

Peer-review

Li, Amber T. 2025. "Attitudes toward Conservation of Different Avian Species Are Influenced and Can Be Predicted by Multiple Aesthetic Perception Factors." *Journal of High School Science* 9 (3): 277–87. <https://doi.org/10.64336/001c.142882>.

I enjoyed reading the manuscript. I do however have some concerns and comments that need to be addressed. In addition, you can actually draw more conclusions from the data (see attached files).

1. You can draw more conclusions from your data. To that effect, I have attached two files (one an excel sheet and one a doc file). Please review and include in the manuscript in an appropriate context. Also include in discussion and conclusion.

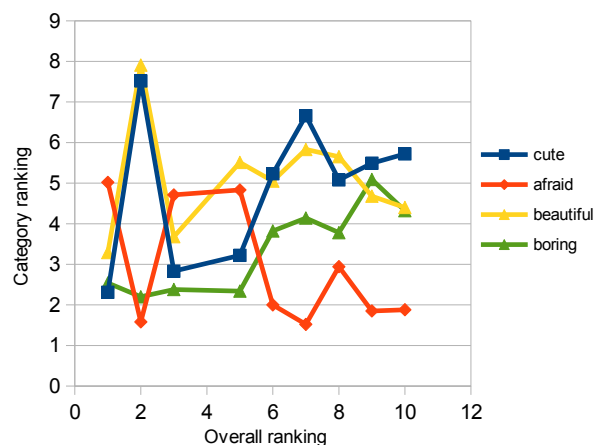
2. Include standard deviations in Table 1. Before performing the ANOVA, did you check for homoskedasticity using a Levine's test? Please include in the manuscript. Also include a table with post-Hoc Tuckey HSD.

3. You will need to distinguish between 'cute' and 'beautiful'. How did the participants know or decide or were told what the difference between a 'cute' bird and a 'beautiful' bird was? Similarly, how did the students know when to categorize a bird as 'boring'?

4. One bird image is shown flying while the other images or photographs are sitting birds. Justify this one exception of a flying bird - Does a different locomotive position determine the scores for the various categories?

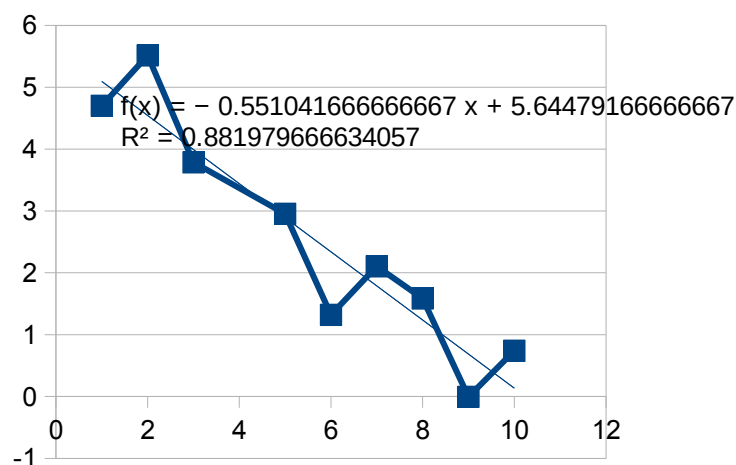
5. You will need to write a 'Conclusion' Section.

6. I am assuming a p value < 0.05 was considered significant? Please include this in the manuscript.



The figure above shows rank on the x-axis and the score for the various categories on the y-axis. From the distribution of the category scores, eyeballing the graph shows that the 'beautiful' and 'cute' categories are correlated. The 'afraid' category drives conservation ranking, unless the |absolute| difference between the (average of the 'cute' and 'beautiful') categories and the 'afraid' categories is large (see rank 2). Also, the 'boring' category is generally inversely correlated with rank. An empirical equation can therefore be derived to predict the rank from the various category scores.

$$\text{Rank} = \text{afraid} + \{ |[(\text{cute} + \text{beautiful})/2] - \text{afraid}| \} - \text{boring}$$



Using the equation, the graph above is obtained. It can be seen that 88% of the variability in the rank can be explained by the expression.

In terms of relevance, first; it can be posited that the more frightening a bird appears – and the lesser its beauty and cute scores – the more likely it is to be recommended for conservation. Second; the more cute and beautiful the bird – and the less threatening it appears – again; the more likely it is to be recommended for conservation. From these results, it may be deduced that the shoebill stork, ostrich, cassowary (all frightening birds) may rank on the same (high) conservation score as the peacock, parrot and toucan (all beautiful and cute birds). You can figure out the implications of this in the manuscript.

Dear Reviewer,

Thank you so much for the suggestions to improve the manuscript! They were extremely helpful. I hope that I incorporated your feedback well in the revised paper. Please see the details in the response table below. Your original comments were in the first column.

Very respectfully,

Amber Li

Reviewer's comments	Author's response	Location of revision
1. You can draw more conclusions from your data. To that effect, I have attached two files (one an excel sheet and one a doc file). Please review and include in the manuscript in an appropriate context. Also include in discussion and conclusion.	This is so interesting! I added the graph of the average ratings of four feelings by the rank order of birds (Figure 1) in the revised manuscript. I inserted the empirical equation in the results and reported the predictive power of the regression model. (Note: I added one line of missing data (probably because of the tie of rank #3) in the attachments received from the reviewer and	Figure 1 First paragraph on p. 6 right below Figure 1

	<p>adjusted the graph and the regression modeling results accordingly.)</p> <p>Additionally, I did Spearman's rank correlation analysis between rank and the average ratings of the four emotions. It showed the strength of the associations.</p> <p>The corresponding statements were reflected in the discussion and conclusion sections.</p>	<p>The last sentence of the first paragraph in Results (p. 5)</p> <p>Last paragraph on p. 8</p>
<p>2. Include standard deviations in Table 1. Before performing the ANOVA, did you check for homoskedasticity using a Levine's test? Please include in the manuscript. Also include a table with post-Hoc Tuckey HSD.</p>	<p>Standard deviations were added to Table 1.</p> <p>Since I conducted repeated measures ANOVA, the test for the assumption of variance generated in SPSS is Mauchly's test of sphericity. In the revised manuscript, I added a clarification of this test in the context.</p> <p>Both the within-subjects measure and the between-subjects measure had only two conditions. Thus, post-hoc tests were not performed. Instead, I added a table to show the means and standard deviations of the pairs to resemble the original Table 2 (now Table 3). I hope that the results can give readers an idea about the distribution across conditions.</p>	<p>Revised Table 1 (p. 5)</p> <p>Third paragraph on p. 6</p> <p>Table 2 (new table)</p>
<p>3. You will need to distinguish between 'cute' and 'beautiful'. How did the participants know or</p>	<p>"Cute" and "Beautiful" were distinguished by emotions towards proximity, with "cute" being defined as a bird species one would want to get</p>	

<p>decide or were told what the difference between a ‘cute’ bird and a ‘beautiful’ bird was? Similarly, how did the students know when to categorize a bird as ‘boring’ ?</p>	<p>closer to in order to touch or cuddle with, while “beautiful” was defined as a bird species one would want to admire from far away, or stand still while watching. These definitions were solidified after showing several peers, who did not take the survey afterward to prevent bias, several of the more aesthetically attractive birds, such as the hummingbird and white-eye, and asking them if they thought it was “cute” or “beautiful” and giving a reason why. The universal feeling seemed to be that cute was something they would want to cuddle, pet, or figuratively eat, while beautiful was a more distant form of appreciation. “Boring” was an emotion that was primarily dictated by having no unique features in color, shape, or ornaments.</p>	<p>Second paragraph in <i>Survey Piloting and Finalization</i> (p. 4)</p>
<p>4. One bird image is shown flying while the other images or photographs are sitting birds. Justify this one exception of a flying bird - Does a different locomotive position determine the scores for the various categories?</p>	<p>The positions the birds are in are how one will most likely find them in the wild, so it gives the participants the closest experience to how they would judge these birds in real life. The majority of birds are terrestrial and are therefore drawn in their most natural standing position, but the Bermuda Petrel and Black Swift are both birds that spend the majority of their day in the air and are therefore drawn as they would be found in their aerial domain. The difference in positions between the species can also be found in most bird field guides.</p>	<p>Third paragraph in <i>Survey Piloting and Finalization</i> (p. 4)</p>

5. You will need to write a 'Conclusion' Section.	I added the section.	p. 9-10
6. I am assuming a p value < 0.05 was considered significant? Please include this in the manuscript.	Yes, the critical p value was 0.05. I included this in the revised manuscript.	Last paragraph of methods (p. 5)

Thank you for addressing my comments. I have changed the XY graph for the Gender effect on aesthetic attributes to a column graph and added content. Please review carefully to make sure you agree with my changes.

Accepted.