"Don't Break My Heart!": User Security Strategies for Online Dating





 ${}^{
m D}_{{}_{
m TY}}$ Borke Obada-Obieh, Sonia Chiasson, Anil Somayaji

USEC 2017

3/11/17 (1



Crazy people

meet and rape women

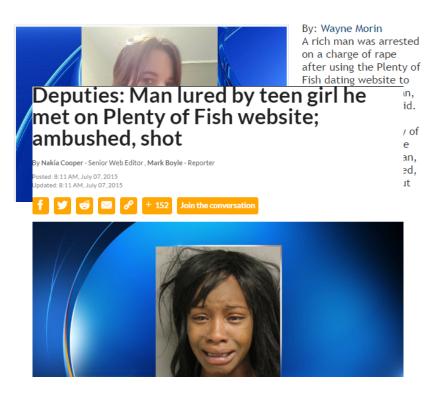
Rich man uses Plenty of Fish dating website to

Liars

Trolls

Rapists

Creeps



Misrepresentation

Cads

USEC 2017

COMMON WITH OTHER ONLINE PLATFORMS

Fear of Misrepresentation

Trust

Reputation

USEC 2017

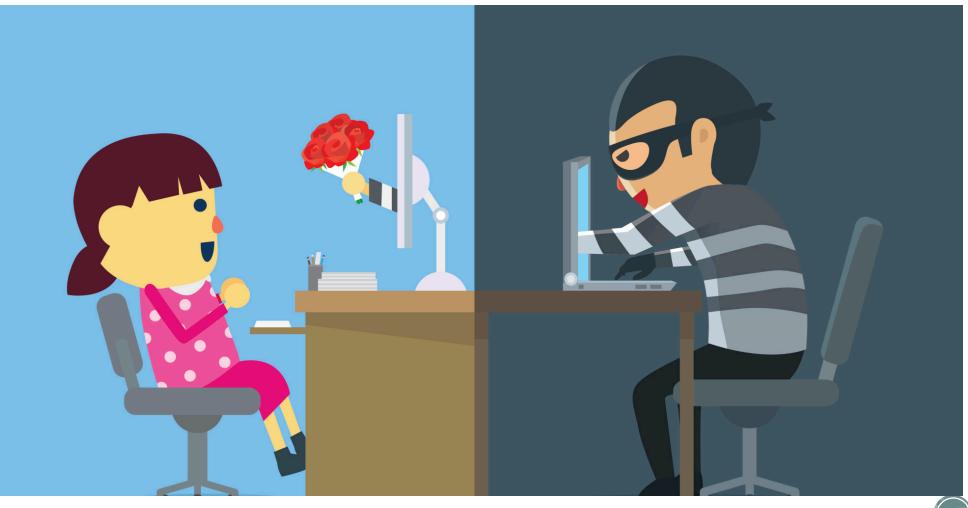
3/11/17

4





USEC 2017



USEC 2017

QUESTIONS WE SOUGHT TO ANSWER

- Understand the security and privacy precautions taken by users in online dating sites
- Understand how users balance the need for sharing information with the need to protect themselves
- Explore situations where users discover others were untruthful in their representations and how this might endanger them
- Explore how users gauge the accuracy of information revealed by others on dating sites

USEC 2017



METHODOLOGY

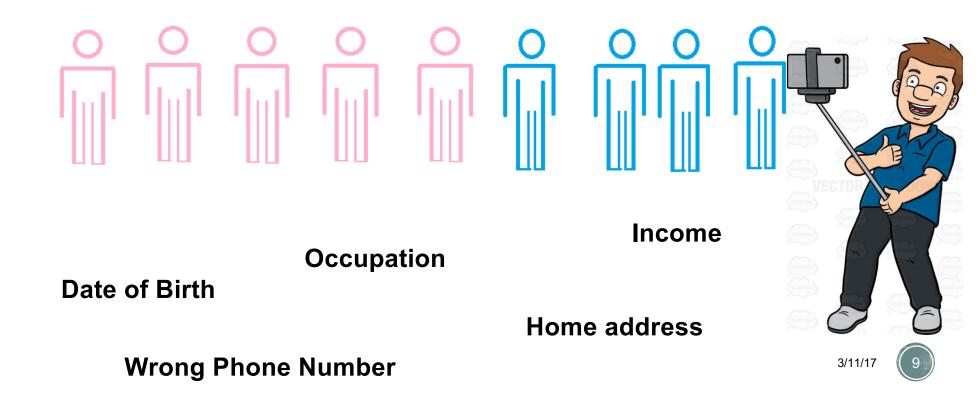
ID	Gender	Age	Occupation
P1	Female	22	Masters Student
P2	Female	18	Undergraduate Student
P3	Male	21	Undergraduate Student
P4	Male	19	Undergraduate Student
P5	Female	24	Research Assistant
P6	Female	20	Undergraduate Student
P7	Female	49	Administrator/Advisor
P8	Male	20	Undergraduate Student
P9	Male	23	Trainer
P10	Female	50	Staff

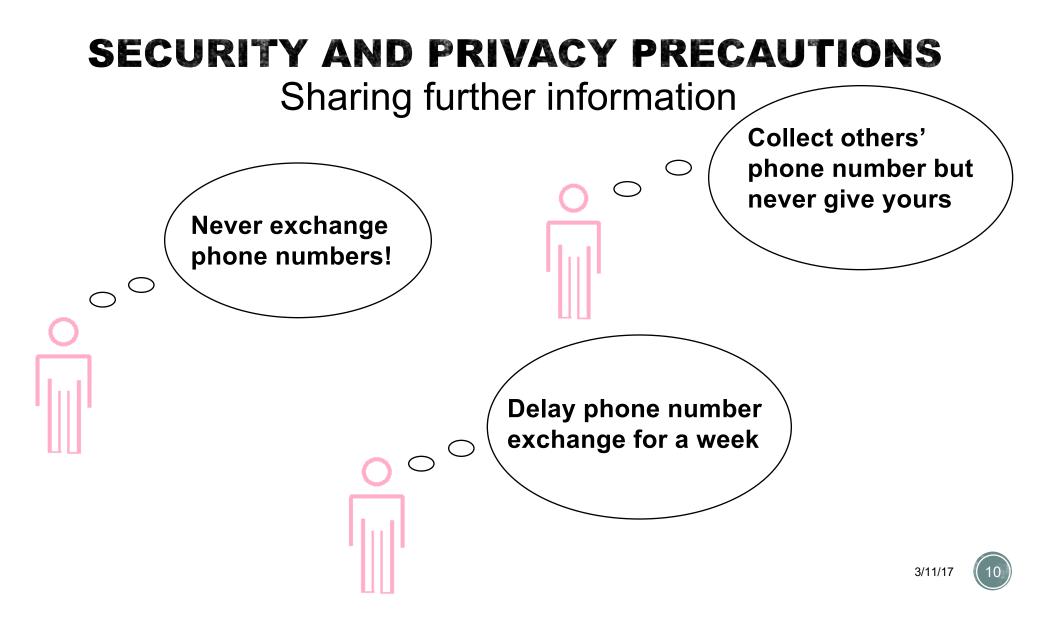


USEC 2017

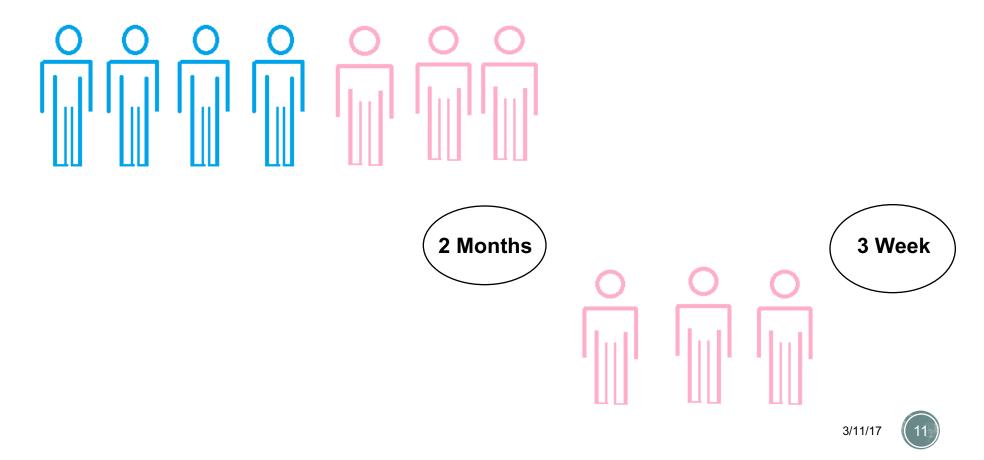
SECURITY AND PRIVACY PRECAUTIONS

Providing limited or incorrect information



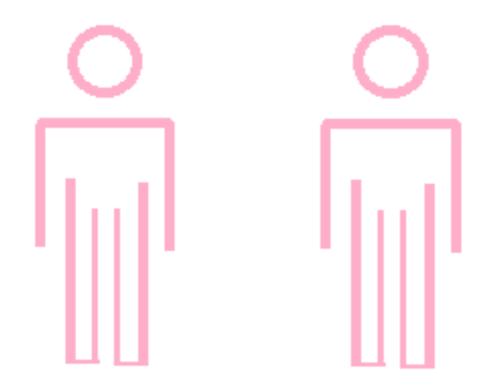


SECURITY AND PRIVACY PRECAUTIONS Setting up dates



SECURITY AND PRIVACY PRECAUTIONS

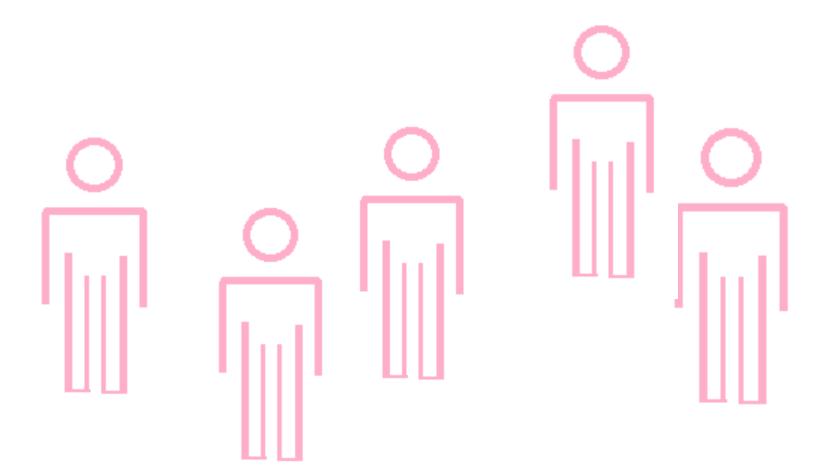
Recognising weird request as red flags



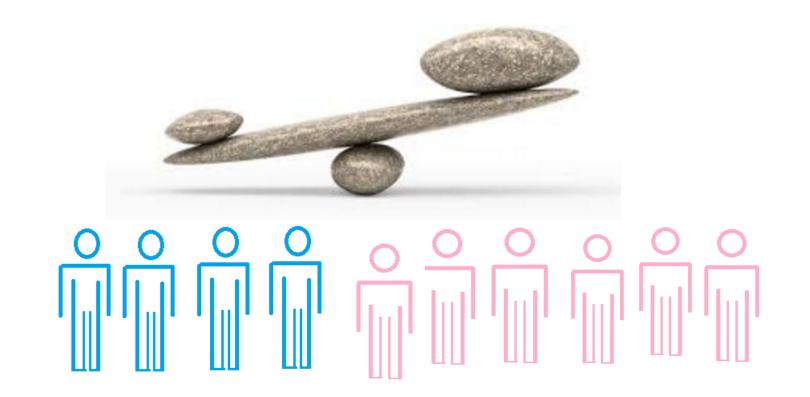
SECURITY AND PRIVACY PRECAUTIONS Stalking on social media



SECURITY AND PRIVACY PRECAUTIONS Being cautious while on dates



BALANCING PRIVACY AND SOCIABILITY



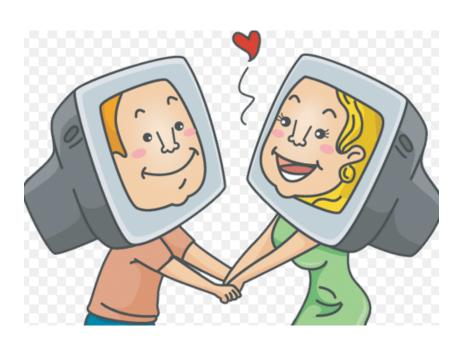
DETECTING SCAMMERS AND GAUGING TRUTHFULNESS

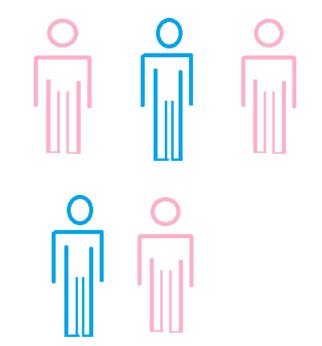
Trusting gut feeling



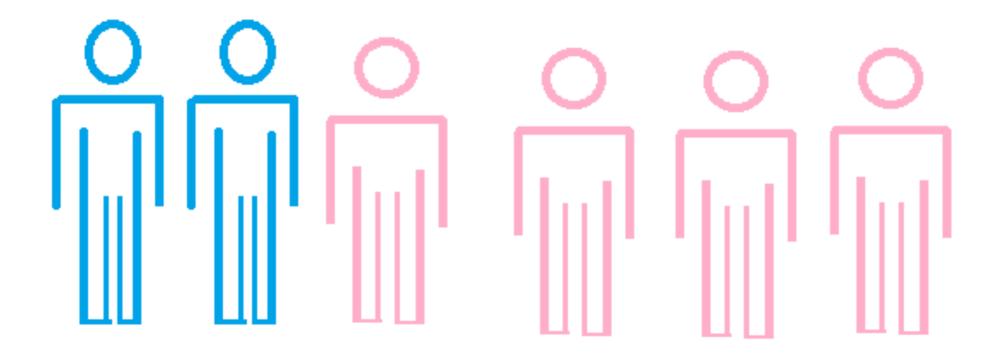
DETECTING SCAMMERS AND GAUGING TRUTHFULNESS

Conversation patterns



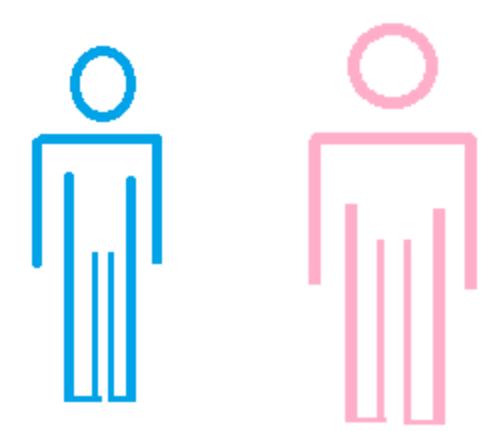


DETECTING SCAMMERS AND GAUGING TRUTHFULNESS Inconsistencies in profiles



DETECTING SCAMMERS AND GAUGING TRUTHFULNESS

Requesting proof

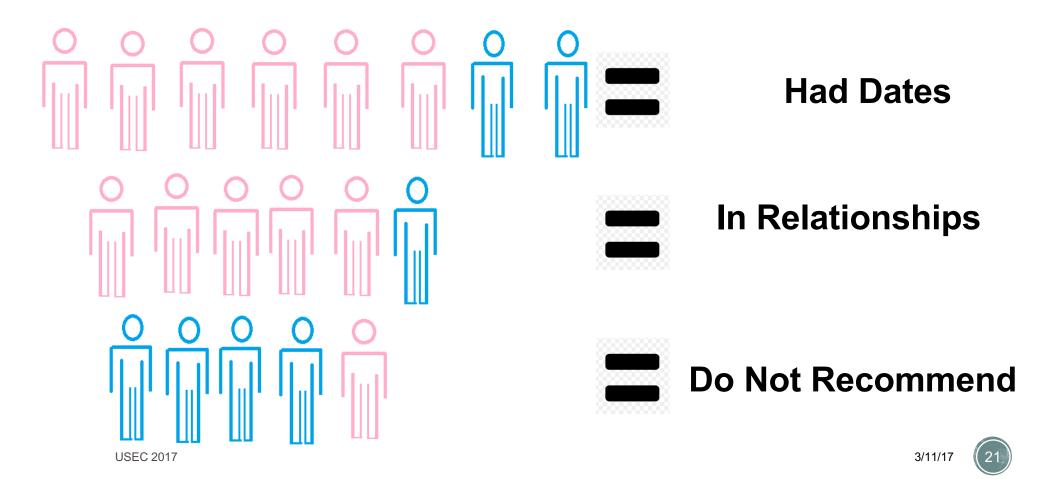


DETECTING SCAMMERS AND GAUGING TRUTHFULNESS

You can never tell



GENERAL DATING EXPERIENCE AND FEEDBACK



AN IDEAL DATING SITE

- Better practical approaches to help dating site user gauge the accuracy of information shared
- Help in sharing information such that they protect their privacy and safety while also not stopping them from finding potential matches
- These mechanisms can be applied on a global scale



Thank you for listening, Any Questions ..?

borkeobadaobieh@cmail.carleton.ca



USEC 2017