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## Who discloses the most on Facebook?

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## ABSTRACT

With the development of new media, the issue of privacy and its determinants has become the subject of a large body of literature in recent years. The main objective of this study was to check whether loneliness is a predictor of putting private information on Facebook. The participants were 887 young people. Facebook Privacy Scale and Loneliness Scale were used. We showed that young age and loneliness are predictors of disclosure on Facebook. Moreover, junior high school students more often put private information on their Facebook profiles than senior high school and university students.

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## 1. Introduction

The need for privacy is one of the human needs, and privacy gives people their identity, autonomy, and individuality (Jedruszczak, 2005). Self-disclosure is part of social interaction; it is essential to the expression of thoughts and feelings and contributes to creating intimacy in interpersonal relationships (Fisher, 2010). However, in recent years, with the development of new media, the border between what is private and what is not seems to be moving. Social networking sites give people a chance to share private information in an easy way (Glac, Elm, & Martin, 2014). This makes teaching about online privacy crucial to safe information disclosure (Archer et al., 2014). As indicated by previous studies, people have a tendency to disclose more positive vs. negative experiences on Facebook than in real life (Qiu, Lin, Leung, & Tov, 2012). A large body of research reported in the literature shows that disclosure in the Internet often co-occurs with extraversion and agreeableness (Wang, 2013) and with self-esteem or social cohesion (Hollenbaugh & Ferris, 2014). There is also research linking other personality traits with Facebook disclosure. Some authors have assumed that a high level of narcissism is connected with more frequent disclosure of private information on Facebook (Smith, Mendez, & White, 2014). This phenomenon is easy to observe in social networking sites. Especially young users share private information with their Facebook friends. What is more, research has shown that young people disclose more private information on Facebook than adults (Christofides, Muise, & Desmarais, 2011). The motives behind revealing some private information and making it public has been an area of research interest recently, too (Emily Christofides, Muise, & Desmarais, 2009). Is it the function of Facebook or a sign of our modern times? Or perhaps there are some characteristics of users that make them more prone to sharing their privacy? Although in some studies interpersonal differences connected with disclosure and nondisclosure on Facebook have been found, the results are ambiguous and this field of research is still weakly explored.

The main objective of this study was to check whether loneliness can be a predictor of posting private information on Facebook more often. The novelty of this study lies in connecting disclosure with loneliness and in the examination of this relationship in different age groups: junior high school, senior high school, and university level. It can be assumed that those who feel more lonely want to relieve this feeling by sharing more private information with their friends. The study is planned to verify whether there are age differences in this relation. The added value of this study lies in the fact that it considers the possible and not fully explained relationship of sharing important news on Facebook with well-being and a higher level of stress (Bevan, Gomez, & Sparks, 2014).

This line of research was partly inspired by several of studies that found a connection between Facebook use and loneliness. For instance, the longitudinal study by Teppers, Luyckx, Klimstra, and Goossens (2014), who examined the group of adolescents, revealed

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that depending on the motives for using Facebook this activity can have different impact on loneliness. The authors found that with Facebook used for social skills compensation peer-related loneliness increased and that Facebook used as a way of making new friends helps in decreasing the feeling of loneliness. By contrast, in the study on college students by Lou, Yan, Nickerson, and Mc-Morris (2012) it was found that neither loneliness nor the motive for using Facebook influenced Facebook intensity. Decreased loneliness can be linked with feeling a connection with Facebook friends in the context of everyday problems(Deters & Mehl, 2013). Loneliness was the characteristic that determined the frequency of Facebook use and preferences for specific features on Facebook (Ryan & Xenos, 2011). In their recent study, Al-Saggaf and Nielsen (2014) analyzed the content of Facebook profiles and distinguished two groups of users: the lonely and the connected. They showed that loneliness and feeling connected may be related to specific patterns of Facebook use. The group of Facebook users labeled "lonely" more often disclosed their personal information, relationship information, and address in than "connected" people, whereas the latter group disclosed their views and their wall more often than "lonely" people. The authors suggested that females who were lonely more often disclosed their personal information and relationship information on Facebook. However, the result of the experiment conducted by Deters and Mehl (2013) showed that after experimentally increasing their status updating activity people felt less lonely and more connected with friends. Facebook can be used as compensation of the small number of friends in reality such a conclusion was drawn Skues, Williams, and Wise (2012), who found that loneliness was positively related to a higher number of Facebook friends. Sharing private information about important life events can be detrimental for well-being and covaries with a higher level of stress (Bevan et al., 2014). The meta-analysis done by Song, Zmyslinski-Seelig, Kim, Drent, Victor, Omori et al. (Song et al., 2014) supported the causal direction of the relationship between Facebook use and loneliness, confirming that people who feel lonely use Facebook.

To sum up, we supposed that loneliness was strongly related to Facebook disclosure and could predict it. Studies on this issue conducted simultaneously in three age groups are novel. We hypothesized that loneliness would be a predictor of Facebook disclosure and that this relation would be stronger in the younger group. The hypotheses were tested among adolescents and young adults. Youth is the period when peers look for important reference groups, and being accepted and liked by the group is of additional value. Therefore, young people might want to interact with their friends and reveal some personal information on their profiles in order to catch other users' attention and to promote themselves. On the basis of the existing literature on sociometric popularity (e.g., Newcomb, Bukowski, & Pattee, 1993; Parkhurst & Hopmeyer, 1998), we may conclude that being admired, getting as many "likes" as possible might be of paramount importance especially at that age.

## 2. Method

## 2.1. Participants and procedure

The sample consisted of 897 individuals aged 12–29 years. Their mean age was M=17.61 years (SD=3.75 years), and 66% of them were women. The participants were recruited in three types of schools: junior high schools (Polish gimnazjum) (N=346), senior high schools (Polish liceum) (N=231) and universities or colleges (N=320) from different regions in Poland. The participants were approached in their classrooms and asked to fill in the questionnaires. They volunteered for the study and received no mon-

etary reward. All the participants reported that they had profiles on Facebook. They were informed about the anonymity of the research.

## 2.2. Measures

The participants completed a battery of self-report scales consisting of two questionnaires. Additionally, they were asked about basic demographic information and about their Facebook use habits.

In order to examine the issue of privacy, a new scale was developed for the purposes of this study: Facebook Privacy Scale. To our best knowledge, there was no other questionnaire for measuring disclosure on Facebook. The previous studies mainly used isolated items (Qiu et al., 2012). After an analysis of communications posted on Facebook walls, 40 statements were selected to make up an experimental version of the questionnaire. They were rated by 46 competent judges in terms of privacy. The judges were psychologists participating in the a research seminar. Based on the judges' ratings, 10 statements classified as the most private were selected, for example:  $Tomorrow\ I$  will start exercise or Why am I sad today? The questionnaire measures the level of self-disclosure on Facebook (see appendix). The items are rated on a 5-point Likert scale  $(1 = I \ wouldn't \ post \ it, 5 = I \ would \ post \ it)$ . In this study, the scale had a Cronbach's  $\alpha$  of .84.

The De Jong Gierveld Loneliness Scale as adapted into Polish by Grygiel, Humenny, Rębisz, Świtaj, and Sikorska-Grygiel (Grygiel, Humenny, Rebisz, Świtaj, & Sikorska, 2013) measuring the sense of loneliness. The scale consists of 11 items, such as I miss having really close friends. Six of them are negatively and five positively formulated. The items are rated on a 5-point Likert scale ( $1 = completely\ disagree$ ;  $5 = completely\ agree$ ). The Polish adaptation has good psychometric properties (e.g., a good level of internal consistency or validity). Cronbach's  $\alpha$  was .87.

## 3. Results

The descriptive statistics for each group are presented in Table 1.

There was a positive correlation between Facebook privacy and loneliness (Pearson's r=16, p=.004) in the junior high school group, while no statistically significant correlation was found between these variables in the senior high school and university groups (r=.10, p=.13 and r=.07, p=.22, respectively). There was also a correlation between using Facebook on mobile devices and Facebook disclosure (r=11, p=.001). Mobile Facebook users more often put private information on Facebook.

Table 2 provides information on the results of regression analyses for Facebook privacy. Hierarchical multiple regression analyses were performed to check if gender and loneliness were predictors of Facebook disclosure. Loneliness turned out to be such a predictor only in the youngest group, and gender predicted

**Table 1**Means and standard deviations for the three age groups.

	Junior high school N = 346		Senior high school N = 231		University $N = 320$		F(2, 884)	NIR
	M	SD	M	SD	M	SD	_	
Facebook disclosure	1.91	.78	1.61	.69	1.63	.66	16.96***	1≠2,3
Loneliness	2.28	.89	2.41	.82	2.26	.80	2.36	-

 $<sup>^{*}</sup>p$  < .05;  $^{**}p$  < .01;  $^{***}p$  < .001.

Facebook disclosure in the group of university students. Female students disclosed private information on Facebook more often than male students.

## 4. Discussion

Facebook serves as an online platform for communication, sharing information, socializing, and entertainment. Previous research showed that for lonely people Facebook is also a comfortable way of communication and spending time; Clayton, Osborne, Miller, & Oberle, 2013). The main objective of this research was to investigate whether loneliness is related to disclosure on Facebook. The study was conducted in three age groups: junior high school, senior high school, and university students.

The results showed that only in the youngest group is loneliness a positive predictor of Facebook disclosure. We may state that young people put private information on their Facebook profiles because they feel lonely. Lonely people disclose more information on Facebook than those who are not lonely. This was found to be true for the group of adolescents (junior high school students). Our results are similar to those obtained by Van Gool, Van Ouytsel, Ponnet, and Walrave (2015), who also found a strong tendency to disclose information among adolescents. The authors stressed the need to teach young people critical attitude toward information disclosure. In the present study the statements posted on the Facebook were not categorized, but Al-Saggaf and Nielsen (2014) found that specific types of information were disclosed by those who reported a high level of loneliness. Previous studies showed that Facebook was a useful communication tool especially for people suffering from loneliness and social anxiety. Lee, Noh, and Koo (2013) indicated that loneliness positively influenced selfdisclosure on SNS in students. Wei, Russell, and Zakalik (2005) found that self-disclosure was mediated by attachment avoidance, the feeling of loneliness and subsequent depression.

Additionally, people who use Facebook on mobile devices often disclose private information on Facebook. This may indicate that the frequency of contact with Facebook increases the tendency to share private information from everyday life. This may also be related to personality traits, especially extraversion. Extraverts more often use Facebook and they have a higher tendency to disclose private information on Facebook (Seidman, 2013; Wang, 2013).

Adolescents were the group whom the problem of information disclosure concerns the most. This disclosure tendency may be part of some developmental trends and due to higher peer pressure and higher risk-taking (Strasburger & Wilson, 2002). Decreased critical thinking may result in perceiving certain activities as less risky and it is often the case that young people are not aware of the serious consequences of revealing some private information on Facebook. The disclosure behavior may be stem from the need to belong (Gangadharbatla, 2008) and the motivation to build social capital (Ellison, Steinfield, & Lampe, 2007). Disclosing information was a function of risk perception and perceived benefits from information disclosure (Youn, 2005). The higher the perceived risk the weaker the intention to make some information public, the greater

**Table 2** The results of regression analyses.

	Junior high school		Senior high school		University	
	Step1 β	Step2 $\beta$	Step1 β	Step2 $\beta$	Step1 β	Step2 $eta$
Gender Loneliness R <sup>2</sup> R <sup>2</sup> change	.062 .004 .004	.047 .16** .028 .024**	.094 .009 .019	.092 .10 .009 .010	12* .016 .024	14* .09 .016* .008

p < .05; \*\*p < .01; \*\*\*p < .001

the perceived benefits perceived from disclosing information and the higher the intention to do so.

## 4.1. Limitations

Specific limitations have to be acknowledged in the current study. Foremost among them is the use of self-report methods. In future research also other methods should be used, such as individual Facebook profile analysis. We did not investigate Facebook use pattern or the kind of information that the participants posted most often. The present study is based on correlational analyses; therefore, no causal direction of the relationship can be determined. To investigate this issue further, longitudinal studies should be conducted in the future. Other variables related to personality that could explain disclosure on Facebook should be added. It would also be recommended to investigate whether Facebook disclosure is somehow related to well-being. Additional variables potentially explaining Facebook disclosure should be considered, such as risk perception.

## 4.2. Implications

The results of this study also have practical implications. Considering the fact that young people are a majority of Facebook users, the problem of disclosing private information concerns them the most. Our study confirms this trend. Therefore, it is important to organize some educational workshops aimed at presenting to them the dangers related to the reckless posting of information on their profiles and at preventing them from revealing personal and identifying information. Such trainings with practitioners would raise the awareness concerning the safe use of social networking sites and show some useful techniques. Young people could become more aware of the importance of implementing privacy setting and restricting others from viewing their profiles.

Moreover, the study shows that increased loneliness is an antecedent of using Facebook. Some intervention treatment could be implemented in order to reduce this negative feeling. On the one hand, young people can interact with friends to become less lonely, but on the other hand they should also be encouraged to use other ways of spending their free time and socializing with their peers, not only via Facebook.

## 5. Conclusion

The popularity of social networking sites is still increasing. Self-disclosure and privacy has become an important issue in the context of SNS use. Our findings provide a more comprehensive picture of the predictors of disclosure on Facebook and show a certain developmental relationship. Adolescents were the group with the highest level of disclosure. Young people's awareness should be raised in order to show them the results and possible consequences of sharing private information. More studies should be conducted and further discussion should take place in order to provide a better understanding of Facebook disclosure. These findings can be useful in developing strategies and regulations in order to protect young users' online privacy.

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## **Appendix**

1.	Od jutra zaczynam regularnie ćwiczyć.	Tomorrow I'm starting regular exercise.
2.	Kochany, wszystkiego najlepszego.	All the best, my dear.
3.	Ale bolą mnie plecy, za długo wczoraj grałem na kompie.	I have a backache. I played on the computer too long yesterday.
4.	Tydzień bez przygód tygodniem straconym! Ale tym razem wstyd opowiedzieć	A week without adventures is a wasted week! But this time I'm ashamed to tell you
5.	Dlaczego jest mi dziś smutno??	Why do I feel sad today?
6.	Znów dzień do d***. Gdyby tak mieć z kim pogadać.	A shitty day again!. I wish I had someone to chat with.
7.	Dzięki za dziś DZIEWCZYNY).	Thanks for today, girls).
8.	To mój codzienny widok: laptop i stos papierów do przejrzenia. Potrzebuję	This is what I see every day: a laptop and a pile of papers to look
	przerwy!!	through. I need a break!!
9.	Dzień zaczął się bardzo miło. Otrzymałem niecodzienne gratulacje i zaproszenie.	The day started very nicely. I received unusual congratulations and an invitation.

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10.

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Wrrrrrrrrrr! od samego rana źle!

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