

The Association of Weight Bias with Health At Every Size® Alignment and Weight Bias Training in a Nationally Representative Sample of Registered Dietitians

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Background:

- Health At Every Size (HAES®) purports to promote health and diet quality without a focus on weight.¹
- The use of HAES® is becoming increasingly popular and acceptable among Registered Dietitians (RDs).²
- Interestingly, a well-documented source of weight stigma includes practicing RDs.³
- The HAES® approach may not add to the stigma against people of size and could reduce the discrimination experienced by many individuals with higher body weights.⁴
- It remains unclear if adopting weight-inclusive approaches, like HAES® or receiving weight bias training, are correlated with weight bias or impact the way RDs practice.

Objectives:

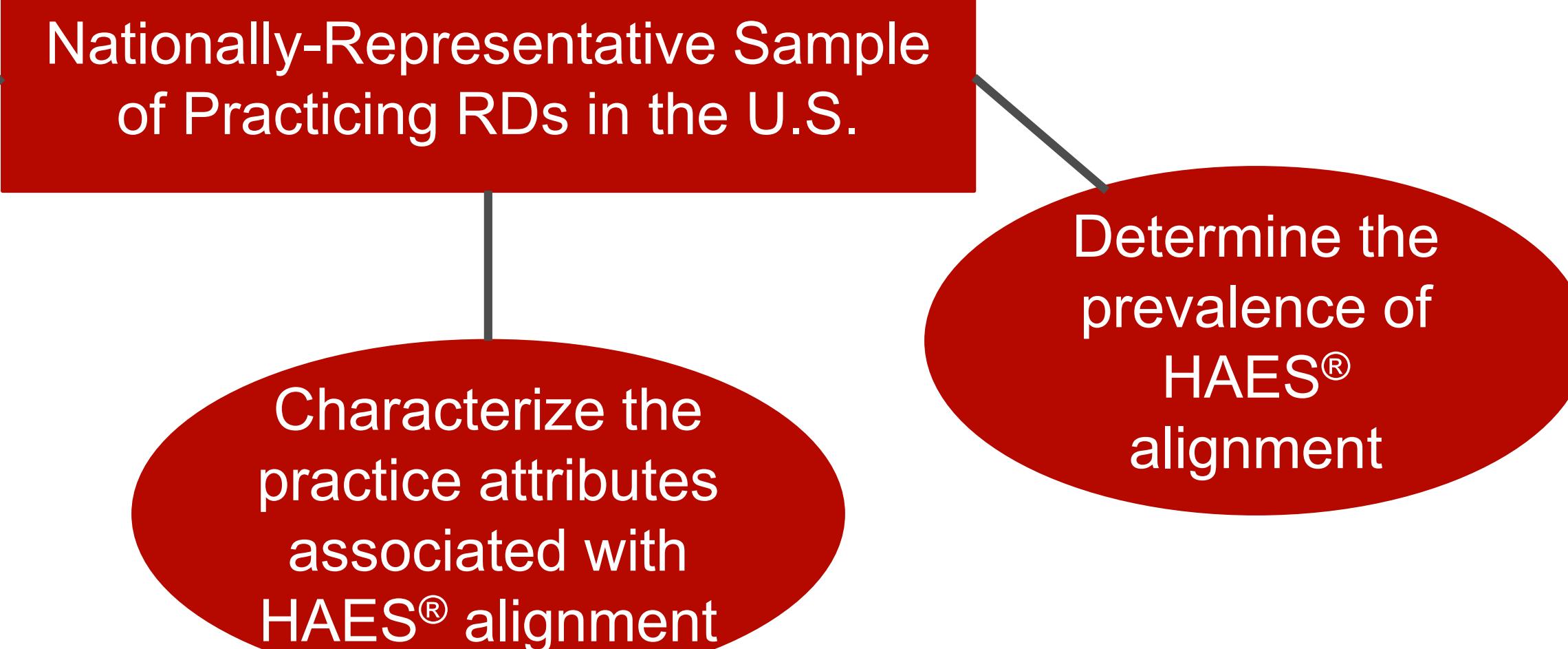


Figure 1. Study aims.

Methods:

- Secondary analysis of baseline data of 246 participants collected between June 5th to August 8th, 2019, from a randomized trial that planned to reduce weight bias among practicing RDs (Clinical Trials Registry NCT04177784), was completed.
- A nationally representative sample of 300 RDs participated from an email blast to a random sample of 5,000 in the Commission on Dietetic Registration (CDR) Database.
- Weight bias (explicit weight bias [e.g., Anti-Fat Attitude Test(AFAT)]; implicit weight bias [e.g., Implicit Association Test]), self-reported HAES® alignment, past weight bias training, sociodemographic and practice area data were collected.

Analysis:

- Categorical data were compared between groups using Pearson chi-squared test. Normality was assessed using Shapiro-Wilks test for continuous data and parametric (One-way ANOVA) or non-parametric test (Kruskal Wallis test) were used accordingly.
- A two-way ANOVA was conducted to examine the effects of HAES® and weight bias training on AFAT subscores.
- P value of <0.05 was considered statistically significant.

Results:

Table 1. Study participant characteristics, weight bias training and weight bias scores.

Variable	Mean (SD) or %
Age (Years)	38.95 (12.68)
Sex (%), Females	97.5
Ethnicity (%)	
White	83.7
Black or African American	0.8
Hispanic or Latino	4.9
Asian	4.9
American Indian/Alaskan Native	0.8
Multiracial	1.2
Not Hispanic or Latino	1.6
Other or Unknown	2.0
BMI (kg/m ²)	23.47 (3.66)
Alignment with HAES® (%)	
Yes	34.1
No	13.0
Somewhat	34.6
I Do Not Know	18.3
Experience As An RD (Years)	12.68 (11.60)
Weight Management Practice, Yes (%)	22.9%
Weight Bias Training, Yes (%)	37.1%
Implicit Weight Bias - Implicit Association Test (IAT) Automatic Preference For Thin People Over Fat People	
Strong	24.0%
Moderate	35.0%
Slight	24.0%
No Preference	16.9%
Explicit Weight Bias – AFAT Subscores	
AFAT-Blame	2.02 (0.56)
AFAT-Physical score	2.07 (0.56)
AFAT-Social score	1.40 (0.37)

SD = standard deviation; % = percentage

- Self-reported HAES® alignment was not significantly associated with RD demographics, practice attributes, weight bias training or IAT results ($p>0.05$).
- AFAT-Blame and AFAT-Physical subscores were significantly different between self-reported HAES® alignment categories($p<0.05$) as shown in Table 2.

Table 2. Associations between self-reported HAES® alignment and explicit weight bias.

Variable	Aligned with HAES®	Not aligned with HAES®	Somewhat aligned with HAES®	Do not know about HAES®	P value
AFAT-Blame	1.80 (0.51) ^a	2.27 (0.62) ^b	2.11 (0.53) ^b	2.10 (0.58) ^b	0.001\$
AFAT-Physical	1.90 (0.80) ^a	2.20 (0.98) ^{ab}	2.20 (0.85) ^b	2.20 (0.60) ^b	0.003#
AFAT-Social	1.33 (0.36)	1.47 (0.76)	1.33 (0.47)	1.33 (0.54)	0.056#

\$Median and interquartile range (IQR) are shown and Kruskal-Wallis test was performed. Post-hoc analysis was performed using Bonferroni correction for multiple tests when the main effect was significant ($p<0.05$).

#Mean (standard deviation) are shown and One way ANOVA test was performed. Post-hoc analysis was performed using Tukey's test. Different letters indicate statistically significant difference between the groups ($p<0.05$).

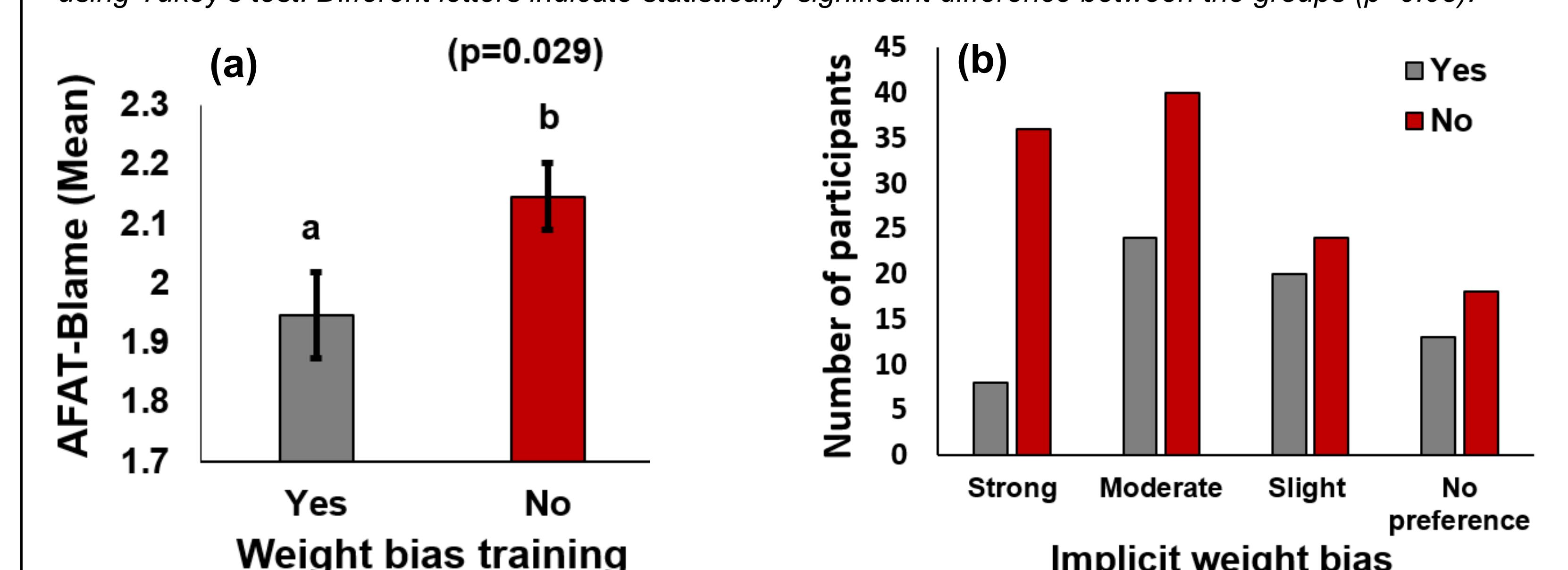


Figure 2. (a) Association between weight bias training and AFAT-Blame after adjustment for self-reported HAES® alignment and, (b) Association between weight bias training and implicit weight bias.

(a) AFAT-Blame score was significantly lower in RDs with weight bias training than those without, when adjusted for HAES® alignment ($p=0.03$). No interaction effect between HAES® alignment and weight bias training for AFAT-Blame score ($p=0.41$). Marginal means and standard error shown.

(b) Implicit weight bias was significantly different according to weight bias training (Pearson Chi-square [$p=0.04$]).

- Mean AFAT-Physical and AFAT-Social subscores were not significantly different according to weight bias training, when adjusted for HAES® alignment ($p>0.05$).

Conclusions:

- Over one third of RDs surveyed reported being aligned with HAES®.
- Self-reported HAES® alignment is associated with lower weight blame.
- Weight bias training is associated with lower weight blame and associated with implicit weight bias.
- Future research is warranted to confirm our findings, which have important implications for the care of individuals with higher weight.

Disclosures:

- This study was funded by startup funds from Texas Tech University.

References:

1. HAES® Principles. <https://www.sizediversityandhealth.org/content.asp?id=152>. Accessed September 21, 2020.
2. Willer F, Hannan-Jones M, Strohl E. Australian dietitians' beliefs and attitudes towards weight loss counselling and health at every size counselling for larger-bodied clients. *Nutrition & Dietetics*. 2019;76(4):407-413.
3. Jung FUCE, Luck-Sikorski C, Wiemers N, Riedel-Heller SG. Dietitians and nutritionists: stigma in the context of obesity. A systematic review. *PLoS One*. 2015;10(e140276-e0140276).
4. Health At Every Size® Fact Sheet. <https://www.sizediversityandhealth.org/content.asp?id=161>. Accessed September 21, 2020.