

Use case	Seniors ≤ 80 years	Seniors > 80 years
Play a Game	4.43	4.19
Entertainment	4.14	3.50
Get Help	4.14	3.50
Call My Family	3.57	3.69
Bring water	3.50	3.38
Bring Food	3.62	3.12
Connect to my Doc	3.31	3.12
Bring Medicine	3.29	2.25
Mean	3.75	3.34

TABLE III: Age differences in attitudes towards key use cases.

the older populace were slightly more positive than their younger counterparts.

Figure 7 shows the histograms for a couple of use cases. In the "Bring Medicine" use case, the majority of seniors over 80 were giving a strong response (1) while those in the younger cohort were evenly divided. An inverse dynamic is seen for "Get Help" where the younger cohort decided strongly for this, while the older cohort is evenly divided.

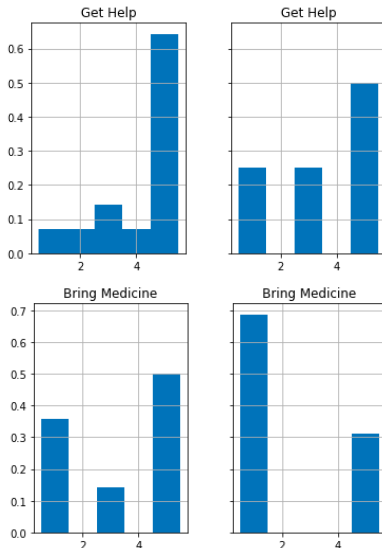


Fig. 7: Age differences in attitudes toward specific activities.



Fig. 8: Likability of various robots.

D. Likability of different robots

Figures 8 and 9 show the results of the likability survey. We have results in 10 categories. Note that the survey have both positive and negative questions. A score of 1 in an negative category "Dumb" means that the users strongly disagreed with the statement and vice versa.

Pepper® and Mini Mitra® tended to rank highest in many categories, while predictably Atlas came a few spots lower in most categories. Given that the Atlas robot was not designed for senior care use case, such a result was expected before the survey. The presence of Atlas serves as a control group here, enabling us to objectively look at the survey results.

Pepper scored the best in the "Creepy" and "Scary" categories, as nearly everyone agreed that it is neither creepy nor scary, while Mini Mitra topped the category in approachability. Both Mitra and Mini Mitra scored high on Fun metric.

Seniors tended to prefer more well-rounded bodies rather than designs with exposed metal. And there is a bias towards humanoid form factors. Based on the limited sample, we believe that robots of about 4 feet tall suited well for this audience (older Americans). There are likely cultural factors too and the height and humanoid preferences may vary for other demographics.

Overall, the robots used for senior care tended to score above average on all the positive categories, giving hope that