|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Switch** | **Gaze-independent levels** | | | | **Gaze-dependent levels** | | **N** |
| **Attribute integration** | **× Multiplicative** Outcomes and probabilities combine multiplicatively into expected utilities (e.g., Glickman et al., 2019; Tversky & Kahneman, 1992) | | **+ Weighted additive** Outcomes and probabilities are normalized, weighted and added (e.g., Rouault et al., 2019) | | *n.a.* | | 2 |
| **Comparison** | **Independent** Accumulation of absolute item values per alternative (e.g., Bhatia, 2013; Glickman et al., 2019) | | **Comparative** Accumulation of relative values per alternative (e.g., Roe et al., 2001) | | *n.a.* | | 2 |
| **Attribute-wise gaze-discount** | **False** Fixated and non-fixated alternatives are processed equally. | | | | **True** Non-fixated alternatives’ values are discounted by a parameter θ (e.g., Krajbich et al., 2010) | | 2 |
| **Alternative-wise gaze-discount** | **False** Fixated and non-fixated attributes are processed equally. | | | | **True** Attributes on the non-fixated dimension are discounted by a parameter η (e.g., Fisher, 2017; Krajbich et al., 2012) | | 2 |
| **Accumulation leak** | **None** Perfect integration over fixations. | | **Constant** With each fixation, accumulators leak information proportional to their current value, controlled by parameter λ (e.g., Roe et al., 2001; Usher & McClelland, 2001; Glickman et al., 2019) | | **Gaze-dependent** With each fixation, accumulators of non-fixated alternatives leak information, as in Constant leak (e.g., Ashby et al. 2016) | | 3 |
| **Accumulator inhibition** | **None** No inhibition between accumulators. | **Constant** Accumulators inhibit each other proportional to their current value, controlled by parameter φ (e.g., Usher & McClelland, 2004) | | **Distance-dependent** Inhibition between accumulators depends on pairwise distance between alternatives in attribute space. Parameters *wd* and φ (Roe et al., 2001) | | **Gaze-dependent** With each fixation, accumulators of non-fixated alternatives are inhibited, proportional to the currently fixated items’ accumulator value. Controlled by parameter φ. | 4 |
| **Total variants** |  | | | | | | 192 |

**Supplementary Table 2. Overview of the nodes and switch-levels used in the switchboard analysis.** Switch levels that depend on gaze-data are shaded blue. Note that due to the model ﬁtting procedure, where model predicted choice probabilities are derived from a soft-max function over the ﬁnal accumulator values, the comparison switch levels independent and comparative are not distinguishable for a subset of the model space, reducing the total number of unique variants to 160.