

Poster: Information Disclosure between Different Groups on Social Networking Sites

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1. INTRODUCTION

Social networking sites (SNS) have grown enormously over recent years. SNS Facebook had 1.1 billion active monthly users as of March 2013 [1], and has been the most popular SNS since 2009 [2]. Studies on SNS have recently been focusing also on self-disclosure. Chen [3] developed a model for members' self-disclosure and found that users' attitudes towards SNS affects their self-disclosure. Another study indicated that the amount of data published on user profiles has reduced over time [4].

Privacy awareness is also part of information disclosure. Hintz et al. [5] indicated that the users of SNS make a clear distinction between SNS friends and real-life friends, as 45% of SNS users had frequent contact with only 30% of their SNS friends. RoSser et al. [6] indicated that 52% of their survey's respondents did not know when applications on SNS are sending their personal information forward or using the information for other purposes. The results of another study by Taddei and Contena [7] indicate that there is a need for a clearer information management on SNS, while privacy concerns on their own are not able to directly influence the degree of disclosure online.

In view of increasing privacy awareness concerns, and self-disclosure research, a survey was conducted, part of which focused on personal information disclosure on Facebook profile. This study was conducted amongst Slovenian users of Facebook.

1.1 Research Questions

How much personal information do young adults disclose on their profiles on Facebook? Are there any differences according to age and gender?

2. METHODOLOGY

Research on user awareness about privacy whilst using Facebook was carried out in Slovenia. The research included 57 questions. The survey was conducted with an online questionnaire, which was based on LimeSurvey open source platform. The respondents were recruited via different web forums, on Facebook etc.

2.1 Data Collection

The total sample was made-up of 1,444 subjects, 652 male and 792 female, aged between 14 and 65 years. The analysis of frequency distribution by age showed that 1,092 subjects fell within the 19 and 30 age group. Out of these subjects, 940 used SNS Facebook, of which in the final sample 55.7% were female.

2.2 Data Management

The respondents were divided into 3 groups covering a span of four years each – 19-22 (49.5%), 23-26 (31.3%), and 27-30 (19.3%) years.

Respondents were asked to self-report on which personal data they have published on their Facebook profiles. These variables were then merged into a new variable 'Information disclosure on Facebook profile'. The variable contained information on how much personal information had the users of SNS put up on their profiles in the About section on Facebook. All variables were summed up, while each of the variable had a value of 0 or 1, 0 meaning that the user did not publish any information in that section and 1 meaning that the user did write something in that section on Facebook. The variables were location, hometown, gender, languages, relationship status, family members, employer, university and other schools, religion, and different Like sections such as sports, activities, interests, music, books, movies, TV, games etc. When collating the information together, the variable minimum was 0 and the maximum 36 (mean = 10.28; standard deviation = 5.68).

The respondents also self-reported on their privacy settings on Facebook (who can see their profile). They were also asked how many friends they have on Facebook whom they do not know in real life. These two variables were used to discuss who could access information that users disclosed on their Facebook profiles.

3. RESULTS

The results show the mean comparisons between age groups and gender for personal information disclosure on Facebook profiles.

3.1 Information disclosure according to age groups

An analysis of variance (ANOVA) was carried out for information disclosure on Facebook profile between different age groups. The analysis indicated a significance at the 0.001 level between age groups, which suggests that there is a difference of information disclosure between age groups of 19-22, 23-26 and 27-30. To determine how these age groups differ with regard to information disclosure, boxplots and a post-hoc Bonferroni analysis was done.

The boxplots (see Figure 1) indicate that the older the users were, the less information the users revealed on their profiles, excluding the outliers. The age group of 27-30 years (n=181) had a mean 9.25, s.d. 5.88 and range 36. The age group of 23-26 years (n=294) presented with a mean 9.87, s.d. 5.80 with a range 32. The age group of 19-22 years (n=465) had a mean 10.95, s.d. 5.45

with a range 33. This results indicate that the youngest age group published in 1.7 section more than the oldest age group.

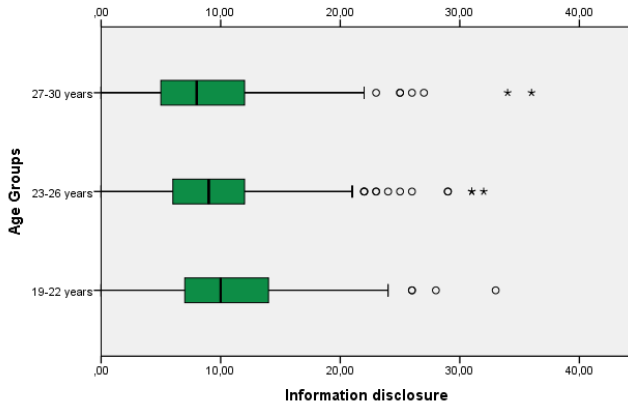


Figure 1. Boxplots of information disclosure on SNS profiles according to age groups.

A post-hoc Bonferroni test was carried out for a clearer comparison between age groups and for testing the significance of differences between age groups. The mean difference was significant at the 0.05 level for all age groups except of the comparison between 23-26 and 27-30 age groups. All other groups had significant mean differences (see Table 1).

The biggest difference between age groups was between age groups of 19-22 and 27-30 with a significance level at 0.002.

Table 1. Bonferroni Post-hoc test

| Multiple Comparisons | | | | | | |
|--|---------------|--------------------|------------|-------|-------------------------|-------------|
| Dependent Variable: Information disclosure on Facebook profile | | | | | | |
| (I) Age Group | (J) Age Group | Mean Differ. (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
| | | | | | Lower Bound | Upper Bound |
| 19-22 | 23-26 | 1.07854* | 0.42037 | 0.031 | 0.0704 | 2.0867 |
| | 27-30 | 1.69854* | 0.49427 | 0.002 | 0.5132 | 2.8839 |
| 23-26 | 19-22 | -1.07854* | 0.42037 | 0.031 | -2.0867 | -0.0704 |
| | 27-30 | 0.62001 | 0.53302 | 0.735 | -0.6583 | 1.8983 |
| 27-30 | 19-22 | -1.69854* | 0.49427 | 0.002 | -2.8839 | -0.5132 |
| | 23-26 | -0.62001 | 0.53302 | 0.735 | -1.8983 | 0.6583 |

*. The mean difference is significant at the 0.05 level.

3.2 Information disclosure according to gender

A comparison of means for personal information disclosure for women (n=524) and men (n=416) was also conducted. Mean for females personal information disclosure was 9.64 (s.d. 4.97) and mean for males was 11.11 (s.d.6.37), indicating that female respondents publish in 1.5 section less than men respondents.

The maximum for female was 32 and for male 36. This indicates that the women that have published the most information on their profiles have published in at most 32 different sections, while some men have published information in all 36 sections of About section on Facebook.

3.3 Privacy settings of respondents

Respondents were also asked, what their privacy settings are, indicating who can see their information on their profiles on Facebook. 51.6% of the respondents had their privacy settings set to Friends only and 40.2% had their settings set to Custom. The other 8.2% had their settings set to Everyone or Friends of friends.

Respondents also estimated how many of their friends on Facebook they knew also in real life. Only 34.0% of the respondents knew their every Facebook friend also in real life. 35.0% of the respondents did not know between 1 and 10 friends and the other 31.0% of respondents did not know more than 10 added friends on Facebook.

A crosstabs analysis was done to analyze what is the exact percent of the respondents who have disclosed their information also to people that they do not know in real life. The analysis showed that 67.8% respondents have disclosed their information on their profile to at least one person that they do not know in real life.

4. CONCLUSION AND FUTURE WORK

This paper presents the preliminary result of a survey investigating personal information disclosure between different groups. The results indicated that the older the respondents were, the less information they disclosed on Facebook profiles. Also the females disclosed less information on their profiles than the men. The privacy settings of the respondents also showed that not only their real life friends can access the information that they have put on their profile.

A further analysis of information sensitivity of disclosed data and a comparison of other research regarding information disclosure will be done during further research.

5. REFERENCES

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