

Does experience with rattlesnakes in the wild change human perception of snake aggression?

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Introduction and Objectives

Rattlesnakes are a species widely considered a nuisance animal in urban environments (Pitts et al, 2017). People’s attitudes towards rattlesnakes may vary based on their experiences and knowledge of the species. Fear is a common feeling associated with rattlesnakes that is generated by the misrepresentation of snakes in the media and myths (Woodside, 2019).



Hypothesis: There will be a difference in how people expect a rattlesnake to behave depending on whether they have encountered one in the wild.

Methods

- Create a survey that follows a five-point Likert scale on Google forms
- Send survey out to friends, family, and students
- Determine the average expectation of rattlesnake behavior between people who have and have not encountered a rattlesnake in the wild, take the mean of each individuals responses and use them for the mean per group

Rate how much you agree/disagree with the following statement:

When I see a rattlesnake in the wild, I expect it to freeze.

1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Strongly agree				Strongly disagree

Figure 1: Verbatim question from the rattlesnake behavior survey

Results

Average aggression expectation of rattlesnakes encountered in the wild

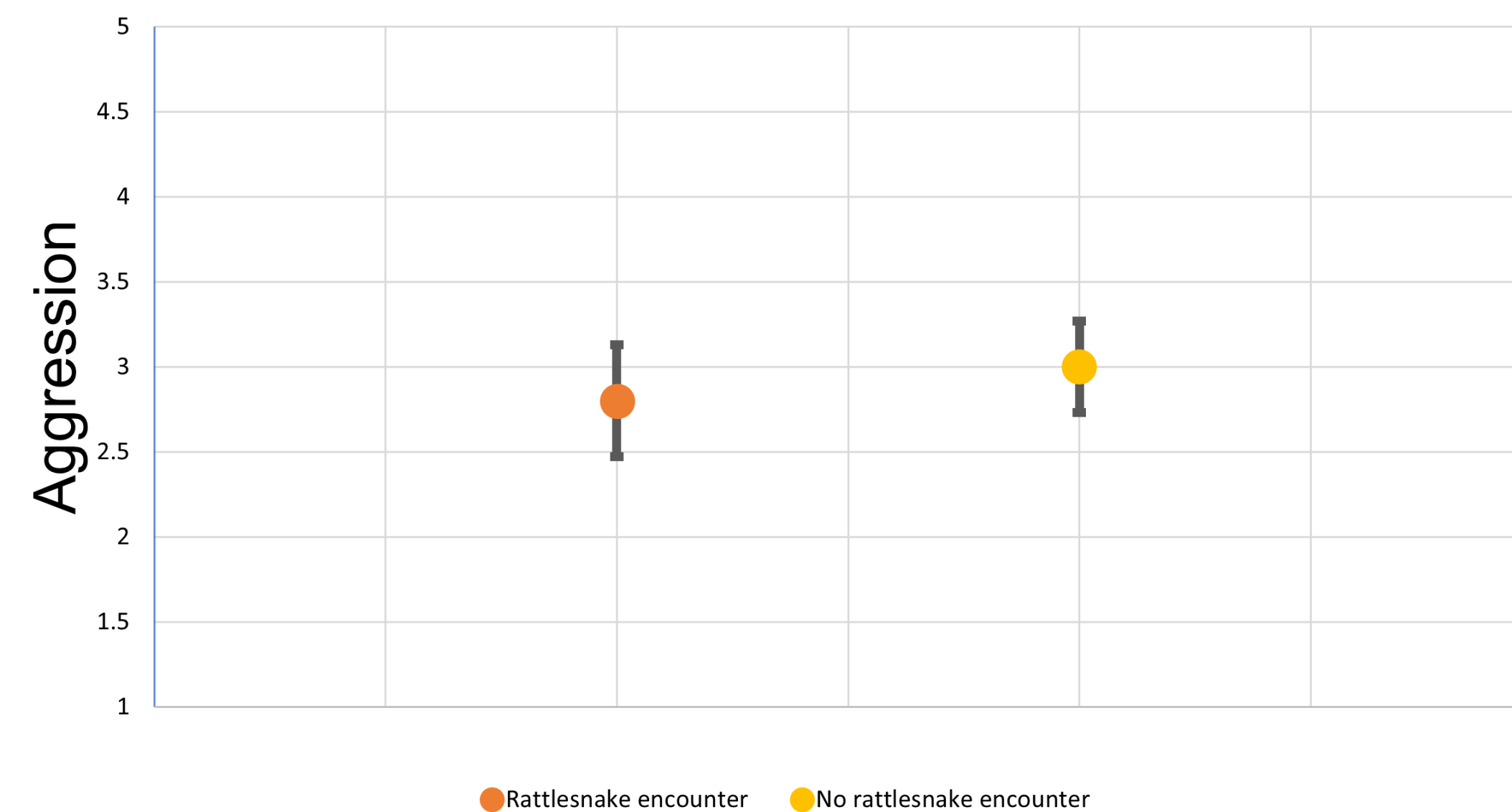


Figure 2: The graph depicts the mean responses (n=30) of the survey. The y-axis is the level of aggression expected increasing from bottom to top.

Results

There was no significant difference between behavioral expectations of rattlesnakes between participants who had previously encountered rattlesnakes in the wild and those who had not. Both parties would expect to have mostly neutral encounters with a rattlesnake.

Conclusions

The similar attitudes expressed towards rattlesnakes by both those who have and have not had encounters with them in the wild indicates a positive outlook towards treatment and management regarding the species. A greater understanding about these animals' behavior is necessary to combat the amount of misrepresentation in the media. Both parties have been educated well enough to understand rattlesnake behavior and not always expect aggression or danger.

Literature Cited & Acknowledgements

Pitts, Hughes, B. D., & Mali, I. (2017). Rattlesnake Nuisance Removals and Urban Expansion in Phoenix, Arizona. *Western North American Naturalist*, 77(3), 309–316. <https://doi.org/10.3398/064.077.0304>

Woodside, C. (2019). Fear of Rattlesnakes: On the Secret Trails of Small-Time New England Poachers. *Appalachia*, 70(1), 12.