Investigating Hand-Size and Mobile Touch Interactions

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ABSTRACT
UPDATED—August 16, 2016. This sample paper describes the formatting requirements for SIGCHI conference proceedings, and offers recommendations on writing for the worldwide SIGCHI readership. Please review this document even if you have submitted to SIGCHI conferences before, as some format details have changed relative to previous years. Abstracts should be about 150 words and are required.

ACM Classification Keywords
H.5.m. Information Interfaces and Presentation (e.g. HCI): Miscellaneous; See http://acm.org/about/class/1998/ for the full list of ACM classifiers. This section is required.

Author Keywords
Authors' choice; of terms; separated; by semicolons; include commas, within terms only; required.

————————Sarah ————————————-

INTRODUCTION
Interaction with your personal mobile device is an individual daily routine. Devices are increasingly smart and have plenty of functions. As today's mobile devices vary highly in their dimensions, interaction has different levels of difficulties. One or two hands might be necessary for different tasks.
People have different hand sizes and tend to have different device sizes, although that might not be closely interlinked. Mobile touch interactions differ widely with hand and device size.
Besides mobility, personalization is an important aspect. Our smartphone can only be smart based on our personal information, like for example our residence, contacts and browsing habits.
Our hand size could be another personalization aspect and make our devices even smarter. If my device knows about my hand size, it could for instance adapt the layout to help us reaching the important interaction elements.
The paper is organized as follows ...

————————Iris ————————————-

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RELATED WORK
Infos aus [2]

STUDY
- warum haben wir diese Tasks gewÃd'hlt
- warum die Activities
- was haben wir wie warum gemacht
- wie haben wir damit unsere Studie durchgefÃijhrt

Study Design
- jeder hat alle Tasks gemacht (ist das dann "between subjects" oder so Ãd'hnlich?)
- welche Interaktionen
- welche Daten wurden gemessen

App
- Aufbau
- einzelne Activities auffÃijhren
- welche Daten wurden gemessen (DB-Schema)

Participants
————————Sarah ————————————-

Procedure
The participants have been invited to a 15 minute time slot to take part in our hand measurement study. They could receive credits or an amazon voucher for their participation. In order to allow the usage of their hand and touch data, they had to sign a letter of agreement.
At first, the participants hand dimensions were measured manually as described before. Their data was then entered directly into our app. The participants started with the radius task in a predetermined hand position. After that, the tasks came up in a random order according to a latin square. The participants were free in solving the tasks, except they were only allowed to use one hand. For the zooming tasks, participants were instructed to use the other hand as well or to leave the device on the table.

————————Jonas ————————————-
=> was haben wir ausgewertet
"Signifikanz nicht untersucht, da nicht explorativ" !!!!! ... am interessantesten war dieses und jenes ... darauf eingehen => Plot zeigen und erlÃd'utern

RESULTS

=> das korreliert mit xy

DISCUSSION

————————Sarah ————————————-

CONCLUSION AND FUTURE WORK

We came up with different challenges when investigating hand size and mobile touch interactions. In our study, it was hardly possible to determine the user's hand size from his mobile touch interactions during our tasks.

We could show a higher correlation between touch interaction and hand size when we determined the hand position. As this might be uncomfortable for users, the other tasks in our study were designed in such a way that hand position is free and left over to the user.

Further investigations should eventually determine hand positions in order to evaluate the user's hand size. As the most promising result we got was from our radius task, this could eventually be used to predict the user's hand size.

Knowing about the user's hand size could then enhance mobile interaction. If our mobile devices know about our hand sizes, they could adapt the user interfaces in order to facilitate the interaction. Navigation bars and other important UI Elements could be moved to make them more reachable.

- Conclusion: am vielversprechendsten ist vermutlich ... Wie wÃijrde man speziell dieses noch in neuer Studie untersuchen
- weitere Daten angucken und evaluieren
- make mobile interaction smarter (Bezug zur Introduction nehmen)

REFERENCES FORMAT

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