

The Effects of Advisor Status and Time Pressure on Decision-Making in a Luggage Screening Task

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Abstract : In a busy airport, the decision whether to take passengers aside and search their luggage for dangerous items can have important consequences. If an officer fails to search and stop a bag containing a dangerous object, a life-threatening incident might occur. But stopping a bag unnecessarily means that the officer might lose time searching the bag and face an angry passenger. Passengers' bags, however, are often cluttered with personal belongings of varying shapes and sizes. It can be difficult to determine what is dangerous or not, especially if the decisions must be made quickly in cases of busy flight schedules. Additionally, the decision to search bags is often made with input from the surrounding officers on duty. This scenario raises several questions: 1) Past findings suggest that humans are more reliant on an automated aid when under time pressure in a visual search task, but does this translate to human-human reliance? 2) Are humans more likely to agree with another person if the person is assumed to be an expert or a novice in these ambiguous situations? In the present study, forty-one participants performed a simulated luggage-screening task. They were partnered with an advisor of two different statuses (expert vs. novice), but of equal accuracy (90% correct). Participants made two choices each trial: their first choice with no advisor input, and their second choice after advisor input. The second choice was made within either 2 seconds or 8 seconds; failure to do so resulted in a long time-out period. Under the 2-second time pressure, participants were more likely to disagree with their own first choice and agree with the expert advisor, regardless of whether the expert was right or wrong, but especially when the expert suggested that the bag was safe. The findings indicate a tendency for people to assume less responsibility for their decisions and defer to their partner, especially when a quick decision is required. This over-reliance on others' opinions might have negative consequences in real life, particularly when relying on fallible human judgments. More awareness is needed regarding how a stressful environment may influence reliance on other's opinions, and how better techniques are needed to make the best decisions under high stress and time pressure.

Keywords : advisors, decision-making, time pressure, trust

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