

5.7 Limitations

While the use of focus group methodology has its merits, group composition is a recognized weakness. Despite our care in implementing Krueger and Casey's [9] guidelines our design choices regarding group composition may be called into question. Given the topic of study we argue that our chosen variables, degree of vision loss and age, were rather logical choices. Disagreement can be found however in our manner of implementation. While our goal in implementing the guidelines was to structure each group according to degree of vision loss and participant age range, due largely to recruitment, scheduling and logistical constraints several of the focus groups ended somewhat mixed in terms of degree of vision loss and participant age range. Generally low vision persons were underrepresented in most groups as most were slightly weighted towards blind persons. Our use of a functional definition as opposed to medical definition of vision loss may also have impacted our groupings. Given the active participation of nearly all participants in the focus groups it is our opinion that the aforementioned limitations had little impact on the discussions themselves however.

6. CONCLUSION AND FUTURE WORK

The present study was designed to contribute to the literature a study that explored the needs and preferences of blind and low vision consumers as it relates to self-driving vehicles. Using focus group methodology we asked participants to comment on their general opinions regarding self-driving vehicles conceptually, their hopes for the technology, their major concerns, and their preferences regarding modes of interaction among other topics. Our findings suggest that blind and low vision consumers may view fully self-driving vehicles more favorably than consumers generally and may have a greater degree of trust in the safety and reliability of the technology. At the same time, if the results of our focus groups are reflective of general attitudes of people with visual impairments, many believe that their specific needs are not being adequately considered in the development of the technology. We believe that this work furthers our goal of contributing to the literature research that furthers the understanding of the needs and preferences of users with a range of visual impairments as it relates to emerging fully autonomous vehicle technology.

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