# Supplementary Material
# for
# Eye Tracking in the Wild: Piloting a Real-Life Assessment Paradigm for Older Adults

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## Preliminary Results: Correlations between Personality Traits and Number of Fixations

### *Statistical Analysis*

These exploratory data analyses are based on $n = 28$ (75% female). The analyses did not include covariates because the present study piloted the feasibility of grocery shopping as a real-life assessment paradigm. In addition to p-values, we provide 95% confidence intervals when reporting the correlation coefficients. They contain information about the size of an effect and its precision, thus being more informative than *p*-values alone. The confidence intervals were based on bias-corrected bootstrapping (1,000 bootstrap samples).

### *Preliminary Correlations*

It should be noted that the results are reported for exploratory purposes, but not for drawing conclusions on their own due to the lack of power as the goal of this study was to pilot a new paradigm.

Table 1 shows the means, standard deviations, and ranges for all personality traits and the coded eye movements. Table 2 displays the Spearman's correlations coefficients and the bias-corrected bootstrap confidence intervals for the associations of interest. No significant correlations between personality traits and eye movements were found.

### *Proportions*

In addition, we analyzed the proportions of the number of fixations on the three different areas of interest (proportion 1 = different products / price tags; proportion 2 = different products / bought products; proportion 3 = price tags / bought products) to descriptively compare them. On average, participants looked 7.58 times more at different products in relation to price tags (*SD*: 7.98). They also looked 9.53 times more at different products in relation to the products they actually bought (*SD*: 7.65). However, the proportion between price tags and bought products was rather small, participants looked 1.67 times more at price tags than at bought products (*SD*: 1.85). Subsequently, we tested whether the personality traits were associated with these proportions. Only one significant correlation was found, that is agreeableness was negatively related to proportion 3 (price tags / bought products), $r_s = -.41$, $p < .05$, 95% CI [-.691, -.025]. In other words, higher levels of agreeableness were related to a lower proportion 3 or lower levels of agreeableness were related to a higher proportion 3.

Table 1

*Descriptive Statistics for Personality Traits and Eye Movements.*

| Personality traits | *M* | *SD* | Range |
|---|---|---|---|
| Openness | 4.17 | 0.81 | 0-6 |
| Neuroticism | 2.14 | 1.09 | 0-6 |
| Conscientiousness | 4.75 | 0.86 | 0-6 |
| Extraversion | 4.03 | 1.16 | 0-6 |
| Agreeableness | 4.28 | 0.77 | 0-6 |
| Curiosity | 3.10 | 0.47 | 1-4 |
| Exploration | 3.23 | 0.54 | 1-4 |
| Absorption | 2.92 | 0.59 | 1-4 |
| Fixations | | | |
| Different products | 333.14 | 182.41 | 89-752 |
| Price tags | 61.29 | 39.21 | 6-138 |
| Bought products | 49.79 | 34.10 | 6-151 |
| Fixations controlled for shopping duration and total fixations | | | |
| Different products | 0.07 | 0.05 | 0.0-0.2 |
| Price tags | 0.01 | 0.01 | 0.0-0.01 |
| Bought products | 0.01 | 0.02 | 0.0-0.01 |

*Note.* $N = 28$. Means (*M*), standard deviations (*SD*) and possible ranges of the variables of interest are shown in raw scores. The range of eye movements refers to the actual range.

Table 2
*Correlations between Personality Traits and Eye Movements*

| | Openness | Neuroticism | Conscientiousness | Extraversion | Agreeableness | Curiosity | Exploration | Absorption |
|---|---|---|---|---|---|---|---|---|
| Different products | -.04 [-.398, .438] | .27 [-.114, .594] | -.15 [-.503, .244] | -.25 [-.573, .113] | .10 [-.436, .283] | -.05 [-.462, .328] | .18 [-.254, .539] | -.11 [-.489, .294] |
| Price tags | -.05 [-.493, .384] | .20 [-.195, .549] | -.24 [-.579, .202] | -.34 [-.616, .009] | .29 [-.575, .067] | -.02 [-.446, .434] | .14 [-.316, .597] | -.04 [-.481, .425] |
| Bought products | .10 [-.309, .532] | .02 [-.379, .356] | .12 [-.245, .452] | -.13 [-.481, .270] | .16 [-.276, .535] | .03 [-.375, .444] | .23 [-.190, .607] | -.01 [-.426, .430] |

*Note.* $N = 28$. Table shows Spearman's correlation coefficients. BCa bootstrap 95% CIs are reported in brackets.