Supplementary Information

Supplementary Text (pgs 2-3): Provides additional details on methods, primary related to search strategy, and results, primary on the subanalyses for income and education.

Supplementary Table 1 (pgs 4-7): Provides additional details on moderator codes for each individual study included in the meta-analysis.

Supplementary Table 2 (pgs 8-9): Provides additional detail on the statistical results of all moderator analyses.

Supplementary Figure 1 (pg 10): Forest plot of the results for the subanalysis of the association between income and C-reactive protein.

Supplementary Figure 2 (pg 11): Forest plot of the results for the subanalysis of the association between education and C-reactive protein.

Supplementary Figure 3 (pg 12): Forest plot of the results for the subanalysis of the association between income and interleukin-6.

Supplementary Figure 4 (pg 13): Forest plot of the results for the subanalysis of the association between education and interleukin-6

Supplementary References (pgs 14-16): References cited in Supplementary Information section

Methods.

First, we conducted searches using PubMed and PsycINFO in April 2017 according to the following keywords and/or MESH terms: socioeconomic, socioeconomic status, socioeconomic position, SES, income, education, occupation, social status, subjective social status, perceived social status, inflammation, cytokines, pro-inflammatory cytokines, interleukin-6, c-reactive protein. Keywords were combined by using the Boolean operators "AND" and "OR." We excluded studies that focused on individuals with identified mental or physical health problems by examining titles, abstracts, and full text. Any studies that selected their sample on the basis of a clinical criterion (e.g., diagnoses for mental health conditions [e.g., schizophrenia diagnosis]; or physician report or clinical information constituting physical health pathology [e.g., patients with myocardial infarction, rheumatoid arthritics, etc.]) were deemed ineligible.

When multiple articles provided usable data but reported results from the same sample (i.e., from large, publicly-available datasets), the publication with the largest sample size was used for the overall analysis. If two articles using the same participants listed identical sample size, the most recent study was included. When the publication with the largest sample size and/or most recent publication date did not provide data to examine income- or education-specific associations with inflammatory markers, other publications from the same dataset that did report on income and/or education were included in the subanalyses only.

For the income subanalyses, the number of studies included were 13 and five, for CRP and IL-6, respectively. For the education subanalyses, the number of studies included were 17 and ten for CRP and IL-6, respectively.

Results.

Sub-Analyses on Income and Education.

Within studies that used uniform definitions of SES based on income (13 studies), we conducted analyses on the association between income and CRP. Among these, Zs ranged from -.01 to .49 (see Supplemental Figure 1). The random-effects meta-analysis found that lower income was associated with higher CRP (Z=.11; 95% CI, .07–.15) and significantly differed from zero, Z=5.33, $p<.001$. Again, significant heterogeneity was observed across studies ($Q(12)=165.89$, $p<.001$; $I^2=93\%$).

We repeated this approach using studies that operationalized SES as level of educational attainment (17 studies). Among these, Zs ranged from -.01 to .45 (see Supplemental Figure 2). The random-effects meta-analysis found that lower educational attainment was associated with higher CRP (Z=.11; 95% CI, .07–.16) and significantly differed from zero, Z=5.11, $p<.001$. Again, significant heterogeneity was observed across studies ($Q(16)=333.49$, $p<.001$; $I^2=95\%$).

As with CRP, we conducted subanalyses for IL-6 within those studies that operationalized SES as levels of income and education, respectively. Five studies examined the association between income and IL-6, and Zs ranged from .05 to .19 (see Supplemental Figure 3). The random-effects meta-analysis found that lower income was associated with higher IL-6 (Z=.12; 95% CI, .05–.18) and significantly differed from zero, Z=3.32, $p<.001$. Again, there was evidence of significant heterogeneity across studies ($Q(4)=15.44$, $p=.004$; $I^2=74\%$).

Ten studies examined the association between education levels and IL-6, and Zs ranged from .04 to .22 (see Supplemental Figure 4). The random-effects meta-analysis found that lower educational attainment was associated with higher IL-6 (Z=.11; 95% CI, .08–.14) and significantly differed from zero, Z=8.25, $p<.001$. For this association, there was no evidence of significant heterogeneity in effect sizes across studies ($Q(9)=12.17$, $p=.204$; $I^2=26\%$).

Moderator Analyses on Income and Education Sub-Analyses.

The results of all moderator analyses are now presented in Supplemental Table 2, in addition to being described here. None of the examined moderators were associated with heterogeneity in effect sizes in the meta-analysis on income and CRP (all *p*s>.10). For education and CRP, however, two moderators, both regarding use of covariates in analyses, were significantly associated with effect size estimates: BMI (Coef.=-0.12, SE=0.05, *t*=-2.49, *p*=.025), and cigarette smoking status (Coef.=-0.13, SE=0.05, *t*=-2.66, *p*=.018). We again conducted separate analyses within sets of studies that did and did not include these covariates in analyses. Studies that did not covary BMI (Z=.15; 95% CI, .10–.21; n=12) had larger estimated effect sizes than those that did (Z=.03; 95% CI, -.004–.05; n=5), and only those that did not covary BMI produced effect sizes that significantly differed from zero (*p*<.001). Similarly, studies that did not covary for smoking status (Z=.15; 95% CI, .10–.21; n=13) had larger estimated effect sizes than those that did (Z=.02; 95% CI, -.01–.05; n=4), and again, only those that did not covary smoking produced an effect size that differed significantly from zero (*p*<.001).

None of the examined moderators were associated with heterogeneity in effect sizes in the meta-analysis on income and IL-6. At the trend level, one moderator was associated with heterogeneity in effect sizes within the income and IL-6 meta-analysis: whether studies transformed IL-6 prior to analysis (Coef.=0.10, SE=0.04, *t*=2.68, *p*=.075). Because only one study did not transform IL-6, we reconducted the meta-analysis within only those studies that transformed IL-6 levels (n=4), finding an updated estimate of effect size of Z=.15 (95% CI, .11–.20), which significantly differed from zero (*p*<.001).

Supplementary Table 1. Supplemental information for articles included in the meta-analysis

Author and Year	Sample Size Whole Study	Study Design	Age of SES measure	Continuous/Binary	Mean BMI	SES is Focus of Study	Covariates	Source and Measure of Inflammation
Appleton et al., 2012	430	Longitudinal	Childhood	Continuous	NR	Yes	None	Plasma CRP
[a]Boylan et al., 2013	1,054	Cross-Sectional	Current	N/A	29.18	Yes	None	Plasma CRP, Serum IL-6 Log-Transformed
Broyles et al., 2012	385	Cross-Sectional	Childhood/ Current	Continuous	NR	Yes	Sex Race/Ethnicity	Serum CRP Cut-off used
Caroll et al., 2011	112	Retrospective	Childhood	Continuous	26.4	Yes	None	Serum IL-6 Log-Transformed
[ab]Chapman et al., 2009	103	Cross-Sectional	Current	Continuous	NR	No	None	Serum IL-6 Log-Transformed
Chiang et al., 2015	316	Cross-Sectional	Current	Continuous	23.16	Yes	None	Blood Spots Log-Transformed
[b]Clark et al., 2012	26,029	Cross-Sectional	Current	Continuous	24.9	Yes	Race/Ethnicity Smoking	Plasma CRP Log-Transformed
Cole et al., 2011	64	Cross-Sectional	Current	Continuous	24.8	Yes	None	Plasma CRP
[ab]Cozier et al., 2016	418	Longitudinal	Current	Continuous	NR	Yes	Age	Serum CRP Log-Transformed
[*]Cushman et al., 2009	19,080	Cross-Sectional	Current	Binary Extreme groups	29.31	No	None	NR Cut-off used
[*]Dowd et al., 2008	1,503	Longitudinal	Current	Continuous	41	Yes	Sex BMI Smoking	NR Log-Transformed
Dowd et al., 2010	6,004	Cross-Sectional	Current	Binary Extreme groups	NR	Yes	Sex Race/Ethnicity	Serum CRP Log-Transformed
Elliot et al., 2016	1,152	Longitudinal	Current	Continuous	29.62	Yes	None	Plasma CRP, Serum IL-6 Log-Transformed
Fedewa et al., 2014	177	Cross-Sectional	Current	Continuous	23	Yes	None	Serum CRP Log-Transformed
[*]Ford et al., 2002[#]	13,748	Cross-Sectional	Current	Continuous	26.81	No	Sex Race/Ethnicity BMI Smoking Chronic Conditions Medications	Serum CRP Cut-off used
[ab]Gallo et al., 2012	284	Cross-Sectional	Current	Continuous	28.96	Yes	None	Plasma CRP, Plasma IL-6 Log-Transformed
[ab]Herd et al., 2012	1,757	Cross-Sectional	Current	Binary Extreme groups	28.93	Yes	Sex Race/Ethnicity	Blood Spots Log-Transformed

Hostinar et al., 2015	360	Retrospective	Childhood/ Current	Continuous	25.76	Yes	None	Serum CRP, Serum IL-6 Log-Transformed
[b]Janicki-Deverts et al., 2008	1,227	Longitudinal	Current	N/A	28.03	No	None	Plasma CRP Log-Transformed
John-Henderson et al., 2013	209	Cross-Sectional	Current	Continuous	24.51	Yes	None	Oral Mucosal Transudate Log-Transformed
[*]Joseph et al., 2015[#]	71	Longitudinal	Current	Continuous	27.7	No	None	Plasma CRP Log-Transformed
[ab]Koster et al., 2006	3,044	Longitudinal	Current	Binary Extreme groups	27.4	Yes	Sex Race/Ethnicity	Serum CRP, Serum IL-6 Log-Transformed
[ab]Loucks et al., 2006a	2,729	Longitudinal	Current	Continuous	28.1	Yes	Sex	Serum CRP, Serum IL-6
[*]Loucks et al., 2006b	805	Cross-Sectional	Current	Binary	26.1	No	Race/Ethnicity BMI Smoking Chronic Conditions	Plasma CRP, Plasma IL-6 Cut-off used
[*]Marsland et al., 2006	460	Cross-Sectional	Current	Continuous	27.7	No	None	Plasma IL-6 Log-Transformed
[ab]McDade et al., 2006	188	Longitudinal	Current	Continuous	31.4	Yes	None	Blood Spots Cut-off used Log-Transformed
Miller et al., 2009	103	Retrospective	Childhood/ Current	Binary	24.02	Yes	None	Serum CRP
Miller et al., 2010	145	Longitudinal	Current	Continuous	21.61	No	None	Serum IL-6
[ab]Muennig et al., 2007	19,759	Cross-Sectional	Current	Binary	NR	Yes	Sex Race/Ethnicity BMI Smoking	Serum CRP Cut-off used
[*]Mwendwa et al., 2013	198	Cross-Sectional	Current	Continuous	30.09	No	Sex BMI Chronic Conditions	Serum CRP, Serum IL-6 Log-Transformed
[*]Paalani et al., 2011	508	Cross-Sectional	Current	Continuous	26.8	Yes	Sex Race/ethnicity	Serum CRP, Serum IL-6 Log-Transformed
[b]Paul et al., 2008	219	Cross-Sectional	Current	Binary	NR	Yes	Race/Ethnicity	Serum CRP Log-Transformed
Petersen et al., 2008	851	Cross-Sectional	Current	Continuous	27.5	Yes	None	Plasma CRP, Plasma IL-6 Log-Transformed
[*]Pietras et al., 2013	941	Cross-Sectional	Current	Binary Extreme groups	23.9	Yes	None	Plasma IL-6
Schmeer et al., 2016a	425	Cross-Sectional	Current	Continuous	NR	No	None	Blood Spots Log-Transformed
Schmeer et al., 2016b	15,314	Cross-Sectional	Current	Continuous	NR	Yes	None	Serum CRP

								Log-Transformed
Schreier et al., 2010	88	Longitudinal	Current	Continuous	NR	Yes	None	Serum CRP
Schreier et al., 2014	244	Cross-Sectional	Current	Continuous	21.32	Yes	None	Serum CRP, Serum IL-6
[ab]Shanahan et al., 2014	13,257	Cross-Sectional	Current	Continuous	29.29	No	None	Log-Transformed Blood Spots
[b]Sin et al., 2015	872	Cross-Sectional	Current	Continuous	29.66	No	None	Cut-off used NR
Sturgeon et al., 2016	688	Cross-Sectional	Current	Continuous	NR	Yes	None	Log-Transformed Plasma CRP, Plasma IL-6
Taylor et al., 2006	3,248	Retrospective	Childhood	Continuous	28.48	Yes	None	Cut-off used, Log-Transformed Plasma CRP
[ab]Zhang et al., 2008	792	Longitudinal	Current	Binary Extreme groups	NR	Yes	None	Log-Transformed Serum CRP Cut-off used

[a]Included in education sub-analysis
[b]Included in income sub-analysis
Abbreviations: NR, Not Reported; SES, Socioeconomic Status

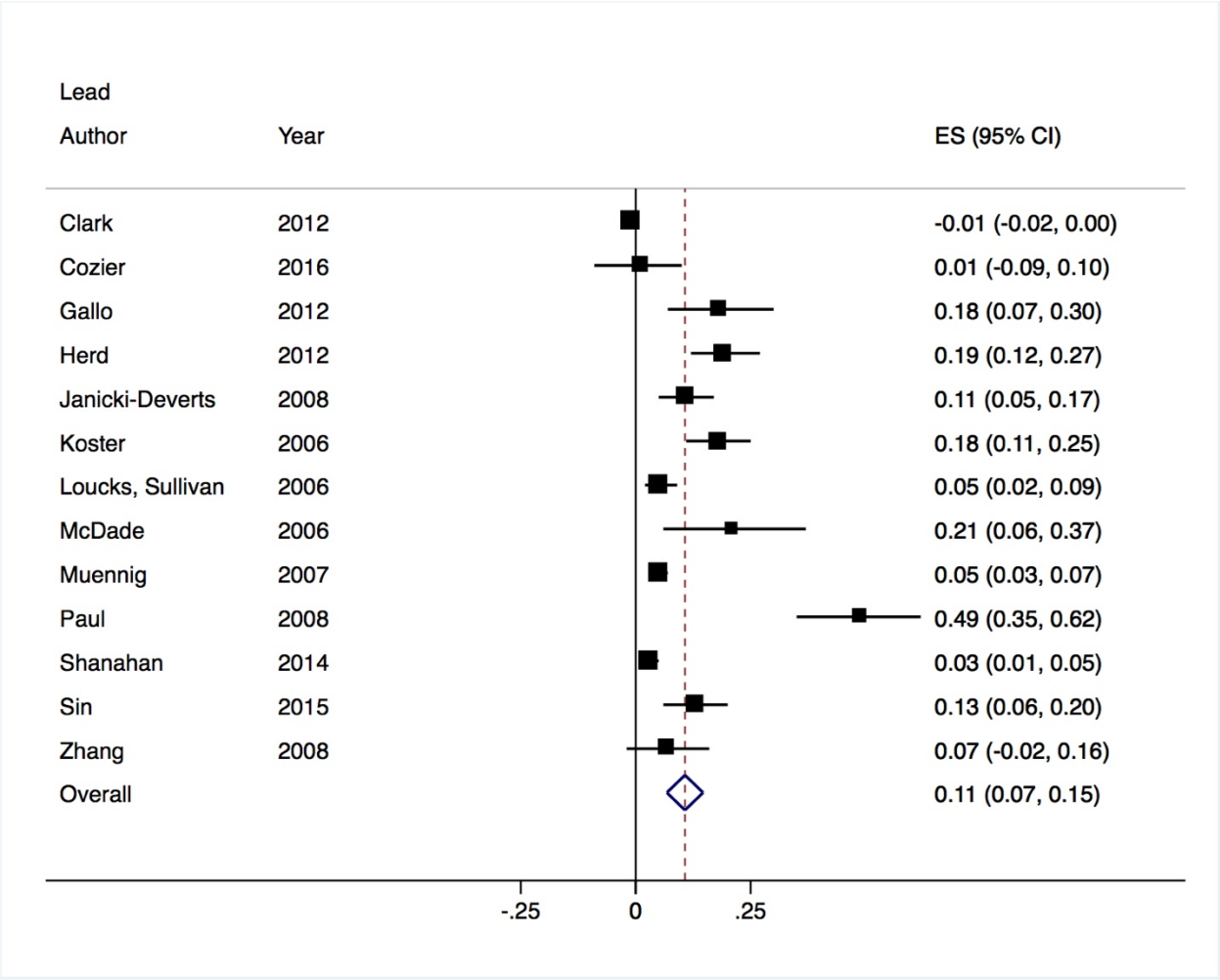
Supplemental Table 2: Results of Moderator Analyses

	CRP - SES	CRP - income	CRP - education	IL-6 - SES	IL-6 - income
Continuous Moderators					
Mean age of sample	<-0.01 (<0.01)	<0.01 (<0.01)	<0.01 (<0.01)	<-0.01 (<0.01)	<0.01 (<0.01)
Percent of sample that is male	<-0.01 (<0.01)	<-0.01 (<0.01)	<0.01 (<0.01)	<0.01 (<0.01)	<0.01 (<0.01)
Percent of sample this is White	<-0.01 (<0.01)	<-0.01 (<0.01)	<0.01 (<0.01)	<-0.01 (<0.01)	<0.01 (<0.01)
Percent of sample that is Black	<0.01 (<0.01)	<-0.01 (<0.01)	<-0.01 (<0.01)	<0.01 (<0.01)	<0.01 (<0.01)
Mean BMI of sample	<-0.01 (0.01)	0.03 (0.01)	<-0.01 (0.01)	<-0.01 (0.01)	0.03 (0.04)
Publication year	<0.01 (0.01)	-0.01 (0.01)	0.01 (0.01)	0.01 (<0.01)*	0.01 (0.01)
Group based moderators					
Pediatric sample (mean age > 18 = 0, mean age < 18 = 1)	0.01 (0.05)	N/A	N/A	0.01 (0.04)	N/A
SES continuous (continuous = 0, categorical = 1)	0.10 (0.04)*	0.10 (0.07)	0.06 (0.06)	-0.03 (0.04)	0.04 (0.08)
SES extreme group (among categorical measures, non-extreme groups = 0, extreme groups = 1)	0.13 (0.10)	-0.11 (0.17)	0.20 (0.12)	0.08 (0.04)	N/A
SES age period (retrospective reports of childhood SES = 0, current adulthood SES =1)	0.02 (0.06)	N/A	N/A	-0.14 (0.11)	N/A
SES focus (no = 0, yes =1)	0.06 (0.04)	0.04 (0.08)	0.05 (0.06)	0.02 (0.03)	-0.08 (0.06)
Type of SES measure (objective = 0, subjective = 1)	-0.13 (0.11)	N/A	N/A	0.18 (0.08)*	N/A
Age covaried in analysis (no = 0, yes =1)	-0.04 (0.04)	-0.08 (0.07)	-0.03 (0.06)	-0.07 (0.02)**	-0.04 (0.06)
Race/ethnicity covaried in analysis (no = 0, yes =1)	0.04 (0.04)	0.07 (0.07)	0.01 (0.06)	-0.04 (0.04)	0.04 (0.08)
Sex covaried in analysis (no = 0, yes =1)	0.02 (0.04)	-0.02 (0.08)	0.02 (0.06)	-0.04 (0.03)	-0.04 (0.06)
BMI covaried in analysis (no = 0, yes =1)	-0.11 (0.05)*	-0.08 (0.13)	-0.12 (0.05)*	-0.03 (0.05)	N/A
Smoking covaried in analysis (no = 0, yes =1)	-0.13 (0.04)**	-0.12 (0.09)	-0.13 (0.05)*	-0.08 (0.05)	N/A
Health conditions covaried in analysis	-0.10 (0.07)	N/A	-0.10 (0.07)	-0.03 (0.05)	N/A

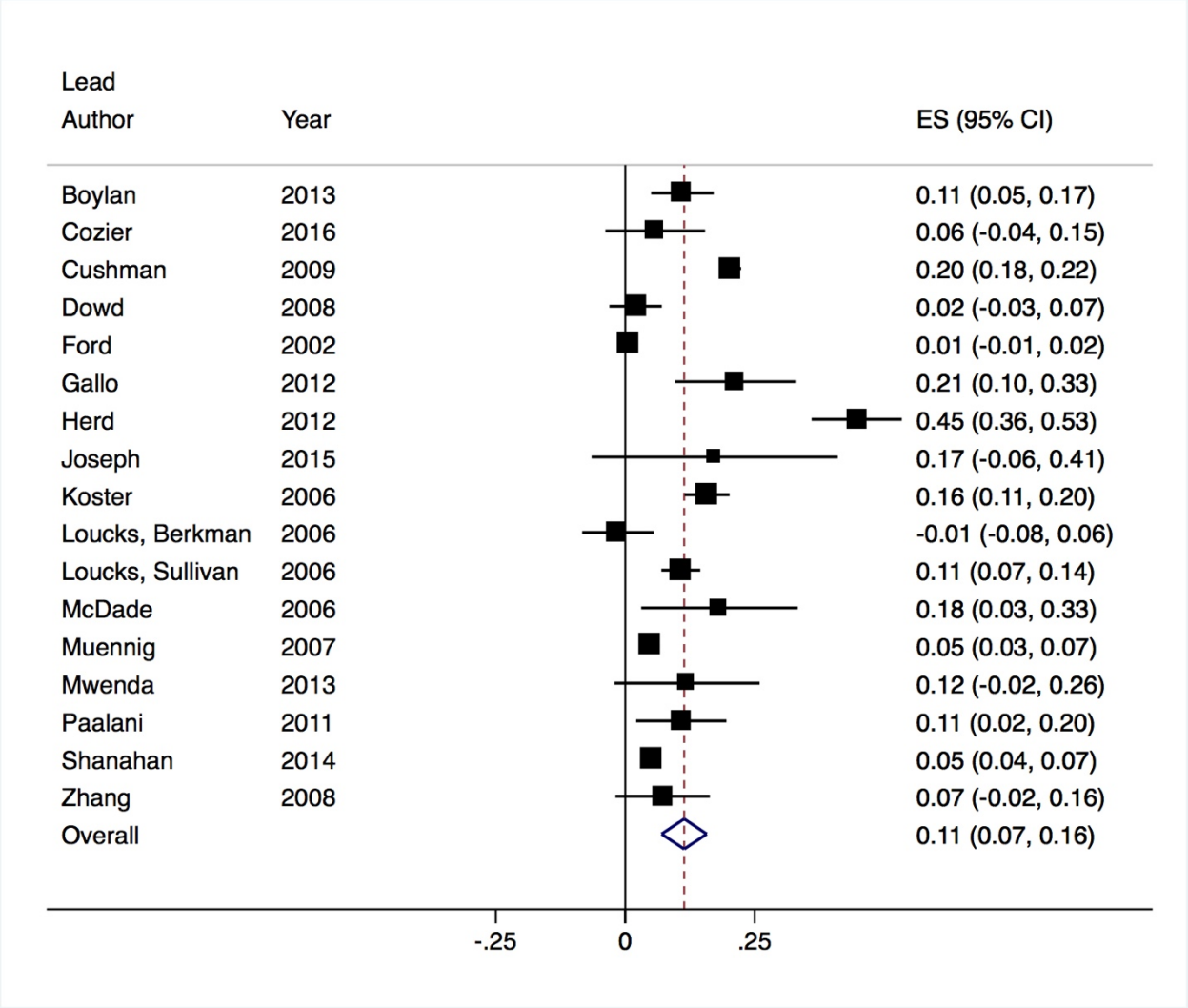
(no = 0, yes =1)					
Medication use covaried in analysis (no = 0, yes =1)	-0.12 (0.10)	N/A	-0.12 (0.11)	N/A	N/A
Sample source (recruited from community = 0, population-based recruitment = 1)	0.05 (0.04)	<-0.01 (0.10)	0.01 (0.06)	-0.04 (0.03)	0.04 (0.08)
Inflammation marker transformed (no vs. yes)	0.08 (0.04)*	0.10 (0.07)	0.09 (0.05)	0.07 (0.02)*	0.10 (0.04)
Inflammation continuous (continuous = 0, cut-off = 1)	-0.08 (0.04)	-0.06 (0.08)	-0.08 (0.05)	-0.08 (0.05)	0.04 (0.08)
Study design					
Cross-sectional = 0, longitudinal = 1	-0.02 (0.04)	-0.04 (0.07)	-0.02 (0.06)	-0.02 (0.03)	-0.04 (0.06)
Retrospective = 0, prospective = 1	0.02 (0.03	N/A	N/A	-0.07 (0.06)	N/A
Inflammation source					
Blood spots = 0, plasma = 1	-0.12 (0.07)	-0.05 (0.08)	-0.08 (0.11)	N/A	N/A
Blood spots = 0, serum = 1	-0.12 (0.07)	<-0.01 (0.11)	-0.15 (0.08)	N/A	N/A
Serum = 0, plasma = 1	0-01 (0.04)	-0.04 (0.11)	0.07 (0.04)	-0.02 (0.03)	-0.01 (0.09)

Notes. Unstandardized Beta (Standard Error). * p<.05. ** p<.01. N/A = not applicable and/or not sufficient observations or variation required to run test. Studies with missing data on the moderator of interest were excluded for that analysis only. There was no significant heterogeneity in effect sizes among studies examining SES operationalized as education and IL-6, and thus no moderator analyses were run on those effect sizes.

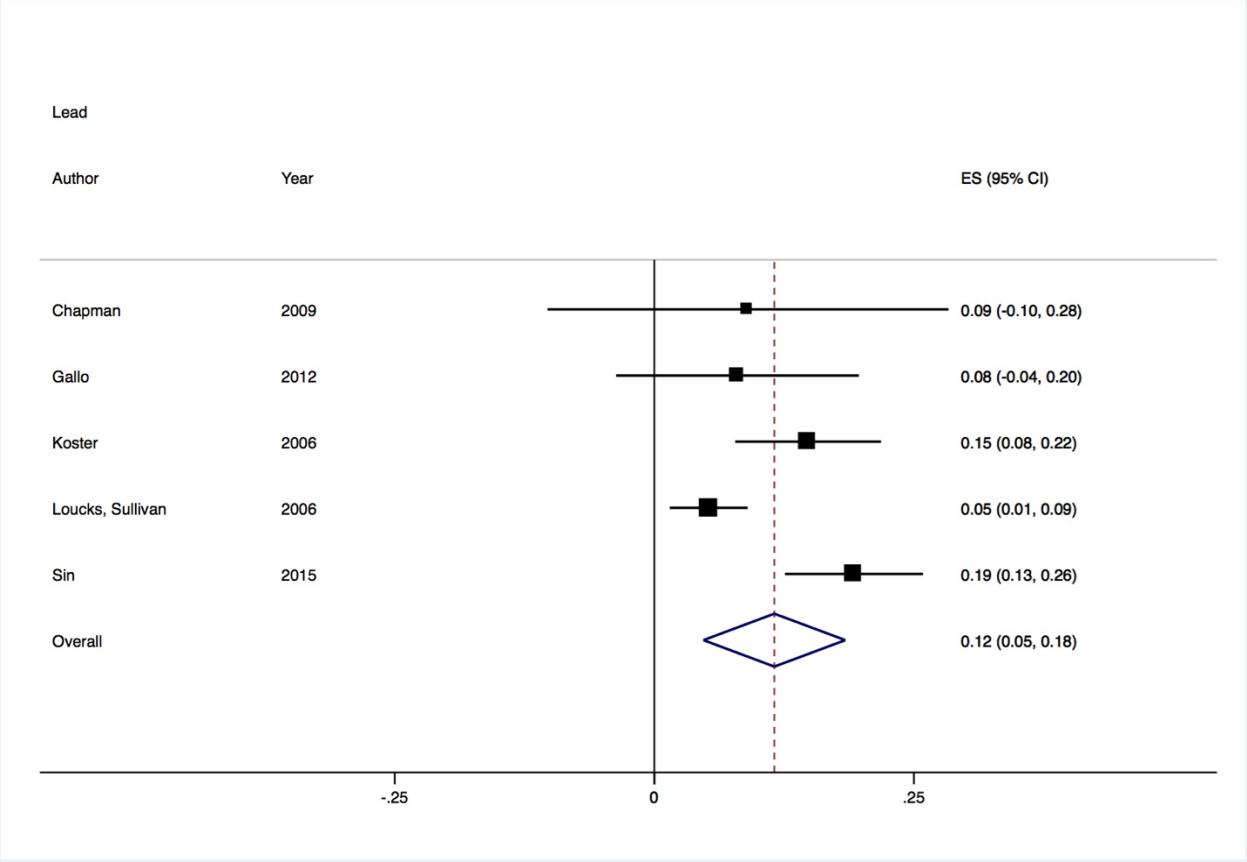
Supplementary Figure 1: Forest Plot of the Subanalysis of the Association between Income and C-Reactive Protein



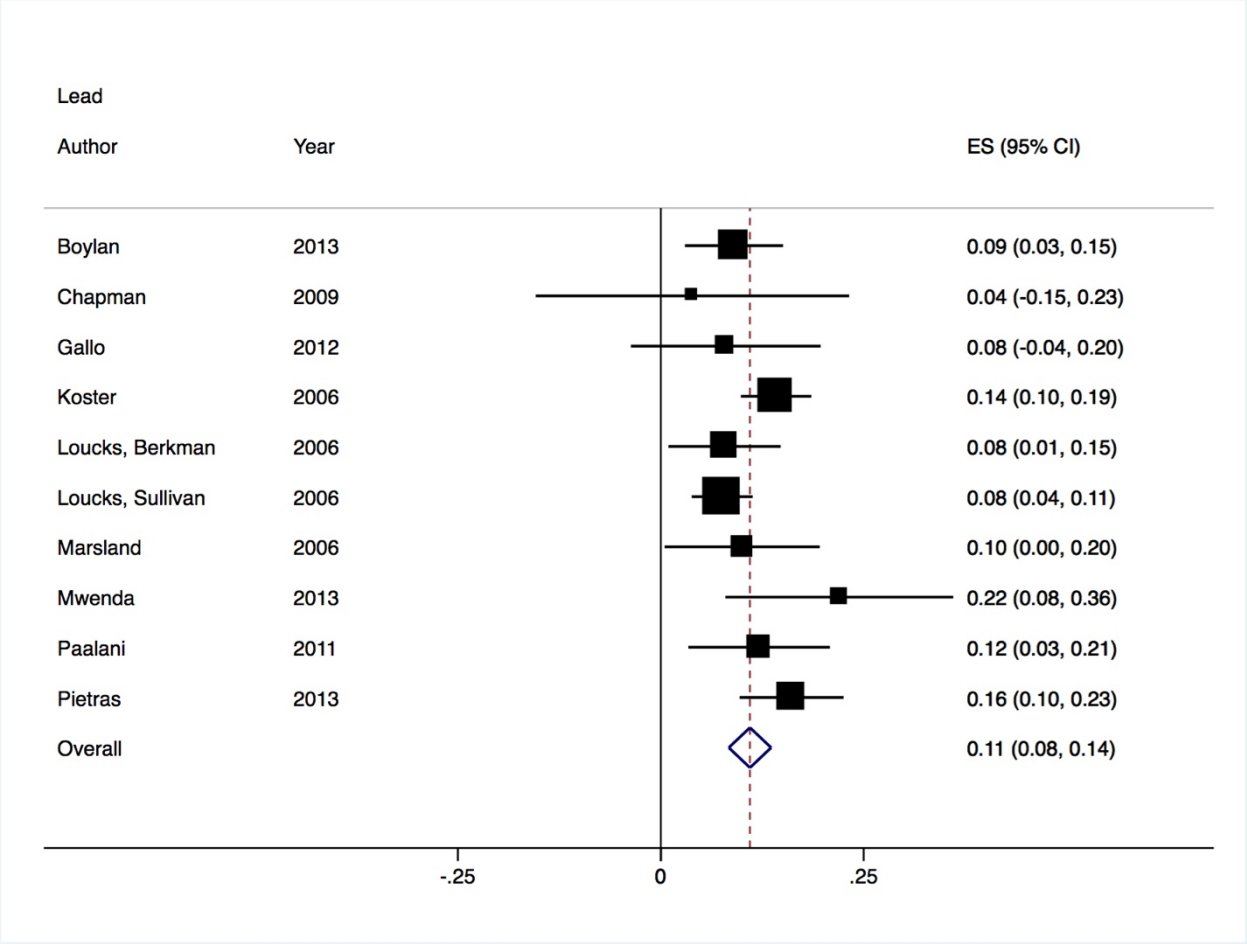
Supplementary Figure 2: Forest Plot of the Subanalysis of the Association between Education and C-Reactive Protein



Supplementary Figure 3: Forest Plot of the Subanalysis of the Association between Income and Interleukin-6



Supplementary Figure 4: Forest Plot of the Subanalysis of the Association between Education and Interleukin-6



Supplementary Information: References

1. Appleton AA, Buka SL, McCormick MC, Koenen KC, Loucks EB, Kubzansky LD. The association between childhood emotional functioning and adulthood inflammation is modified by early-life socioeconomic status. *Heal Psychol*. 2012;31(4):413-422. doi:10.1037/a0027300.
2. Boylan JM, Ryff CD. Varieties of anger and the inverse link between education and inflammation: toward an integrative framework. *Psychosom Med*. 2013;75(6):566-574. doi:10.1097/PSY.0b013e31829683bd.
3. Broyles ST, Staiano AE, Drazba KT, Gupta AK, Sothern M, Katzmarzyk PT. Elevated C-Reactive Protein in Children from Risky Neighborhoods: Evidence for a Stress Pathway Linking Neighborhoods and Inflammation in Children. *PLoS One*. 2012;7(9). doi:10.1371/journal.pone.0045419.
4. Carroll JE, Cohen S, Marsland AL. Early childhood socioeconomic status is associated with circulating interleukin-6 among mid-life adults. *Brain Behav Immun*. 2011;25(7):1468-1474. doi:10.1016/j.bbi.2011.05.016.
5. Chapman BP, Khan A, Harper M, et al. Gender, race/ethnicity, personality, and interleukin-6 in urban primary care patients. *Brain Behav Immun*. 2009;23(5):636-642. doi:10.1016/j.bbi.2008.12.009.
6. Chiang JJ, Bower JE, Almeida DM, Irwin MR, Seeman TE, Fuligni AJ. Socioeconomic status, daily affective and social experiences, and inflammation during adolescence. *Psychosom Med*. 2015;77(3):256-266. doi:10.1097/PSY.0000000000000160.
7. Clark CR, Ridker PM, Ommerborn MJ, et al. Cardiovascular inflammation in healthy women: multilevel associations with state-level prosperity, productivity and income inequality. *BMC Public Health*. 2012;12(1):211. doi:10.1186/1471-2458-12-211.
8. Cole SW, Arevalo JMG, Manu K, et al. Antagonistic pleiotropy at the human IL6 promoter confers genetic resilience to the pro-inflammatory effects of adverse social conditions in adolescence. *Dev Psychol*. 2011;47(4):1173-1180. doi:10.1037/a0023871.
9. Cozier YC, Albert MA, Castro-Webb N, et al. Neighborhood Socioeconomic Status in Relation to Serum Biomarkers in the Black Women's Health Study. *J Urban Health*. 2016;93(2):279-291. doi:10.1007/s11524-016-0034-0.
10. Cushman M, McClure LA, Howard VJ, Jenny NS, Lakoski SG, Howard G. Implications of increased C-reactive protein for cardiovascular risk stratification in black and white men and women in the US. *Clin Chem*. 2009;55(9):1627-1636. doi:10.1373/clinchem.2008.122093.
11. Dowd JB, Haan MN, Blythe L, Moore K, Aiello AE. Socioeconomic gradients in immune response to latent infection. *Am J Epidemiol*. 2008;167(1):112-120. doi:10.1093/aje/kwm247.
12. Dowd JB, Zajacova A, Aiello AE. Predictors of inflammation in U.S. children aged 316 years. *Am J Prev Med*. 2010;39(4):314-320. doi:10.1016/j.amepre.2010.05.014.
13. Elliot AJ, Chapman BP. Socioeconomic Status, Psychological Resources, and Inflammatory Markers: Results From the MIDUS Study. *Heal Psychol*. 2016;35(11):1205-1213. doi:10.1037/hea0000392.
14. Fedewa M V, Das BM, Forehand RL, Evans EM. Area-Level Socioeconomic Status, Adiposity, Physical Activity, and Inflammation in Young Adults, 2013. *Prev Chronic Dis*. 2014;11:E130. doi:10.5888/pcd11.140090.
15. Ford ES. Does exercise reduce inflammation? Physical activity and C-reactive protein

among U.S. adults. *Epidemiology*. 2002;13(5):561-568. doi:10.1097/01.EDE.0000023965.92535.C0.
16. Gallo LC, Fortmann AL, de Los Monteros KE, et al. Individual and neighborhood socioeconomic status and inflammation in Mexican American women: what is the role of obesity? *Psychosom Med*. 2012;74(5):535-542. doi:10.1097/PSY.0b013e31824f5f6d.
17. Herd P, Karraker A, Friedman E. The social patterns of a biological risk factor for disease: race, gender, socioeconomic position, and C-reactive protein. *J Gerontol B Psychol Sci Soc Sci*. 2012;67(4):503-513. doi:10.1093/geronb/gbs048.
18. Hostinar CE, Ross KM, Chen E, Miller GE. Modeling the association between lifecourse socioeconomic disadvantage and systemic inflammation in healthy adults: The role of self-control. *Heal Psychol*. 2015;34(6):580-590. doi:10.1037/hea0000130.
19. Janicki-Deverts D, Cohen S, Matthews KA, Cullen MR. History of unemployment predicts future elevations in C-reactive protein among male participants in the coronary artery risk development in young adults (CARDIA) study. *Ann Behav Med*. 2008;36(2):176-185. doi:10.1007/s12160-008-9056-5.
20. John-Henderson N, Jacobs EG, Mendoza-Denton R, Francis DD. Wealth, health, and the moderating role of implicit social class bias. *Ann Behav Med*. 2013;45(2):173-179. doi:10.1007/s12160-012-9443-9.
21. Joseph J, Depp C, Martin AS, et al. Associations of high sensitivity C-reactive protein levels in schizophrenia and comparison groups. *Schizophr Res*. 2015;168(1-2):456-460. doi:10.1016/j.schres.2015.08.019.
22. Koster A, Bosma H, Penninx BWJH, et al. Association of inflammatory markers with socioeconomic status. *J Gerontol A Biol Sci Med Sci*. 2006;61:284-290. doi:10.1093/gerona/61.3.284.
23. Loucks EB, Sullivan LM, Hayes LJ, et al. Association of educational level with inflammatory markers in the Framingham Offspring Study. *Am J Epidemiol*. 2006;163(7):622-628. doi:10.1093/aje/kwj076.
24. Loucks EB, Berkman LF, Gruenewald TL, Seeman TE. Relation of social integration to inflammatory marker concentrations in men and women 70 to 79 years. *Am J Cardiol*. 2006;97(7):1010-1016. doi:10.1016/j.amjcard.2005.10.043.
25. Marsland AL, Petersen KL, Sathanoori R, et al. Interleukin-6 covaries inversely with cognitive performance among middle-aged community volunteers. *Psychosom Med*. 2006;68(6):895-903. doi:10.1097/01.psy.0000238451.22174.92.
26. McDade TW, Hawkley LC, Cacioppo JT. Psychosocial and Behavioral Predictors of Inflammation in Middle-Aged and Older Adults: The Chicago Health, Aging, and Social Relations Study. *Psychosom Med*. 2006;68(3):376-381. doi:10.1097/01.psy.0000221371.43607.64.
27. Miller GE, Chen E, Fok AK, et al. Low early-life social class leaves a biological residue manifested by decreased glucocorticoid and increased proinflammatory signaling. *Proc Natl Acad Sci U S A*. 2009;106(34):14716-14721. doi:10.1073/pnas.0902971106.
28. Miller GE, Chen E. Harsh Family Climate in Early Life Presages the Emergence of a Proinflammatory Phenotype in Adolescence. *Psychol Sci*. 2010;21(6):848-856. doi:10.1177/0956797610370161.
29. Muennig P, Sohler N, Mahato B. Socioeconomic status as an independent predictor of physiological biomarkers of cardiovascular disease: Evidence from NHANES. *Prev Med (Baltim)*. 2007;45(1):35-40. doi:10.1016/j.ypmed.2007.04.005.

30. Mwendwa DT, Ali MK, Sims RC, et al. Dispositional depression and hostility are associated with inflammatory markers of cardiovascular disease in African Americans. *Brain Behav Immun*. 2013;28:72-82. doi:10.1016/j.bbi.2012.10.019.
31. Paalani M, Lee JW, Haddad E, Tonstad S. Determinants of inflammatory markers in a bi-ethnic population. *Ethn Dis*. 2011;21(2):142-149.
32. Paul K, Boutain D, Agnew K, Thomas J, Hitti J. The relationship between racial identity, income, stress and C-reactive protein among parous women: implications for preterm birth disparity research. *J Natl Med Assoc*. 2008;100(5):540-546. doi:10.1016/S0027-9684(15)31300-6.
33. Petersen KL, Marsland AL, Flory J, Votruba-Drzal E, Muldoon MF, Manuck SB. Community Socioeconomic Status is Associated With Circulating Interleukin-6 and C-Reactive Protein. *Psychosom Med*. 2008;70(6):646-652. doi:10.1097/PSY.0b013e31817b8ee4.
34. Pietras SA, Goodman E. Socioeconomic Status Gradients in Inflammation in Adolescence. *Psychosom Med*. 2013;75(5):442-448. doi:10.1097/PSY.0b013e31828b871a.
35. Schmeer KK, Yoon AJ. Home sweet home? Home physical environment and inflammation in children. *Soc Sci Res*. 2016;60:236-248. doi:10.1016/j.ssresearch.2016.04.001.
36. Schmeer KK, Yoon A. Socioeconomic status inequalities in low-grade inflammation during childhood. *Arch Dis Child*. 2016;101(11):1043-1047. doi:10.1136/archdischild-2016-310837.
37. Schreier HMC, Chen E. Socioeconomic status in one's childhood predicts offspring cardiovascular risk. *Brain Behav Immun*. 2010;24(8):1324-1331. doi:10.1016/j.bbi.2010.06.007.
38. Schreier HMC, Roy LB, Frimer LT, Chen E. Family Chaos and Adolescent Inflammatory Profiles. *Psychosom Med*. 2014;76(6):460-467. doi:10.1097/PSY.0000000000000078.
39. Shanahan L, Freeman J, Bauldry S. Is very high C-reactive protein in young adults associated with indicators of chronic disease risk? *Psychoneuroendocrinology*. 2014;40(1):76-85. doi:10.1016/j.psyneuen.2013.10.019.
40. Sin NL, Graham-Engeland JE, Ong AD, Almeida DM. Affective Reactivity to Daily Stressors Is Associated With Elevated Inflammation. *Health Psychol*. 2015;34(12):1154-1165. doi:10.1037/hea0000240.
41. Sturgeon J a, Arewasikporn A, Okun M a, Davis MC, Ong AD, Zautra AJ. The Psychosocial Context of Financial Stress: Implications for Inflammation and Psychological Health. *Psychosom Med*. 2015. doi:10.1097/PSY.0000000000000276.
42. Taylor SE, Lehman BJ, Kiefe CI, Seeman TE. Relationship of Early Life Stress and Psychological Functioning to Adult C-Reactive Protein in the Coronary Artery Risk Development in Young Adults Study. *Biol Psychiatry*. 2006;60(8):819-824. doi:10.1016/j.biopsych.2006.03.016.
43. Zhang X, Shu X-OO, Signorello LB, et al. Correlates of high serum C-reactive protein levels in a socioeconomically disadvantaged population. *Dis Markers*. 2008;24(6):351-359. doi:10.1155/2008/509138.