

# USING VIRTUAL REALITY TO REDUCE CHOICE UNCERTAINTY IN DISCRETE CHOICE EXPERIMENTS

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## BACKGROUND

In choice experiments (CE) and stated preference (SP) studies in general, **choice uncertainty** has been a major criticism. Due to the often abstracted environments in which traditional CE's like text- or video-based surveys are conducted, respondents might find it **difficult to imagine** how their choices would affect them in real life. Uncertainty about the non-market good will **increase valuation variability** and may cause problems for the estimation of the willingness-to-pay (WTP).

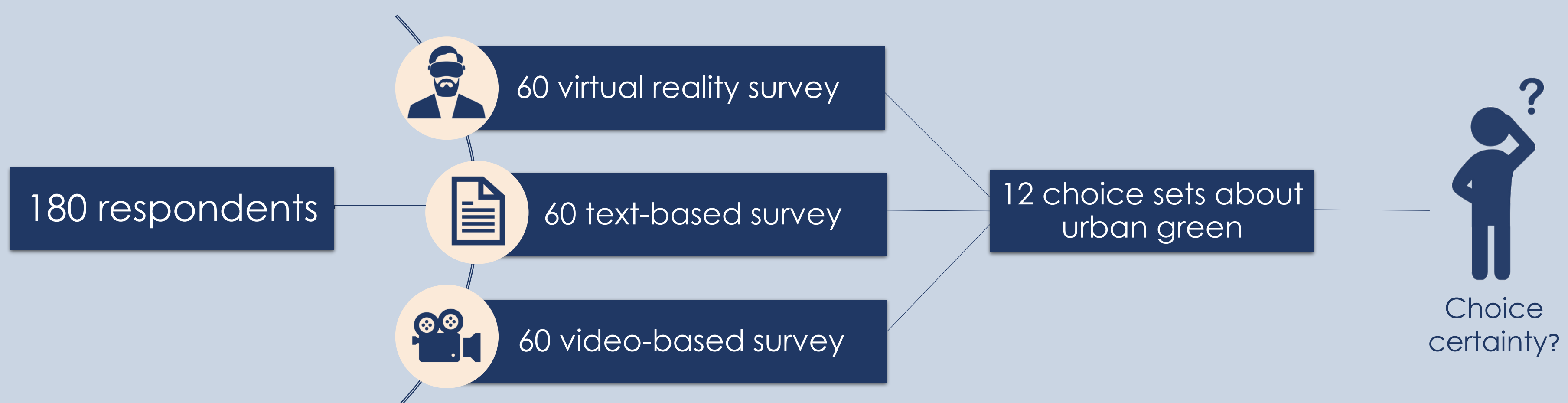


## RESEARCH HYPOTHESES

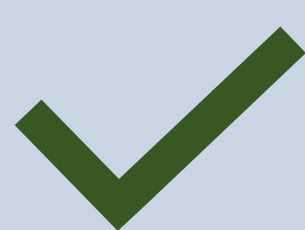
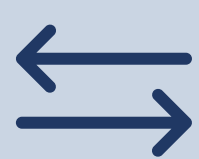
- 1 Compared to text-based surveys, respondents feel more certain about their choices in a virtual reality (VR) experiment
- 2 Compared to video-based surveys, respondents feel more certain about their choices in a virtual reality (VR) experiment



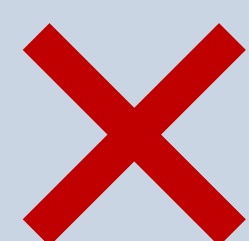
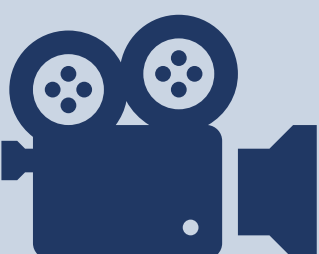
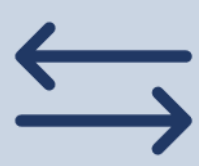
## METHODOLOGY



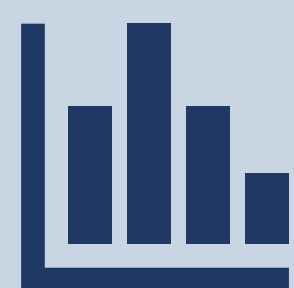
## RESULTS



By using VR, respondents' **self-reported certainty significantly increased** compared to text-based surveys



By using VR, respondents' **self-reported certainty did not significantly increase** compared to video-based surveys



## CONCLUSION

In choice experiments, using **virtual reality** as a survey mode significantly **increases choice certainty** in comparison to traditional text-based surveys

This result is particularly useful towards researchers and companies who seek to **elicit respondent or customer preferences** towards a non-market good through choice experiments



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