

Supplemental Tables

Table 1b: Participant Characteristics (Complete Data at Both Visit 1 and 3)

	Overall	By Sex			p-value ¹	By Age			p-value ²
		Females	Males			21-44	45-64	65+	
N	2711	1730	981			759	1473	479	
Demographics									
Age, Mean (SD)	53.2 (12.1)	53.6 (12.2)	52.5 (11.8)	0.0249		38.5 (5.6)	55.1 (5.9)	70.5 (4.4)	<.0001
Sex (% Female)	63.8	-	-	-		63.2	62.6	68.5	0.0618
SES/Lifestyle factors									
Education (%)									
< High School	12.3	11.9	13.1	0.2725		3.3	10.2	33.2	<.0001
High School 4 – College 3	48.7	49.9	46.7			58.5	47.2	38.0	
College 4+	38.9	38.2	40.2			38.2	42.6	28.8	
Income (%)									
Poor	11.1	13.6	6.6	<.0001		14.2	8.4	14.1	<.0001
Lower-middle	21.4	23.8	17.3			18.7	18.2	35.5	
Upper-middle	31.2	32.6	28.7			38.5	29.4	24.8	
Affluent	36.4	30.1	47.4			28.6	44.0	25.6	
Cigarette smoking (AHA categorization) (%)									
Never smoked/quit ≥ 12 month ago	87.7	90.1	83.4	<.0001		87.0	86.6	92.3	0.0071
Quit < 12 month ago	0.6	0.5	0.8			1.1	0.5	0.4	
Current smoker	11.7	9.4	15.8			12.0	13.0	7.3	
Alcohol consumption									
Alcohol drinking in the past 12 months (%)	50.1	42.9	62.7	<.0001		61.6	50.4	30.7	<.0001
Average number of drinks per week, Mean (SD)	1.7 (5.8)	0.7 (3.0)	3.6 (8.6)	<.0001		2.3 (7.3)	1.7 (5.5)	0.9 (3.8)	0.0002
Nutrition (AHA categorization) (%)									
Ideal health	0.8	0.9	0.6	0.0822		0.2	0.8	1.8	<.0001
Intermediate health	38.6	40.0	36.1			28.7	41.3	45.5	
Poor health	60.6	59.0	63.4			71.2	57.9	52.7	
Physical Activity (AHA categorization) (%)									
Ideal health	21.9	19.3	26.3	0.0001		25.2	22.1	15.9	<.0001
Intermediate health	34.2	35.6	31.6			38.9	33.4	29.2	
Poor health	44.0	45.1	42.0			36.0	44.5	54.9	

Discrimination, Mean (SD)								
Everyday discrimination	2.11 (0.99)	2.04 (1.00)	2.17 (1.06)	0.0004	2.31 (1.01)	2.13 (1.00)	1.77 (0.81)	<.0001
Median (IQR)	1.89 (1.33, 2.67)	1.89 (1.33, 2.56)	2.00 (1.44, 2.78)		2.11 (1.56, 2.89)	1.89 (1.33, 2.67)	1.56 (1.11, 2.06)	
Lifetime discrimination	3.10 (2.09)	2.86 (2.09)	3.24 (2.16)	<.0001	3.13 (2.03)	3.28 (2.11)	2.49 (2.02)	<.0001
Median (IQR)	3 (1, 5)	3 (1, 4)	3 (2, 5)		3 (2, 5)	3 (2, 5)	2 (1, 4)	
Discrimination burden	2.34 (0.76)	2.31 (0.77)	2.36 (0.76)	0.0707	2.20 (0.72)	2.39 (0.76)	2.37 (0.79)	<.0001
Median (IQR)	2.17 (1.83, 2.83)	2.17 (1.83, 2.83)	2.33 (1.83, 2.83)		2.17 (1.67, 2.83)	2.33 (1.83, 2.83)	2.33 (1.67, 2.83)	
Health Measures, Mean (SD)								
BMI	31.2 (7.0)	32.3 (7.4)	29.4 (5.9)	<.0001	31.9 (7.8)	31.2 (6.9)	30.1 (5.8)	<.0001
Waist Circumference	98.5 (15.7)	98.1 (16.1)	99.4 (14.9)	0.0333	97.4 (17.3)	98.9 (15.3)	99.2 (14.0)	0.0622
SBP	125.4 (15.7)	124.4 (15.6)	127.2 (15.6)	<.0001	118.5 (12.8)	126.3 (14.9)	133.6 (17.3)	<.0001
DBP	76.1 (8.5)	74.6 (8.1)	78.8 (8.5)	<.0001	75.9 (8.5)	77.1 (8.2)	73.6 (8.8)	<.0001
Triglycerides	98.0 (55.9)	93.9 (50.1)	105.3 (64.3)	<.0001	87.7 (60.9)	101.6 (54.8)	103.1 (48.5)	<.0001
HDL	52.3 (14.5)	55.5 (14.5)	46.6 (12.5)	<.0001	50.1 (13.0)	52.3 (14.4)	55.6 (16.1)	<.0001
Glucose	90.2 (8.8)	89.6 (8.9)	91.1 (8.5)	<.0001	86.6 (7.5)	91.0 (8.8)	93.4 (8.9)	<.0001
Cortisol	9.4 (3.9)	8.7 (3.6)	10.7 (3.9)	<.0001	9.0 (4.1)	9.4 (3.8)	10.0 (3.6)	<.0001
hsCRP	0.46 (0.68)	0.6 (0.7)	0.3 (0.5)	<.0001	0.4 (0.7)	0.5 (0.7)	0.5 (0.6)	0.2946 ³
ATP-III MetS Status (%)	20.6	22.3	17.6	0.0043	12.5	22.2	28.4	<.0001
MetS severity score Z-score	-0.08 (0.71)	-0.08 (0.73)	-0.09 (0.68)	0.7980	-0.27 (0.75)	-0.03 (0.69)	0.06 (0.67)	<.0001

¹ t-test for continuous variables, chi-square tests for categorical variables

² ANOVA for continuous variables, chi-square tests for categorical variables

³ P=0.0012 by Kruskal-Wallis test

Table 2b. Linear Mixed Models on MetS Severity (Overall, Complete Data at Both Visit 1 and 3)

	Model 1				Model 2				Model 3			
	Mean Z-score (95% CI)		p-value		Mean Z-score (95% CI)		p-value		Mean Z-score (95% CI)		p-value	
	Visit 1	Visit 3	Disc Main Effect	Disc x Visit Interaction	Visit 1	Visit 3	Disc Main Effect	Disc x Visit Interaction	Visit 1	Visit 3	Disc Main Effect	Disc x Visit Interaction
Everyday Discrimination Tertile			0.1644	0.2021			0.2021	0.2167			0.0621	0.1342
n, mean ± SD												
Low	-0.09 n=848	0.10 (-0.14, -0.04)			-0.08 (-0.13, -0.03)	0.11 (0.05, 0.17)			-0.13 (-0.20, -0.07)	0.05 (-0.02, 0.13)		
Med	1.16 ± 0.17 n=947	-0.10 (-0.14, -0.05)	0.11 (0.05, 0.16)		-0.07 (-0.12, -0.02)	0.13 (0.07, 0.19)			-0.11 (-0.17, -0.04)	0.10 (0.03, 0.17)		
High	1.90 ± 0.24 n=870	-0.06 (-0.11, -0.01)	0.18 (0.13, 0.24)		-0.05 (-0.10, 0.00)	0.19 (0.13, 0.25)			-0.08 (-0.14, -0.01)	0.17 (0.10, 0.24)		
	3.27 ± 0.81											
Lifetime Discrimination Tertile			0.0119	0.1347			0.0050	0.1524			0.0105	0.1666
Low	1.10 ± 0.83 n=1101	-0.11 (-0.15, -0.06)	0.09 (0.04, 0.14)		-0.10 (-0.14, -0.05)	0.09 (0.04, 0.15)			-0.12 (-0.18, -0.06)	0.06 (0.00, 0.13)		
Med	3.46 ± 0.50 n=837	-0.04 (-0.08, 0.01)	0.21 (0.15, 0.27)		-0.02 (-0.07, 0.03)	0.23 (0.17, 0.29)			-0.05 (-0.11, 0.01)	0.19 (0.12, 0.27)		
High	5.89 ± 1.01 n=677	-0.08 (-0.14, -0.03)	0.11 (0.05, 0.17)		-0.05 (-0.11, 0.01)	0.14 (0.08, 0.21)			-0.08 (-0.15, -0.01)	0.12 (0.04, 0.20)		
Discrimination Burden Tertile			0.5763	0.3030			0.5144	0.3266			0.5751	0.3938
Low	1.52 ± 0.34 n=779	-0.10 (-0.15, -0.05)	0.14 (0.08, 0.20)		-0.08 (-0.14, -0.03)	0.16 (0.09, 0.22)			-0.11 (-0.18, -0.04)	0.13 (0.05, 0.21)		
Med	2.33 ± 0.19 n=747	-0.06 (-0.11, -0.01)	0.14 (0.08, 0.20)		-0.04 (-0.09, 0.02)	0.15 (0.09, 0.22)			-0.07 (-0.14, 0.00)	0.13 (0.05, 0.21)		
High	3.19 ± 0.38 n=748	-0.05 (-0.10, 0.00)	0.16 (0.10, 0.22)		-0.02 (-0.08, 0.03)	0.19 (0.12, 0.25)			-0.05 (-0.12, 0.01)	0.16 (0.08, 0.23)		

Model 1 covariates: Individual discrimination score (by tertile), age, sex; Model 2 covariates: Model 1 covariates + education (<hs/hs-some college/college graduate); Model 3 covariates: Model 2 covariates + nutrition (poor heath/other), physical activity (poor/intermediate/ideal health), smoking status (current smoker/other), alcohol consumption (number of drinks per week)

Table 3b: Linear Mixed Models on MetS Severity by Age (Model 3, Complete Data at Both Visit 1 and Visit 3)

21 - 44 Year				45 - 64 Year				65+ Year							
Mean Z-score (95% CI)		p-value		Mean Z-score (95% CI)		p-value		Mean Z-score (95% CI)		p-value		p-value		p-value	
N	Visit 1	Visit 3	Disc Main Effect	Disc x Visit Interaction	N	Visit 1	Visit 3	Disc Main Effect	Disc x Visit Interaction	N	Visit 1	Visit 3	Disc Main Effect	Disc x Visit Interaction	Age*disc Interaction
Everyday Discrimination Tertile			0.6915	0.5860				0.1105	0.5912				0.6054	0.1882	<.0001
Low	356	-0.12 (-0.29, 0.05)	0.28 (0.09, 0.46)		912	-0.06 (-0.15, 0.02)	0.11 (0.01, 0.21)			428	-0.16 (-0.32, 0.00)	-0.13 (-0.29, 0.04)			
Med	522	-0.16 (-0.32, -0.00)	0.20 (0.03, 0.37)		1028	-0.03 (-0.11, 0.06)	0.17 (0.08, 0.27)			344	-0.13 (-0.29, 0.03)	-0.17 (-0.34, 0.00)			
High	618	-0.15 (-0.30, 0.00)	0.19 (0.03, 0.35)		950	0.02 (-0.06, 0.10)	0.24 (0.14, 0.33)			172	-0.11 (-0.30, 0.08)	-0.02 (-0.23, 0.19)			
Lifetime Discrimination Tertile			0.7331	0.4567				0.0028	0.6199				0.4878	0.6170	<.0001
Low	608	-0.13 (-0.29, 0.03)	0.22 (0.06, 0.39)		1084	-0.08 (-0.17, 0.00)	0.10 (0.01, 0.19)			510	-0.13 (-0.28, 0.02)	-0.14 (-0.30, 0.02)			
Med	472	-0.15 (-0.31, 0.01)	0.25 (0.08, 0.42)		950	0.05 (-0.03, 0.14)	0.28 (0.18, 0.37)			252	-0.07 (-0.24, 0.10)	-0.03 (-0.22, 0.16)			
High	394	-0.17 (-0.34, 0.00)	0.16 (-0.03, 0.34)		798	0.02 (-0.07, 0.11)	0.21 (0.11, 0.32)			162	-0.17 (-0.37, 0.04)	-0.12 (-0.34, 0.11)			
Discrimination Burden Tertile			0.8326	0.5545				0.5055	0.2547				0.1930	0.0487	<.0001
Low	548	-0.16 (-0.33, 0.01)	0.21 (0.03, 0.39)		772	-0.06 (-0.15, 0.04)	0.20 (0.10, 0.31)			238	-0.01 (-0.20, 0.18)	-0.11 (-0.31, 0.08)			
Med	412	-0.10 (-0.28, 0.08)	0.23 (0.04, 0.42)		832	0.03 (-0.06, 0.12)	0.21 (0.11, 0.32)			250	-0.15 (-0.32, 0.02)	-0.12 (-0.31, 0.06)			
High	346	-0.17 (-0.34, 0.00)	0.22 (0.03, 0.41)		900	0.03 (-0.06, 0.12)	0.23 (0.12, 0.33)			250	0.00 (-0.19, 0.19)	0.05 (-0.15, 0.25)			

Low=first tertile; median=second tertile; high=third tertile

Model 3 covariates: Individual discrimination score (by tertile), sex, education (<hs/hs-some college/college graduate), nutrition (poor health/other), physical activity (poor/intermediate/ideal health), smoking status (current smoker/other), alcohol consumption (number of drinks per week)

Table 4b: Linear Mixed Models on MetS Severity by Sex (Model 3, Complete Data at Both Visit 1 and Visit 3)

Female					Male						
Mean Z-score (95% CI)			p-value		Mean Z-score (95% CI)			p-value		p-value	
	N	Visit 1	Visit 3	Disc Main Effect	Disc x Visit Interaction	N	Visit 1	Visit 3	Disc Main Effect	Disc x Visit Interaction	Gender*disc Interaction
Everyday Discrimination Tertile											
				0.0377	0.1792				0.7692	0.4646	0.9684
Low	1140	-0.12 (-0.20, -0.03)	0.09 (0.00, 0.18)			556	-0.10 (-0.20, 0.01)	0.03 (-0.09, 0.16)			
Med	1234	-0.08 (-0.16, 0.00)	0.14 (0.05, 0.23)			660	-0.12 (-0.22, -0.02)	0.05 (-0.06, 0.16)			
High	1028	-0.04 (-0.12, 0.05)	0.24 (0.15, 0.34)			712	-0.09 (-0.19, 0.01)	0.10 (-0.01, 0.21)			
Lifetime Discrimination Tertile											
				0.0009	0.0990				0.4795	0.7726	0.1437
Low	1510	-0.11 (-0.19, -0.03)	0.09 (0.00, 0.18)			692	-0.12 (-0.21, -0.02)	0.03 (-0.08, 0.14)			
Med	1062	0.00 (-0.08, 0.09)	0.29 (0.19, 0.38)			612	-0.07 (-0.18, 0.03)	0.10 (-0.02, 0.22)			
High	770	-0.08 (-0.18, 0.01)	0.15 (0.04, 0.25)			584	-0.06 (-0.17, 0.05)	0.12 (0.00, 0.25)			
Discrimination Burden Tertile											
				0.3598	0.5738				0.6434	0.7761	0.2725
Low	1026	-0.10 (-0.19, -0.01)	0.16 (0.06, 0.26)			532	-0.07 (-0.18, 0.04)	0.13 (0.00, 0.26)			
Med	944	-0.03 (-0.12, 0.06)	0.19 (0.09, 0.29)			550	-0.10 (-0.21, 0.00)	0.06 (-0.07, 0.18)			
High	914	-0.03 (-0.12, 0.06)	0.21 (0.11, 0.31)			582	-0.06 (-0.17, 0.05)	0.11 (-0.01, 0.24)			

Low=first tertile; median=second tertile; high=third tertile

Model 3 covariates: Individual discrimination score (by tertile), age, education (<hs/hs-some college/college graduate), nutrition (poor health/other), physical activity (poor/intermediate/ideal health), smoking status (current smoker/other), alcohol consumption (number of drinks per week)