Gender differences in privacy awareness on social networking sites

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ABSTRACT

In this research, we have created two Facebook profile accounts of an average 18-year-old female and male. We have added 30 female and 30 male profiles on Facebook as friends from created accounts and waited to see if the profiles will get friend request accepted. We have done a comparative analysis based on gender, age and number of friends of profiles that have been added by the created profiles. We have found that male users of Facebook have more frequently added new, unfamiliar friends on Facebook than female users.

KEYWORDS

Facebook, privacy, accepting friends, strangers

1 Introduction

Facebook is the most popular social networking site (SNS) [1]. Studies on SNS are focusing on privacy and disclosure of users' data on Facebook. Research show that privacy is important to users, but often they do not behave in a way they intended, which is also called the privacy paradox [2]. Users often add unknown persons on social networking sites as their friends and reveal sensitive information with their new friends (e.g. photos, date of birth, address etc.) [3, 4]. Attackers can use such behaviour, and it is important that people on social networking sites would only add people they know as their friends.

To understand the privacy awareness and easiness of adding unknown users on Facebook, we have conducted a study and will present the study's preliminary findings in this paper.

2 Preliminary findings

We have sent a friend request to 60 random persons with a female and male account, the persons we added were the same (female added the same profiles on Facebook as male profile). As in Table 1, the female account received 21 friend accepts, whereas the male account received 11 friend request accepts, both out of 60 sent friend requests. Three persons on Facebook accepted only male profile, and 13 accepted only female profiles, while 8 persons accepted both. In table 2, there is a comparison of the number of female and male profiles who have accepted our two teenage profiles as friends. Twice as much female as men did not accept any profile, which shows a bit higher privacy awareness in

randomly picked female profiles. Previous research also shows that people add their friends and engage with them based on the openness and data on their profiles [5]. Some studies have also shown gender difference in privacy awareness [6, 7].

Table 1. Comparison of female and male profiles and their acceptance of friend requests by two teenage profiles

	Female profiles		Male profiles	
Have not accepted invitation	24	80.00%	12	40.00%
Accepted female profile	4	13.33%	9	30.00%
Accepted male profile	1	3.33%	2	6.67%
Accepted both profiles	1	3.33%	7	23.33%
TOTAL	**30**	**100,00%**	**30**	**100,00%**

As in Table 2, more than twice as many female profiles were comfortable with adding an unknown female profile on Facebook in comparison to adding an unknown male profile. Based on the results, we can also assume that male profiles on Facebook are much more trusting in adding new, unfamiliar friends on Facebook – more than 50% added the teenage girl profile, and 30 % added the teenage boy profile. Further on, the average number of friends of the ones who have accepted female profiles are much higher than the overall average number of friends. The average number of friends of the profiles who have added male profiles is even higher. It also seems that the older profiles on Facebook also tend to be more trustworthy of accepting teenage profiles based pm the average age of the profiles who have added female and male profiles.

Table 2. Comparison of female and male profiles and the acceptance of friend requests

	Added by both profiles	Accepted female profile	Accepted male profile
Female profile	30	5 (16.7 %)	2 (6.7 %)
Male profile	30	16 (53.3 %)	9 (30.0 %)
Average age	33.32	41.19	38.82
Average number of friends	1,093.43	1,246.06	1,442.25

As presented in Figure 1, we have divided female and male profiles into 8 different colour groups. Some female and male profiles did not accept the invitation by our created profiles on Facebook. Some profiles accepted only a female profile, some only the male profile and some accepted both profiles. Yellow and green dots show the persons who have not accepted any profile. Where possible, we have extracted the year of birth from their Facebook profiles and number of friends. Where this number was hidden, the dots lay on the x or y-axis. As seen from the graph, persons aged between 18 and 53 with a relatively low number of friends have not accepted our two profiles. Further on, where the added users had a number of friends above 500 or the age was higher than 35, they tend to accept profiles more.
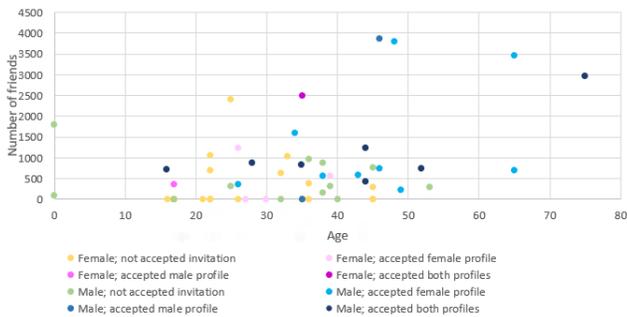

Figure 1: Female and male profiles who have been added on Facebook by female and male profile and their age and number of friends on Facebook (n=60).

As presented in Figure 2, we have also presented the number of friends for each of the 8 profiles with a box plot. Some persons that were added had their number of friends hidden so they are not included in the Figure 2. As presented in the figure, the profiles that have not accepted any of the profiles have a lower number of Facebook friends than the other profiles (except the one female who accepted only male profile).
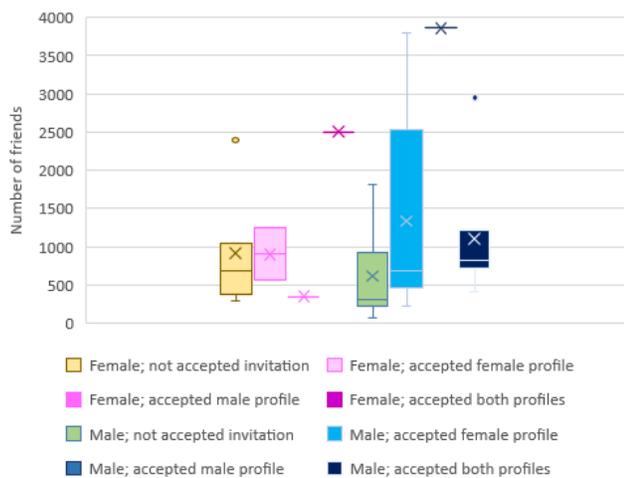

Figure 2: Female and male groups and their number of friends on Facebook (n=60).

Male profiles have quite a larger range and a higher average number of friends than female profile, which also shows on awareness of privacy in female profiles. Some research also shows that a person cannot stay in touch with more than 150 people in real life, but all the selected profiles normally have a lot more friends than this [8].

3 Conclusion

In this research, we have added random users on Facebook with female and male teenage profile created for research purposes. We have found that male users of Facebook are more inclined towards adding new, unfamiliar friends on Facebook than female users. This might be due to privacy awareness across gender or cultural norms, where female think about their safety before adding someone unknow. Also, users with higher number of friends are willing to add strangers on Facebook more easily. The study has some limitations because the users who were added by the profiles were selected randomly from Slovenian users and this can impose ethical consideration. Also, the number of users that were added was 60 for each profile, and this number could be increased to get better results. We have also created the profiles on Facebook as it was done in some other studies for research purposes [9]. In future research, we plan to extend the study by creating guidelines for higher privacy awareness of users and usability guidelines for social networking site creators.

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