March 19th, 2024

Erin M. Buchanan, PhD

Harrisburg University

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Dora Matzke, PhD

University of Amsterdam

Amsterdam, Netherlands

Dear Dr. Buchanan and Dr. Matzke,

My coauthors and I are submitting our manuscript entitled “Affordance Norms for 2825 Concrete Nouns” for consideration as an original research article in *Behavior Research Methods*.

This paper details a recently developed norm set measuring affordances, which reflect the interactive relations between actors and objects. In doing so, we present three affordance measures: Affordance Strength (AFS), Affordance Proportion (AFP), and Affordance Set Size (AFSS). First, AFS and AFP reflect the probability of an object eliciting a specific action. Second, AFSS measures the total number of affordances associated with each object. Unlike existing measures of object interactivity which have traditionally relied upon Likert scale ratings (e.g., Body-Object Interaction [BOI]; Pexman et al., 2019), our affordance measures were developed using an open-ended response format, which allowed us to capture important qualitative information such as the context in which actions occur. Subsequent analyses demonstrated that our affordance measures were distinct from other measures of relatedness (e.g., cosine similarity and forward association strength) and were separate from BOI, leading us to conclude that affordance properties likely reflect a separate construct. Finally, in addition to presenting this dataset, we have developed a corresponding *R Shiny* application which facilitates exploration of the final norm set by interested researchers. Thus, our affordance norms are freely available and easily accessible.

We believe this work makes substantive empirical and methodological contributions while also providing important measures which will be useful for future research on memory, language, and perception. Importantly, to the best of our knowledge, this dataset reflects the first attempt to norm affordance properties. This work is original and not under review elsewhere, and we have no conflicts of interest to disclose. We look forward to hearing about the suitability of our manuscript in *Behavior Research Methods*.

Sincerely,

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