

Research methods quantitative

Business, Management



Quantitative Research Methods al Affiliation Exercise for WA42 Research

Topic: Impact of Aviation on the environment 2. Purpose of the Study: The purpose of the study is to determine the impact of aircraft noise on the health and the wellbeing of the communities exposed to the noise.

3. Overarching Research Question: In health related quality of life worse and low in a community or population which is chronically exposed to the noise coming from aircrafts than in the community which is not exposed?

4. Specific Research Question: Does the noise coming from the aircrafts disturb your daily activities? How does aircraft noise affects your health and wellbeing? In your opinion, how do you rate the overall annoyance from the aircraft noise?

5. Type of Study: Quantitative

6. Variables:

Independent: Aircraft noise levels

Dependent: health and wellbeing of the community exposed to the aircraft noise.

7. Quantitative Research Method: Survey

8. Instrument(s) analysis: The study will rely on the Osgood's semantic differential to measure the meaning of the respondents' responses to the research questions which will be asked. The methods will be designed to measure the connotative meaning of the impact of the air crafts noise on the wellbeing and health of the participants based on their attitudes towards aircraft noise. The respondents will be asked to choose where their position lies in regards to the annoyance caused by the aircraft noise. After taking their position, they will then be requested to rate their overall annoyance

levels on the basis of an opinions scale between 0-10. In the opinion scaled used, zero will denote no annoyance at all while ten will show completely annoyed (Heise, 2010).

9. Data analysis: The researcher will use spreadsheets for the purpose of tabulating the results and coming up with the appropriate graphs which will be key analyzing the responses obtained from the sample population in the study.

10. Consent: The study will target communities which are exposed to aircraft noise by virtue of living or working near the source of the noise. Each respondent will be given a brief summary about the study and the reason why it is being done. The consent of the respondents will be sought by asking them if they can take part in the study to help obtain the data needed. The reasons why it will be imperative to do so is to ensure that the participants take part out of their own will so that the responses which they give are more valid and helpful to the achievement of the objectives of the research (Heise, 2010).

Discussion

The overall purpose of the research has changed from the environment impact of aviation to a more focused study on how the aircraft noise affects the health and wellbeing of the communities which are exposed to the noise. The questions to be used are therefore closed-ended to ensure that focused responses are obtained. It is however worth pointing out that the survey used in the quantitative research does not allow for the comprehensive conveyance of the opinion of the participants on the issues being investigated. Moreover, it is not easy to deal with the various covariates and

confounding factors associated with the impact of noise on health and wellbeing.

References

Heise, D. (2010). *Surveying Cultures: Discovering Shared Conceptions and Sentiments*. Hoboken NJ: Wiley