Effect of age and gender on face scanning during affect recognition in immersive virtual reality

Supplementary Material B. Summaries of viewing time results by emotion and gender

Table B.1. Summary of the viewing time results by emotion in men.

NEUTRAL	Hits	Misses
Most viewed AOIs	EY (27.99%) NS (19.26%)	EY (25.24%), FH (24.14%) BG (19.36%), MT (18.44%)
Statistical significance	Yes ($\chi^2(5) = 45.371, p < 0.001$) for • EY > FH ($p = 0.003$), EY > CH ($p = 0.002$), EY > MT ($p = 0.004$), EY > BG ($p < 0.001$)	No ($\chi^2(5) = 4.512, p = 0.478$)
SURPRISE	**Hits**	**Misses**
Most viewed AOIs	EY (29.11%) FH (16.56%), MT (15.96%), NS (15.90%)	EY (27.33%) FH (19.24%), BG (18.42%)
Statistical significance	Yes ($\chi^2(5) = 40.351, p < 0.001$) for • EY > FH ($p = 0.004$), EY > CH ($p < 0.001$), EY > MT ($p = 0.001$), EY > BG ($p < 0.001$) • NS > BG ($p = 0.009$)	No ($\chi^2(5) = 4.382, p = 0.496$)
FEAR	**Hits**	**Misses**
Most viewed AOIs	EY (28.94%), FH (20.44%)	EY (28.15%) MT (17.48%), NS (16.88%)
Statistical significance	Yes ($\chi^2(5) = 38.370, p < 0.001$) for • EY > FH ($p = 0.049$), EY > CH ($p < 0.001$), EY > BG ($p < 0.001$) • NS > CH ($p = 0.019$), BG ($p = 0.036$)	Yes ($\chi^2(5) = 33.907, p < 0.001$) for • EY > FH ($p < 0.001$), EY > CH ($p = 0.044$)
ANGER	**Hits**	**Misses**
Most viewed AOIs	EY (28.60%) NS (17.43%), MT (16.33%)	EY (34.22%) BG (18.42%)
Statistical significance	Yes ($\chi^2(5) = 40.748, p < 0.001$) for • EY > FH ($p = 0.002$), EY > CH ($p = 0.001$), EY > MT ($p = 0.0264$), EY > BG ($p < 0.001$) • NS > BG ($p = 0.001$)	Yes ($\chi^2(5) = 21.153, p < 0.001$) for • EY > CH ($p = 0.040$), EY > BG ($p = 0.049$)
DISGUST	**Hits**	**Misses**
Most viewed AOIs	EY (28.42%) NS (18.42%)	EY (26.35%), FH (20.72%) NS (17.27%)
Statistical significance	Yes ($\chi^2(5) = 40.342, p < 0.001$) for • EY > FH ($p < 0.001$), EY > CH ($p = 0.012$), EY > MT ($p < 0.001$), EY > BG ($p < 0.001$) • NS > BG ($p = 0.002$)	Yes ($\chi^2(5) = 22.363, p < 0.001$) for • EY > CH ($p = 0.006$), EY > BG ($p = 0.024$)
JOY	**Hits**	**Misses**
Most viewed AOIs	EY (23.27%), NS (20.79%), MT (20.79%)	BG (33.07%), MT (22.49%) EY (19.36%)
Statistical significance	Yes ($\chi^2(5) = 45.627, p < 0.001$) for • EY > FH ($p = 0.001$), EY > CH ($p = 0.010$), EY > MT ($p = 0.014$), EY > BG ($p < 0.001$) • NS > FH ($p = 0.002$), NS > CH ($p = 0.026$), NS > BG ($p < 0.001$) • MT > BG ($p = 0.006$)	Yes ($\chi^2(5) = 11.269, p = 0.046$) for • The pairwise comparison did not find differences among the AOIs.
SADNESS	**Hits**	**Misses**
Most viewed AOIs	EY (27.02%) NS (17.61%), FH (16.64%), MT (16.37%)	EY (27.50%) MT (19.01%)
Statistical significance	Yes ($\chi^2(5) = 42.682, p < 0.001$) for • EY > CH ($p < 0.001$), EY > BG ($p < 0.001$) • BG < NS ($p < 0.001$), BG < FH ($p = 0.049$), BG < MT ($p = 0.021$)	Yes ($\chi^2(5) = 18.648, p = 0.002$) for • EY > BG ($p = 0.014$)

Table B.2. Summary of the viewing time results by emotion in women.

NEUTRAL	Hits	Misses
Most viewed AOIs	EY (25.24%), FH (24.15%) MT (18.44%)	MT (31.72%), FH (25.00%) EY (19.97%)
Statistical significance	Yes ($\chi^2(5) = 38.713, p < 0.001$) for • EY > CH ($p < 0.001$), EY > BG ($p < 0.001$)	No ($\chi^2(5) = 4.815, p = 0.439$)
SURPRISE	**Hits**	**Misses**
Most viewed AOIs	EY (23.40%), FH (22.06%) MT (18.62%)	EY (28.61%), FH (27.02%) NS (13.62%), MT (12.88%), BG (12.73%)
Statistical significance	Yes ($\chi^2(5) = 26.758, p < 0.001$) for • EY > CH ($p < 0.001$), EY > BG ($p < 0.001$)	Yes ($\chi^2(5) = 11.789, p = 0.038$) for • The pairwise comparison did not find differences among the AOIs.
FEAR	**Hits**	**Misses**
Most viewed AOIs	FH (26.30%), EY (24.74%) MT (16.53%)	EY (28.15%) NS (15.31%), MT (14.23%)
Statistical significance	Yes ($\chi^2(5) = 30.395, p < 0.001$) for • EY > CH ($p = 0.001$), EY > BG ($p < 0.001$) • NS > BG ($p = 0.014$)	Yes ($\chi^2(5) = 31.029, p < 0.001$) for • EY > CH ($p = 0.004$), EY > MT ($p = 0.018$), EY > BG ($p < 0.001$) • NS > BG ($p = 0.025$)
ANGER	**Hits**	**Misses**
Most viewed AOIs	FH (24.09%), EY (22.04%) MT (16.37%)	MT (21.95%), EY (20.12%) NS (19.24%)
Statistical significance	Yes ($\chi^2(5) = 23.9718, p < 0.001$) for • EY > CH ($p = 0.002$), EY > BG ($p < 0.001$)	Yes ($\chi^2(5) = 12.503, p = 0.029$) for • The pairwise comparison did not find differences among the AOIs.
DISGUST	**Hits**	**Misses**
Most viewed AOIs	EY (21.78%), FH (20.91%) MT (17.93%), NS (17.09%)	EY (25.55%), FH (25.38%) NS (16.06%), MT (15.24%)
Statistical significance	Yes ($\chi^2(5) = 22.266, p < 0.001$) for • EY > CH ($p = 0.002$), EY > BG ($p = 0.006$)	Yes ($\chi^2(5) = 20.726, p < 0.001$) for • EY > CH ($p = 0.037$), EY > BG ($p = 0.011$)
JOY	**Hits**	**Misses**
Most viewed AOIs	MT (23.14%), EY (21.75%) NS (17.57%)	MT (23.94%), FH (21.53%), BG (20.40%)
Statistical significance	Yes ($\chi^2(5) = 27.424, p < 0.001$) for • EY > FH ($p = 0.006$), EY > CH ($p = 0.020$), EY > BG ($p < 0.001$) • BG < NS ($p = 0.037$), BG < MT ($p = 0.046$)	No ($\chi^2(5) = 2.573, p = 0.766$)
SADNESS	**Hits**	**Misses**
Most viewed AOIs	EY (25.30%), FH (21.39%)	MT (23.64%), FH (21.46%), EY (21.68%)
Statistical significance	Yes ($\chi^2(5) = 27.253, p < 0.001$) for • EY > CH ($p < 0.001$), EY > BG ($p < 0.001$)	Yes ($\chi^2(5) = 19.981, p = 0.001$) for • EY > CH ($p = 0.046$), EY > BG ($p = 0.009$)