**Supplementary Material**

**Naturalistic Eye Movement Tasks in Parkinson’s Disease: A Systematic Review**

**Supplementary Material 1. Full search strategy**

|  |  |  |
| --- | --- | --- |
| **Database** | **Search No.** | **Search String** |
| PsycINFO accessed via Ovid      25/08/2023 | S1 | (Parkinson\* or PD or "healthy aging" or "healthy ageing" or "older adult\*" or elder\* or "geriatric\*").ti. or (Parkinson\* or PD or "healthy aging" or "healthy ageing" or "older adult\*" or elder\* or "geriatric\*").ab. |
| 486 results | S2 | ("eye track\*" or eye-track\* or oculomotor or ocularmotor or "memory guided" or "memory-guided" or saccad\* or pro-saccad\* or prosaccade\* or "pro saccad\*" or anti-saccad\* or antisaccad\* or "anti saccad\*" or ((eye\* or retina\* or ocular\* or optic\*) adj3 (mov\* or track\*))).ti. or ("eye track\*" or eye-track\* or oculomotor or ocularmotor or "memory guided" or "memory-guided" or saccad\* or pro-saccad\* or prosaccade\* or "pro saccad\*" or anti-saccad\* or antisaccad\* or "anti saccad\*" or ((eye\* or retina\* or ocular\* or optic\*) adj3 (mov\* or track\*))).ab. |
|  | S3 | ("virtual realit\*" or virtual-realit\* or "computer simulation\*" or "virtual environment\*" or "augmented reality" or VPC or "paired comparison\*" or paired-comparison\* or "free view\*" or free-view\* or "visual scan\*" or ((natural or scene) and (view\* or vision)) or locomotion or exercise\* or "physical activit\*" or walk\* or run\* or jog\* or stair\* or travel\* or natural\* or real\* or tea or tea-making or television or TV or watch\* or read\* or video\* or view\* or "emotion\* recognition" or "emotion\* processing" or "emotion\* perception" or "affect\* recognition" or "affect\* processing" or "affect\* perception" or "fac\* perception" or "fac\* processing" or "expression processing" or "expression recognition" or "expression perception" or (face adj3 processing)).ti. or ("virtual realit\*" or virtual-realit\* or "computer simulation\*" or "virtual environment\*" or "augmented reality" or VPC or "paired comparison\*" or paired-comparison\* or "free view\*" or free-view\* or "visual scan\*" or ((natural or scene) and (view\* or vision)) or locomotion or exercise\* or "physical activit\*" or walk\* or run\* or jog\* or stair\* or travel\* or natural\* or real\* or tea or tea-making or television or TV or watch\* or read\* or video\* or view\* or "emotion\* recognition" or "emotion\* processing" or "emotion\* perception" or "affect\* recognition" or "affect\* processing" or "affect\* perception" or "fac\* perception" or "fac\* processing" or "expression processing" or "expression recognition" or "expression perception" or (face adj3 processing)).ab. |
|  | S4 | S1 AND S2 AND S3 |
| MEDLINE accessed via Ovid      25/08/2023 | S1 | (Parkinson\* or PD or "healthy aging" or "healthy ageing" or "older adult\*" or elder\* or "geriatric\*").ti. or (Parkinson\* or PD or "healthy aging" or "healthy ageing" or "older adult\*" or elder\* or "geriatric\*").ab. |
| 790 results | S2 | ("eye track\*" or eye-track\* or oculomotor or ocularmotor or "memory guided" or "memory-guided" or saccad\* or pro-saccad\* or prosaccade\* or "pro saccad\*" or anti-saccad\* or antisaccad\* or "anti saccad\*" or ((eye\* or retina\* or ocular\* or optic\*) adj3 (mov\* or track\*))).ti. or ("eye track\*" or eye-track\* or oculomotor or ocularmotor or "memory guided" or "memory-guided" or saccad\* or pro-saccad\* or prosaccade\* or "pro saccad\*" or anti-saccad\* or antisaccad\* or "anti saccad\*" or ((eye\* or retina\* or ocular\* or optic\*) adj3 (mov\* or track\*))).ab. |
|  | S3 | ("virtual realit\*" or virtual-realit\* or "computer simulation\*" or "virtual environment\*" or "augmented reality" or VPC or "paired comparison\*" or paired-comparison\* or "free view\*" or free-view\* or "visual scan\*" or ((natural or scene) and (view\* or vision)) or locomotion or exercise\* or "physical activit\*" or walk\* or run\* or jog\* or stair\* or travel\* or natural\* or real\* or tea or tea-making or television or TV or watch\* or read\* or video\* or view\* or "emotion\* recognition" or "emotion\* processing" or "emotion\* perception" or "affect\* recognition" or "affect\* processing" or "affect\* perception" or "fac\* perception" or "fac\* processing" or "expression processing" or "expression recognition" or "expression perception" or (face adj3 processing)).ti. or ("virtual realit\*" or virtual-realit\* or "computer simulation\*" or "virtual environment\*" or "augmented reality" or VPC or "paired comparison\*" or paired-comparison\* or "free view\*" or free-view\* or "visual scan\*" or ((natural or scene) and (view\* or vision)) or locomotion or exercise\* or "physical activit\*" or walk\* or run\* or jog\* or stair\* or travel\* or natural\* or real\* or tea or tea-making or television or TV or watch\* or read\* or video\* or view\* or "emotion\* recognition" or "emotion\* processing" or "emotion\* perception" or "affect\* recognition" or "affect\* processing" or "affect\* perception" or "fac\* perception" or "fac\* processing" or "expression processing" or "expression recognition" or "expression perception" or (face adj3 processing)).ab. |
|  | S4 | S1 AND S2 AND S3 |
| Scopus | S1 | TITLE-ABS ( parkinson\* OR pd OR "healthy aging" OR "healthy ageing" OR "olderadult\*" OR elder\* OR geriatric\* ) |
| 25/08/2023  842 results | S2 | TITLE-ABS ( "eye track\*" OR "eye track\*" OR oculomotor OR ocularmotor OR "smooth pursuit" OR "memory guided" OR memory-guided OR saccad\* OR "pro-saccad\*" OR prosaccade\* OR pro-saccad\* OR "anti-saccad\*" OR antisaccad\* OR anti-saccad\* OR ( ( eye\* OR retina\* OR ocular\* OR optic\* ) W/3 ( mov\* OR track\* ) ) ) |
|  | S3 | TITLE-ABS ( "virtual realit\*" OR virtual-realit\* OR "computer simulation\*" OR "virtual environment\*" OR "augmented reality" OR vpc OR "paired comparison\*" OR paired-comparison\* OR "free view\*" OR "free-view\*" OR "visual scan\*" OR ( ( natural OR scene ) AND ( view\* OR vision ) ) OR "emotion\* recognition" OR "emotion\* processing" OR "emotion\* perception" OR "affect\* recognition" OR "affect\* processing" OR "affect\* perception" OR "fac\* perception" OR "fac\* processing" OR "expression processing" OR "expression recognition" OR "expression perception" OR ( face W/3 processing ) OR "locomot\*" OR exercise\* OR "physical activity" OR walk\* OR run\* OR jog\* OR stair\* OR travel\* OR natural\* OR real\* OR tea OR tea-making OR television OR tv OR watch\* OR read\* OR video\* OR view\* ) |
|  | S4 | S1 AND S2 AND S3 |
| Web of Science    25/08/2023 | S1 | (TI=(Parkinson\* OR PD OR “healthy aging” OR “healthy ageing” OR “older adult\*” OR elder\* OR geriatric\*) OR AB=(Parkinson\* OR PD OR “healthy aging” OR “healthy ageing” OR “older adult\*” OR elder\* OR geriatric\*)) NOT (SILOID==("PPRN")) |
| 191 results | S2 | TI=(“eye track\*” OR “eye-track\*” OR Oculomotor OR Ocularmotor OR "smooth pursuit" OR “memory guided” OR “memory-guided” OR saccad\* OR pro-saccad\* OR prosaccade\* OR “pro saccad\*” OR anti-saccad\* OR antisaccad\* OR “anti saccad\*” OR ((eye\* OR retina\* OR ocular\* OR optic\*) N3 (mov\* OR track\*))) OR AB=(“eye track\*” OR “eye-track\*” OR Oculomotor OR Ocularmotor OR "smooth pursuit" OR “memory guided” OR “memory-guided” OR saccad\* OR pro-saccad\* OR prosaccade\* OR “pro saccad\*” OR anti-saccad\* OR antisaccad\* OR “anti saccad\*” OR ((eye\* OR retina\* OR ocular\* OR optic\*) N3 (mov\* OR track\*))) and Preprint Citation Index (Exclude – Database) |
|  | S3 | TI=(“virtual realit\*” OR “virtual-realit\*” OR “computer simulation\*” OR “virtual environment\*” OR “augmented reality” OR VPC OR “paired comparison\*” OR paired-comparison\* OR “free view\*” OR free-view\* OR “visual scan\*” OR ((“natural” OR “scene”) AND (“view\*” OR “vision”)) OR “emotion\* recognition” OR “emotion\* processing” OR “emotion\* perception” OR “affect\* recognition” OR “affect\* processing” OR “affect\* perception” OR “fac\* perception” OR “fac\* processing” OR “expression processing” OR “expression recognition” OR “expression perception” OR (face N3 processing) OR locomot\* OR “exercise\* OR “physical activit\*" OR walk\* OR run\* OR jog\* OR stair\* OR travel\* OR natural\* OR real\* OR tea OR tea-making OR television OR TV OR watch\* OR read\* OR video\* OR view\*) OR AB=(“virtual realit\*” OR “virtual-realit\*” OR “computer simulation\*” OR “virtual environment\*” OR “augmented reality” OR VPC OR “paired comparison\*” OR paired-comparison\* OR “free view\*” OR free-view\* OR “visual scan\*” OR ((“natural” OR “scene”) AND (“view\*” OR “vision”)) OR “emotion\* recognition” OR “emotion\* processing” OR “emotion\* perception” OR “affect\* recognition” OR “affect\* processing” OR “affect\* perception” OR “fac\* perception” OR “fac\* processing” OR “expression processing” OR “expression recognition” OR “expression perception” OR (face N3 processing) OR locomot\* OR “exercise\* OR “physical activit\*" OR walk\* OR run\* OR jog\* OR stair\* OR travel\* OR natural\* OR real\* OR tea OR tea-making OR television OR TV OR watch\* OR read\* OR video\* OR view\*) and Preprint Citation Index (Exclude – Database) |
|  | S4 | S1 AND S2 AND S3 |