JOURNAL OF SCHOOL HEALTH

American SCHOOL HEALTH Association
Connecting Health & Learning
www.ashaweb.org

RESEARCH ARTICLE

Reducing Educators' Weight Bias: The Role of School-Based Anti-Bullying Policies

LEAH M. LESSARD, PhD[a] REBECCA M. PUHL, PhD[a,b]

ABSTRACT

BACKGROUND: Educators' negative weight biases toward students with high body weight have been well-documented. The present investigation examined whether inclusion of body weight in school anti-bullying policies is associated with lower levels of weight bias among educators.

METHODS: Data on explicit weight bias was collected from a sample of secondary school teachers and principals in the United States (N = 246) and examined in relation to the presence of weight-related language in each participant's school district anti-bullying policy.

RESULTS: The results indicate that, although educators on average make negative judgments about individuals with high weight, these biases were lower for educators whose school district anti-bullying policy included enumeration of body weight. Notably, this association did not hold when policies enumerated ''appearance.''

CONCLUSIONS: The study findings suggest that the explicit mention of ''weight'' in school anti-bullying policies may represent a feasible mechanism to reduce explicit weight bias among U.S. secondary school educators.

Keywords: weight stigma; educators; anti-bullying; educational policy; overweight.

Citation: Lessard LM, Puhl RM. Reducing educators' weight bias: the role of school-based anti-bullying policies. J Sch Health. 2021; DOI: 10.1111/josh.13068

Received on June 3, 2020
Accepted on March 22, 2021

In 2018, the National Education Association recognized the importance of confronting educator bias, including stereotypical beliefs and attitudes, to achieve equitable learning environments for all students.[1] While biases surrounding race/ethnicity, gender, sexual orientation, disability, and religion were all clearly articulated as important areas to address, bias related to body weight was noticeably absent from the report. Although such an omission parallels the general lack of attention to body weight in teacher education trainings, this absence is significant given well-documented negative educator weight biases toward students with high body weight,[2-5] including readily endorsed stereotypical assumptions that students with high weight are lazy, unsuccessful, and unintelligent.[6] Moreover, just as educator bias contributes to achievement gaps among other stigmatized identities (eg, racial/ethnic minorities),[7] systematic weight bias by educators likely also plays a fundamental role in weight-related gaps in educational achievement and attainment.[8,9] Surprisingly, however, evidence of educator weight bias has generated little response to remedy this problem. Thus, with rising rates of overweight and obesity among children and adolescents in the United States,[10] it is now more critical than ever to understand how schools can reduce negative weight-related attitudes among educators.

Despite largely negative views toward individuals with high weight, many educators recognize the severity of weight stigma within the school setting. In fact, a national sample of teachers rated weight-based bullying, which can target students across a range of non-normative body sizes, as the most problematic form of bullying at school.[11] In addition, educators seem to be on board and supportive of strategies to modify existing school-based anti-bullying policies in order to strengthen protections for youth vulnerable to

[a]Postdoctoral Fellow, (leah.lessard@uconn.edu), Rudd Center for Food Policy & Obesity, University of Connecticut, One Constitution Plaza, Suite 600, Hartford, CT 06103.

[b]Professor, (rebecca.puhl@uconn.edu), Department of Human Development and Family Sciences, Rudd Center for Food Policy & Obesity, University of Connecticut, One Constitution Plaza, Suite 600, Hartford, CT 06103.

Address correspondence to: Leah M. Lessard, Postdoctoral Fellow, (leah.lessard@uconn.edu), Rudd Center for Food Policy & Obesity, University of Connecticut, One Constitution Plaza, Suite 600, Hartford, CT 06103.

weight-based harassment and bullying. For example, Puhl et al.[12] found that over 90% of secondary school teachers and principals expressed support for initiatives to improve their school's anti-bullying policies to better protect students from being bullied about their weight. Despite such overwhelming support for weight-based anti-bullying policies, only just over a third (37%) of these educators reported that weight-related bullying was included in their school anti-bullying policies.[12] These results align with an overall lack of school-based anti-bullying policies that enumerate body weight as a distinguishing characteristic that heightens students' vulnerability to bullying at school; policies that enumerate characteristics like race/ethnicity, gender, disability, or sexual orientation are more common.[13]

While policy improvements are needed in light of the absence of body weight in school-based anti-bullying policies across the United States, it unknown whether enumerating weight in these policies may be an effective intervention strategy to reduce educator weight bias. Although no work, to our knowledge, has examined links between educator weight bias and school-based anti-bullying policies, weight-specific language present (or absent) in anti-bullying policies seems particularly important to examine in this context. For example, one study found that the specific enumeration of ''physical appearance'' (which included body weight among other characteristics) in state anti-bullying laws was unrelated to weight-based disparities in bullying.[14] The authors presumed these null findings reflected the lack of specificity with respect to weight in the policies.[14] In other words, to affect weight-related attitudes, it may be critical for anti-bullying policies to explicitly reference ''weight'' as a legitimate characteristic that places youth at risk for bullying.

The Current Study

The current study aimed to investigate whether weight enumeration in school anti-bullying policies is associated with educators' weight bias. Given increased teacher intervention during bias-based mistreatment in schools with policies that include clear protections for specific students,[15] in the present investigation, we hypothesized educators' weight bias to be lower in schools with, versus without, weight-enumerated policies. With the lack of attention to strategies to reduce educator weight bias, our study aims to shed light on the potential of weight enumeration in school anti-bullying policies as a readily adoptable mechanism of bias-reduction.

METHODS

Participants

Participants were recruited between August and October of 2014 through Market Data Retrieval (MDR)—a leading provider of marketing information and services in United States education markets. The current study was advertised online to 15,000 secondary school teachers and principals in the MDR database. Consistent with the typical MDR response rate, the click rate (ie, opening the recruitment email and clicking on the survey link) was 2.2%. The final analytic sample of middle and high school educators (ie, teachers and principals; N = 246) excluded those who did not provide consent.

Procedure

The study was approved by the relevant Institutional Review Board. All participants completed an identical, online, anonymous survey hosted by Qualtrics.com, which took approximately 10-15 minutes to complete. The study was described to participants as an opinion survey for educators about potential strategies to address bullying experienced by students in schools. Recruitment invitations were emailed to the educator participant pool once in August and a second time in September. One week after each recruitment deployment, those who opened the email received follow-up invitations to participate. All participants were required to be at least 18 years old, and could proceed to the survey only after providing consent. Participants who completed the survey were given the option to enter a raffle with a 1-in-10 chance of winning a $20 gift card to an online retailer.

Instrumentation

Demographic and personal characteristic information. Participants self-reported their sex, age, race/ethnicity, political affiliation, and household income. In addition, personal experiences of weight stigma were measured using the sum of three binary response (yes/no) items which asked participants if they had ever been bullied, treated unfairly, or discriminated against because of their weight. These items were summed to create an experienced weight stigma scale that ranged from 0 (never experienced weight stigma) to 3 (experienced all three types).[16] Twenty-five percent of participants reported at least one instance of experienced weight stigma.

Explicit weight bias. Participants completed the 14-item Fat Phobia scale assessing endorsement of negative stereotypes about individuals who are ''fat or obese.''[17] The scale contains 14 pairs of antonyms (eg, ''lazy'' versus ''industrious,'' ''fast'' versus ''slow''), and participants indicated their views about ''fat and obese people'' by choosing one of five points along the spectrum between each word and its opposite, with higher composite scores indicating more negative attitudes ($\alpha = .92$).

Presence of weight-related language in school district anti-bullying policies. Data on school anti-bullying policies were obtained from school districts where participants were employed as educators at the time of the study. School district websites and student handbooks were analyzed for 205 school districts (41 districts included two participants). Policies were coded based on whether they contained an enumerated list of groups specifically covered by the policy (ie, whether the policy conveyed specific protections for individuals with characteristics that may motivate bullying behavior, such as race/ethnicity, gender, disability).[18] An indicator variable was created to specify whether the enumerated list in each policy included language about body weight[14]; policies had to specifically include the word ''weight'' in their list of protected class statuses. To assess the specificity of weight enumeration in anti-bullying policies, a second variable was also created to indicate whether the enumerated list included a broader ''appearance'' category, which could hypothetically include body weight even if it was not specifically referenced. Policies using any of the following terms were included in this broader category: ''appearance,'' ''physical appearance,'' or ''personal appearance''.

Analytic Strategy

Analyses were conducted in SPSS (version 27) and Mplus 8.0. First, descriptive information regarding the sample, school district anti-bullying policies and educator weight bias was considered. Second, to shed light on associations between school-based anti-bullying policies and educator weight bias, a linear regression model was built in a three-stage process. To start, we examined the relative contributions of sociodemographic (eg, sex, ethnicity, age) and relevant (eg, experienced weight stigma) covariates on educators' weight bias. Then, we tested whether anti-bullying policies that enumerated weight were significantly associated with educators' weight bias over and above the covariate effects. Finally, sensitivity analyses were conducted to test the specificity of the effects of weight enumeration in anti-bullying policies on educators' weight bias. Specifically, the main model was re-run to determine whether ''appearance'' enumeration contributed to lower educator weight bias, or whether such weight-related attitudes were related only to anti-bullying policies that specifically enumerated ''weight.''

RESULTS

Descriptive Information

Table 1 summarizes sample sociodemographic characteristics. Based on self-reported sex, about half (54%) of the sample was female, and ages ranged from 25 to 67 years. Aligning with the national racial/ethnic distribution of U.S. educators,[19] the majority of educators in our sample self-identified as white. Six percent of the educators (N = 15) worked in school districts with anti-bullying policies that specifically enumerated weight. Consistent with national reports,[15] enumeration of ''appearance'' broadly was found in 15% of the anti-bullying policies of our sample's school districts.

Table 1. **Sample Sociodemographic Characteristics**

Variable	N	%
Sex		
Female	115	54.0
Male	98	46.0
Race/ethnicity		
White	176	82.6
Latino	18	8.5
African American	14	6.6
Other*	5	2.3
Household income		
$25,000-$49,999	14	6.8
$50,000-$74,999	36	17.4
$75,000-$99,999	48	23.2
$100,000-$124,999	45	21.7
$125,000 or more	64	30.9
Political orientation		
Conservative	58	27.6
Moderate	87	41.4
Liberal	65	31.0

Percentages do not include missing data.
*Other refers to individuals who self-reported their race/ethnicity as Asian or Pacific Islander (N = 2), or a racial/ethnic group other than the four pan-ethnic groups (N = 3).

To examine agreement with negative stereotypes about persons with obesity, as assessed by the Fat Phobia Scale,[17] Table 2 reports the percentage of educators who endorsed negative attitudes toward people with high weight (ie, selecting greater than the midpoint (3) on the 5-point scale). Most notably, the majority of educators endorsed assumptions that ''fat or obese people'' are ''slow'' (54%) and ''insecure'' (52%), as well as ''having no endurance'' (52%) and ''low self-esteem'' (52%). In addition, about a third of the educators reported that ''fat or obese people'' have ''no will power'' (38%), are ''self-indulgent'' (32%) and ''unattractive'' (32%). Finally, a quarter of the sample rated ''fat or obese people'' as ''lazy'' (25%) and ''weak'' (26%).

Associations With Educator Weight Bias

Table 3 displays a summary of the models testing predictors of educator weight bias. Interpreting first the covariate effects shown in Model 1, males and females had similar levels of weight bias ($\beta = -0.06$, SE = .15, $p = .69$). Similarly, educators' weight bias did not vary as a function of ethnicity, or any covariate variables. Model 2 assessed the hypothesized effect of weight

Table 2. **Percentage of Educators Agreeing With Negative Adjectives on the Fat Phobia Scale**

Negative Adjective About ''Fat or Obese People'' as Measured by the Fat Phobia Scale	% Agreement
Lazy	25%
No will power	38%
Unattractive	32%
Poor self-control	41%
Slow	54%
Having no endurance	52%
Inactive	61%
Weak	26%
Self-indulgent	32%
Likes food	72%
Shapeless	24%
Overeats	65%
Insecure	52%
Low self-esteem	52%
Mean scale (SD)	3.39 (.67)
Cronbach's α	.92

Table 3. **Predictors of Educator Weight Bias**

	Weight Bias		
	Model 1	Model 2	Model 3
Variable	β (SE)	β (SE)	β (SE)
Covariates			
Sex			
Female	−0.06 (.15)	−0.10 (.14)	−0.06 (.15)
Ethnicity			
African American	−0.23 (.31)	−0.27 (.31)	−0.23 (.31)
Latino	0.45 (.26)	0.41 (.26)	0.45 (.26)
Other†	0.31 (.50)	0.28 (.50)	0.31 (.50)
Political orientation			
Conservative	0.01 (.17)	0.03 (.17)	0.01 (.17)
Liberal	0.11 (.17)	0.15 (.17)	0.11 (.17)
Age	−0.08 (.07)	−0.09 (.07)	−0.09 (.07)
Household income	0.03 (.07)	0.04 (.07)	0.03 (.07)
Experienced weight stigma	−0.06 (.07)	−0.06 (.07)	−0.06 (.07)
Predictors			
"Weight" enumeration		−0.66* (.31)	
"Appearance" enumeration			0.02 (.21)

*$p < .05$.
Sex reference group = male; ethnicity reference group = white; political orientation reference group = moderate.
†Other refers to individuals who self-reported their race/ethnicity as Asian or Pacific Islander, or a racial/ethnic group other than the four pan-ethnic groups.

enumeration in school policies on educators' weight bias. Even after accounting for sociodemographic characteristics and personal experiences of weight stigma, educators in school districts with anti-bullying policies that specifically enumerate weight showed reduced levels of weight bias compared to those whose school-based anti-bullying policies did not mention weight ($\beta = -0.66$, SE = .31, $p = .03$).

To test the specificity of the weight enumeration effect, we re-ran the models testing the degree to which the broader ''appearance'' enumeration category in anti-bullying policies contributes to weight bias. As shown in Model 3, levels of educator weight bias were not significantly different based on whether ''appearance'' was included in school district anti-bullying policies or not ($\beta = 0.02$, SE = .21, $p = .93$), suggesting that the added specificity of enumerating ''weight'' may play a unique role in lessening negative weight-related attitudes and beliefs among educators.

DISCUSSION

Despite increased efforts to reduce educators' racial,[20] gender,[21] and sexual orientation[22] biases, little to no research has considered mechanisms to disrupt pervasive weight biases held by educators. The current study begins to address this significant gap in the literature. In particular, this study linked data from a sample of U.S. educators to school district anti-bullying policies, examining associations between the presence of weight-related language in the policies—including the enumeration of body weight versus appearance—and educators' explicit weight bias.

Aligning with weight bias documented among community and general population samples,[23] our descriptive findings shed light on educators' largely negative views toward people with high weight, regardless of their sex, ethnicity, or any other sociodemographic characteristic. In particular, over a third of educators in our sample endorsed negative stereotypes that reinforce personal blame for high weight,[24] including agreement that individuals with obesity have ''no will power,'' ''poor self-control,'' and are ''self-indulgent.'' Such negative judgments can be directly detrimental to students with high weight by contributing to weight-based discriminatory grading in the classroom, and lack of intervention during experiences of weight-based victimization.[5] Moreover, given that teachers' affect toward their students can affect peer relations,[25] educators' weight bias is likely also to play a role in the frequent peer marginalization and mistreatment of youth with high weight.[26]

Extending past research on educator bias, our study is among the first to offer a potential point of intervention. Specifically, we found evidence of lower weight bias among educators in school districts with anti-bullying policies that enumerate weight. Although additional research is needed to investigate the underlying mechanisms, we presume that educators are more likely to recognize high weight as a legitimate and consequential stigma when enumerated in policies. In particular, it may be that weight enumeration increases educators' awareness to the severity of weight-based mistreatment. However, it remains unclear to what extent a reduction in weight bias impacts teachers' behaviors. Given evidence that enumeration of sexual orientation and

gender identity in anti-bullying policies promotes teacher intervention during instances of sexual and gender-based mistreatment,[15] it will be important to investigate whether teachers are more likely to intervene during weight-based bullying when weight is enumerated in school policies.

Limitations and Future Directions

This study has several limitations. First, although sample characteristics generally approximated the demographics of U.S. public school teachers,[19] the overall response rate was low, which may have biased our sample and findings. Second, these data are cross-sectional, and it is therefore not possible to establish causal relationships between anti-bullying policies and educator bias. We presume that weight enumeration heightened awareness to weight stigma in such a way to reduce educators' negative attitudes and stereotypes toward individuals with high weight; however, it is also possible that schools with inclusive weight climates are more likely to add specific protections for youth with high weight in their anti-bullying policies. Future studies using within-school pre/posttest designs to compare educator weight bias before and after the inclusion of weight enumeration in policies would help shed light on such alternative hypotheses.

In addition, these results are generalizable only to the educators and school districts that were included in this study. Future research is needed to replicate the current findings in more diverse samples and in all states so that the variability and diversity of enumeration in anti-bullying policies across the country can be included and assessed in relation to educator biases. Moreover, insofar as interactions among social identities (eg, race, gender) can contribute to differential victimization risk,[27] investigation of how weight enumeration affects educators' weight-related judgments of students across a range of gender identities and racial/ethnic groups represents a fruitful avenue for future research. Finally, our estimates of weight bias reflect educators' explicit attitudes and beliefs. Given the pervasiveness[28] and consequences[29] associated with implicit weight bias, it will be important for future studies to consider whether weight enumeration in anti-bullying policies also relates to educators' implicit weight-related attitudes.

IMPLICATIONS FOR SCHOOL HEALTH AND EQUITY

Schools have a responsibility to provide a safe, welcoming and bias-free environment for students,[1] including the freedom from negative weight-related judgments by educators. Thus, in light of our findings documenting prevalent negative views of people with high weight among educators, it is important that schools take a proactive approach to address and reduce educators' weight biases so that students of all body weights are afforded equal respect and opportunities to succeed at school. Consistent with growing support for school policies to address weight stigma,[30] the current results underscore weight-based anti-bullying policies as a promising intervention point to reduce educators' negative weight biases. Thus, school administrators should consider adding the specific enumeration of ''weight'' to their anti-bullying policies. This approach can be readily implemented across school districts and carries little financial burden; nevertheless, careful consideration should also be given to relevant existing legislation at the state and municipal levels to ensure effective implementation of the policy. It is also important to recognize that the inclusion of appearance-related terminology not specific to body weight in school policies may be insufficient to reduce educator weight bias.

To maximize the stigma-reduction benefits associated with weight enumeration, it may be useful for school policymakers to engage educators in the development and implementation of weight-related policies. Further, given that multicomponent interventions are most effective in reducing stigma,[31] schools should strive to reinforce educators' awareness to the pervasiveness of weight stigma and its harmful consequences across multiple contexts. Professional development within schools that addresses educators' weight bias may therefore serve as a critical supplement to weight-based anti-bullying policies. Moreover, equipping educators with strategies to support students with high body weight (eg, problem-focused coping) is likely to boost educators' confidence to intervene during instances of weight-based victimization. As teachers' behaviors can affect social relations among students,[32] efforts to improve weight-related attitudes among educators are likely to spill over to cultivate an overall more inclusive school weight climate.[33]

Human Subjects Approval Statement

This study was approved by the Yale University institutional review board (IRB Protocol #1407014338). All procedures involving human participants in this study were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. Informed consent was obtained from all individuals included in the study.

Conflict of Interest

The authors declare no conflict of interest.

REFERENCES

1. National Education Association. Confronting Implicit Bias through Exemplary Educator Preparation. 2018. Available at: www.nea.org/assets/docs/23840%20Confronting%20Implicit

%20Bias%20Thru%20Exemp%20Teacher%20Prep-v2.pdf. Accessed December 19, 2019.
2. Kenney EL, Gortmaker SL, Davison KK, Austin BS. The academic penalty for gaining weight: a longitudinal, change-in-change analysis of BMI and perceived academic ability in middle school students. *Int J Obes*. 2015;39(9):1408-1413. https://doi.org/10.1038/ijo.2015.88.
3. Lynagh M, Cliff K, Morgan PJ. Attitudes and beliefs of nonspecialist and specialist trainee health and physical education teachers toward obese children: evidence for ''anti-fat'' bias. *J Sch Health*. 2015;85(9):595-603. https://doi.org/10.1111/josh.12287.
4. MacCann C, Roberts RD. Just as smart but not as successful: obese students obtain lower school grades but equivalent test scores to nonobese students. *Int J Obes*. 2013;37(1):40-46. https://doi.org/10.1038/ijo.2012.47.
5. Peterson JL, Puhl RM, Luedicke J. An experimental assessment of physical educators' expectations and attitudes: the importance of student weight and gender. *J Sch Health*. 2012;82(9):432-440. https://doi.org/10.1111/j.1746-1561.2012.00719.x.
6. Puhl RM, Heuer CA. The stigma of obesity: a review and update. *Obesity*. 2009;17(5):941-964. https://doi.org/10.1038/oby.2008.636.
7. Gregory A, Hafen CA, Ruzek E, Mikami AY, Allen JP, Pianta RC. Closing the racial discipline gap in classrooms by changing teacher practice. *Sch Psychol Rev*. 2016;45(2):171-191. https://doi.org/10.17105/SPR45-2.171-191.
8. Crosnoe R, Muller C. Body mass index, academic achievement, and school context: examining the educational experiences of adolescents at risk of obesity. *J Health Soc Behav*. 2004;45(4):393-407. https://doi.org/10.1177/002214650404500403.
9. Crosnoe R. Gender, obesity, and education. *Sociol Educ*. 2007;80(3):241-260. https://doi.org/10.1177/003804070708000303.
10. Fryar CD, Carroll MD, Ogden CL. *Prevalence of Overweight, Obesity, and Severe Obesity among Children and Adolescents Aged 2-19 Years: United States, 1963-1965 through 2015-2016*. National Center for Health Statistics, US Centers for Disease Control and Prevention: Atlanta, GA; 2018.
11. Bradshaw CP, Waasdorp TE, O'Brennan LM, Gulemetova M. Teachers' and education support professionals' perspectives on bullying and prevention: findings from a National Education Association study. *Sch Psychol Rev*. 2013;42(3):280-297.
12. Puhl RM, Neumark-Sztainer D, Austin SB, Suh Y, Wakefield DB. Policy actions to address weight-based bullying and eating disorders in schools: views of teachers and school administrators. *J Sch Health*. 2016;86(7):507-515. https://doi.org/10.1111/josh.12401.
13. Kull RM, Kosciw JG, Greytak EA. *From Statehouse to Schoolhouse: Anti-Bullying Policy Efforts in U.S. States and School Districts*. New York, NY: Gay, Lesbian & Straight Education Network; 2015.
14. Hatzenbuehler ML, Flores JE, Cavanaugh JE, Onwuachi-Willig A, Ramirez MR. Anti-bullying policies and disparities in bullying: a state-level analysis. *Am J Prev Med*. 2017;53(2):184-191. https://doi.org/10.1016/j.amepre.2017.02.004.
15. Hall W. The effectiveness of policy interventions for school bullying: a systematic review. *J Soc Soc Work Res*. 2017;8(1):45-69. https://doi.org/10.1086/690565.
16. Puhl RM, Quinn DM, Weisz BM, Suh YJ. The role of stigma in weight loss maintenance among U.S. adults. *Ann Behav Med*. 2017;51(5):754-763. https://doi.org/10.1007/s12160-017-9898-9.
17. Bacon JG, Scheltema KE, Robinson BE. Fat phobia scale revisited: the short form. *Int J Obes*. 2001;25(2):252-257. https://doi.org/10.1038/sj.ijo.0801537.
18. Stuart-Cassel V, Bell A, Springer JF. *Analysis of State Bullying Laws and Policies*. Washington, DC: US Department of Education; 2011 Available at: www.eric.ed.gov/?id=ED527524. Accessed December 19, 2019.
19. U.S. Department of Education. *Public School Teacher Data File, 2015-1016*. Washington, DC: National Center for Education Statistics, National Teacher and Principal Survey; 2017.
20. Kahn KB, Goff PA, Glaser J. Research and training to mitigate the effects of implicit stereotypes and masculinity threat on authority figures' interactions with adolescents and non-Whites. In: Skiba RJ, Mediratta K, Rausch MK, eds. *Inequality in School Discipline: Research and Practice to Reduce Disparities*. New York, NY: Palgrave Macmillan; 2016:189-205. https://doi.org/10.1057/978-1-137-51257-4_11.
21. Jackson SM, Hillard AL, Schneider TR. Using implicit bias training to improve attitudes toward women in STEM. *Soc Psychol Educ*. 2014;17(3):419-438. https://doi.org/10.1007/s11218-014-9259-5.
22. Payne EC, Smith M. The reduction of stigma in schools: a new professional development model for empowering educators to support LGBTQ students. *J LGBT Youth*. 2011;8(2):174-200. https://doi.org/10.1080/19361653.2011.563183.
23. Puhl RM, Latner JD, O'Brien K, Luedicke J, Danielsdottir S, Forhan M. A multinational examination of weight bias: predictors of anti-fat attitudes across four countries. *Int J Obes*. 2015;39(7):1166-1173. https://doi.org/10.1038/ijo.2015.32.
24. Crocker J, Cornwell B, Major B. The stigma of overweight: affective consequences of attributional ambiguity. *J Pers Soc Psychol*. 1993;64(1):60-70. https://doi.org/10.1037/0022-3514.64.1.60.
25. Sette S, Gasser L, Grütter J. Links between teachers' liking of students, peer inclusion, and students' academic achievement: a two-wave longitudinal study. *J Youth Adolesc*. 2020;49(3):747-756. https://doi.org/10.1007/s10964-019-01048-5.
26. Puhl RM, Luedicke J, Heuer C. Weight-based victimization toward overweight adolescents: observations and reactions of peers. *J Sch Health*. 2011;81(11):696-703. https://doi.org/10.1111/j.1746-1561.2011.00646.x.
27. Kahle L, Peguero AA. Bodies and bullying: the interaction of gender, race, ethnicity, weight, and inequality with school victimization. *Vict Offenders*. 2017;12(2):323-345. https://doi.org/10.1080/15564886.2015.1117551.
28. Phelan SM, Dovidio JF, Puhl RM, et al. Implicit and explicit weight bias in a national sample of 4,732 medical students: the medical student CHANGES study. *Obesity*. 2014;22(4):1201-1208. https://doi.org/10.1002/oby.20687.
29. Watts K, Cranney J. The nature and implications of implicit weight bias. *Curr Psychiatr Rev*. 2009;5(2):110-126. https://doi.org/10.2174/157340009788167338.
30. Puhl RM, Suh Y, Li X. Improving anti-bullying laws and policies to protect youth from weight-based victimization: parental support for action. *Pediatr Obes*. 2017;12(2):e14-e19. https://doi.org/10.1111/ijpo.12129.
31. Earnshaw VA, Reisner SL, Menino DD, et al. Stigma-based bullying interventions: a systematic review. *Dev Rev*. 2018;48:178-200. https://doi.org/10.1016/j.dr.2018.02.001.
32. Juvonen J, Lessard LM, Rastogi R, Schacter HL, Smith DS. Promoting social inclusion in educational settings: challenges and opportunities. *Educ Psychol*. 2019;54(4):250-270. https://doi.org/10.1080/00461520.2019.1655645.
33. Lessard LM, Juvonen J. Weight stigma in the school setting: the role of inclusive weight climate. *J Sch Health*. 2020;90(7):507-510. https://doi.org/10.1111/josh.12898.