

Table S2: Hierarchical, Linear Regression Modeling for the Association Between VSQOL and VFL in the BSE in MOCCaS*

Vision-Specific Quality of Life	Model 1 Main Effects			Model 2 Interaction by Racial and Ethnic Cohort				
	β_{MD}	(95% CI)	P-Value	β_{MD}	(95% CI)	P-Value	P-Value Interaction (CHES)	P-Value Interaction (AFEDS)
<u>Item Response Theory</u>								
Task Composite, IRT [†]	0.659	(0.585, 0.733)	< 0.001	0.750	(0.646, 0.854)	< 0.001	1.000	0.004
Well-Being Composite, IRT [‡]	0.554	(0.479, 0.630)	< 0.001	0.666	(0.560, 0.772)	< 0.001	0.990	0.002
<u>Classical Test Theory</u>								
Overall Composite, CTT [§]	0.637	(0.583, 0.690)	< 0.001	0.970	(0.895, 1.045)	< 0.001	< 0.001	< 0.001
Driving Difficulties	1.159	(1.050, 1.267)	< 0.001	1.712	(1.538, 1.886)	< 0.001	< 0.001	< 0.001
Vision-Related Dependency	0.780	(0.695, 0.866)	< 0.001	1.382	(1.263, 1.502)	< 0.001	< 0.001	< 0.001
Peripheral Vision	0.674	(0.599, 0.750)	< 0.001	1.151	(1.046, 1.257)	< 0.001	< 0.001	< 0.001
Vision-Related Mental Health	0.795	(0.694, 0.896)	< 0.001	1.142	(1.000, 1.283)	< 0.001	0.257	< 0.001
Distance Vision	0.669	(0.599, 0.738)	< 0.001	1.101	(1.004, 1.199)	< 0.001	< 0.001	< 0.001
Vision-Related Role Function	0.772	(0.673, 0.871)	< 0.001	1.071	(0.932, 1.210)	< 0.001	1.000	< 0.001
Near Vision	0.673	(0.594, 0.751)	< 0.001	0.920	(0.810, 1.030)	< 0.001	0.002	< 0.001
Vision-Related Social Function	0.493	(0.441, 0.545)	< 0.001	0.911	(0.839, 0.984)	< 0.001	< 0.001	< 0.001
Color Vision	0.399	(0.345, 0.454)	< 0.001	0.856	(0.780, 0.931)	< 0.001	< 0.001	< 0.001
Ocular Pain	0.478	(0.384, 0.573)	< 0.001	0.721	(0.588, 0.853)	< 0.001	0.257	< 0.001
General Vision	0.419	(0.338, 0.499)	< 0.001	0.287	(0.173, 0.400)	< 0.001	0.257	0.004
<u>General Health Item</u>								
General Health	0.357	(0.238, 0.476)	< 0.001	0.337	(0.170, 0.504)	< 0.001	0.271	0.071

VSQOL = Vision-Specific Quality of Life; VFL = Visual Field Loss; BSE = Better Seeing Eye; MOCCaS = Multiethnic Ophthalmology Cohorts of California Study; 95% CI = 95% confidence interval; NEI-VFQ-25 = National Eye Institute Visual Function Questionnaire 25-Item; MD = Mean Deviation; IRT = Item Response Theory; CTT = Classical Test Theory

*VFL for LALES at baseline is presented as mean deviation score in decibels; VSQOL is assessed by the NEI-VFQ-25. Data are presented as coefficient (95% CI). NEI-VFQ-25 scores are adjusted for age, gender, education, employment status, income, acculturation, co-morbidities, health insurance, vision insurance, and visual acuity impairment. Models 2 and 3 are additionally adjusted for an interaction term by racial and ethnic cohort, where LALES is the baseline. Model 3 is additionally adjusted for age strata, where age < 65 years is the baseline. The Holm method was used to adjust for multiple comparisons for 15 VSQOL outcomes.

[†]IRT Task Composite was calculated from a graded response theory model of 12 items from near vision, distance vision, driving, color vision, peripheral vision, and role difficulties subscales.

[‡]IRT Well-Being Composite was calculated from a graded response model of 12 items from general vision, dependency on others, mental health, ocular pain, and social functioning subscales.

Table S2, Continued: Hierarchical, Linear Regression β Coefficients for the Association Between VSQOL and VFL in the BSE in MOCCaS*

Vision-Specific Quality of Life	Model 3 Interaction by Age \geq 65 Years					
	β_{MD}	(95% CI)	P-Value	P-Value Interaction (CHES)	P-Value Interaction (AFEDS)	P-Value Interaction (Age \geq 65 Years)
<u>Item Response Theory</u>						
Task Composite, IRT [†]	0.687	(0.561, 0.813)	< 0.001	1.000	0.003	0.984
Well-Being Composite, IRT [‡]	0.598	(0.469, 0.726)	< 0.001	1.000	0.002	1.000
<u>Classical Test Theory</u>						
Overall Composite, CTT [§]	0.931	(0.841, 1.022)	< 0.001	< 0.001	< 0.001	1.000
Driving Difficulties	1.502	(1.306, 1.698)	< 0.001	< 0.001	< 0.001	< 0.001
Vision-Related Dependency	1.310	(1.166, 1.454)	< 0.001	< 0.001	< 0.001	1.000
Peripheral Vision	1.138	(1.011, 1.266)	< 0.001	< 0.001	< 0.001	1.000
Vision-Related Mental Health	1.147	(0.976, 1.318)	< 0.001	0.264	< 0.001	1.000
Distance Vision	1.033	(0.916, 1.151)	< 0.001	< 0.001	< 0.001	0.652
Vision-Related Role Function	0.998	(0.830, 1.167)	< 0.001	1.000	< 0.001	1.000
Near Vision	0.844	(0.711, 0.977)	< 0.001	0.005	< 0.001	0.652
Vision-Related Social Function	0.893	(0.805, 0.980)	< 0.001	< 0.001	< 0.001	1.000
Color Vision	0.843	(0.752, 0.935)	< 0.001	< 0.001	< 0.001	1.000
Ocular Pain	0.697	(0.537, 0.858)	< 0.001	0.264	< 0.001	1.000
General Vision	0.262	(0.125, 0.399)	< 0.001	0.264	0.003	1.000
<u>General Health Item</u>						
General Health	0.395	(0.194, 0.596)	< 0.001	0.311	0.064	1.000

[§]Composite score is an un-weighted mean of the 12 subscale scores (excluding general health).

^{||}Scores could be generated for only 3,816 Latinos who reported that they were currently driving or had driven in the past.