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Author Correction

Eye movement characteristics reflected fatigue development in both young and elderly individuals

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Published in:
Scientific Reports

DOI (link to publication from Publisher):
[10.1038/s41598-020-60914-6](https://doi.org/10.1038/s41598-020-60914-6)

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Publication date:
2020

Document Version
Publisher's PDF, also known as Version of record

[Link to publication from Aalborg University](#)

Citation for published version (APA):

Zargari Marandi, R., Madeleine, P., Omland, Ø., Vuillerme, N., & Samani, A. (2020). Author Correction: Eye movement characteristics reflected fatigue development in both young and elderly individuals. *Scientific Reports*, 10(1), 3964. [3964]. <https://doi.org/10.1038/s41598-020-60914-6>

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Author Correction: Eye movement characteristics reflected fatigue development in both young and elderly individuals

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Correction to: *Scientific Reports* <https://doi.org/10.1038/s41598-018-31577-1>, published online 03 September 2018

The article contains errors in Table 1, Table 2, Figure 1 and in the Reference list.

In Table 1 and Figure 1, the unit for PDR incorrectly reads “cm” and should read “mm”. The correct Table 1 and Figure 1 appear below.

Published online: 27 February 2020

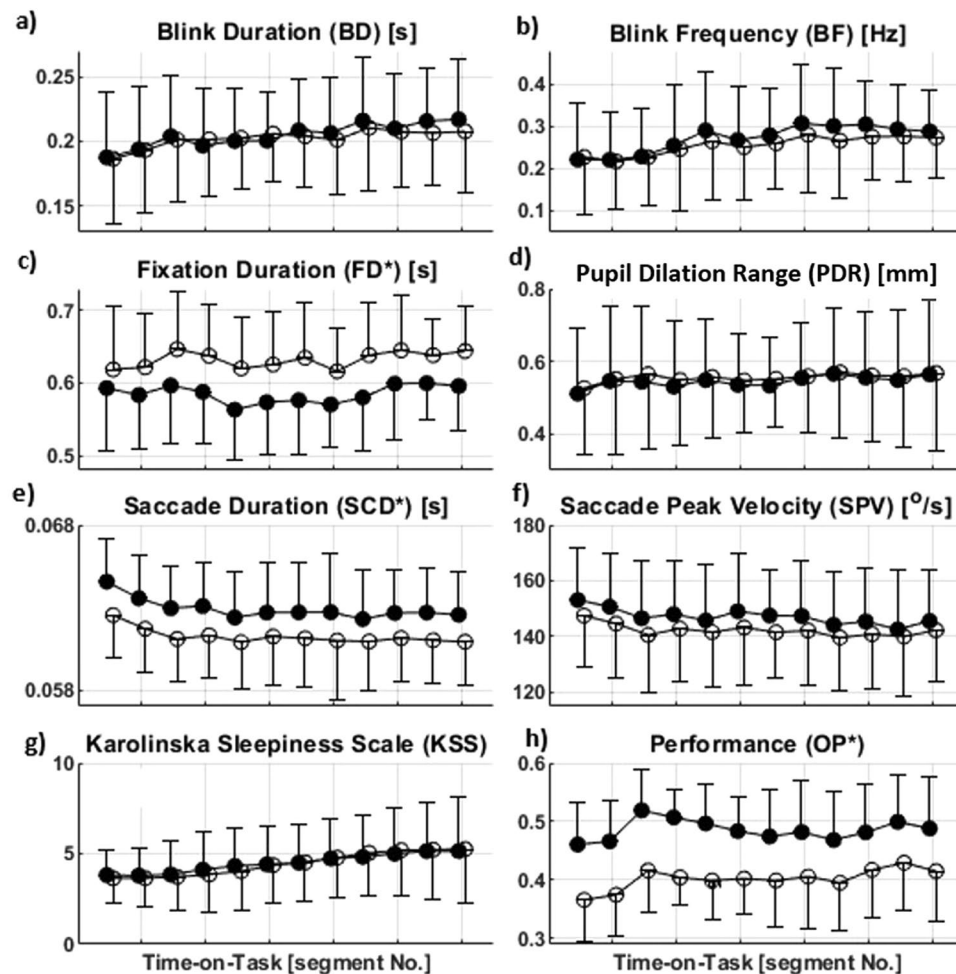


Figure 1.

Oculometrics	Abbreviation (unit)	Ocular event attribution	Operational definition (computation method)
Saccade Peak Velocity	SPV (°/s)	Saccade	The maximum of the gaze velocity during the course of a saccade
Saccade Duration	SCD ¹ (s)	Saccade	Number of samples of a saccade divided by the sampling frequency ²
Fixation Duration	FD (s)	Fixation	Number of samples of a fixation divided by the sampling frequency
Blink Duration	BD (s)	Blink	Number of samples of a blink divided by the sampling frequency
Blink Frequency	BF (Hz)	Blink	Number of blink occurrences during a cycle ³ divided by the duration of a cycle
Pupil Dilation Range	PDR (mm)	Pupillary response	The range of pupil dilation

Table 1. The operational definitions used to compute the oculometrics. (1) The saccade duration was abbreviated here as SCD, not to be confused with the standard deviation (SD). (2) The sampling frequency in this study was 360 Hz. (3) The cycle is described in the method section.

In Table 2, in the parameters column,

“*TI*: Time interval between correct clicks (*TI* for the first correct click is computed from the replication period onset time) *CC*: Number of correct clicks *RP*: Replication period *IC*: number of incorrect clicks *PP*: Number of pattern points *DC*: number of clicks on the distracting point”

should read:

“*TI*: Time interval between correct clicks (*TI* for the first correct click is computed from the replication period onset time) *CC*: Number of correct clicks *RP*: Replication period *IC*: number of incorrect clicks *PP*: Number of pattern points *DC*: number of clicks on the distracting point *RTRP*: Remaining Time of the RP”

The correct Table 2 appears below.

Formula	Parameters
$MRT = \begin{cases} \frac{\sum_{i=1}^{CC} TI_i}{CC}, & \text{Completed pattern} \\ \frac{\sum_{i=1}^{CC} TI_i + RTRP}{CC + 1}, & \text{Partially completed pattern} \\ RP, & \text{No correct clicks} \end{cases}$	<i>TI</i> : Time interval between correct clicks (<i>TI</i> for the first correct click is computed from the replication period onset time) <i>CC</i> : Number of correct clicks <i>RP</i> : Replication period <i>IC</i> : Number of incorrect clicks <i>PP</i> : Number of pattern points <i>DC</i> : Number of clicks on the distracting point <i>RTRP</i> : Remaining Time of the RP
$SelA = \frac{CC}{IC + PP + DC}$	

Table 2. The formula used to compute the task performance for each cycle.

Finally, in the Reference list, the title is missing from Reference 20. The correct Reference 20 appears below as Reference 1.

Reference

1. Martins, R. & Carvalho, J. Eye blinking as an indicator of fatigue and mental load – a systematic review. In *Occupational Safety and Hygiene III* 231–235 (2015).



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