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2024 SOLAR ECLIPSE: STUDENT PERCEPTIONS

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Introduction

Title: An Exploratory Study for Understanding Perceptions and Knowledge of University Students in Arkansas Regarding the 2024 Solar Eclipse.

This research investigates university student perceptions toward a mega-event to assist with emergency planning in addition to advancing knowledge within this area.

Objective

The purpose of the study is to understand the knowledge level and perceptions of college students in Arkansas regarding the 2024 total solar eclipse.

RQ: Do college students understand the implications of being in the path of totality of a solar eclipse?

Methodology

The research method was quantitative utilizing an exploratory research design and survey instrumentation to collect data and answer the research question.

Students within the researchers' university were sent an email invitation to participate in the online survey. 50 students responded.

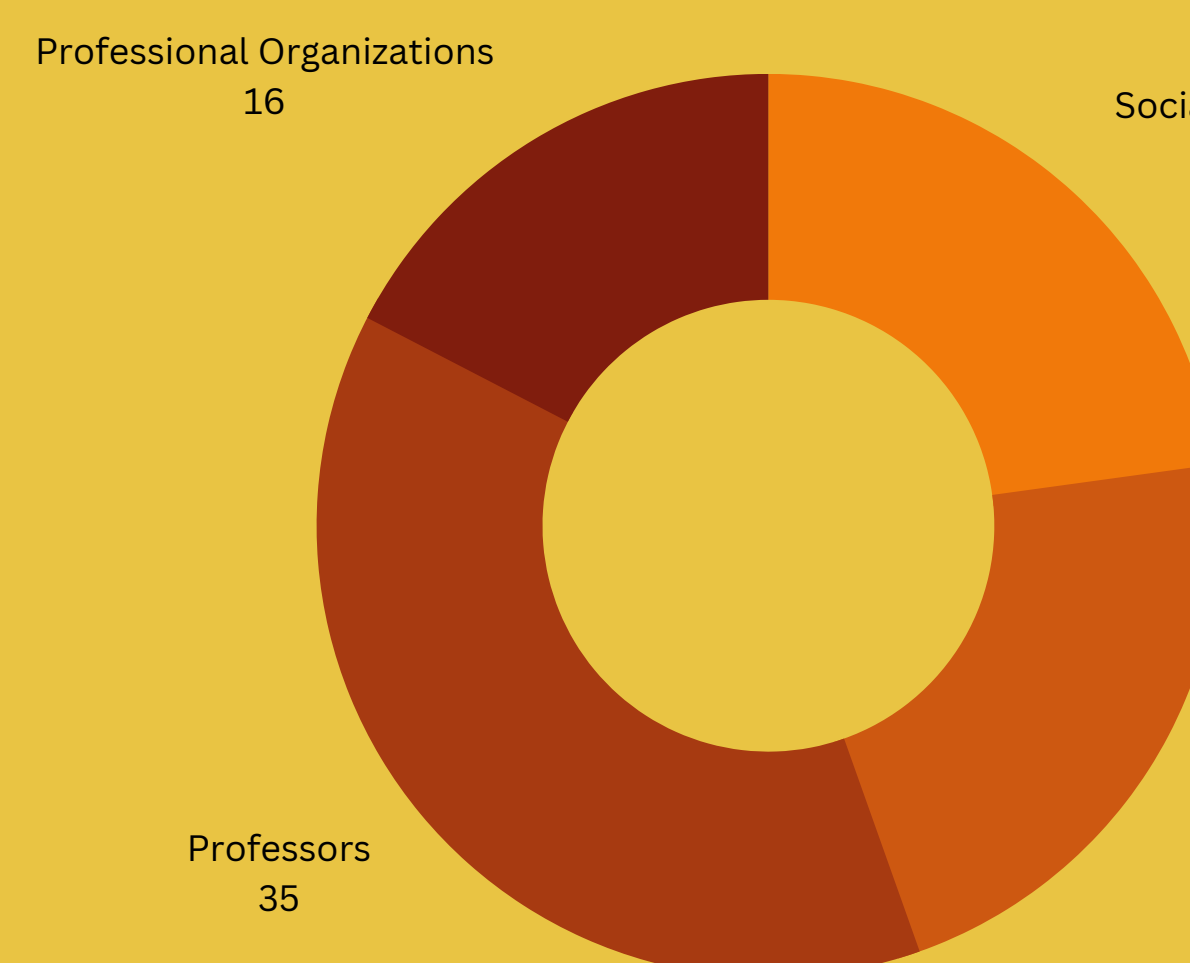
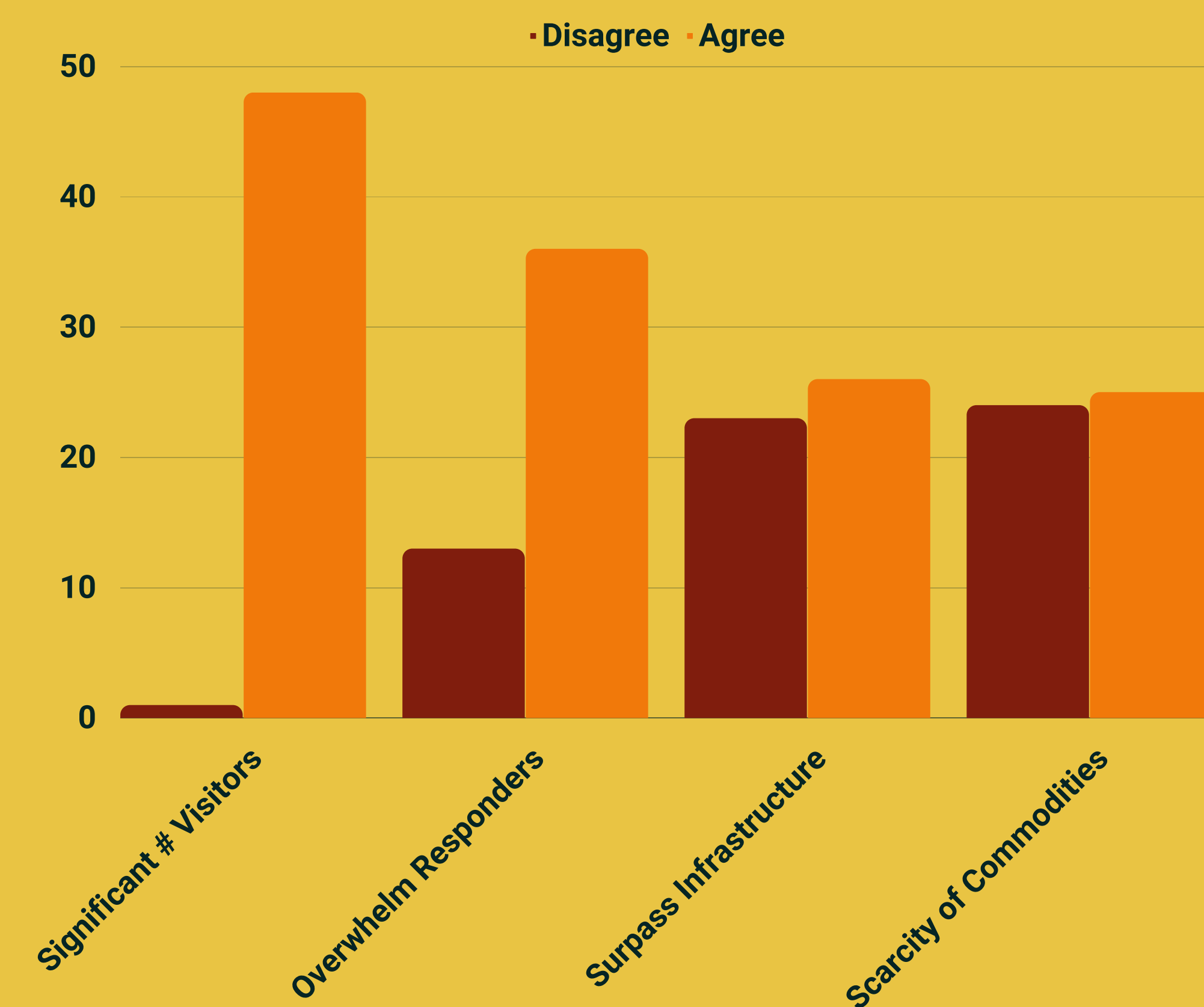
Results / Findings

Participants were almost exclusively living in Arkansas (48/49) with 65% of respondents identifying as female and the largest representation being the 18-24 year old category (65%). Freshmen represented 40% of respondents with Sophomores 10%, Juniors 14%, Seniors 18%, and Graduate Students/Faculty/Staff 18%. 49% noted minimal or not at all informed, while 43% were somewhat informed; only 8% felt very informed. There was no significant effect of class standing on how well informed the participant felt, $F(1, 96) = .98, p = .325, \omega = .000$.



83% of participants have seen a solar eclipse. With only 65% knowing if they are in the path of totality for the 2024 eclipse.

The majority of participants agree that there will be a significant number of visitors which will have an impact locally.



The majority of participants noted they received information primarily from college professors.

Implications

A total solar eclipse is the single largest event to occur within a region, attracting unprecedented crowds and media on a scale never previously experienced. Perceptions on the implications are key to mega-event emergency planning.

- Many do not understand the implications of a mega-event on local responders, infrastructure, and supplies.
- Although many participants saw the 2017 eclipse, few people have experienced a total solar eclipse.

Conclusion

This exploratory research was an initial look into the perceptions of university students in Arkansas regarding the implications of a total solar eclipse. The research findings provided baseline insight toward this specific mega-event for researchers and industry practitioners.

Due to the specificity of this event, it is understood that this particular study is not replicable. Future research includes a post-lecture and a post-event survey to better understand perceptions.

References

Freyaldenhoven, C., & Howard, D. (n.d.). Arkansas Eclipse Planning Guide. Central Arkansas Astronomical Society.
Labor, I. D. (2017). 2017 Total Solar Eclipse: Infrastructure Challenge or Economic Windfall?
Miller, J. D. (2018). Americans and the 2017 Eclipse: A final report on public viewing of the August total solar eclipse. University of Michigan.
Russo, K. (2015). Community Eclipse Planning. Tourism Queensland.
Upchurch, J. (2018, September - October). Total Solar Eclipse on August 21, 2017: Special Event with Coast-to-Coast Traffic Congestion. TR News, pp. 3 - 9.

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