*Ein Bild, das Text, Schrift, Grafiken, Design enthält.

KI-generierte Inhalte können fehlerhaft sein. Institut für Psychologie*

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**Analysis Plan**

**Time-dependent Specificity of Pre-Speech Auditory Modulation**

**Behavioural Analysis**

**BEH1**

**Description:** Analysis BEH1 concerns the fundamental frequency (F0) of the auditory probes (unaltered and altered) relative to the distribution of the F0 of the vocal responses during the experiment.

**Transformations:** The mean (M) and the standard deviation (SD) of each subjects’ F0 distribution (based on the vocal responses made during the experiment, not during the stimuli recordings) are extracted. The F0 values of the auditory probes (unaltered and altered) are z-standardized relative to the M and th SD of the F0 distribution (based on the vocal responses made during the experiment, not during the stimuli recordings).

**Exlusion/Inclusion:** Per definition only trials including vocal responses are included to extract the M and SD of the F0 distribution.

**Statistical procedures:** A paired T-Test is performed.

**Outcome:** Z-transformed probe F0 value.

**Variables & Interactions:** Probe-type (unaltered, altered).

**BEH2**

**Description:** Analysis BEH2 concerns how the F0 of the vocal responses during the experiment is influenced by a probe being presented.

**Transformations:** The F0 values of the vocal responses are z-transformed relative to their own M and SD. Further, the mean z-transformed F0 value for probe and no-probe trials is extracted, leaving each subject with 2 values (one for probe and one for no-probe trials).

**Exlusion/Inclusion:** Per definition only trials including vocal responses are used.

**Statistical procedures:** A paired T-Test is performed.

**Outcome:** Z-transformed F0 value.

**Variables & Interactions:** Probe (yes, no)

**BEH3**

**Description:** Analysis BEH3 concerns how the F0 of the vocal responses during the experiment is influenced by probe-type and probe-onset.

**Transformations:** The F0 values of the vocal responses are z-transformed relative to their own M and SD for each subject. Further, the mean z-transformed F0 value for each combintion of probe type and probe onset is extracted, leaving each subject with 4 values (one for each combination).

**Exlusion/Inclusion:** Per definition only trials including vocal responses and probes are used.

**Statistical procedures:** A repeated-measures analysis of variance (rmANOVA) is performed.

**Outcome:** Z-transformed F0 value.

**Variables & Interactions:** Probe-type (unaltered, altered) \* Probe-onset (early, late).

**BEH4**

**Description:** Analysis BEH4 concerns how the vocal onset time is influenced by a probe being presented.

**Transformations:** The vocal onset times are z-transformed relative to their own M and SD. Further, the mean z-transformed vocal onset time for probe and no-probe trials is extracted, leaving each subject with 2 values (one for probe and one for no-probe trials).

**Exlusion/Inclusion:** Per definition only trials including vocal responses are included.

**Statistical procedures:** A paired T-Test is performed.

**Outcome:** Z-transformed vocal onset time for each subject.

**Variables & Interactions:** Probe (yes, no).

**BEH5**

**Description:** Analysis BEH5 concerns how the vocal onset time is influenced by probe-type and probe-onset

**Transformations:** The vocal onset times are z-transformed relative to their own M and SD for each subject. Further, the mean z-transformed vocal onset time for each combintion of probe type and probe onset is extracted, leaving each subject with 4 values (one for each combination).

**Exlusion/Inclusion:** Per definition only trials including vocal responses and probes are included.

**Statistical procedures:** A rmANOVA is performed.

**Outcome:** Z-transformed vocal onset time.

**Variables & Interactions:** Probe-type (unaltered, altered) \* Probe-onset (early, late).

**BEH6**

**Description:** Analysis BEH6 concerns how the F0 of the vocal responses during the experiment is influenced by the block of the experiment.

**Transformations:** The F0 values of the vocal responses are z-transformed relative to their own M and SD for each subject. Further, the mean z-transformed F0 value for each block is extracted, leaving each subject with 8 values (one for each block).

**Exlusion/Inclusion:** Per definition only trials including vocal responses are included.

**Statistical procedures:** A rmANOVA is performed.

**Outcome:** Z-transformed F0 value.

**Variables & Interactions:** Block (1,2,3,4,5,6,7,8)

**BEH7**

**Description:** Analysis BEH7 concerns how vocal onset time is influenced by the block of the experiment.

**Transformations:** The vocal onset times are z-transformed relative to their own M and SD for each subject. Further, the mean z-transformed vocal onset time for each block is extracted, leaving each subject with 8 values (one for each block).

**Exlusion/Inclusion:** Per definition only trials including vocal responses are included.

**Statistical procedures:** A rmANOVA is performed.

**Outcome:** Z-transformed vocal onset time.

**Variables & Interactions:** Block (1,2,3,4,5,6,7,8)

**BEH8**

**Description:** Analysis BEH8 concerns how the mood, as measured with a costum version of the Self-Assessment Manikin (SAM), is by the block of the experiment.

**Transformations:** -

**Exlusion/Inclusion:** -

**Statistical procedures:** A rmANOVA is performed.

**Outcome:** SAM mood rating.

**Variables & Interactions:** Block (1,2,3,4,5,6,7,8)

**BEH9**

**Description:** Analysis BEH9 concerns how the tiredness, as measured with a costum version of the Self-Assessment Manikin (SAM), is by the block of the experiment.

**Transformations:** -

**Exlusion/Inclusion:** -

**Statistical procedures:** A rmANOVA is performed.

**Outcome:** SAM tiredness rating.

**Variables & Interactions:** Block (1,2,3,4,5,6,7,8)

**ERP Analysis**

**ERP1**

**Description:** Analysis ERP1 concerns

**Transformations:**

**Exlusion/Inclusion:**

**Statistical procedures:** A rmANOVA is performed.

**Outcome:**

**Variables & Interactions:** Task (active, passive) \* probe-type (unaltered, altered) \* probe-onset (early, late)