Which People Are Best at Predicting Whether Something Will Blend?

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Introduction: Let's admit it: We all like to see stuff put in a blender. Most of us, in fact, probably believe that we're better at predicting what will happen when items are blended than our friends. To figure out whether this is true, we did an investigation at Stratford Landing Elementary's School's STEAM night.

How it was done: At SLES STEAM night on 11/8/18, I blended a bunch of balls of various sizes and materials in a blender. Participants were asked to predict whether an item would be totally destroyed on blending, partially destroyed, or left largely intact. Information was also taken about each participant to see if there were any skills or traits that make them better predictors of what will happen when things are blended.

Experimental data:

In this experiment there were 181 responses, though only 164 of them were usable for various reasons. The mean age of the respondents was 20, with a median age of 10. There were 77 male respondents and 79 female respondents, with 8 respondents declining to report their gender. Of the respondents, 85 had previously seen non-food items blended, while 79 had only seen food blended in the past.

Effect of prior blending experience:

Of the participants, 84 people had seen non-food items blended before and 79 had not. The percentage of participants who accurately guessed what would happen when an item was blended was, statistically speaking, the same.

Effect of gender:

Of the participants, 77 were male and 78 were female. The percentage of participants who accurately guessed what would happen when an item was blended was, statistically speaking, the same.

Effect of age:

Of the participants, 95 were below the age of 16 and 43 were 16 and older. The percentage of participants who accurately guessed what would happen when an item was blended was, statistically speaking, the same.

Possible sources of error

There were a number of issues that came up during the collection and analysis of the data, though most of these were easy to correct. Some of these sources of error include the following:
- Young children seemed to think that name and gender were the same thing.
- Middle-aged women don't like to say how old they are, falsely believing that anybody cares how old they are.
- Kids are likely to list their ages as "5 ½" or the like. This was not noticed in any participant older than 8.
- Middle-aged men in fancy suits tended to decline to participate in this study. Go figure.

Conclusions

In this experiment, we learned that everybody, regardless of age, gender, or past blender experience, were able to predict what would happen when an item is blended with about the same accuracy. Further studies are required to test this hypothesis and because it's fun.