

Senior high school	0.84(0.64,1.11)	0.221	1.00(0.72,1.38)	0.986	1.26(0.82,1.95)	0.291	-	-	1.02(0.81,1.27)	0.890	1.02(0.80,1.30)	0.883	0.84(0.57,1.24)	0.381	-	-
Bachelor	0.64(0.50,0.83)	0.001	0.94(0.70,1.28)	0.695	1.31(0.87,1.96)	0.190	-	-	0.97(0.79,1.19)	0.748	1.11(0.88,1.39)	0.397	0.82(0.57,1.18)	0.293	-	-
Master	0.50(0.35,0.73)	<0.001	0.76(0.48,1.19)	0.231	0.73(0.34,1.54)	0.403	-	-	0.71(0.51,0.99)	0.042	0.85(0.59,1.23)	0.384	0.60(0.31,1.17)	0.131	-	-

* Adjusted with age, gender, and any the variables analysed significantly in the bivariate analysis and potential confounders

Table S2. Bivariate and multivariate regression results for REs in rural participants.

	Myopia				Hyperopia				Astigmatism				Anisometropia			
	bivariate		Multivariate*		bivariate		Multivariate*		bivariate		Multivariate*		bivariate		Multivariate*	
	OR(95%CI)	P	OR(95%CI)	P	OR(95%CI)	P	OR(95%CI)	P	OR(95%CI)	P	OR(95%CI)	P	OR(95%CI)	P	OR(95%CI)	P
Gender																
Male	1		1		1		1		1		1		1		1	
Female	1.20(1.00,1.43)	0.045	1.16(0.93,1.44)	0.197	0.99(0.77,1.27)	0.919	1.07(0.82,1.40)	0.623	0.89(0.75,1.06)	0.200	0.84(0.69,1.01)	0.101	1.27(0.86,1.86)	0.230	1.28(0.86,1.91)	0.226
Age (years)																
6 - 10	1		1		1		1		1		1		1		1	
11 - 15	6.60(5.36,8.12)	<0.001	6.39(5.13,7.96)	<0.001	0.18(0.13,0.25)	<0.001	0.19(0.14,0.26)	<0.001	1.62(1.33,1.97)	<0.001	1.60(1.29,1.97)	<0.001	3.10(1.84,5.22)	<0.001	3.31(1.89,5.80)	<0.001
16 - 18	57.60(30.18,109.94)	<0.001	53.84(28.08,103.22)	<0.001	0.11(0.06,0.21)	<0.001	0.12(0.06,0.22)	<0.001	3.96(3.00,5.23)	<0.001	3.83(2.86,5.12)	<0.001	4.89(2.71,8.83)	<0.001	4.82(2.57,9.03)	<0.001
Average parental refractive error																
Without	1		1		1		1		1		1		1		1	
With	1.44(1.18,1.74)	<0.001	1.66(1.30,2.13)	<0.001	0.75(0.56,0.99)	0.041	0.68(0.50,0.91)	0.010	1.43(1.19,1.72)	<0.001	1.31(1.06,1.61)	<0.001	1.24(0.83,1.85)	0.287	1.20(0.80,1.81)	0.383
Daily hours of near-work																
<2h	1		1		1		1		1		1		1		1	
≥2h	5.07(3.48,7.38)	<0.001	2.34(1.52,3.59)	<0.001	0.27(0.19,0.40)	<0.001	0.52(0.35,0.78)	0.001	1.69(1.17,2.43)	0.005	1.31(0.86,1.98)	0.206	2.13(0.77,5.86)	0.144	-	-
Daily hours of outdoor activities																
> 2h	1		1		1		1		1		1		1		1	
≤ 2h	0.82(0.68,1.00)	0.048	0.94(0.75,1.19)	0.622	1.00(0.76,1.31)	0.996	-	-	1.19(0.99,1.44)	0.070	-	-	1.18(0.78,1.76)	0.436	-	-

Annual household income (yuan)																	
>200,000	1		1		1		1		1		1		1		1		
≤ 200,000	0.68(0.45,1.01)	0.057	-	-	1.19(0.67,2.10)	0.559	-	-	0.54(0.37,0.78)	0.001	0.65(0.44,0.97)	0.035	0.45(0.25,0.83)	0.011	0.53(0.28,0.98)	0.043	
Parental education level																	
Junior high school	1		1		1		1		1		1		1		1		
Senior high school	1.28(1.04,1.58)	0.022	1.52(1.17,1.97)	0.002	1.20(0.90,1.62)	0.220	-	-	1.42(1.15,1.74)	0.001	1.35(1.08,1.68)	0.009	1.42(0.90,2.23)	0.128	-	-	
Bachelor	1.15(0.90,1.47)	0.275	1.15(0.84,1.56)	0.377	1.09(0.77,1.56)	0.623	-	-	1.58(1.24,2.02)	<0.001	1.49(1.14,1.95)	0.004	1.64(0.99,2.73)	0.054	-	-	
Master	0.66(0.27,1.59)	0.349	0.59(0.20,1.75)	0.341	1.77(0.58,5.37)	0.316	-	-	1.15(0.47,2.85)	0.755	1.14(0.44,2.97)	0.782	-	-	-	-	

*Adjusted with age, gender, and any the variables analysed significantly in the bivariate analysi

