Faculti Summary
https://staging.faculti.net/improving-the-statistical-power-and-reliability-of-research/

This video video is a detailed discussion about the challenges and considerations of conducting behavioral research using Amazon Mechanical Turk (MTurk) as a participant source. It outlines the difficulties researchers face in recruiting participants traditionally, particularly from limited pools such as students or alumni, and how MTurk can provide a larger and more diverse participant base.

However, the speaker emphasizes that MTurk is not a perfect solution and introduces various sources of noise that can affect the reliability and validity of research findings conducted through this platform. Key points include:

1. **Unqualified Participants**: There is a risk of low-quality responses from participants who may not meet the necessary criteria for the study, including potential bots. The speaker suggests pre-screening participants to ensure they are qualified.

2. **Lack of Attention**: Participants may be distracted or rushed, which can lead to unreliable data. The speaker recommends using attention checks during experiments to ensure participants are engaged and understand their tasks.

3. **Lack of Experimental Control**: MTurk participants are more heterogeneous than traditional student samples, which can add variability to the data. Researchers must decide whether to embrace this diversity or restrict participant demographics through prescreening.

4. **Nonna Participants**: Frequent MTurk users might have preconceived notions about study manipulations due to their experience with similar tasks. The speaker advises using novel experimental paradigms to engage such participants meaningfully and maintain data integrity.

5. **Addressing Effect Sizes**: The speaker discusses the importance of sample size in detecting effects, particularly when working with small effect sizes typically observed in behavioral research. Suggestions for calculating appropriate sample sizes based on the nature of the effects are provided.

In summary, while MTurk can be a valuable tool for researchers, careful consideration must be given to participant selection, attention, and potential biases. Strategies for mitigating these issues are discussed to improve the reliability and validity of research findings obtained from MTurk.