

# The Effect of Attendance on Anthropometric Outcomes of Children Completing Vidas Activas y Familias Saludables (VALÉ), a Pediatric Weight Management Program for Latino Families

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## BACKGROUND

- Latinos have high rates of pediatric obesity compared to other ethnic minorities<sup>1</sup>.
- Treatment efforts should include a multidisciplinary and culturally-adapted approach<sup>2</sup>.
- Program attendance has shown to influence health outcomes *yet, has not been explored with pediatric programs targeting low-income and ethnic minority populations*<sup>3</sup>.

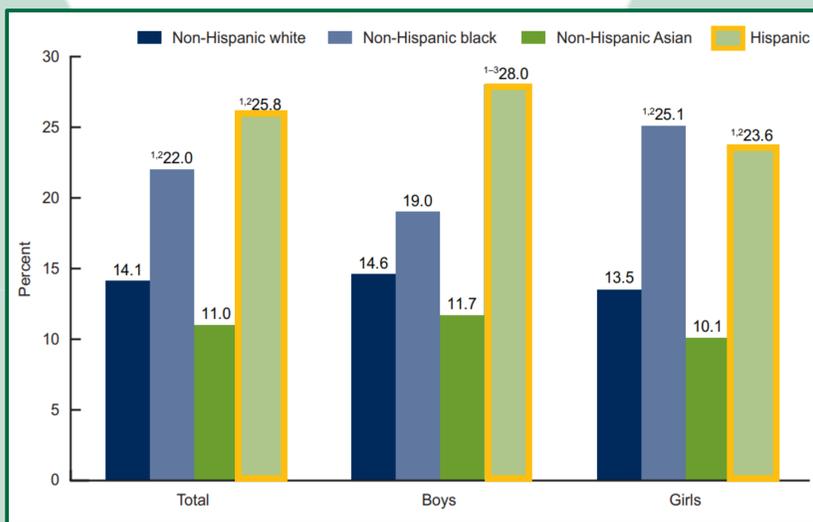


Figure 1. Prevalence of obesity among youth aged 2–19 years, by sex and race and Hispanic origin: United States, 2015–2016<sup>4</sup>

## OBJECTIVE

- To evaluate whether attendance improves anthropometric outcomes among Latino children who are overweight/obese and participating in a family-based pediatric weight management program.



## STUDY DESIGN, SETTINGS, PARTICIPANTS

- Latino children ages 5-9, BMI-for-age ≥85th percentile (overweight/obese), participated in a multidisciplinary and culturally-adapted group-based program focusing on diet, exercise, behavior modification.

- Families met ~90 minutes/week for 10-weeks.

## MEASURABLE OUTCOME/ANALYSIS

- Attendance at each session was recorded.
- Anthropometric measurements including waist circumference, body fat (using bioelectrical impedance), height and weight for BMI-for-age Z scores (compared to CDC growth charts) were measured pre- and immediately-post intervention.
- Attendance and anthropometric outcomes were analyzed via SPSS using Spearman correlation and Kruskal Wallis H test for non-normally distributed data.

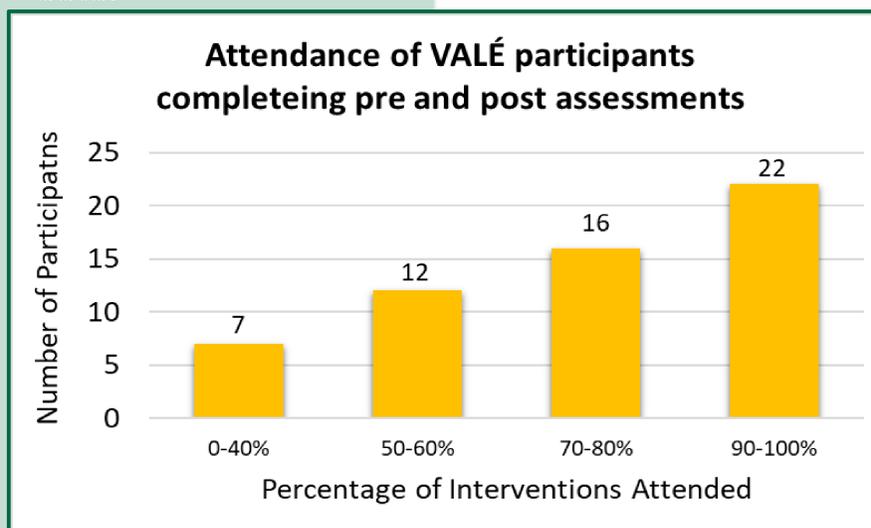


Figure 2. Attendance of the 57 VALÉ participants who completed pre and post assessment.

## ACKNOWLEDGEMENTS

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## RESULTS

Variables	Attendance Median (95% CI)				P value <sup>b</sup>
	0-40% of sessions (n=7)	50-60% of sessions (n=12)	70-80% of sessions (n=16)	90-100% of sessions (n=22)	
Δ BMI <sup>a</sup>	0.02(-1.43, 1.18)	0.11(-0.66, 0.54)	0.02(-0.93, 0.54)	-0.35(-0.70, 0.16)	0.637
Δ BMI Z score (CDC growth charts) <sup>a</sup>	-0.05(-0.30, 0.12)	-0.04(-0.12, 0.01)	-0.05(-0.23, 0.02)	-0.08(-0.23, 0.02)	0.833
Δ Waist Circumference (cm) <sup>a</sup>	-0.40(-4.05, 3.34)	0.20(-8.49, 20.27)	0.625(-0.45, 2.27)	-1.25(-2.35, 0.43)	0.249
Δ % Body Fat <sup>a</sup>	0.00(-2.23, 2.4)	-2.2(-2.76, 0.56)	-1.20(-2.13, -0.52)	-0.90(-2.19, -0.25)	0.469

<sup>a</sup> Δ = change calculated from immediately post intervention-pre-interventions.

<sup>b</sup> Kruskal Wallis H test analyzed pre and post intervention outcomes

Table 1. Results from Kruskal Wallis H test for non-normally distributed data.

- Median change in BMI, BMI Z, and waist circumference improved with higher attendance, however, no significant associations were observed between percent of sessions attended and anthropometric outcomes.

## CONCLUSIONS

- Higher program attendance did not significantly affect anthropometric outcomes of children participating in a pediatric weight management program targeting low-income Latino families.
- Limited sample size may have affected these results.
- Future work should look into larger sample size and tracking the relationship of attendance and adherence of interventions in the home.

## REFERENCES:

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