Comprehension of Idiomatic Expressions in Low-Literacy Readers of Easy German: An Experimental Investigation

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We present a planned experimental investigation into the comprehension of idiomatic expressions in *Leichte Sprache* (Easy German), a simplified variety of German aimed at enhancing accessibility by reducing the complexity of vocabulary, morphology, and syntax (Bredel and Maass, 2016). Easy German primarily supports low-literacy readers and individuals with cognitive impairments (Bock and Pappert, 2023), populations that often struggle with figurative language. Despite recommendations to minimize idiomatic expressions in Easy German, little empirical research has examined how these populations actually process idiomatic language in simplified contexts.

We address this gap by examining the effects of literacy, transparency, and literal plausibility on the comprehension of 24 idiomatic expressions, such as *jemandem einen Bären aufbinden* (fig.: to pull sb.'s leg, lit.: to tie a bear on someone). Idioms were selected from a prior rating study involving 30 participants without cognitive impairments, ensuring a balanced distribution across two key dimensions: transparency, the degree to which the idiomatic meaning can be inferred from its literal components (transparent vs. non-transparent), and plausibility, reflecting the extent to which the idiom appears contextually or logically reasonable (plausible vs. non-plausible).

In our main study, we aim to examine the factors that influence idiom comprehension in low-literacy readers within a simplified linguistic context. Additionally, we will explore whether participants exhibit a preference for literal over figurative expressions. We hypothesize that (i) higher literacy correlates with better comprehension; (ii) transparency impacts comprehension, making transparent idioms easier to interpret; (iii) literal plausibility affects preference, with highly plausible idioms ranked lower than literal alternatives; and (iv) interactions between transparency and plausibility modulate comprehension.

The main study will involve a cohort of 31 low-literacy readers, whose literacy levels are assessed using the *lea.diagnostik* online tool (Koppel and Wolf, 2014). The participants will complete two tasks per idiom: a multiple-choice task to assess recognition within context, followed by a ranking task to evaluate preferences for idiomatic versus literal interpretations. To ensure timely execution of the experiment before the conference, we will establish a timeline that includes finalizing the study design by November, completing data collection by early January, and preparing findings for presentation by late January.

Our preliminary findings from a GLMM analysis (Knudson, 2024) of low-literacy participants interpreting idioms without context in a sentence interpretation task indicate that literacy score significantly predicts accuracy, ($b = 0.0313$, $SE = 0.0084$, $z = 3.72$, $p < 001$), suggesting better comprehension with higher literacy (Fig. 1). Additionally, plausibility also predicts accuracy, ($b = 0.4367$, $SE = 0.1646$, $z = 2.65$, $p = .008$). A significant interaction between transparency and plausibility was observed, ($b = -1.3610$, $SE = 0.3304$, $z = -4.12$, $p < .001$), indicating that idioms characterized by high transparency and high plausibility are particularly challenging for participants (Fig. 2).

By examining idiom comprehension in Easy German, our research aims to offer novel insights into how figurative language can be adapted for low-literacy populations, informing educational and communicative strategies for cognitively impaired readers.
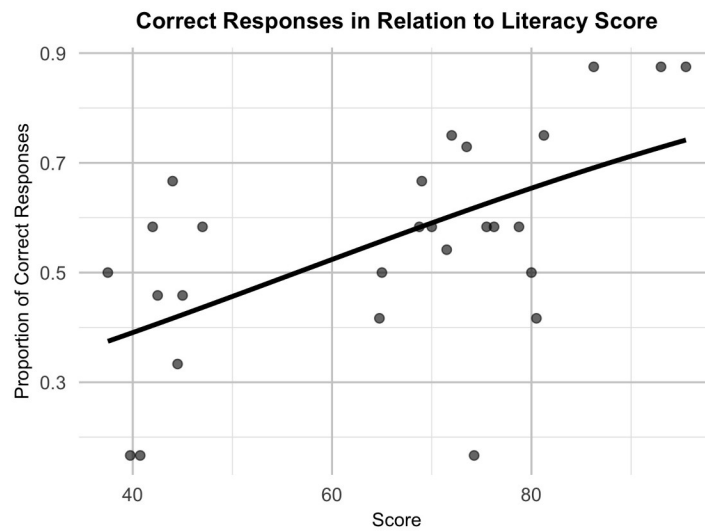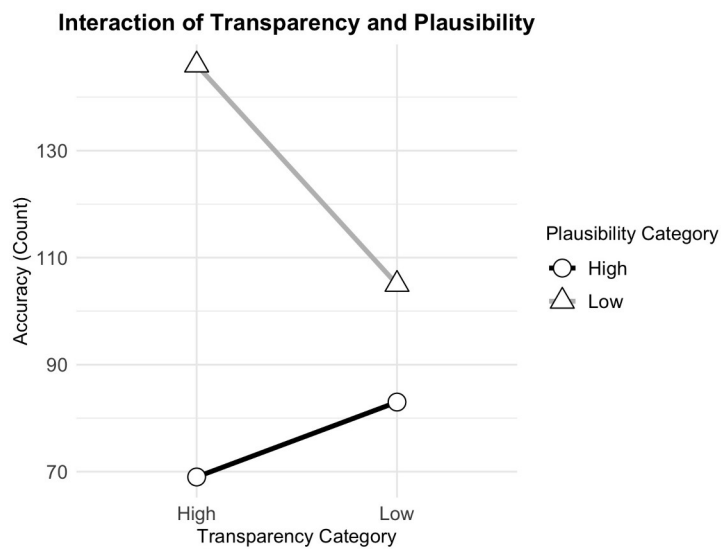
Correct Responses in Relation to Literacy Score

Figure 1

Interaction of Transparency and Plausibility

Figure 2

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