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## **Trust and Reputation in the Sharing Economy: the Role of Personal Photos in Airbnb**

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Review-scores in Airbnb are indistinguishable as all hosts receive maximal values. This paper shows that guests rely instead on the host's photo as communicating trustworthiness. Sellers who their personal photo is perceived as more trustworthy charge higher listing price, and have higher probability to be booked.

### **[to cite]:**

Eyal Ert, Aliza Fleischer, and Nathan Magen (2015) ,"Trust and Reputation in the Sharing Economy: the Role of Personal Photos in Airbnb", in NA - Advances in Consumer Research Volume 43, eds. Kristin Diehl and Carolyn Yoon, Duluth, MN : Association for Consumer Research, Pages: 518-519.

### **[url]:**

<http://www.acrwebsite.org/volumes/1019689/volumes/v43/NA-43>

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# Trust and Reputation in the Sharing Economy: The Role of Personal Photos in Airbnb

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## EXTENDED ABSTRACT

Airbnb is one of the most successful “sharing-economy” businesses. It is an online marketplace through which individuals become ‘hosts’ by renting residences to other individuals (‘guests’) for a short-term accommodation (Zervas et al. 2014). The direct face-to-face interactions implied by Airbnb entail more risks than regular e-commerce (e.g., asset abuse, physical violence). Therefore a necessary condition for Airbnb transactions is trust. To increase trust Airbnb presents the online review-score that hosts receive from their guests. Hosts are also encouraged to post their personal photos together with their listings. We assert that reputation, as communicated by the online review-score (Zhu and Zhang 2010), and trustworthiness as perceived from the hosts’ personal photo (Eckel and Petrie 2011) will both affect the demand for listings in Airbnb. Specifically we test the effects of review score and hosts photos on the listing’s price (Study1) and its likelihood to be booked (Studies 2 and 3).

Study1 evaluates the impact of the hosts’ review scores and their personal photos on their listing’s market price. We focus on market price since change in the listing’s attributes affects its price more than its sales volume in fix capacity markets like Airbnb. In such markets hosts, realizing an excess demand for their listing, respond by increasing prices. To test the effects of online reviews and hosts photos on their listing’s price we downloaded all available data on 395 listings in Stockholm (e.g., apartment size and features, review-score, price). We then combined this data with trustworthiness score for each host’s photo collected from 260 Mturk respondents. In addition we estimated the attractiveness of each apartment photo using another 640 Mturk respondents.

The results revealed that surprisingly online review scores have no effect on Airbnb listings’ price. However, trustworthy photos do result with a price premium: hosts whose pictures are perceived as more trustworthy charge higher prices than their less trustworthy counterparts. Specifically, an increase in one unit of trustworthiness score is reflected by a 7% increase in the listing’s price. The other control variables (e.g., apartment size, apartment photo) were also significant as expected.

A further investigation of why review scores had no effect on price, revealed that they reviews were associated with very low variance; 97% of the scores were astonishingly high between 4.5-5 stars. To assess the robustness of this finding we compared Airbnb listings with hotels review scores in five large European cities. In all cities the Airbnb listings’ review scores were significantly higher, by 20% on average, than the hotels’ scores. Furthermore, over 90% of Airbnb hosts received a review-score of 4.5-5 stars making them practically indistinguishable (Reznick and Zeckhauser (2002) report similar phenomenon in ebay).

Our next two studies are controlled experiments that assess the effect of hosts’ photos on guests choice to stay at the listed unit when review scores are all high (Study 2), and when the review scores are varied (Study3). One hypothesis suggest that the effect of hosts photos in Airbnb results from the fact that the review scores are in effect meaningless, so consumers seek other trust signals and rely on the hosts photos. This hypothesis predicts a significant effect of the hosts photos in absence of meaningful reviews (Study2), but that this

effect should disappear when review scores are meaningful (Study3). Alternatively, consumers might respond to the hosts photos regardless of whether reviews are meaningful, in which case the hosts photos will impact significantly guests on choice in both studies.

In each experiment participants had to choose a listing from a menu of four options for accommodations in Stockholm. A pre-test preceded each experiment in which individuals rated the trustworthiness and attractiveness of 70 photos of unfamiliar people (see Lundqvist, Flykt, and Öhman 1998). The photos with the most extreme average rating scores of trustworthiness and attractiveness were selected for the experiments.

The experiments simulated listing choice on Airbnb when attractiveness and trustworthiness of hosts’ photos vary and review scores are kept constant (Study2) or also vary (study3). The choice set was presented on computer screen. Three options represented Airbnb apartments and the fourth option featured a hotel room. Each apartment option included the host photo and her name, price, apartment photo, a short description of the apartment, and guests’ average review score. The hotel option featured the logo of the Best-Western hotel in place of the host photograph.

The experimental design used the full factorial principle for combining photos and price levels. The prices varied systematically and were based on actual prices of Airbnb listings in Stockholm. The hotel option was fixed throughout all of the choice sets, and offered a price equivalent to that of a three stars hotel in Stockholm. Participants (N=566 in each study) were drawn from a custom online panel. We first screened participants who have used the Internet in the past to book or seek information on accommodation for their travel. Participants were asked to choose their preferred option of accommodation for one night in Stockholm.

The results of the mixed-logit analysis revealed that both trustworthiness and attractiveness of the hosts photos affected guests choice: the higher they were ranked, the higher the likelihood of the listing to be chosen, holding all other attributes constant. In Study3 the review scores also had significant impact on guests. Yet even in this study the effect of the trustworthiness as perceived by the host photo remained significant.

In summary, the choice of listings, as reflected by their price (Study1) and their likelihood to be booked (Study2), is affected by the perceived trustworthiness of the host’s photo. This effect holds even when review scores vary (Study3). Interestingly, guests were not conscious of this personal photo effect on their judgment: only a minority (8%) mentioned the hosts’ photo as a factor that influenced their choice in a post-study questionnaire. The results show that in platforms like Airbnb, the review scores of the product/asset are less influential (and are actually neutralized by guests tendency to give maximal scores) than the guests’ impression of the hosts personal photo.

## REFERENCES

- Eckel, Catherine C. and Ragan Petrie (2011), “Face value,” *The American Economic Review*, 1497–1513.  
Lundqvist, Daniel, A. Flykt, and A. Öhman (1998), “The Karolinska directed emotional faces,” *Stockholm, Sweden: Karolinska Institute*.

Resnick, Paul and Richard Zeckhauser (2002), "Trust among strangers in Internet transactions: Empirical analysis of eBay's reputation system," *Advances in applied microeconomics*, 11, 127–57.

Zervas, Georgios, Davide Proserpio, and John W. Byers (2014), "The Rise of the Sharing Economy: Estimating the Impact of Airbnb on the Hotel Industry," *Boston U. School of Management Research Paper*.

Zhu, Feng and Xiaoquan Zhang (2010), "Impact of online consumer reviews on sales: The moderating role of product and consumer characteristics," *Journal of Marketing*, 74 (2), 133–48.