

The effect of chocolate on customer retention

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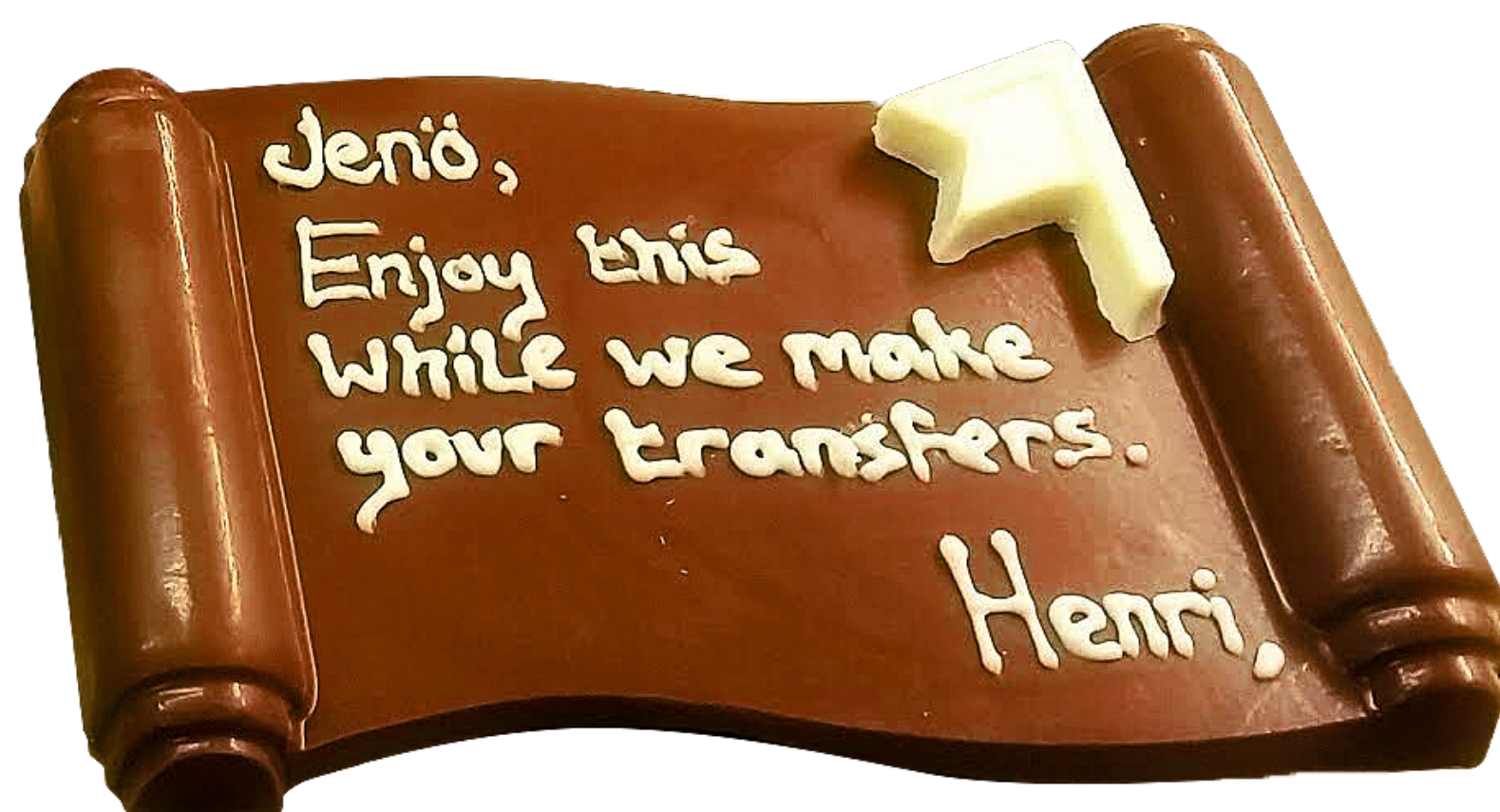
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Introduction

Sorry as a Service is a customer retention start-up that enables businesses to send apologies, measure, track and optimise their retention activities and reduce churn. The data was of **TransferWise** clients who had filed an online complaint. The aim of the project was to explore whether sending chocolate (See an example illustration below) to the unhappy customers is more convenient than giving the customer a free transfer.



Results

We used Apriori to find interesting association rules for the amount of money transferred, number of transfer and invites after the complaint.

Sex. We first found that women who get a chocolate are with higher confidence going to stop transferring money after the complaint compared when they get a free transfer (See **Fig 1A**). This is the opposite for men who prefer chocolate as a compensation.

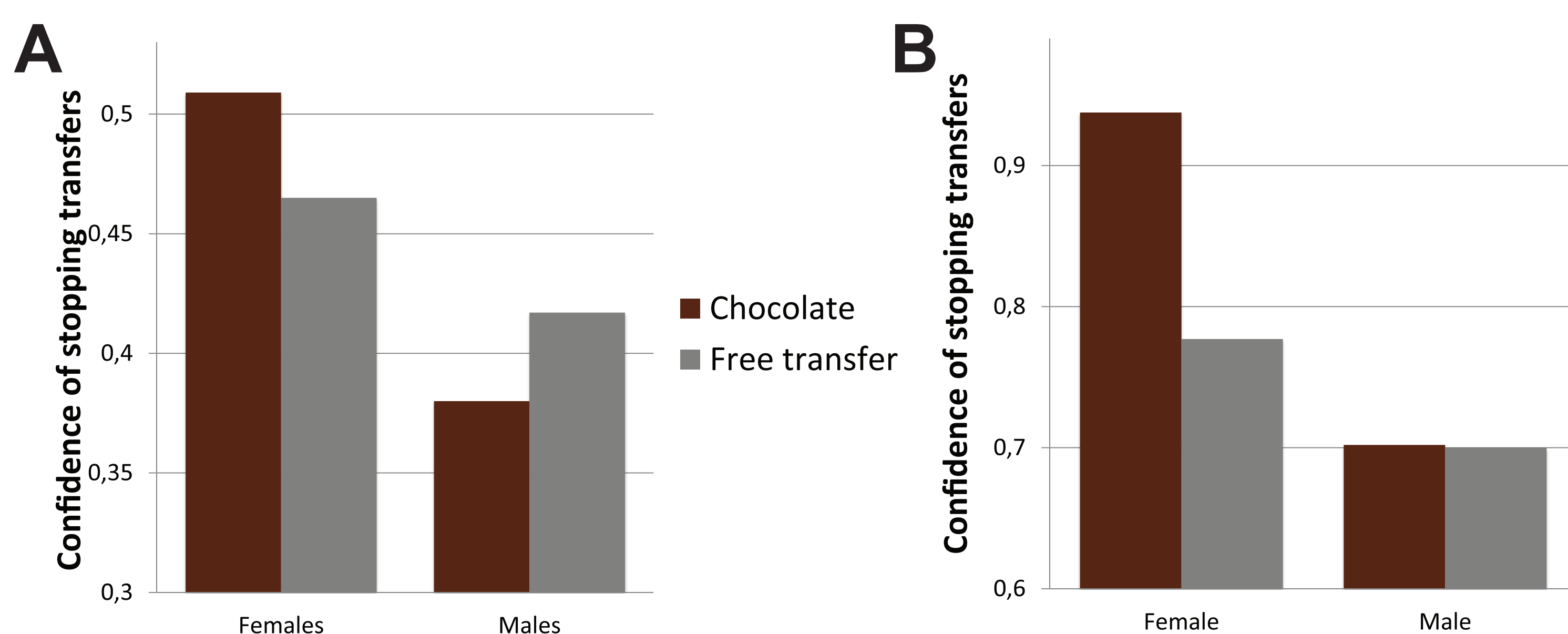


Figure 1. A Confidence for the classification of the amount of money transferred after the complaint equal to "stopped sending money". Women tend to prefer free transfer and men chocolate. **B** Amount of money sent before complaint in range 500-3000 euros in the case of sex and "stopped sending money". There is no difference for men in terms of compensation, but women prefer free transfer.

Amount transferred before. We next divided the data into four groups by the amount transferred before the complaint: 0, 1-500, 500-3000, more than 3000 euros. We observed that chocolate is preferred for amounts over 3000 and below 500 and free transfer for 500-3000.

In terms of sexes, we found that for 500-3000 euros sent before the complaint, a free transfer retains women more than a free chocolate but there is no difference in retention in men's preferences (See **Fig 1B**).

Age groups. When looking at the age tiers, the data reveals that for the classifications stopped, started and increase the amount of money by 50% clients in age group 35-45 are in favor of chocolate. Other age tiers are all in favor of chocolate (See **Fig 2**).

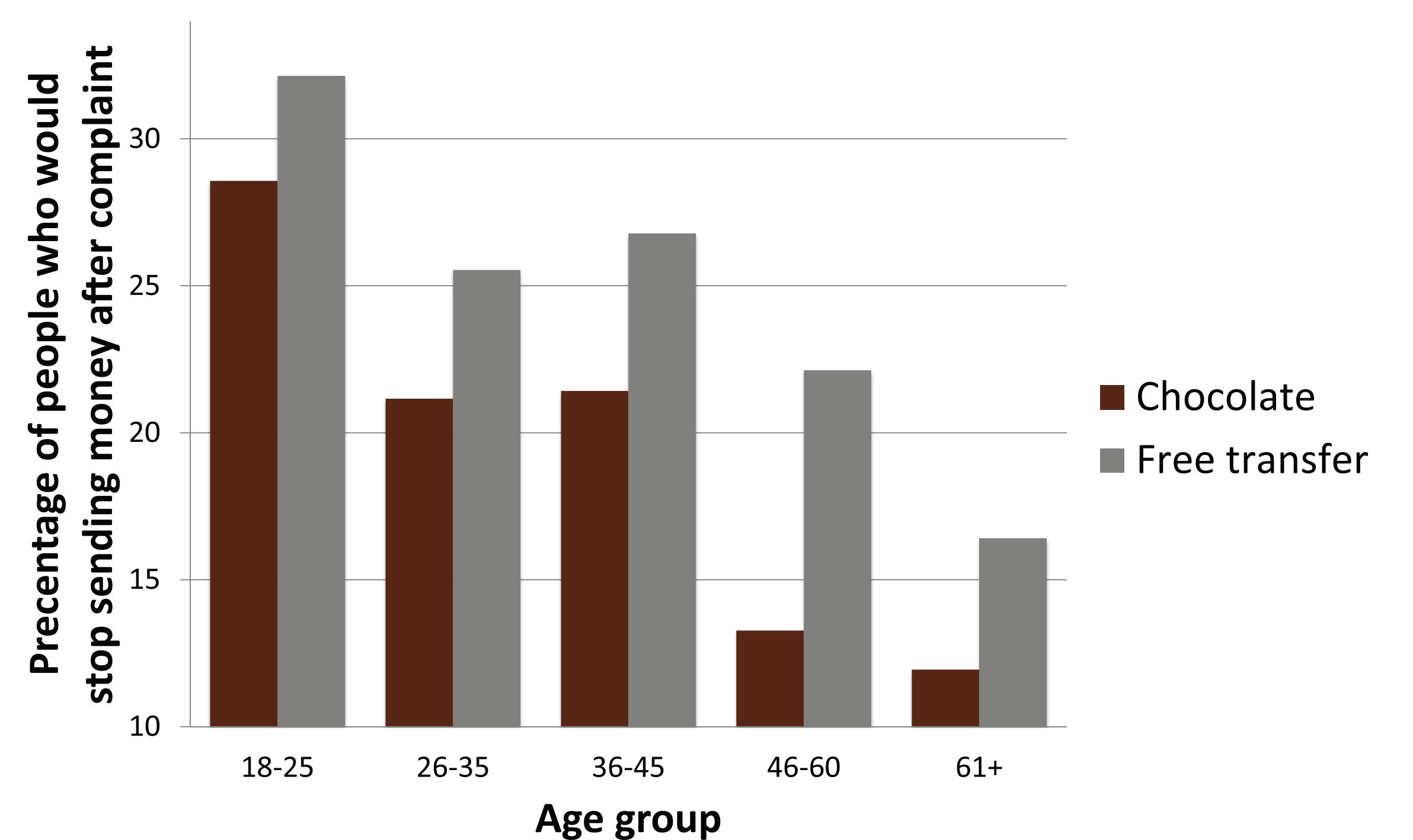


Figure 2. We could observe that for all age groups clients will at least numerically stop more probably sending money when they receive a free transfer for compensation compared to chocolate.

Complaint time of month. We divided the data into four groups by the week of the month the complaint was sent. We observed - with a low support - that during the in the first half of the month, it is reasonable to send a chocolate instead of a free transfer (See **Fig 3**). On week 3, chocolate obtains high confidence in stopping transfers; there is no difference in the last part of the month. These results are to be taken very preliminary.

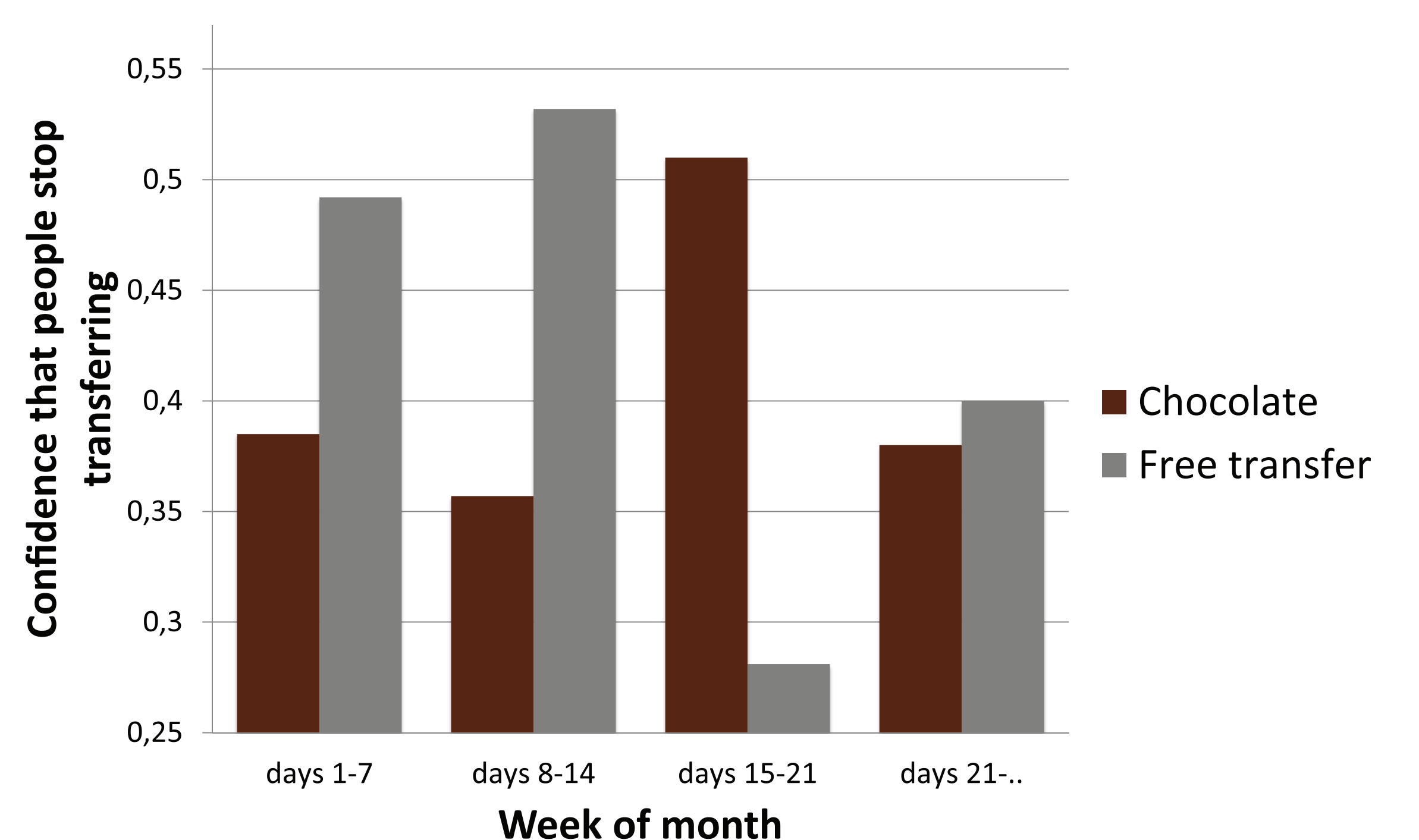


Figure 2. Clients prefer to get a free transfer on the third week of the month but chocolate on the other weeks.

Conclusions

In contrast to prior hypothesis, **women prefer free transfers to personalized chocolates**. The other results are to be taken as preliminary and future studies should confirm the results using more data.