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Study Design

GOAL

To determine if there is a measurable difference in performance and perception of reading 2D and 3D charts.

PROCEDURE

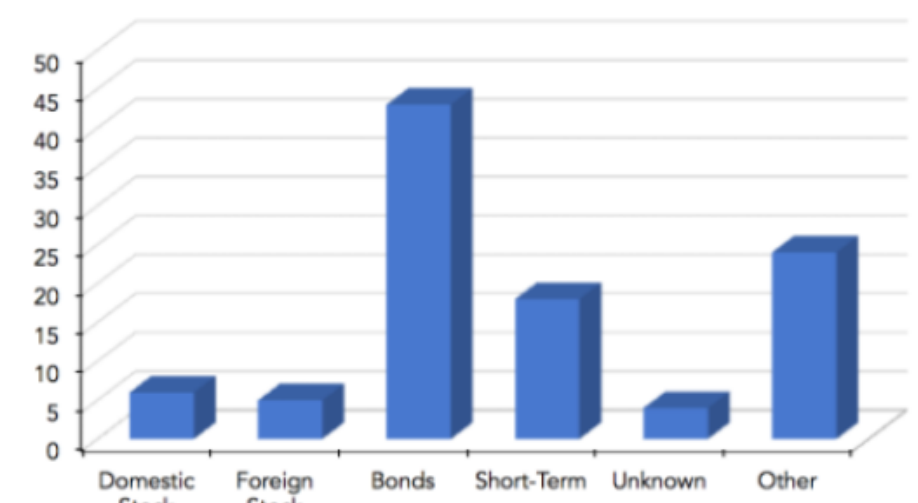
An online study with 1,423 participants. Participants either saw 2D or 3D charts.

TASKS

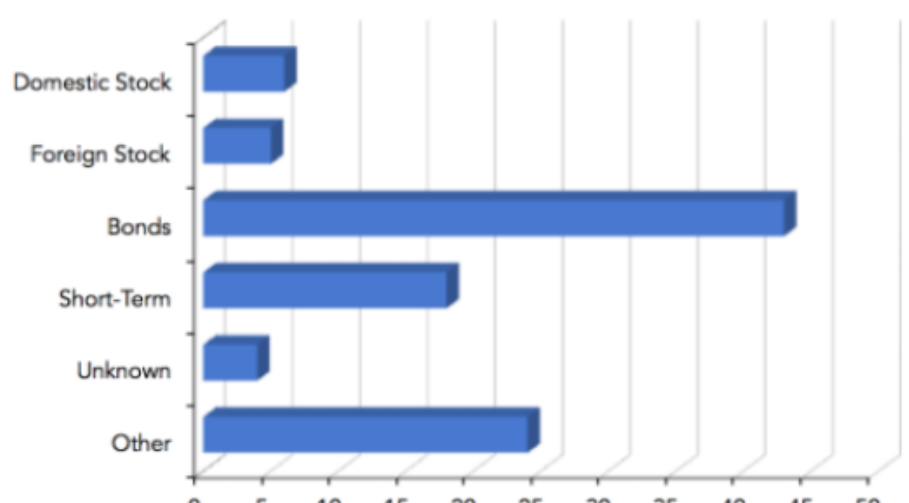
- Which segment is the largest?
- Which segment is the smallest?
- Estimate the amount of "Domestic Stock."
- Estimate the amount of "Short-Term."

STIMULI

COLUMN



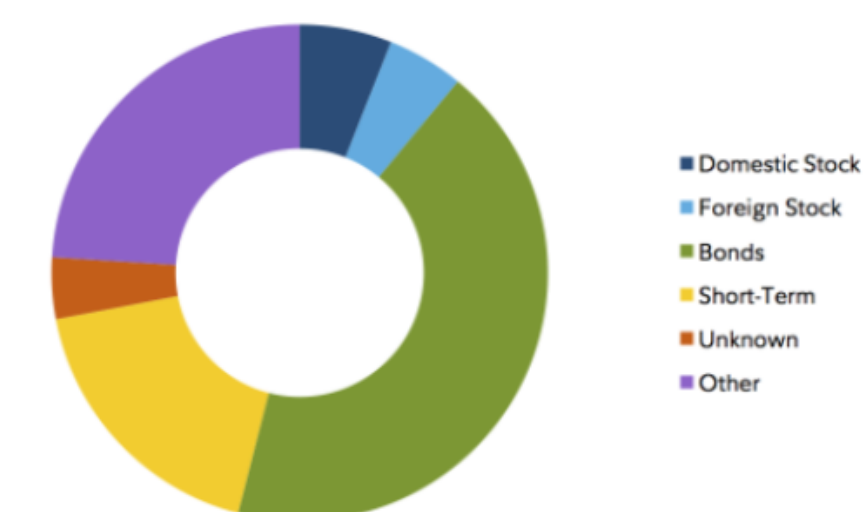
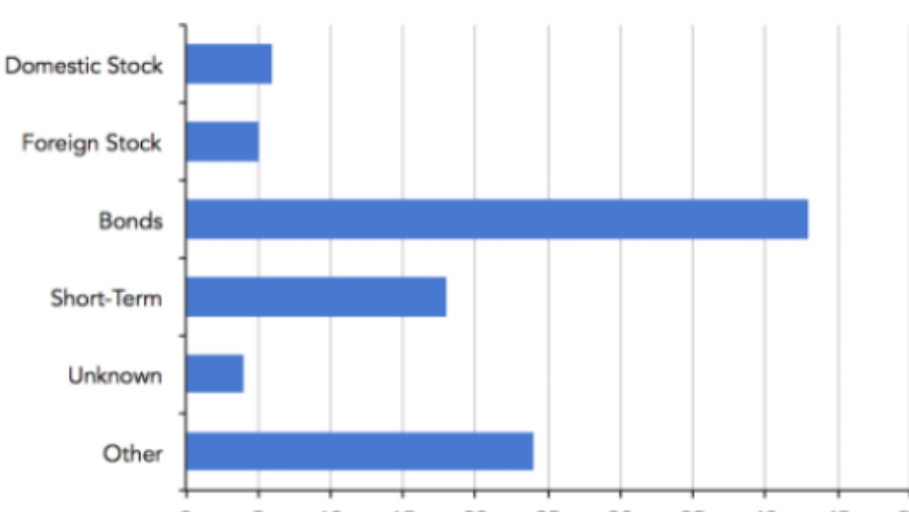
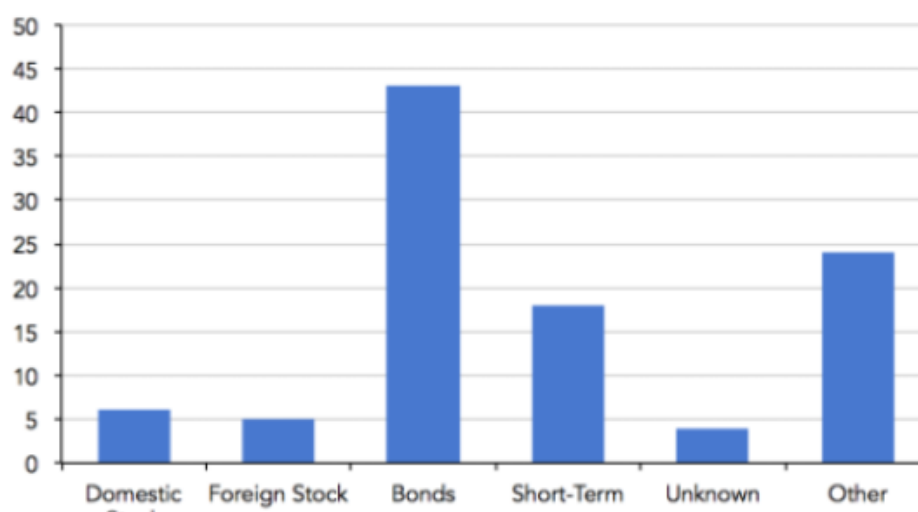
BAR



PIE



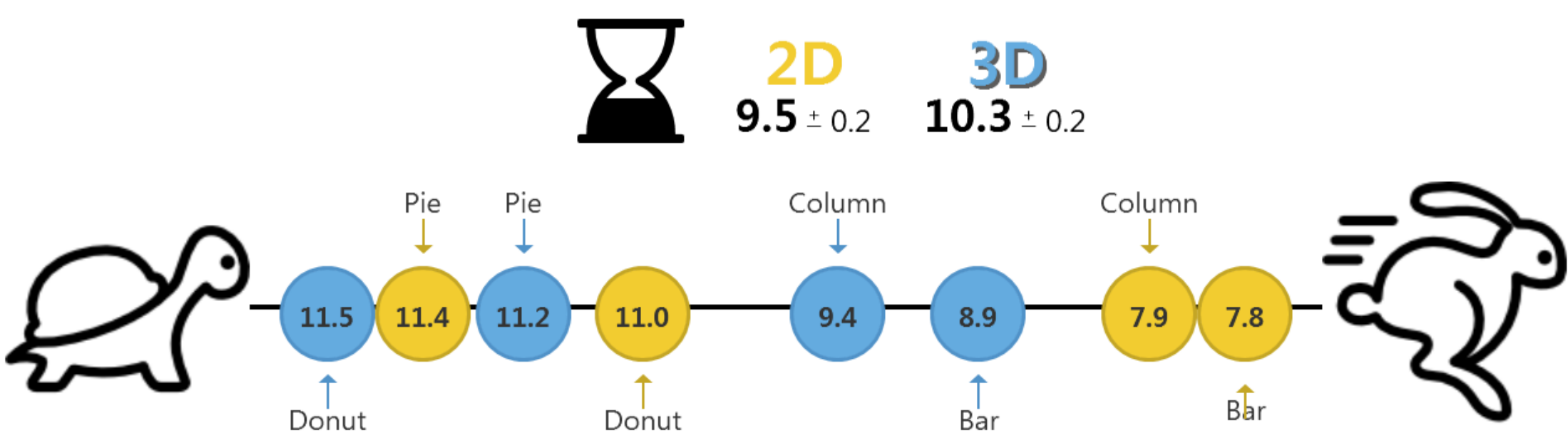
DONUT



What We Found

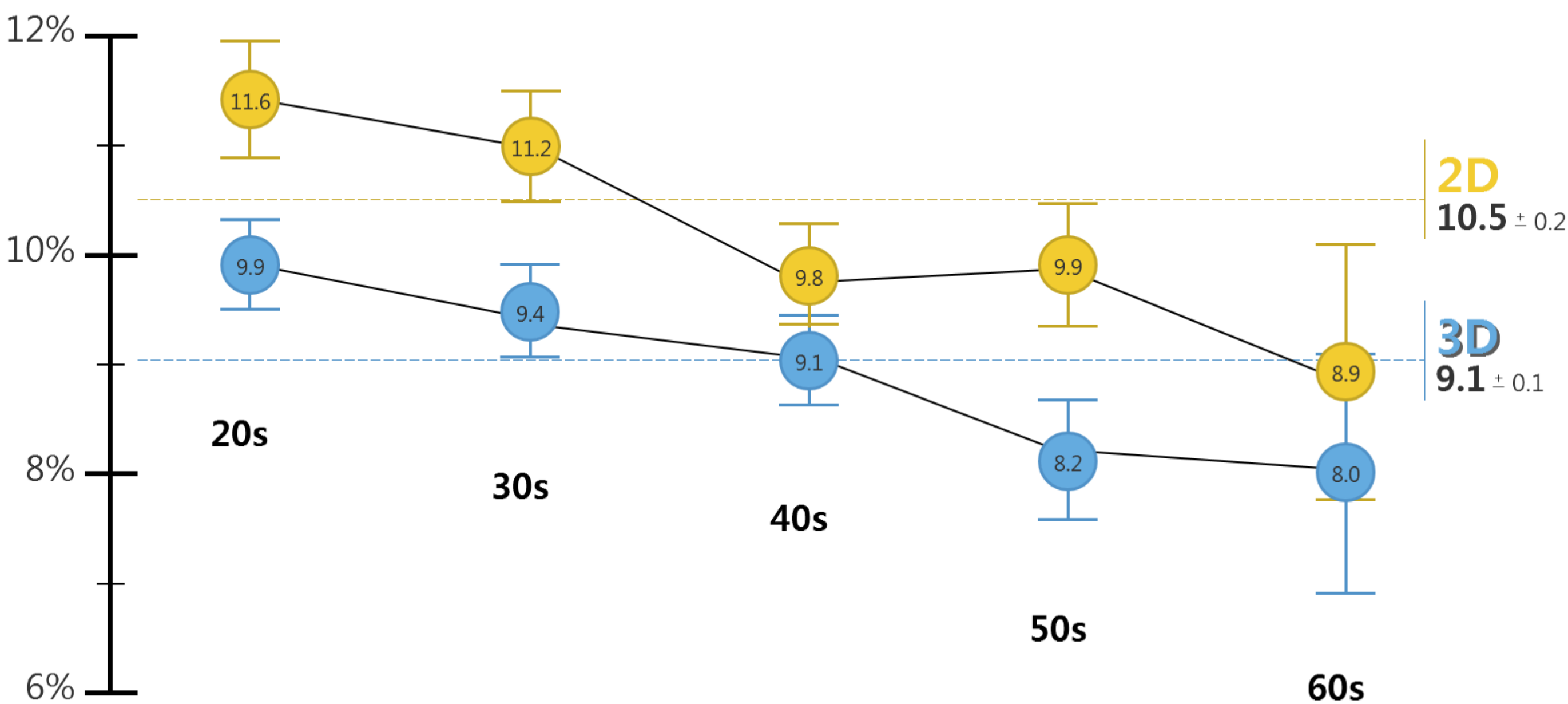
SPEED in seconds

Overall, people were faster with 2D charts. Especially the column and bar charts.



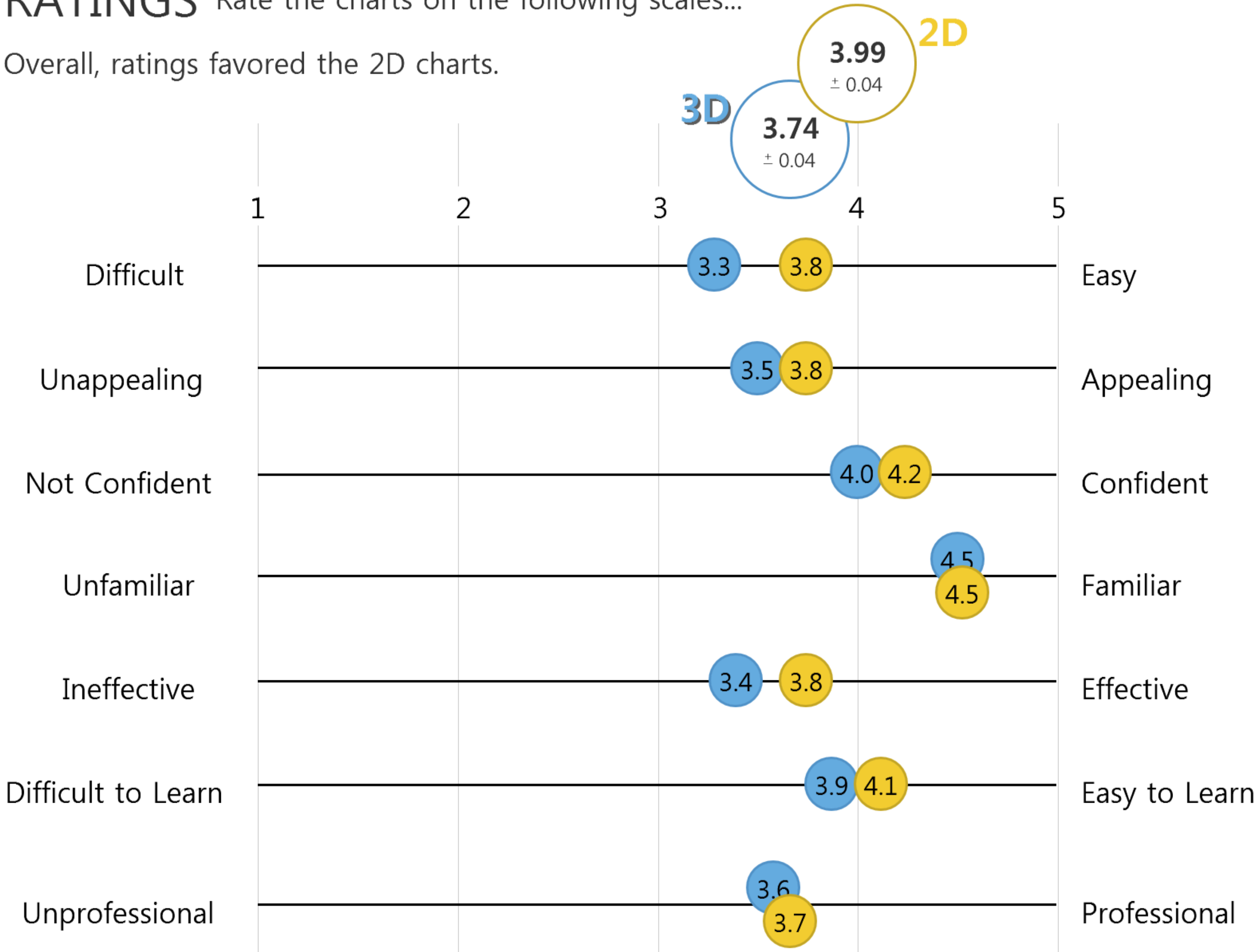
EFFICIENCY % correct per second

Again, 2D charts perform slightly better. There were no gender differences across age groups.



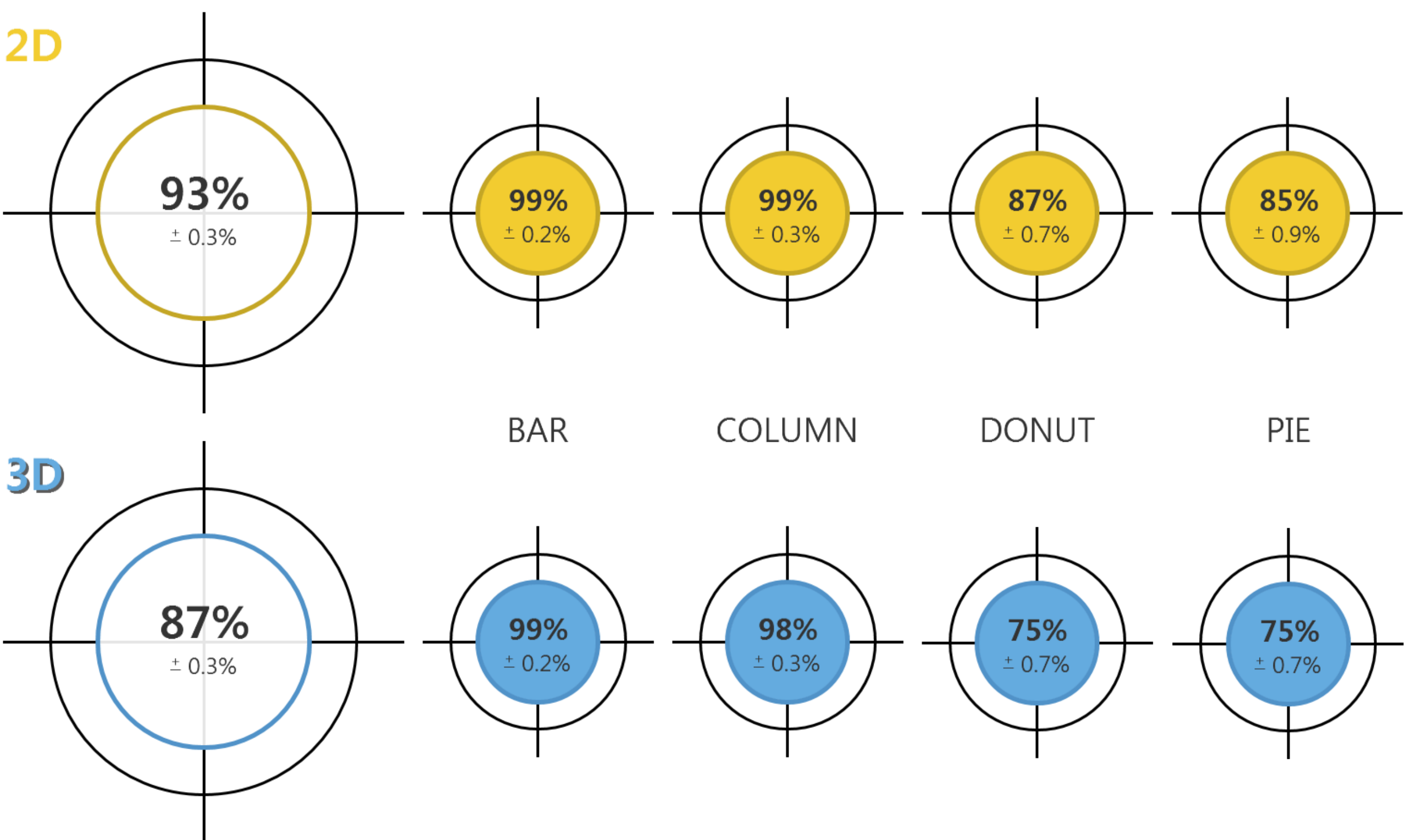
RATINGS Rate the charts on the following scales...

Overall, ratings favored the 2D charts.



ACCURACY

Overall, people were more accurate with the 2D charts.



FAVORITE

The column chart was selected most often as the favorite.



CONCLUSION

The 2D charts outperformed their 3D counterparts across all measures.



The jury is out on the specific chart type preference. The 2D bar charts had higher accuracy and speed but the 2D column charts were most preferred.