

Risk Propensity & Smartphone Operating System

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Introduction

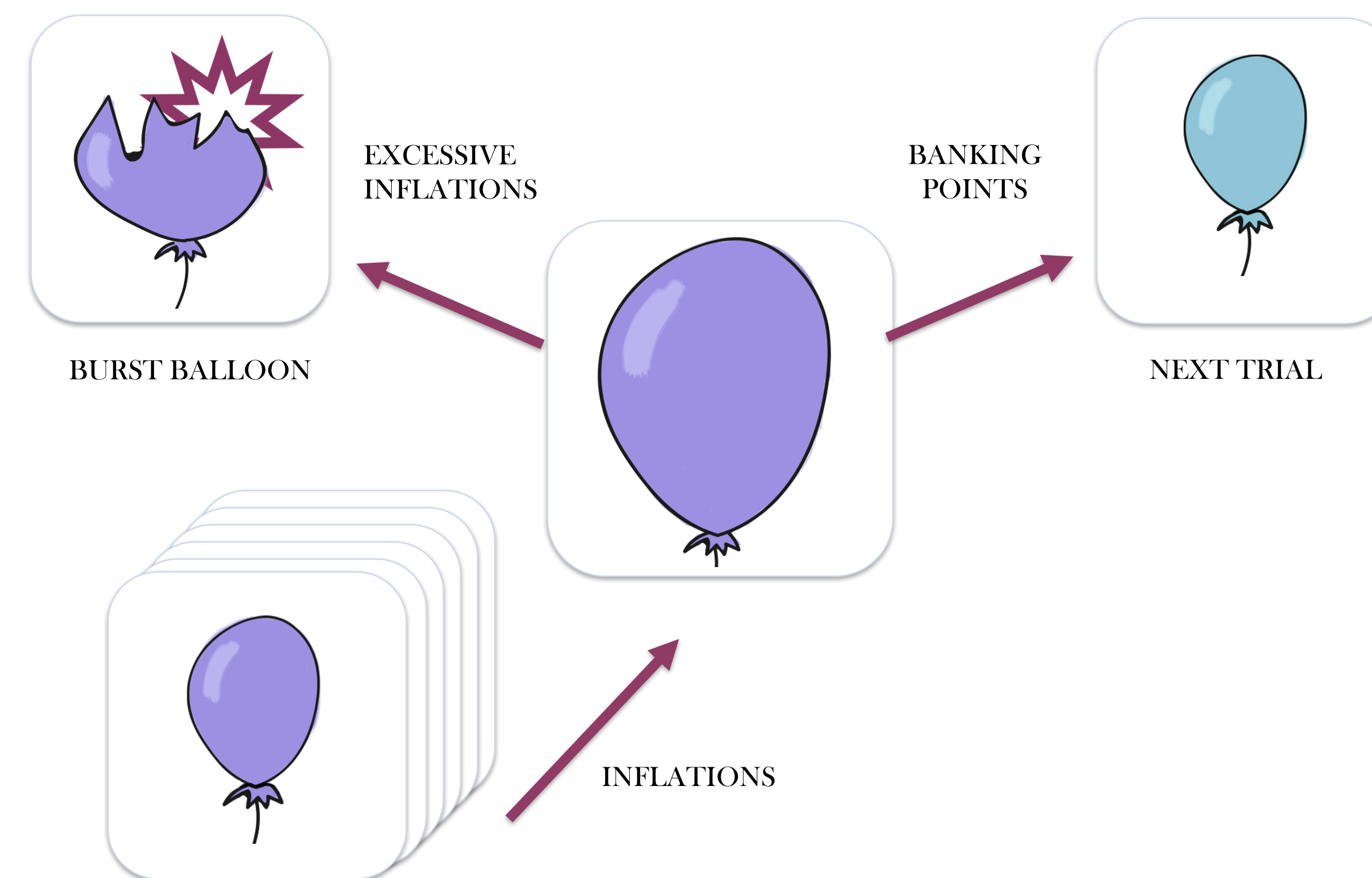
- Researchers have demonstrated that smartphone type can predict personality.
- Consumers who purchase an iPhone rather than Android device typically rated themselves as lower in honesty and more emotional. Suggested reasons for this include that smartphone users embody the personality of their frequently used devices, or they are drawn to a device which matches their personality or ideal personality.
- We were interested to see if this relationship extended to behaviour. For example, those who are less honest are also more likely to exhibit other risky behaviours.

Method

	Android	iOS	No smartphone	Windows	Total
Male	21	8	1	1	31
Female	20	18	2	0	40

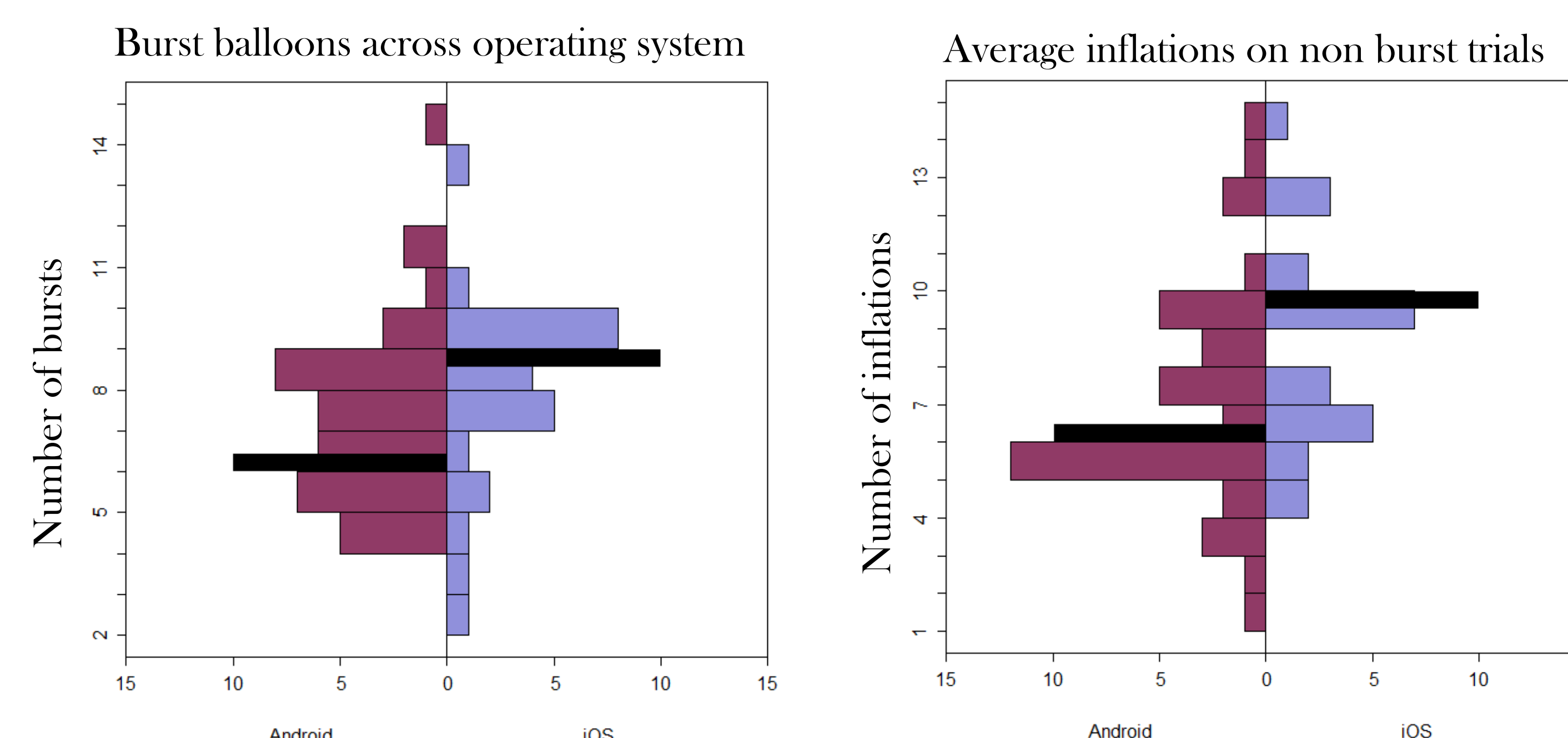
Materials/ procedure

- Participants had to complete an online survey giving details about their smartphone usage and beliefs regarding cyber security.
- Participants also completed the Balloon Analogy Risk Task (BART). The task involved playing a video game with the aim of inflating balloons as much as possible without causing the balloon to explode.
- Provided that participants banked their points before the balloon exploded, the number of times they inflated the balloon would be added to their score. Participants were constantly informed how many times they had inflated the balloons.
- Points corresponded to an increased likelihood of receiving a cash prize.
- A balloon's explosion was randomly determined by the computer, however there were different patterns of distribution for each colour balloon.



Results

- iPhone users reliably earned more points than the Android users.
- The graphs below report the frequency of various scores across operating system. The black bar denotes the average score of the groups.



- iPhone users earned more points, but this is not explained by the group inflating the balloons larger than Android user group. For the trials which did not end in a balloon bursting, Android users had significantly less inflations. Since iPhone users tended to unreliably burst more balloons overall, this contributed to differences in group scores.
- The groups did not seem to differ in how they responded to a previously failed trial or successful trial.
- More females owned iPhones yet they were not found to have a different propensity for risk.

Discussion

- These preliminary results should be interpreted with caution, however they suggest that iPhone users are more willing to risk higher levels of unsuccessful trials for greater reward in the successful trials. Or to put it another way, Android users were overly cautious, and underperformed in the task as a result.
- Participants who had committed to a particular operating system did not have a different learning style and risk propensity did not differ according to gender. This strengthens the interpretation that the initial approach to a risky task distinguishes the groups.

Implications

- This study supports claims of a dyadic relationship between individual differences and smartphones. Not only can we infer what a person is like from the data collected by a smartphone but the reverse is also true; who you are may impact choices relevant to your smartphone.
- Future research into what we can learn about people from real world behaviour detected by their smartphone needs to acknowledge that Android and iPhone users are distinct groups. Assertions made irrespective of the operating system involved should be considered alarming.
- Much may also be inferred by the degree of commitment that a person has to a particular operating system regarding both aspects of their personality and their propensity for particular behaviour.