

Microaggressions, Obesity & African American Women's Health

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AABC Birth Institute Online

October 3, 2020



Racial Disparities in Perinatal Outcomes and Obesity

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- Despite advances in care, poor perinatal outcomes persist for African American (AA) women and remain incompletely understood.
- Obesity contributes to poor perinatal outcomes.
- 78% of African American women are overweight or obese, a higher percentage than other groups.
- Chronic stress contributes to obesity through dysregulation of the HPA axis resulting in higher cortisol
 - Increased abdominal fat distribution
 - Up-regulated appetite for highly palatable foods

Racial Discrimination as a Chronic Stressor

Racial Discrimination (RD) disproportionately affects Black Americans and is frequently experienced.

There is growing evidence of negative effects of RD on mental and physical health outcomes and health behaviors.

However, **relationships are inconsistent.**

- Not everyone with high RD exposure reports poor outcomes.
 - Relationships are not always linear.
 - Reporting RD is sometimes paradoxically associated with better health outcomes.

Forms of Interpersonal Discrimination

- **Overt:** obvious. N-word or other slurs, denial of service with explicit intent, harassment.
- **Microaggressions:** subtle, ambiguous, often unintentional on the part of the perpetrator.
- **Vicarious:** RD directed at other members of one's racial group. For this study: close contacts, not media.

Defining Microaggressions



Coined by Derald Wing Sue, based on prior work by Solorzano (2000) & Pierce (1970). Goal was to get a better descriptive handle on how most modern interpersonal racial discrimination works.



Brief interactions that **intentionally or unintentionally** communicate negative or exclusionary messages to targeted individuals or groups.



Originally conceptualized as a form of modern *racial* discrimination, but microaggressions can occur along any line of social difference, and may be additive based on multiple identities, e.g. Black/ woman/ overweight/ gay.



Net effect of microaggressions is to “other” members of those groups & further social exclusion by members of traditionally dominant groups.

Racial Identity

Racial identity: beliefs, attitudes about race, and enacting cultural behaviors linked with race. May be explicit (conscious) or implicit (unconscious/inaccessible).

Racial identity may account for inconsistent findings in the RD and health literature and have not been sufficiently explored.

Racial identity may **moderate** relationships between RD and health outcomes (levels of racial identity may change nature or direction of the relationship)



STUDY PURPOSE

To investigate:

1. whether three manifestations of racial discrimination (RD) (lifetime overt, microaggressions and vicarious) are associated with obesity in young African American (AA) women; and
2. whether racial identity attitudes moderate these relationships.

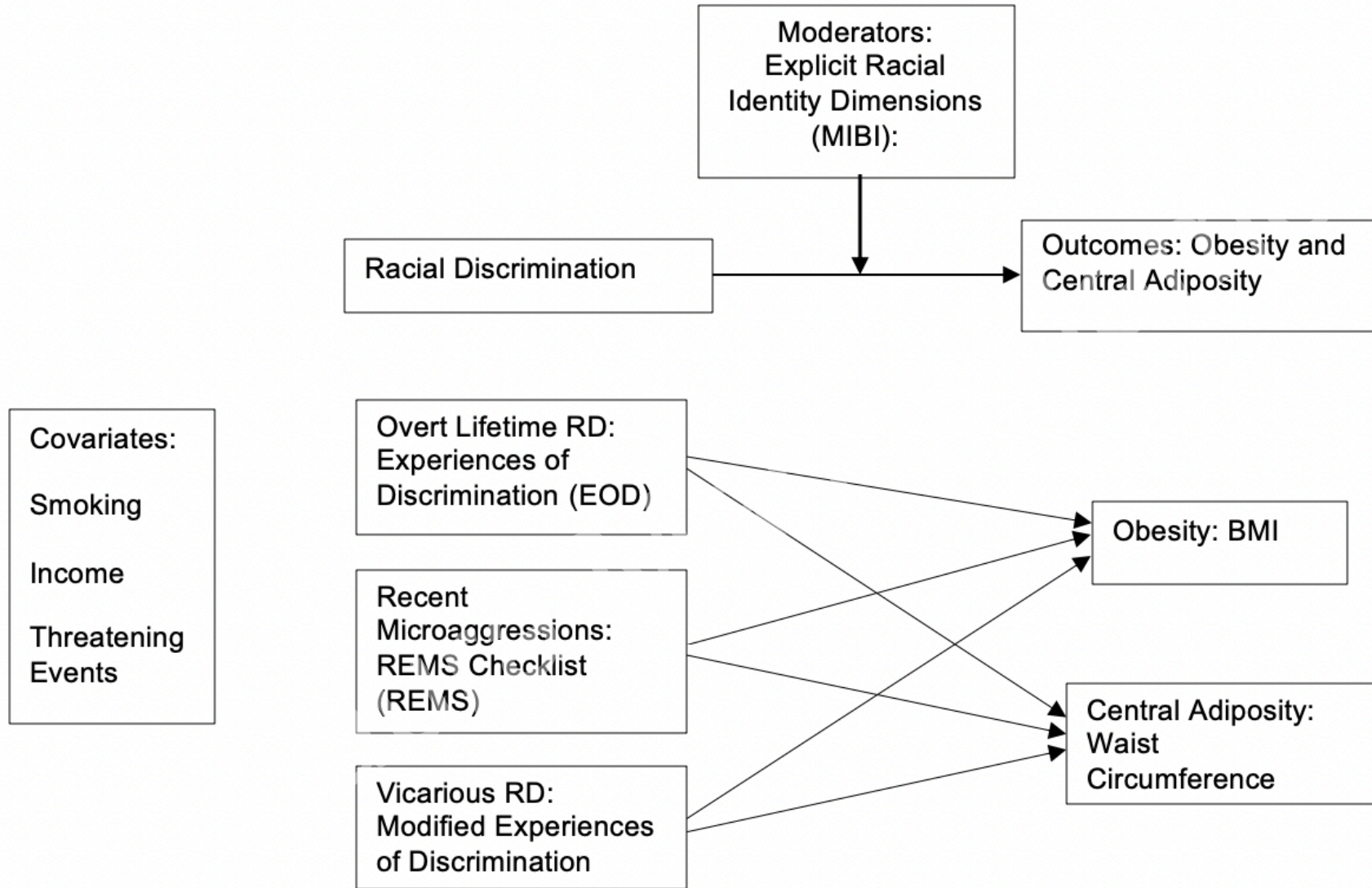
Sample & Data Collection

- 136 African American college women, aged 18-25
- Volunteer sample
- Diverse in SES, parental education and parental job titles
- Midwestern university (large)
- Data collection late 2015 - early 2016



Variables & Measurement

- Overt RD, microaggressions, and vicarious RD and obesity (BMI and waist circumference)
- **REMS-Checklist** for microaggressions
- **Experiences of Discrimination (EOD)** scale for overt RD
- Modified EOD for vicarious RD
- Racial identity dimensions tested as moderators
- Obesity measured with height/weight and waist circumference (no self-report)
- Waist Circumference (WC) = metabolically important, related to chronic stress levels and HPA axis functioning.



Note: REMS = Racial and Ethnic Microaggressions Scale

RESULTS:

High levels
of RD
reported in
this sample

OVERT

Mean represents 8 lifetime incidents of Overt RD

MICRO-
AGGRESSIONS

Mean represents 17 different microaggressions over the past 6 months

VICARIOUS

Mean represents 1.5 close contacts who experienced RD (friends, mothers, siblings most often reported)

Moderators: Racial Identity Dimensions (Sellers' MIBI)

Private Regard: how positively and proud does the participant feel about BEING Black?

HIGH in this sample

Public Regard: how does the participant believe members of other groups feel about Black people and their accomplishments / contributions to society?

LOW in this sample

Centrality: how important is being Black to personal identity, and how important is feeling connected to other Black people?

MODERATE in this sample

Correlations

Means, Ranges, Standard Deviations and Correlations for Major Study Variables

Variable (construct)	Mean	Range	SD	1	2	3	4	5	6
1. EOD (lifetime)	9.40	0 – 35	7.06	-					
2. REMS-Checklist (microaggressions)	.38	0 – 0.84	.20	.67**	-				
3. Vicarious RD	1.96	0 – 7.8	1.82	.44**	.43**	-			
4. Private regard	6.35	3.00 – 7.00	.82	-.10	-.09	-.14	-		
5. Public regard	2.99	1.33 – 7.00	1.03	-.26**	-.31**	-.27**	.29**	-	
6. Centrality	4.92	1.63 – 7.00	1.09	.12	.16	.04	.39**	-.06	-
7. BMI (kg/m ²)	27.2	16.6 – 49.6	6.84	-.04	.17*	-.06	-.30**	-.09	-.04
8. Waist circumference (in cm)	82.3	61.5 – 142.75	15.0	-.04	.15	-.05	-.27**	-.11	-.09

*p < .05; ** p < .01

Regression of Obesity Measures on Racial Discrimination Variables

	BMI (N=136)			Waist Circumference (N=136)		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β
Income (Subsidized Lunch)	.43	1.20	.03	1.00	2.62	.03
Threatening events (LTE-Q)	.24	.21	.10	.51	.46	.10
Step 1 Adjusted r^2		-.003			-.003	
Income (Subsidized Lunch)	.05	1.18	.00	.17	2.63	.01
Threatening events (LTE-Q)	.44	.22	.18*	.91	.49	.17
Overt RD (EOD)	-.30	.12	-.31*	-.60	.26	-.28*
Microaggressions (REMS)	14.63	4.01	.42**	27.69	8.91	.36**
Vicarious RD (Modified EOD)	-.56	.36	-.15	-.94	.80	-.12
Step 2 Adjusted r^2		.077**			.051*	

* $p < .05$; ** $p < .01$

Main effects

Effects of Private Regard on the Regression of Obesity Measures on Racial Discrimination

	BMI (N=136)			Waist Circumference (N=136)		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β
Income (Subsidized Lunch)	.43	1.20	.03	1.001	2.62	.03
Threatening events (LTE-Q)	.24	.21	.10	.51	.46	.10
Step 1 Adjusted r^2	-.003			-.003		
Income (Subsidized Lunch)	-.46	1.16	-.03	-1.16	2.54	-.04
Threatening events (LTE-Q)	.39	.21	.16	.76	.47	.14
Overt RD (EOD)	-.30	.12	-.31**	-.61	.25	-.29**
Microaggressions (REMS)	14.30	3.89	.41**	26.83	8.53	.35**
Vicarious RD (modified EOD)	-.64	.35	-.17	-1.14	.76	-.14
Private Regard	-2.09	.68	-.25**	-5.41	1.50	-.30**
Step 2 Adjusted r^2	.133**			.131**		
Income	-.56	1.18	-.04	-1.25	2.58	-.04
Threatening events	.37	.22	.15	.70	.49	.13
Overt RD	-.30	.12	-.31*	-.62	.26	-.29*
Microaggressions	14.28	3.92	.41**	26.93	8.59	.35**
Vicarious RD	-.64	.35	-.17	-1.15	.77	.14
Private Regard	-2.13	.71	-.26**	-5.33	1.44	-.29**
Overt RD x Private Regard	.06	.13	.08	.04	.28	.02
Microaggressions x Private Regard	-5.38	5.26	-.15	-11.43	11.52	-.14
Vicarious RD x Private Regard	.18	.49	.05	.55	1.08	.07
Step 3 Adjusted r^2	.120**			.120**		

Testing
Moderators:
PRIVATE
Regard

Effects of Public Regard on the Regression of Obesity Measures on Racial Discrimination



	BMI (N=136)			Waist Circumference (N =128) ^a		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β
Income (Subsidized Lunch)	.43.	1.20	.03	-.60	2.25	-.02
Threatening events (LTE-Q)	.24	.21	.10	.58	.40	.13
Step 1 Adjusted r^2		-.003			.001	
Income (Subsidized Lunch)	-.01.	1.19	.00	-.85	2.27	-.03
Threatening events (LTE-Q)	.45	.22	.18*	.87	.42	.20*
Overt RD (EOD)	-.30	.12	-.31*	-.44	.23	-.23
Microaggressions (REMS)	14.06	4.07	.40**	21.59	7.93	.33**
Vicarious RD (modified EOD)	-.60	.36	-.16	-.90	.73	-.12
Public Regard	-.52	.58	-.08	-.71	1.23	-.05
Step 2 Adjusted r^2		.076*			.042	
Income	.04	1.21	.00	-.16	2.27	-.01
Threatening events	.44	.22	.18*	.89	.41	.20*
Overt RD	-.28	.12	-.29*	-.36	.23	-.19
Microaggressions	14.14	4.12	.41**	20.05	7.77	.31*
Vicarious RD	-.66	.38	-.18	-.95	.73	-.13
Public Regard	-.38	.59	-.06	-.91	1.22	-.07
Overt RD x Public Regard	.11	.12	.13	.52	.25	.27*
Microaggressions x Public Regard	-6.37	4.07	-.22	-23.64	8.47	-.36**
Vicarious RD x Public Regard	.02	.37	.01	.74	.89	.10
Step 3 Adjusted r^2		.073*			.085*	

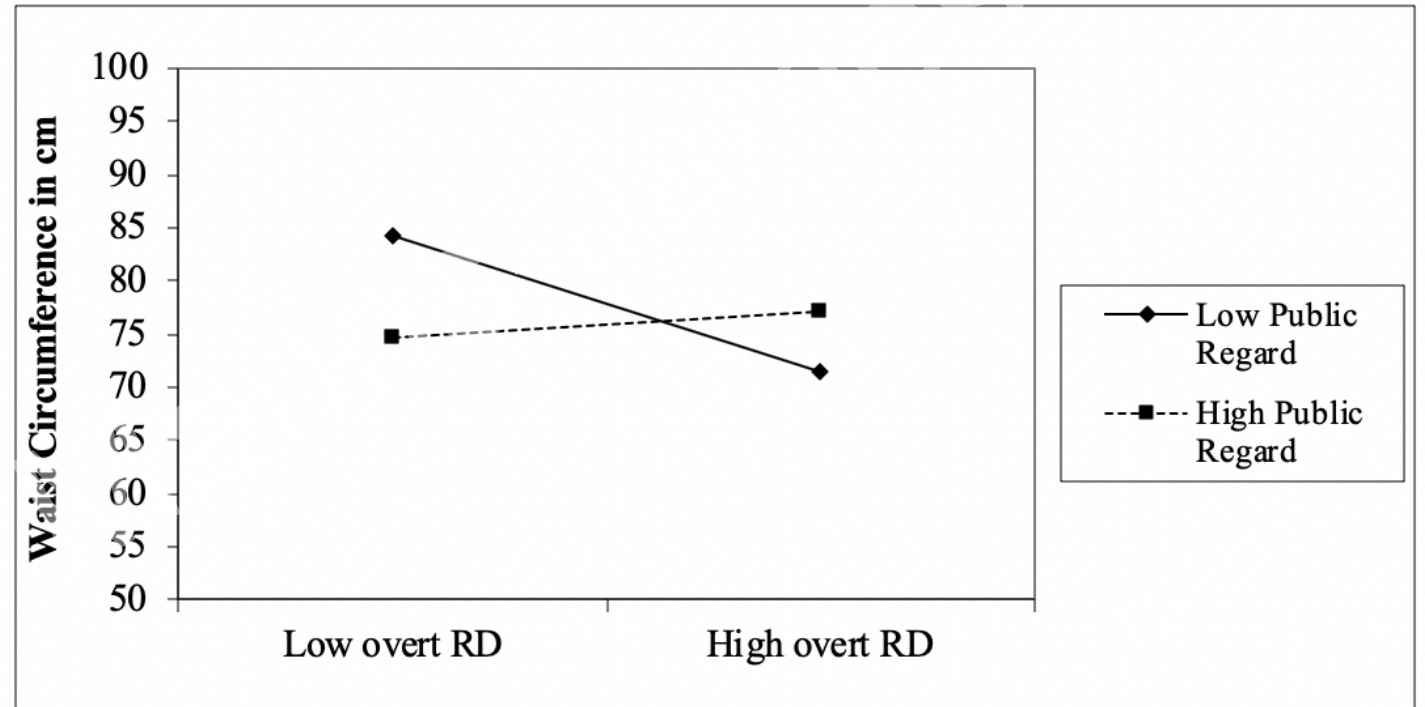
^aInfluential cases excluded

* $p < .05$, ** $p \leq .01$

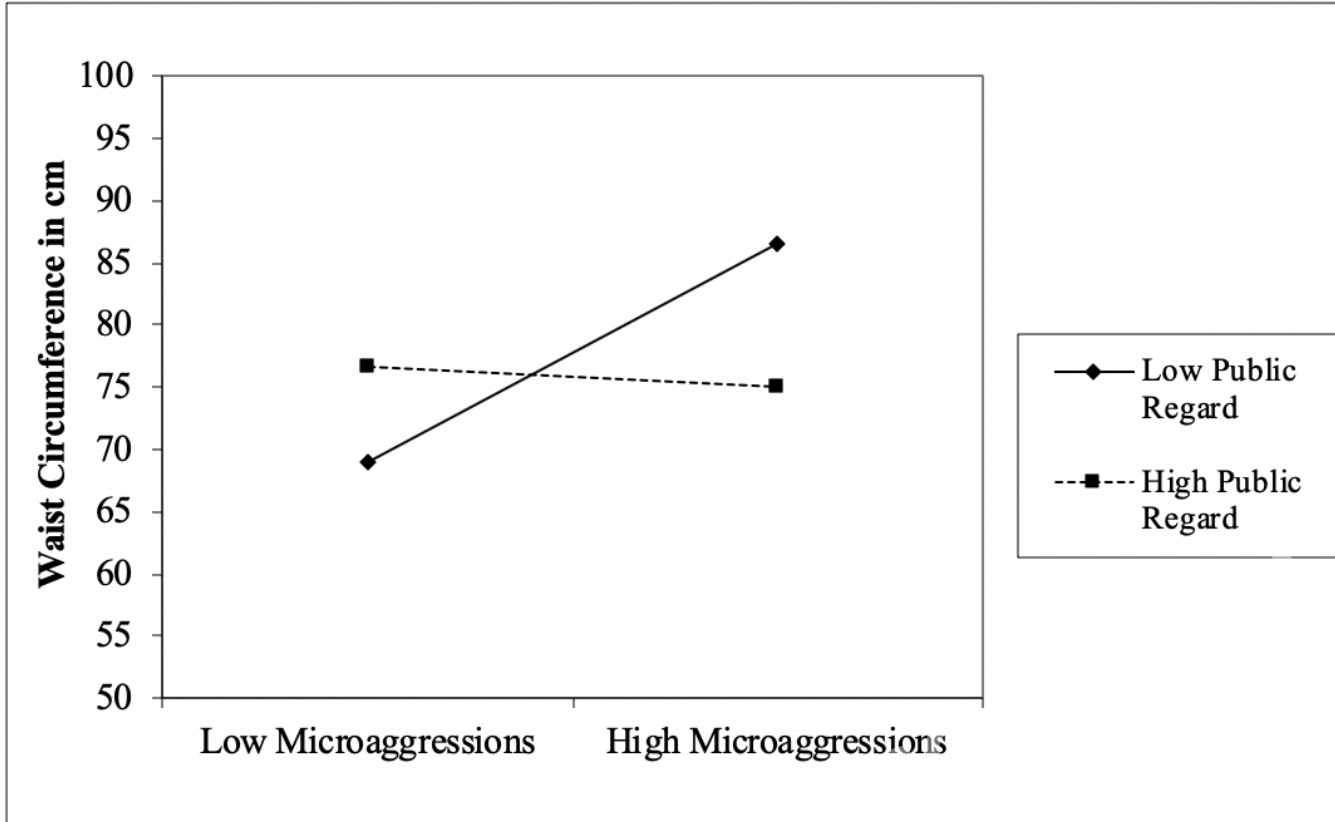
Testing
Moderators:
PUBLIC
Regard



Effects of High and Low Public Regard on the relationship between **Lifetime Overt RD** and Waist Circumference



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Effects of High and Low Public Regard on relationships between **Microaggressions** and Waist Circumference

Overall, these variables were important.

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- RD variables and racial identity accounted for up to 13% of the variance in BMI and waist circumference in the entire range of the study (BMIs: 16 - 49)
- Obesity is a multifactorial phenomenon
- Disparity between AA women and White women for obesity is about 15%.

Strengths and Limitations



- Broad SES among participants
- Biometrics
- Measured RD three ways



- Non-probability sample
- Setting may not be generalizable
- Measurement issues: vicarious RD, LTE-Q

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What do these findings mean?

- Microaggressions are stressful and may contribute to weight gain. However, maybe heavier women experience more racial microaggressions. Not longitudinal, so we can't be sure.
- Empowered women may be more likely to report overt RD experiences and that may be weight-protective.
- OR....experience with overt RD may help young women build skills in dealing with adversity for a lower overall stress level.

Implications for future research

- How women think about race & RD may impact how stressful RD is: is it expected, and reinforcing? Or is it unusual and discountable?
- Private regard may be protective against excess weight.
- We may be modeling RD effects on health inadequately.
- We need more research!



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References

- Aiken, L.S. & West, S.G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park: SAGE Publications, Inc.
- Brugha, T.S. & Cragg, D. (1990). The List of Threatening Experiences: A subset of 12 life event categories with considerable long-term contextual threat. *Psychological Medicine*, 15 (1), 189-194.
- Centers for Disease Control (2011). CDC Health Disparities and Inequalities Report — United States, 2011. *Morbidity & Mortality Weekly Report, Supplement/ 60*, 1-116.
- Centers for Disease Control (2014). Pregnancy Mortality Surveillance System. Available at <http://www.cdc.gov/reproductivehealth/maternalinfanthealth/pmss.html>. Accessed Feb 12, 2015.
- Dovidio, J. F., & Fiske, S. T. (2012). Under the radar: how unexamined biases in decision-making processes in clinical interactions can contribute to health care disparities. *American Journal of Public Health*, 102(5), 945-952.
doi:10.2105/ajph.2011.300601

References

- Ingram, L., & Wallace, B. (2019). "It Creates Fear and Divides Us:" Minority College Students' Experiences of Stress from Racism, Coping Responses, and Recommendations for Colleges. *Journal of Health Disparities Research & Practice*, 12(1), 80-112.
- Krieger, N., Smith, K., Naishadham, D., Hartman, C., & Barbeau, E. M. (2005, Oct). Experiences of discrimination: validity and reliability of a self-report measure for population health research on racism and health. *Social Science and Medicine*, 61(7), 1576-1596. [https://doi.org/S0277-9536\(05\)00097-3](https://doi.org/S0277-9536(05)00097-3) [pii] 10.1016/j.socscimed.2005.03.006 [doi]
- Lilly, F. R. W., Owens, J., Bailey, T. C., Ramirez, A. M. Y., Brown, W., Clawson, C., & Vidal, C. (2018). The influence of racial microaggressions and social rank on risk for depression among minority graduate and professional students. *College Student Journal*, 52(1), 86-104.
- Ogden, C.L., Carroll, M.D., Kit, B.K., Flegal, K.M. (2014). Prevalence of childhood and adult obesity in the United States, 2011-2012. *Journal of the American Medical Association*, 311(8), 806-814. doi:10.1001/jama.2014.732.
- Singh, G.K. & Van Dyck, P.C. (2010). *Infant mortality in the United States, 1935-2007: Over seven decades of progress and disparities*. A 75th Anniversary Publication. Rockville MD, Health Resources and Services Administration, Maternal and Child Health Bureau.

References

- Lui, P. P. (2020). Racial Microaggression, Overt Discrimination, and Distress: (In)Direct Associations With Psychological Adjustment. *Counseling Psychologist, 48*(4), 551.
- Nadal, K. L. (2011). The Racial and Ethnic Microaggressions Scale (REMS): Construction, Reliability, and Validity. *Journal of Counseling Psychology, 58*(4), 470-480.
- Nadal, K. L., Erazo, T., & King, R. (2019). Challenging Definitions of Psychological Trauma: Connecting Racial Microaggressions and Traumatic Stress. *Journal for Social Action in Counseling & Psychology, 11*(2), 2-16.
- Nadal, K. L., Griffin, K. E., Wong, Y., Davidoff, K. C., & Davis, L. S. (2017). The injurious relationship between racial microaggressions and physical health: Implications for social work. *Journal of Ethnic & Cultural Diversity in Social Work, 26*(1-2), 6-17.

References

- Pierce, C. (1970). Offensive mechanisms. In F. Barbour (Ed.), *The Black Seventies* (pp. 265-282). Boston: Porter Sargeant.
- Salvatore, J., & Shelton, J. N. (2007). Cognitive costs of exposure to racial prejudice. *Psychological Science, 18*(9), 810-815.
- Solórzano, D., Ceja, M., & Yosso, T. (2000). Critical race theory, racial microaggressions, and campus racial climate: The experiences of African American college students. *Journal of Negro Education, 69*(1-2), 60-73.
- Sue, D. W., Capodilupo, C. M., Torino, G. C., Bucceri, J. M., Holder, A. M., Nadal, K. L., & Esquilin, M. (2007). Racial microaggressions in everyday life: implications for clinical practice. *The American Psychologist, 62*(4), 271-286. doi:10.1037/0003-066x.62.4.271

References

World Health Organization (1995). Physical status: The use and interpretation of anthropometry. Report of a WHO Expert Committee. *WHO Technical Report Series* (Vol. 854). Geneva, Switzerland.

World Health Organization (2011). Waist circumference and waist-hip ratio. Report of a WHO expert consultation. Geneva, 8-11 December 2008.