

# Supplementary Materials

**Supplementary Table 1.** Description of the seven studies that provided data for the current study

Authors / Year	Design / Aim	Population	N of study	N included
Van Nispen et al., 2011	Cross-sectional study to find indications to improve care and referral pathways for visually impaired older adults with depressive symptoms	Visually impaired older adults (50 years and older) from low vision service organisations in the Netherlands	274	274
Burggraaff et al., 2012	RCT to investigate the effectiveness of closed-circuit televisions (CCTV) training	Visually impaired adults (aged 18 years or older) from low vision service organisations in the Netherlands	111	111
Van der Aa et al., 2013	RCT to investigate the (cost-)effectiveness of a stepped care intervention to prevent depressive and anxiety disorders	Visually impaired older adults (50 years and older) from low vision service organisations in the Netherlands and Belgium	914	805*
Bruijning et al., 2014	Longitudinal study to provide more insight into the construct validity and interpretation of goals related to mental health aspects of the Dutch ICF Activity Inventory (D-AI)	Visually impaired adults (aged 18 years or older) from low vision service organisations in the Netherlands	240	240
Van Nispen et al., 2016	Longitudinal study to investigate the (cost-)effectiveness of intensive rehabilitation of clients focused on the impact on functioning, participation and quality of life	visually impaired adults (18 years and older) who are rehabilitating at the intensive rehabilitation centre of interest	74	74
Van der Aa et al., 2017	RCT to evaluate whether an intervention called E-PsEYE is costeffective in comparison with usual care	Visually impaired older adults (50 years or older), who have retinal exudative diseases, receive antiVEGF treatment and have mild symptoms of depression/anxiety	174	174
Schakel et al., 2018	Cross-sectional study to investigate societal costs of visual impairment and comorbid fatigue	Visually impaired adults (18 years and older) from low vision service organisations in the Netherlands and normally sighted adults	480	247**
Total			2267	1925

\* Participants from Belgium (N=109) were excluded since weather data was not available for these people.

\*\* The control group (N=233) was excluded since these people did not have a visual impairment.

**Supplementary Table 2.** Logistic regression analyses of the possible effect modifiers in the association between season and clinically significant depressive symptoms (N=1.925)

<b>Model 1<sup>b</sup></b>	<b>OR</b>	<b>95% Confidence Interval</b>	<b>P-value</b>
Winter (reference)	-	-	-
Spring	0.77	0.55-1.08	0.138
Summer	0.82	0.60-1.14	0.241
Fall	<b>0.68</b>	<b>0.50-0.93</b>	<b>0.016</b>
Blind	0.84	0.41-1.70	0.618
Blind * Spring	0.80	0.35-1.83	0.603
Blind * Summer	0.81	0.35-1.85	0.612
Blind * Fall	0.92	0.43-2.02	0.839
<b>Model 2<sup>b</sup></b>			
Winter (reference)	-	-	-
Spring	0.97	0.50-1.75	0.811
Summer	1.04	0.52-1.80	0.914
Fall	0.99	0.57-1.90	0.903
Sensitive to bright light	<b>2.33</b>	<b>1.37-3.90</b>	<b>0.001</b>
Sensitive to bright light * Spring	0.77	0.38-1.55	0.464
Sensitive to bright light * Summer	0.82	0.40-1.67	0.575
Sensitive to bright light * Fall	0.58	0.27-1.16	0.122
<b>Model 3<sup>b</sup></b>			
Winter (reference)	-	-	-
Spring	0.88	0.60-1.30	0.531
Summer	0.83	0.56-1.24	0.372
Fall	0.75	0.51-1.10	0.140
Macular degeneration	0.98	0.64-1.51	0.942
Macular degeneration * Spring	0.62	0.33-1.16	0.136
Macular degeneration * Summer	0.90	0.48-1.64	0.730
Macular degeneration * Fall	0.78	0.44-1.39	0.402
<b>Model 4<sup>b</sup></b>			
Winter (reference)	-	-	-
Spring	0.75	0.54-1.04	0.083
Summer	<b>0.70</b>	<b>0.50-0.97</b>	<b>0.031</b>
Fall	<b>0.69</b>	<b>0.50-0.94</b>	<b>0.020</b>
Cataract	1.14	0.67-1.94	0.622
Cataract * Spring	1.06	0.44-2.54	0.899
Cataract * Summer	<b>2.41</b>	<b>1.10-5.28</b>	<b>0.026</b>
Cataract * Fall	0.87	0.39-1.93	0.727
<b>Model 5<sup>b</sup></b>			
Winter (reference)	-	-	-
Spring	<b>0.72</b>	<b>0.52-1.00</b>	<b>0.048</b>
Summer	0.82	0.60-1.12	0.211
Fall	<b>0.68</b>	<b>0.50-0.93</b>	<b>0.017</b>
Glaucoma	1.08	0.60-1.93	0.802
Glaucoma * Spring	1.28	0.55-3.00	0.567
Glaucoma * Summer	0.82	0.35-1.94	0.654
Glaucoma * Fall	0.84	0.34-2.04	0.683
<b>Model 6<sup>b</sup></b>			
Winter (reference)	-	-	-
Spring	0.78	0.57-1.06	0.109
Summer	0.84	0.62-1.13	0.152
Fall	<b>0.66</b>	<b>0.48-0.89</b>	<b>0.007</b>
Diabetic retinopathy	1.33	0.51-3.43	0.558
Diabetic retinopathy * Spring	0.38	0.08-1.70	0.196
Diabetic retinopathy * Summer	0.28	0.06-1.36	0.115
Diabetic retinopathy * Fall	1.09	0.33-3.55	0.889
<b>Model 7<sup>b</sup></b>			
Winter (reference)	-	-	-
Spring	0.74	0.54-1.01	0.056
Summer	0.80	0.59-1.10	0.155
Fall	<b>0.64</b>	<b>0.48-0.87</b>	<b>0.004</b>
Retinitis Pigmentosa	0.59	0.21-1.90	0.351
Retinitis Pigmentosa * Spring	1.14	0.36-5.02	0.867
Retinitis Pigmentosa * Summer	0.69	0.13-3.61	0.857

Retinitis Pigmentosa * Fall	<b>2.27</b>	<b>0.60-8.57</b>	<b>0.228</b>
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OR: Odds Ratio; Bold is a statistically significant association  $p < 0.05$   
b. adjusted for age, sex, level of education, having paid work, visual acuity, comorbidity and household situation

**Supplementary Table 3.** Logistic regression analyses of the possible effect modifiers in the association between the hours of sunlight and clinically significant depressive symptoms (N=1.925)

Model 1 <sup>b</sup>	OR	95% Confidence Interval	P-value
Sunlight in hours	<b>0.995</b>	<b>0.992-0.999</b>	<b>0.016</b>
Blind	0.753	0.351-1.819	0.467
Blind * Sunlight in hours	1.000	0.990-1.009	0.980
Model 2 <sup>b</sup>			
Sunlight in hours	0.998	0.992-1.004	0.552
Sensitive to bright light	<b>2.150</b>	<b>1.254-3.698</b>	<b>0.006</b>
Sensitive to bright light * sunlight in hours	0.997	0.990-1.004	0.410
Model 3 <sup>b</sup>			
Sunlight in hours	0.996	0.991-1.000	0.076
Macular degeneration	0.865	0.545-1.374	0.540
Macular degeneration * sunlight in hours	0.998	0.992-1.005	0.741
Model 4 <sup>b</sup>			
Sunlight in hours	<b>0.995</b>	<b>0.992-0.999</b>	<b>0.012</b>
Cataract	1.147	0.621-2.116	0.661
Cataract * sunlight in hours	1.003	0.894-1.013	0.506
Model 5 <sup>b</sup>			
Sunlight in hours	0.996	0.993-1.000	0.051
Glaucoma	1.724	0.868-3.424	0.120
Glaucoma * Sunlight in hours	0.991	0.980-1.002	0.127
Model 6 <sup>b</sup>			
Sunlight in hours	<b>0.996</b>	<b>0.993-1.000</b>	<b>0.044</b>
Diabetic retinopathy	2.238	0.819-6.114	0.116
Diabetic retinopathy * sunlight in hours	0.984	0.968-1.000	0.054
Model 7 <sup>b</sup>			
Sunlight in hours	<b>0.995</b>	<b>0.992-0.999</b>	<b>0.014</b>
Retinitis Pigmentosa	0.809	0.256-2.556	0.718
Retinitis Pigmentosa * sunlight in hours	0.989	0.981-1.016	0.838

OR: Odds Ratio; Bold is a statistically significant association  $p < 0.05$

b. adjusted for age, sex, level of education, having paid work, visual acuity, comorbidity and household situation

**Supplementary Table 4.** Logistic regression analyses of the possible effect modifiers in the association between sensitivity to bright light and clinically significant depressive symptoms (N=1.925)

Model 1 <sup>b</sup>	OR	95% Confidence Interval	P-value
Sensitivity to bright light	<b>1.85</b>	<b>1.36-2.51</b>	<b>&lt;0.001</b>
Blind	0.83	0.38-1.81	0.831
Blind * Sensitivity to bright light	0.87	0.44-1.73	0.683
<b>Model 2<sup>b</sup></b>			
Sensitivity to bright light	<b>1.62</b>	<b>1.14-2.31</b>	<b>0.008</b>
Macular degeneration	0.65	0.40-1.06	0.084
Macular degeneration * Sensitivity to bright light	1.31	0.75-2.31	0.342
<b>Model 3<sup>b</sup></b>			
Sensitivity to bright light	<b>1.78</b>	<b>1.35-2.35</b>	<b>&lt;0.001</b>
Cataract	1.35	0.75-2.44	0.315
Cataract * Sensitivity to bright light	1.07	0.53-2.13	0.854
<b>Model 4<sup>b</sup></b>			
Sensitivity to bright light	<b>0.78</b>	<b>1.36-2.34</b>	<b>&lt;0.001</b>
Glaucoma	0.96	0.48-1.94	0.910
Glaucoma * Sensitivity to bright light	1.08	0.50-2.42	0.823
<b>Model 5<sup>b</sup></b>			
Sensitivity to bright light	<b>1.74</b>	<b>1.34-2.27</b>	<b>&lt;0.001</b>
Diabetic retinopathy	0.44	0.13-1.46	0.178
Diabetic retinopathy * Sensitivity to bright light	2.33	0.63-8.60	0.203
<b>Model 6<sup>b</sup></b>			
Sensitivity to bright light	<b>1.88</b>	<b>1.44-2.48</b>	<b>&lt;0.001</b>
Retinitis Pigmentosa	1.44	0.60-3.44	0.416
Retinitis Pigmentosa * Sensitivity to bright light	0.38	0.13-1.11	0.076

OR: Odds Ratio; Bold is a statistically significant association  $p < 0.05$

b. adjusted for age, sex, level of education, having paid work, visual acuity, comorbidity and household situation

**Supplementary Table 5.** Sensitivity analyses for the association between season and clinically significant depressive symptoms encompassing various models from two different datasets (Pre multiple imputation dataset and dataset with exclusion normally sighted participants)

<b>PRE-MULTIPLE IMPUTATION</b>			
<b>Model 1<sup>a</sup></b>	<b>OR</b>	<b>95% Confidence Interval</b>	<b>P-value</b>
Winter (reference)	-	-	-
Spring	<b>0.73</b>	<b>0.54-0.97</b>	<b>0.031</b>
Summer	0.77	0.58-1.03	0.078
Fall	<b>0.65</b>	<b>0.49-0.86</b>	<b>0.003</b>
<b>Model 2<sup>b</sup></b>			
Winter (reference)	-	-	-
Spring	<b>0.68</b>	<b>0.49-0.95</b>	<b>0.022</b>
Summer	0.75	0.54-1.04	0.084
Fall	<b>0.65</b>	<b>0.47-0.89</b>	<b>0.007</b>
<b>Model 3<sup>b</sup></b>			
Winter (reference)	-	-	-
Spring	0.72	0.50-1.03	0.072
Summer	0.78	0.55-1.12	0.179
Fall	<b>0.64</b>	<b>0.45-0.90</b>	<b>0.011</b>
Blind	0.76	0.37-1.55	0.447
Blind * Spring	0.74	0.30-1.79	0.498
Blind * Summer	0.74	0.30-1.82	0.507
Blind * Fall	1.09	0.47-2.50	0.846
<b>Model 4<sup>b</sup></b>			
Winter (reference)	-	-	-
Spring	0.90	0.43-1.88	0.772
Summer	0.87	0.42-1.82	0.712
Fall	1.01	0.51-1.99	0.981
Sensitive to bright light	<b>2.22</b>	<b>1.21-4.06</b>	<b>0.010</b>
Sensitive to bright light * Spring	0.82	0.35-1.92	0.653
Sensitive to bright light * Summer	1.01	0.43-2.35	0.984
Sensitive to bright light * Fall	0.62	0.28-1.36	0.229
<b>Model 5<sup>b</sup></b>			
Winter (reference)	-	-	-
Spring	0.77	0.50-1.18	0.278
Summer	0.78	0.50-1.22	0.277
Fall	0.89	0.45-1.05	0.086
Macular degeneration	0.93	0.58-1.49	0.768
Macular degeneration * Spring	0.72	0.37-1.41	0.338
Macular degeneration * Summer	0.92	0.48-1.78	0.807
Macular degeneration * Fall	0.89	0.47-1.67	0.715
<b>Model 6<sup>b</sup></b>			
Winter (reference)	-	-	-
Spring	<b>0.70</b>	<b>0.49-1.00</b>	<b>0.048</b>
Summer	<b>0.68</b>	<b>0.47-0.97</b>	<b>0.035</b>
Fall	<b>0.69</b>	<b>0.49-0.97</b>	<b>0.036</b>
Cataract	1.30	0.72-2.34	0.379
Cataract * Spring	0.93	0.35-2.43	0.877
Cataract * Summer	2.00	0.85-4.72	0.114
Cataract * Fall	0.65	0.27-1.58	0.343
<b>Model 7<sup>b</sup></b>			
Winter (reference)	-	-	-
Spring	<b>0.68</b>	<b>0.47-0.96</b>	<b>0.031</b>
Summer	0.78	0.65-1.11	0.160
Fall	<b>0.69</b>	<b>0.49-0.96</b>	<b>0.029</b>
Glaucoma	1.25	0.65-2.41	0.499
Glaucoma * Spring	1.05	0.40-2.70	0.928
Glaucoma * Summer	0.76	0.29-1.99	0.581
Glaucoma * Fall	0.57	0.21-1.56	0.270
<b>Model 8<sup>b</sup></b>			
Winter (reference)	-	-	-
Spring	<b>0.71</b>	<b>0.50-0.99</b>	<b>0.043</b>
Summer	0.78	0.66-1.09	0.148
Fall	<b>0.63</b>	<b>0.45-0.87</b>	<b>0.006</b>

Diabetic retinopathy	1.41	0.51-3.92	0.514
Diabetic retinopathy * Spring	0.44	0.08-2.25	0.321
Diabetic retinopathy * Summer	0.40	0.08-2.06	0.272
Diabetic retinopathy * Fall	1.17	0.33-4.12	0.810
<b>Model 9<sup>b</sup></b>			
Winter (reference)	-	-	-
Spring	<b>0.68</b>	<b>0.48-0.95</b>	<b>0.023</b>
Summer	0.76	0.54-1.06	0.108
Fall	<b>0.62</b>	<b>0.45-0.86</b>	<b>0.004</b>
Retinitis Pigmentosa	0.66	0.23-1.92	0.443
Retinitis Pigmentosa * Spring	1.14	0.24-5.43	0.872
Retinitis Pigmentosa * Summer	0.57	0.07-3.67	0.554
Retinitis Pigmentosa * Fall	2.18	0.54-8.76	0.273
<b>EXCLUSION OF PARTICIPANTS WITH NORMAL VISION</b>			
<b>Model 1<sup>a</sup></b>			
Winter (reference)	-	-	-
Spring	0.72	0.51-1.01	0.059
Summer	0.73	0.52-1.02	0.063
Fall	<b>0.61</b>	<b>0.43-0.81</b>	<b>0.004</b>
<b>Model 2<sup>b</sup></b>			
Winter (reference)	-	-	-
Spring	<b>0.67</b>	<b>0.47-0.96</b>	<b>0.027</b>
Summer	<b>0.70</b>	<b>0.50-0.98</b>	<b>0.036</b>
Fall	<b>0.57</b>	<b>0.41-0.81</b>	<b>0.001</b>
<b>Model 3<sup>b</sup></b>			
Winter (reference)	-	-	-
Spring	0.69	0.46-1.03	0.066
Summer	0.71	0.48-1.03	0.074
Fall	<b>0.56</b>	<b>0.38-0.82</b>	<b>0.003</b>
Blind	0.95	0.45-1.99	0.885
Blind * Spring	0.89	0.38-2.10	0.797
Blind * Summer	0.92	0.39-2.17	0.855
Blind * Fall	1.09	0.48-2.49	0.832
<b>Model 4<sup>b</sup></b>			
Winter (reference)	-	-	-
Spring	0.74	0.36-1.53	0.410
Summer	0.82	0.39-1.70	0.585
Fall	0.77	0.39-1.51	0.441
Sensitive to bright light	<b>1.90</b>	<b>1.06-3.40</b>	<b>0.031</b>
Sensitive to bright light * Spring	0.92	0.41-2.08	0.842
Sensitive to bright light * Summer	0.85	0.36-2.00	0.713
Sensitive to bright light * Fall	0.71	0.33-1.56	0.396
<b>Model 5<sup>b</sup></b>			
Winter (reference)	-	-	-
Spring	0.82	0.62-1.28	0.377
Summer	0.72	0.45-1.14	0.155
Fall	0.66	0.42-1.03	0.070
Macular degeneration	1.03	0.64-1.86	0.901
Macular degeneration * Spring	0.61	0.30-1.22	0.159
Macular degeneration * Summer	0.93	0.47-1.83	0.834
Macular degeneration * Fall	0.73	0.38-1.42	0.256
<b>Model 6<sup>b</sup></b>			
Winter (reference)	-	-	-
Spring	0.69	0.47-1.01	0.056
Summer	<b>0.61</b>	<b>0.42-0.89</b>	<b>0.011</b>
Fall	<b>0.62</b>	<b>0.43-0.90</b>	<b>0.011</b>
Cataract	1.17	0.65-2.11	0.595
Cataract * Spring	0.88	0.34-2.35	0.796
Cataract * Summer	2.26	0.93-5.47	0.071
Cataract * Fall	0.60	0.24-1.63	0.286
<b>Model 7<sup>b</sup></b>			
Winter (reference)	-	-	-

Spring	<b>0.65</b>	<b>0.44-0.95</b>	<b>0.027</b>
Summer	0.73	0.50-1.05	0.087
Fall	<b>0.60</b>	<b>0.41-0.86</b>	<b>0.006</b>
Glaucoma	1.14	0.60-2.17	0.684
Glaucoma * Spring	1.26	0.50-3.17	0.627
Glaucoma * Summer	0.75	0.29-1.92	0.545
Glaucoma * Fall	0.74	0.28-1.96	0.542
<b>Model 8<sup>b</sup></b>			
Winter (reference)	-	-	-
Spring	0.71	0.50-1.01	0.054
Summer	0.72	0.61-1.03	0.069
Fall	<b>0.54</b>	<b>0.38-0.77</b>	<b>&lt;0.001</b>
Diabetic retinopathy	1.45	0.41-4.45	0.817
Diabetic retinopathy * Spring	0.21	0.02-2.21	0.192
Diabetic retinopathy * Summer	0.39	0.07-2.32	0.302
Diabetic retinopathy * Fall	1.77	0.41-7.62	0.446
<b>Model 9<sup>b</sup></b>			
Winter (reference)	-	-	-
Spring	<b>0.67</b>	<b>0.47-0.95</b>	<b>0.026</b>
Summer	0.71	0.50-1.00	0.050
Fall	<b>0.55</b>	<b>0.38-0.78</b>	<b>&lt;0.001</b>
Retinitis Pigmentosa	0.62	0.21-1.78	0.370
Retinitis Pigmentosa * Spring	1.20	0.26-5.50	0.814
Retinitis Pigmentosa * Summer	0.67	0.12-3.63	0.643
Retinitis Pigmentosa * Fall	2.25	0.55-9.16	0.258

OR: Odds Ratio; Bold is a statistically significant association  $p < 0.05$

a. unadjusted

b. adjusted for age, sex, level of education, having paid work, visual acuity, comorbidity and household situation



**Supplementary Table 6. Sensitivity analyses for the association between the hours of sunlight and clinically significant depressive symptoms encompassing various models from different datasets (Pre multiple imputation dataset, dataset with exclusion of normally sighted adults and dataset with exclusion of participants without information about their residence)**

<b>PRE-MULTIPLE IMPUTATION</b>			
<b>Model 1</b>	<b>OR</b>	<b>95% Confidence Interval</b>	<b>P-value</b>
Sunlight in hours	<b>0.995</b>	<b>0.991-0.998</b>	<b>0.001</b>
<b>Model 2<sup>b</sup></b>			
Sunlight in hours	<b>0.996</b>	<b>0.992-0.999</b>	<b>0.019</b>
<b>Model 3<sup>b</sup></b>			
Sunlight in hours	<b>0.996</b>	<b>0.992-1.000</b>	<b>0.036</b>
Blind	0.710	0.316-0.987	0.404
Blind * Sunlight in hours	0.999	0.989-1.010	0.911
<b>Model 4<sup>b</sup></b>			
Sunlight in hours	0.998	0.991-1.005	0.606
Sensitive to bright light	<b>2.020</b>	<b>1.074-3.801</b>	<b>0.029</b>
Sensitive to bright light * sunlight in hours	0.998	0.990-1.007	0.739
<b>Model 5<sup>b</sup></b>			
Sunlight in hours	0.996	0.991-1.001	0.097
Macular degeneration	0.835	0.498-1.401	0.496
Macular degeneration * sunlight in hours	1.000	0.992-1.007	0.953
<b>Model 6<sup>b</sup></b>			
Sunlight in hours	<b>0.995</b>	<b>0.991-0.999</b>	<b>0.017</b>
Cataract	1.031	0.515-2.063	0.931
Cataract * sunlight in hours	1.005	0.894-1.016	0.357
<b>Model 7<sup>b</sup></b>			
Sunlight in hours	0.996	0.993-1.000	0.068
Glaucoma	1.558	0.727-3.339	0.254
Glaucoma * Sunlight in hours	0.993	0.981-1.005	0.254
<b>Model 8<sup>b</sup></b>			
Sunlight in hours	0.996	0.993-1.00	0.057
Diabetic retinopathy	2.196	0.764-6.256	0.145
Diabetic retinopathy * sunlight in hours	0.988	0.972-1.004	0.152
<b>Model 9<sup>b</sup></b>			
Sunlight in hours	<b>0.996</b>	<b>0.992-0.999</b>	<b>0.023</b>
Retinitis Pigmentosa	0.889	0.271-2.810	0.846
Retinitis Pigmentosa * sunlight in hours	0.998	0.980-1.016	0.816
<b>EXCLUSION OF PARTICIPANTS WITH NORMAL VISION</b>			
<b>Model 1<sup>a</sup></b>			
<b>Sunlight in hours</b>	<b>0.996</b>	<b>0.992-1.000</b>	<b>0.036</b>
<b>Model 2<sup>b</sup></b>			
<b>Sunlight in hours</b>	<b>0.996</b>	<b>0.992-1.000</b>	<b>0.039</b>
<b>Model 3<sup>b</sup></b>			
Sunlight in hours	0.996	0.992-1.001	0.093
Blind	0.975	0.438-2.171	0.950
Blind * Sunlight in hours	0.999	0.990-1.009	0.917
<b>Model 4<sup>b</sup></b>			
Sunlight in hours	1.000	0.992-1.008	0.096
Sensitive to bright light	<b>2.236</b>	<b>1.161-4.313</b>	<b>0.015</b>

Sensitive to bright light * sunlight in hours	0.995	0.986-1.004	0.307
<b>Model 5<sup>b</sup></b>			
Sunlight in hours	0.997	0.991-1.002	0.206
Macular degeneration	0.897	0.525-1.531	0.689
Macular degeneration * sunlight in hours	0.999	0.992-1.007	0.780
<b>Model 6<sup>b</sup></b>			
Sunlight in hours	0.996	0.992-1.000	0.058
Cataract	1.072	0.524-2.191	0.850
Cataract * sunlight in hours	1.003	0.992-1.014	0.838
<b>Model 7<sup>b</sup></b>			
Sunlight in hours	0.997	0.993-1.002	0.213
Glaucoma	1.834	0.868-3.876	0.112
Glaucoma * Sunlight in hours	0.990	0.978-1.003	0.120
<b>Model 8<sup>b</sup></b>			
Sunlight in hours	<b>0.988</b>	<b>0.979-9.98</b>	<b>0.006</b>
Diabetic retinopathy	3.307	0.861-11.379	0.958
Diabetic retinopathy * sunlight in hours	0.982	0.953-1.000	0.054
<b>Model 9<sup>b</sup></b>			
Sunlight in hours	0.996	0.992-1.000	0.069
Retinitis Pigmentosa	0.828	0.249-2.750	0.758
Retinitis Pigmentosa * sunlight in hours	0.998	0.980-1.017	0.856
<b>EXCLUSION OF PARTICIPANTS WITHOUT INFORMATION ABOUT THEIR RESIDENCE</b>			
<b>Model 1<sup>a</sup></b>			
<b>Sunlight in hours</b>	<b>0.995</b>	<b>0.991-0.999</b>	<b>0.012</b>
<b>Model 2<sup>b</sup></b>			
<b>Sunlight in hours</b>	<b>0.995</b>	<b>0.991-0.999</b>	<b>0.018</b>
<b>Model 3<sup>b</sup></b>			
Sunlight in hours	<b>0.995</b>	<b>0.992-0.999</b>	<b>0.019</b>
Blind	0.603	0.240-1511	0.279
Blind * Sunlight in hours	1.000	0.989-1.011	0.976
<b>Model 4<sup>b</sup></b>			
Sunlight in hours	0.996	0.988-1.004	0.314
Sensitive to bright light	<b>1.990</b>	<b>1.012-3.919</b>	<b>0.046</b>
Sensitive to bright light * sunlight in hours	1.000	0.991-1.009	0.874
<b>Model 5<sup>b</sup></b>			
Sunlight in hours	0.9	0.991-1.001	0.099
Macular degeneration	0.825	0.483-1.409	0.481
Macular degeneration * sunlight in hours	0.999	0.992-1.007	0.827
<b>Model 6<sup>b</sup></b>			
Sunlight in hours	<b>0.995</b>	<b>0.991-0.999</b>	<b>0.024</b>
Cataract	1.351	0.666-2.742	0.404
Cataract * sunlight in hours	1.003	0.894-1.013	0.567
<b>Model 7<sup>b</sup></b>			
8			
Sunlight in hours	0.997	0.981-1.001	0.118
Glaucoma	<b>2.678</b>	<b>1.219-5.877</b>	<b>0.014</b>
Glaucoma * Sunlight in hours	0.989	0.977-1.001	0.079
<b>Model 8<sup>b</sup></b>			
Sunlight in hours	0.996	<b>0.992-1.000</b>	<b>0.053</b>
Diabetic retinopathy	3.075	0.892-10.601	0.075
Diabetic retinopathy * sunlight in hours	0.986	0.968-1.005	0.144

Model 9 <sup>b</sup>			
Sunlight in hours	<b>0.995</b>	<b>0.991-0.999</b>	<b>0.023</b>
Retinitis Pigmentosa	0.813	0.119-5.569	0.833
Retinitis Pigmentosa * sunlight in hours	1.230	0.627-2.413	0.546

OR: Odds Ratio; Bold is a statistically significant association  $p < 0.05$

a. unadjusted

b. adjusted for age, sex, level of education, having paid work, visual acuity, comorbidity and household situation

**Supplementary Table 7.** Sensitivity analyses for the association between sensitivity to bright light and clinically significant depressive symptoms encompassing various models from different datasets (Pre multiple imputation dataset and dataset with exclusion of participants with normal vision)

<b>PRE-MULTIPLE IMPUTATION</b>			
<b>Model 1<sup>a</sup></b>	<b>OR</b>	<b>95% Confidence Interval</b>	<b>P-value</b>
Sensitivity to bright light	<b>1.93</b>	<b>1.50-2.49</b>	<b>&lt;0.001</b>
<b>Model 2<sup>b</sup></b>			
Sensitivity to bright light	<b>1.87</b>	<b>1.40-2.48</b>	<b>&lt;0.001</b>
<b>Model 3<sup>b</sup></b>			
Sensitivity to bright light	<b>1.93</b>	<b>1.41-2.64</b>	<b>&lt;0.001</b>
Blind	0.82	0.36-1.89	0.648
Blind * Sensitivity to bright light	0.81	0.38-1.73	0.590
<b>Model 4<sup>b</sup></b>			
Sensitivity to bright light	<b>1.66</b>	<b>1.15-2.39</b>	<b>0.007</b>
Macular degeneration	0.69	0.40-1.06	0.184
Macular degeneration * Sensitivity to bright light	1.36	0.76-2.45	0.299
<b>Model 5<sup>b</sup></b>			
Sensitivity to bright light	<b>1.82</b>	<b>1.34-2.48</b>	<b>&lt;0.001</b>
Cataract	1.24	0.62-2.48	0.545
Cataract * Sensitivity to bright light	1.18	0.53-2.64	0.693
<b>Model 6<sup>b</sup></b>			
Sensitivity to bright light	<b>1.84</b>	<b>1.36-2.49</b>	<b>&lt;0.001</b>
Glaucoma	0.94	0.42-2.10	0.870
Glaucoma * Sensitivity to bright light	1.13	0.45-2.81	0.801
<b>Model 7<sup>b</sup></b>			
Sensitivity to bright light	<b>1.74</b>	<b>1.30-2.32</b>	<b>&lt;0.001</b>
Diabetic retinopathy	0.18	0.02-1.36	0.096
Diabetic retinopathy * Sensitivity to bright light	2.25	0.89-5.47	0.65
<b>Model 8<sup>b</sup></b>			
Sensitivity to bright light	<b>1.96</b>	<b>1.48-2.64</b>	<b>&lt;0.001</b>
Retinitis Pigmentosa	1.45	0.53-3.85	0.465
Retinitis Pigmentosa * Sensitivity to bright light	0.42	0.13-1.35	0.145
<b>EXCLUSION OF PARTICIPANTS WITH NORMAL VISION</b>			
<b>Model 1<sup>a</sup></b>			
Sensitivity to bright light	<b>1.82</b>	<b>1.37-2.44</b>	<b>&lt;0.001</b>
<b>Model 2<sup>b</sup></b>			
Sensitivity to bright light	<b>1.68</b>	<b>1.25-2.26</b>	<b>&lt;0.001</b>
<b>Model 3<sup>b</sup></b>			
Sensitivity to bright light	<b>1.73</b>	<b>1.20-2.49</b>	<b>0.003</b>
Blind	1.00	0.44-2.30	0.996
Blind * Sensitivity to bright light	0.88	0.43-1.83	0.737
<b>Model 4<sup>b</sup></b>			
Sensitivity to bright light	<b>1.53</b>	<b>1.01-2.32</b>	<b>0.046</b>
Macular degeneration	0.69	0.40-1.20	0.191
Macular degeneration * Sensitivity to bright light	1.27	0.65-2.49	0.483
<b>Model 5<sup>b</sup></b>			

Sensitivity to bright light	<b>1.66</b>	<b>1.21-2.28</b>	<b>0.002</b>
Cataract	1.20	0.61-2.37	0.597
Cataract * Sensitivity to bright light	1.08	0.50-2.37	0.841
<b>Model 6<sup>b</sup></b>			
Sensitivity to bright light	<b>0.70</b>	<b>1.24-2.33</b>	<b>&lt;0.001</b>
Glaucoma	1.11	0.52-2.37	0.782
Glaucoma * Sensitivity to bright light	0.91	0.40-2.11	0.832
<b>Model 7<sup>b</sup></b>			
Sensitivity to bright light	<b>1.63</b>	<b>1.21-2.20</b>	<b>0.001</b>
Diabetic retinopathy	0.63	0.17-2.37	0.490
Diabetic retinopathy * Sensitivity to bright light	1.90	0.44-8.29	0.391
<b>Model 8<sup>b</sup></b>			
Sensitivity to bright light	<b>1.79</b>	<b>1.32-2.48</b>	<b>&lt;0.001</b>
Retinitis Pigmentosa	1.60	0.63-4.08	0.322
Retinitis Pigmentosa * Sensitivity to bright light	0.34	0.11-1.07	0.065

OR: Odds Ratio; Bold is a statistically significant association  $p < 0.05$

a. unadjusted

b. adjusted for age, sex, level of education, having paid work, visual acuity, comorbidity and household situation