Does habituation affect user’s performance and the acquisition of quality prints?

How does feedback affect habituation and image quality?

Study Design
- Collected impressions of left and right index fingers
- For each phase collected 2 impressions per day over 15 days

Phase 1:
- Operator indicated when to place and remove finger
- Operator manually triggered image capture
- Participants received no information about image

Phase 2:
- Participants:
  - Decided which order to scan fingers
  - Saw a dynamic scale bar of image quality
  - Encouraged to collect as many samples as needed to achieve desired quality
  - Decided when to submit the image to the database

Phase One:
1. Younger participants submit higher quality images than older participants
2. Women’s images, on average, are of poorer quality than men’s
3. Habitation has no affect on image quality without feedback

Phase Two:
1. When feedback was introduced older participants tried more times
2. Older participants produced images that were of higher quality over time
3. But younger subjects still submit higher quality images