

TABLE 10
Mean Mutability and Name Centrality Ratings from Study 4 for Specific and Intermediate-Level Categories and Features

Judgement Task	Relational Role of Feature		
	No Relation	Depending-On	Depended-On
Similarity-to-Ideal (mutability)	6.0	5.3	4.5
Frequency	43.9	52.3	57.3

Note. Similarity-to-ideal judgments range from 0 (most immutable) to 10 (most mutable). Frequency judgments range from 0 to 100.

degraded while they made mutability ratings when frequency judgments were second, so they were forced to rely more on dependency information when making frequency judgments than they did when frequency was judged first. Perhaps participants were able to keep track of frequencies in the short term, but eventually came to rely on mutability. Another possibility is that rating mutability first made participants more aware of the features' internal relations to one another, which increased the likelihood of using dependencies to estimate frequency. No such interaction obtained for the mutability ratings, $F < 1$; mutability was not influenced by prior frequency judgments.

As a check of the dependency manipulation, pairwise dependency ratings were collected. As expected, the dependency of the depending feature on the depended-on feature was stronger than any other dependency ($p < .05$, Bonferroni adjusted t -tests).

This experiment demonstrates experimentally that the mutability of a feature can be decreased by causing other features to depend on it and that frequency—and therefore variability—judgments can be biased by those dependencies. Variability represents how the instances in a category differ. A concept's dependency structure is not directly relevant to such judgments, although it does provide a clue about how instances might be expected to differ. Our demonstration that dependency structure affects variability judgments implies that people attend to dependency structure, even when it is not relevant. They also use it when making mutability judgments, where it is relevant.

GENERAL DISCUSSION

Summary

The current results support two hypotheses. First, mutability captures a systematic aspect of conceptual structure. This follows from the convergence of our mutability measures, suggesting that features can be reliably ordered according to their transformability, and the divergence of mutability from other measures. Mutability did not correlate with measures of diagnosticity or salience (Study 1) and it dissociated from a measure of naming centrality (Study 4). Our wager is that our four measures of mutability (surprise, ease-of-imagining, goodness-of-example, and similarity-to-an-ideal) will prove hard to distinguish from each other empirically.