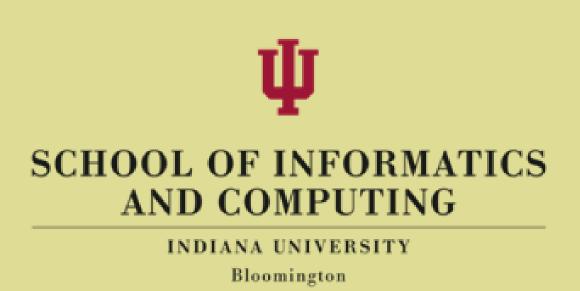
A User Study of WhatsApp Privacy Settings Among Arab Users



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Abstract

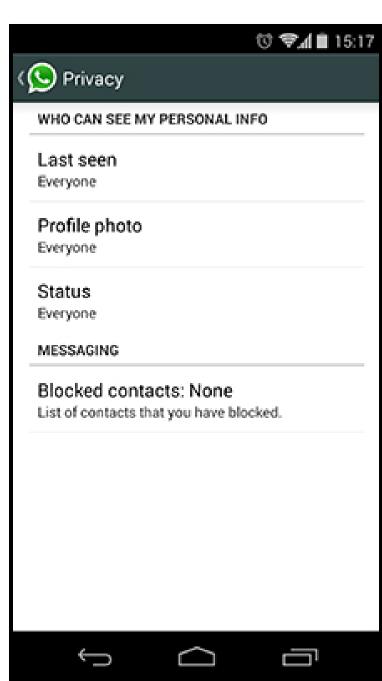
- Mobile Instant Messaging (MIM) applications (apps) such as WhatsApp Messenger enable easy communication and open new issues of information control and privacy management.
- We investigate WhatsApp to understand how Arab people manage their privacy on MIM apps.
- We find that WhatsApp's design decisions around adding contacts result in privacy issues of managing privacy settings and unwanted contact through the app.

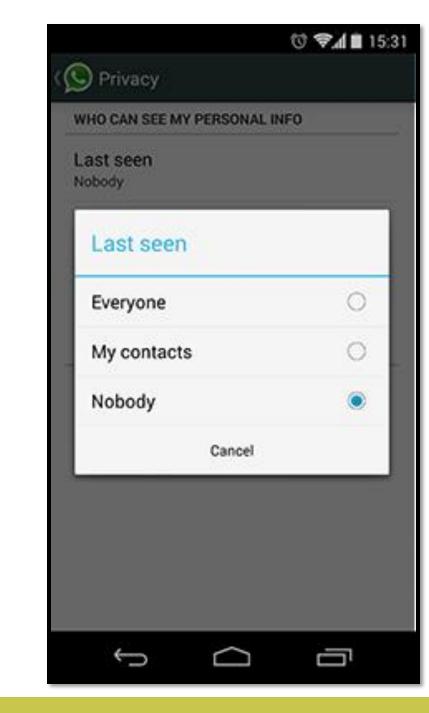
WhatsApp

- Cross-platform mobile messaging application
- Text messaging, create groups, and send images, video and audio media messages.
- More than 450 million monthly active users in its fourth year.
- On Feb. 19, 2014 Facebook bought WhatsApp with \$19 billion

Research Questions

- Q1: How do Arab manage their privacy settings using WhatsApp?
- Q2: What are their expectations and concerns when use the app?

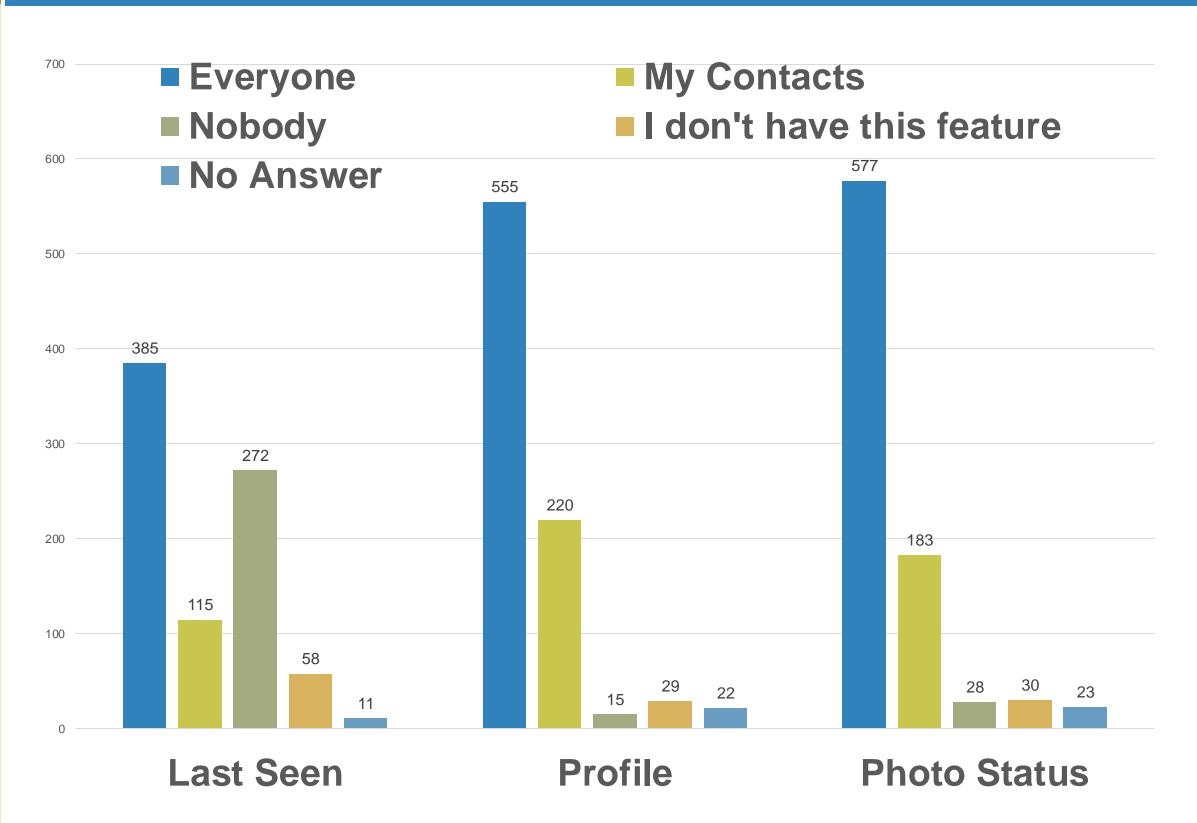




Method

- Online survey snowball sample
- Survey in English and Arabic
- 945 complete responses, 841 of which self-identified as Arab
- Gender:
 - (67.06%, n=564) women
 - (30.08%, n=253) men
 - (2.85%, n=24) chose to not indicate a gender

Managing Privacy Settings





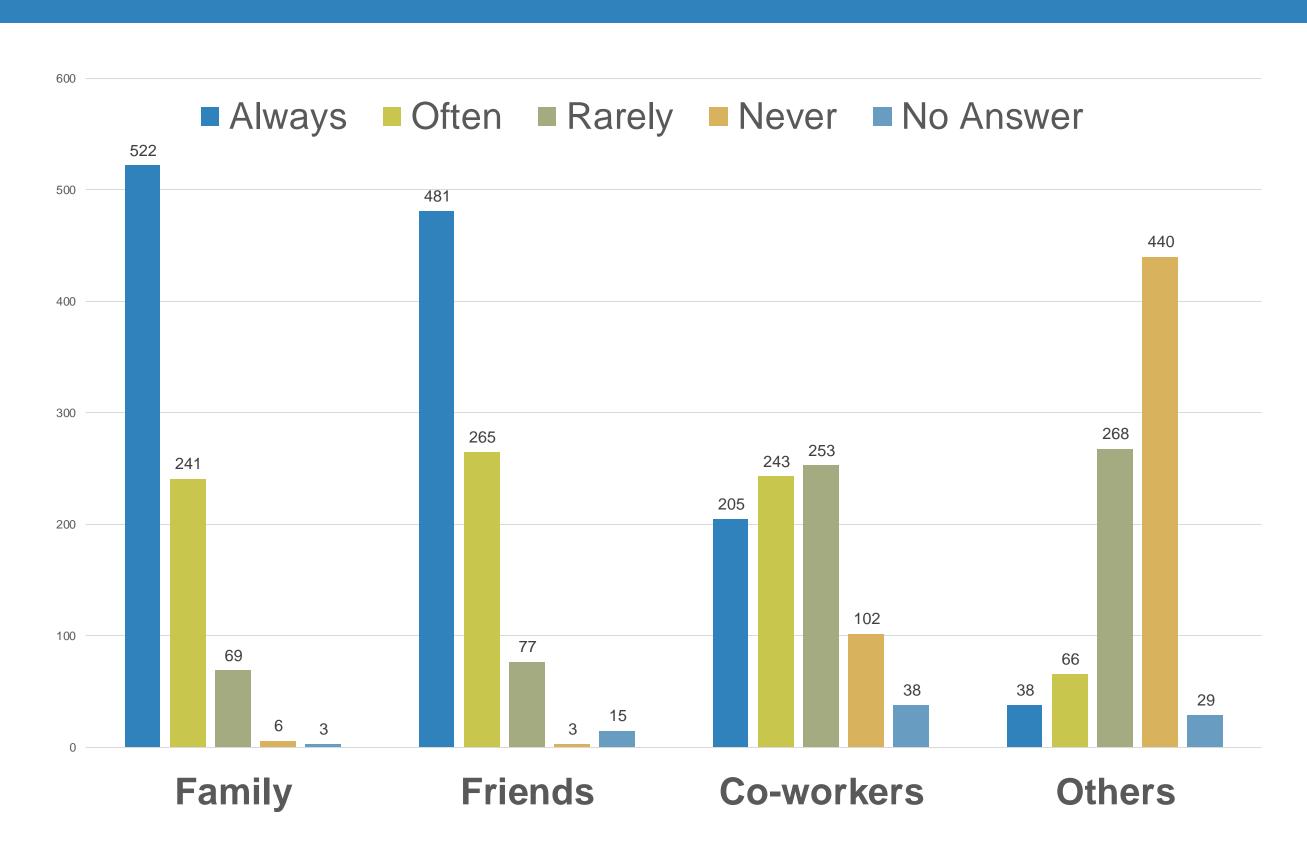


FIGURE 2: HOW OFTEN RESPONDENTS CONTACT EACH GROUP THROUGH WHATSAPP.

Unwanted Contacts and Blocking

Reason	Women	Men
He has my number but I don't know this person	49.47%	22.13%
I have this person's phone number, but I don't want him to contact me over WhatsApp	6.56%	10.67%
I don't want him to be able to see my profile photo and/or status	8.87%	7.51%
We are not friends anymore	5.50%	7.51%
We had a bad fight	14.36%	21.74%

TABLE 1: WHY MEN AND WOMEN CHOSE TO BLOCK PEOPLE.

"I once I had to delete my phone number because of a stalker that kept sending me messages from different phone numbers. Blocking his numbers was not effective. That was a breach of my privacy."

- 51.96% of respondents are bothered that a stranger can see their profile photo, status, and when they last logged in.
- How many times have you been contacted by a stranger?
 - 63.85% more than once
 - 18.31% just once
 - 15.93% never
- Had you ever used the blocking feature?
 - 81.03% of women
 - 64.03%.of men

Discussion

- People are developing a greater dependence on MIM applications as their primary communication mechanism. Privacy is therefor an important component that should be considered by the developers of such apps. Our work shows that the emphasis WhatsApp puts on ease of contact and sharing of data puts users in a position where it is challenging to impossible for them to manage their privacy.
- We intentionally investigated Arab culture because of the high use of WhatsApp and some of the conservative elements of the culture. In future work we plan on comparing how people in different cultures respond to MIM privacy issues, both in how they manage privacy, and what their privacy expectations are.