 18 49 1 3 49 1 3 4 2 7 8 5 7 8 5 7 8 5 7 8 5 7 8 5 7 8 5 7 8 5 7 8 5 7 8 5 7 8 5 7 8 5 7 8 5 7 8 5 7 8 5 7 8 5 7 8 7 8

J. Lauren Butler, PhD, RDN, Julianne Lang BS, MS Candidate, Lesli Biediger-Friedman PhD, MPH, RD, Lindsey Menge, MS, RD, LD, Cassandra M. Johnson PhD, MSPH Nutrition and Foods Program, Family and Consumer Sciences, Texas State University

> 59.8% (n=49) of respondents reported Mexican heritage, 94% (n=74) were women and more than 50% reported living with a BMI \ge 25

• Weight self-stigma scores for those of Mexican heritage (33.53 ± 9.12) were higher than non-Hispanic Black (29.2 ± 8.12) and lower than non-Hispanic white respondents (43.4 ± 6.5) (Table

 Body appreciation scores for those of Mexican heritage (3.87 ± 0.88) were lower than non-Hispanic Black (4.29 \pm 0.76) and higher than non-Hispanic white respondents. (2.8 ±

• There was a moderate, negative correlation between weight self- stigma and body appreciation scores among respondents of Mexican heritage (r= -0,50, n = 49, p < .001)

• There was a moderate, positive correlation between weight self-stigma and eating attitudes scores among respondents of Mexican heritage (r=.59, n=49, p < .001) (Figure 2).

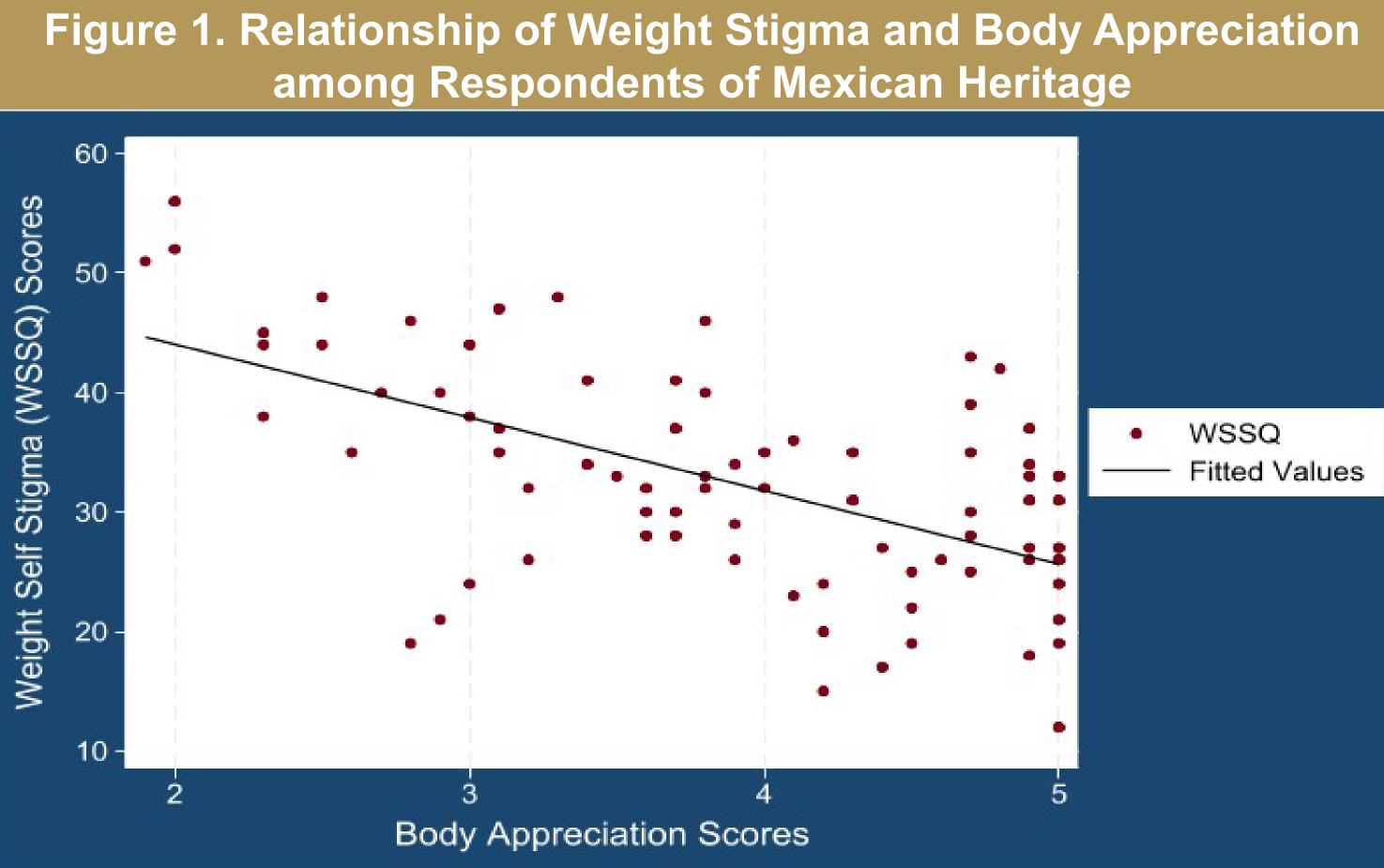
Table 2. Mean (SD) Weight

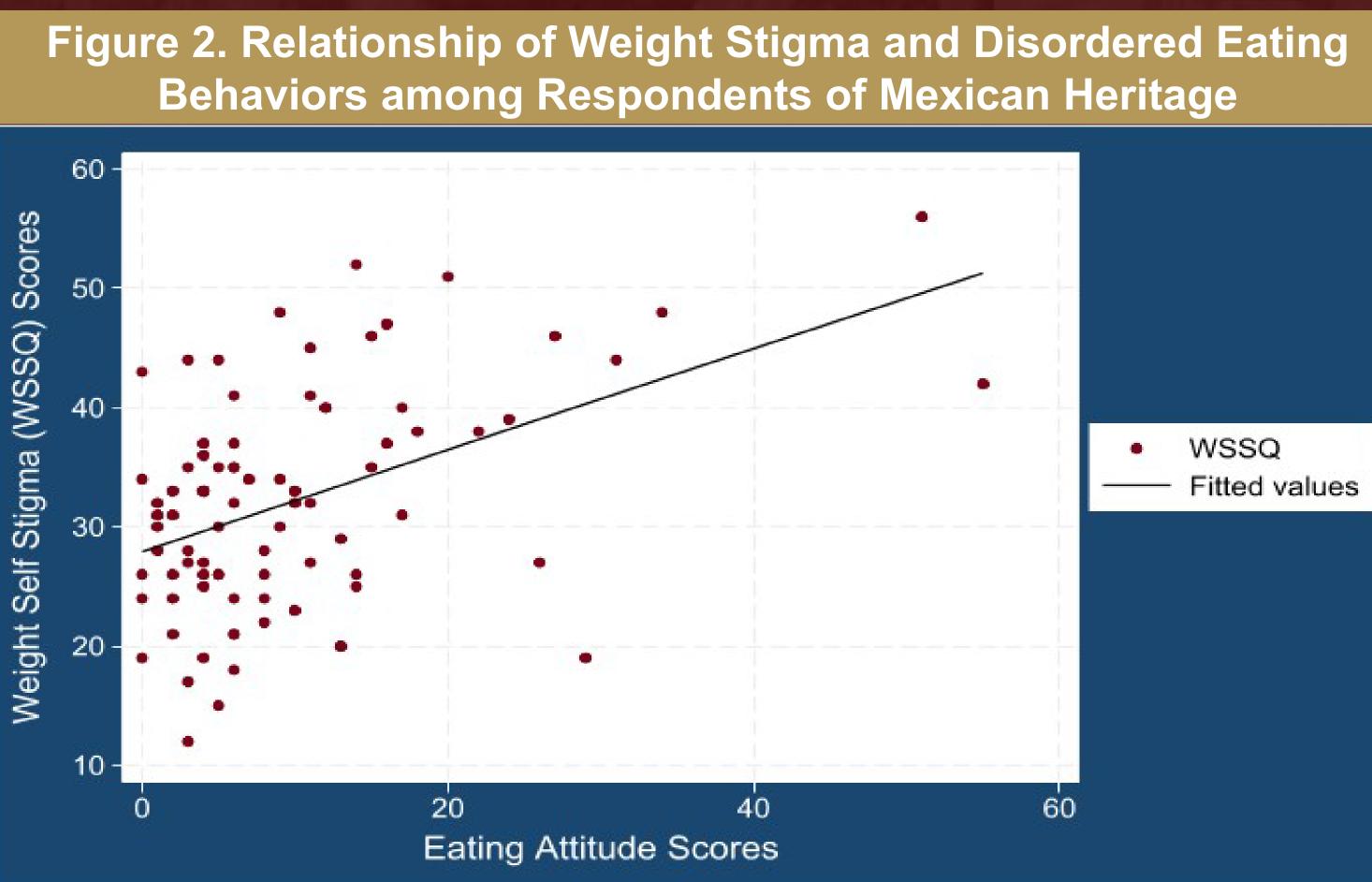
Race and Ethnicity ^a										
	Mexican Heritage	Other Hispanic Hertiage	z- statistic	p- value	Non- Hispanic White	z- statistic	p- value	Non-Hispanic Black	z- statistic	p- value
Weight Self- Stigma	33.53 (9.12)	29.2 (8.12)	-1.386	0.170	43.4 (6.5)	2.360	0.015	27.17 (7.54)	-2.690	0.006
Body Appreciation	3.87 (0.88)	4.25 (0.82)	1.246	0.218	2.8 (1.1)	-2.363	0.015	4.29 (0.76)	1.732	0.084
Eating Attitudes	10.49 (11.67)	8.00 (8.51)	-0.618	0.546	14.2 (8.41)	1.345	0.187	8.28 (6.84)	-0.347	0.734

^a SD=Standard Deviation

Estimates in **bold** are significantly different (p≤0.05) than estimates for persons of Mexican heritage according to Mann Whitney U tests.

Table 1. Select Sociodemographic **Characteristics of Survey Respondents**





Survey	Resp	dy Appred ondents a nd Ethnic	accordi		Eating Attitu	ides Sc	ore
z- statistic	p- value	Non- Hispanic White	z- statistic	p- value	Non-Hispanic Black	z- statistic	p val

es	
p-	
lue	

006

Discussion & Conclusions

- These findings highlight racial and ethnic differences in weight stigma, body appreciation and disordered eating among promotores and CHWs in TX.
- Weight stigma was negatively associated with body appreciation and positively associated with disordered eating among Mexican promotores and CHWs in this preliminary sample.
- Culturally relevant interventions aimed at improving body appreciation may mitigate internalized weight stigma and disordered eating among persons of Mexican heritage.
- Further research, including a larger more representative sample, is needed to inform development of culturally relevant and effective interventions.



Future Directions

- The online virtual survey will close on 3/1/2024.
- Analyses of the final analytic sample will:
 - compare weight self-stigma, body appreciation and disordered eating scores across all racial and ethnic groups available;
 - o examine associations of weight stigma with body appreciation and disordered eating among non-Hispanic Black, non-Hispanic white and other Hispanic heritage respondents.
- Results of the final analytic sample will be used to inform a promotora and CHW training to reduce weight stigma among multiethnic communities in TX.

For more information please contact:

Dr. Lauren Butler, RDN **Assistant Professor** Nutrition & Foods Program Email: laurenbutler@txstate.edu Ph: (512) 408 7265

- References
- 1. Soulliard ZA, Brode C, Tabone LE, Abunnaja S, Szoka N, Cox S. The role of body appreciation, weight bias internalization, and disordered eating behaviors among presurgical bariatric patients. Surg Obes Relat Dis. May 2021;17(5):1000-1007. doi:10.1016/j.soard.2020.12.012
- 2. Himmelstein MS, Puhl RM, Quinn DM. Intersectionality: An Understudied Framework for Addressing Weight Stigma. Am J Prev Med. Oct 2017;53(4):421-431. doi:10.1016/j.amepre.2017.04.003