PSYRGGU 2020
Psychology of Personality: Real and Virtual Context

SOCIAL NETWORKS AND EXPERIENCE OF LONELINESS: THE MEANING OF CONTENT

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Abstract

The connection between the experience of loneliness and the features of using social networks among modern users is investigated. Modern approaches to understanding the importance of using the Internet for socialization and identification are considered. The possibility of understanding the psychological states of modern users through content on social networks is discussed. The data of an empirical study conducted on users of popular networks Instagram, Facebook, Vkontakte are presented. Significant links are shown between the availability of a personal account for other users, the amount of intimate information and the content of publications with different aspects of loneliness. The hypothesis of a positive relationship between the frequency of user publications, a lot of personal information and the negative feeling of loneliness is confirmed. The hypothesis of a positive relationship between the profile's accessibility for other users and the negative aspects of loneliness is not supported. It also concludes that there is a significant connection between the topics of publications, the emotionality of the content, and the experience of loneliness. The publication format of those users who are trying to cope with loneliness and looking for positive and friendly interaction with other users is discussed. The ambiguity and bi-directionality of the connection between the use of social networks and loneliness among modern users is postulated.

Keywords: Digital world, loneliness, social networks, user content,

1. Introduction

According to the latest data (Kemp, 2020), the number of Internet users in the world increased by 7% to 4.54 billion compared to January 2019. The social media audience grew by 9% over the year, by January 2020, about 3.80 billion people used social networks. The number of Internet users in Russia, according to Digital 2020, was 118 million - 81% of Russians. There are about 70 million users of social networks, which is 48% of the total population of the country. Thus, we see that the popularity of digital technologies is growing every year, becoming an increasingly accessible and generally accepted way of interacting between people and organizing their activities.

But with the expansion of the capabilities of the Internet use, the potential risks for the social and psychological well-being of individuals also increase. Researchers note such issues as online grooming, cyberbullying, cybersuicide and cyber racism (Diomidous et al, 2016). Internet users seek understanding, acceptance and opportunities for self-disclosure on the Internet, but often become victims of incorrect, and sometimes openly harmful effects from other users, which can exacerbate their psychological problems. At the same time, social networks can be considered as a source of satisfying the needs for self-expression and interpersonal communication, including coping with loneliness. In this process, the content that users share on social networks and which often reflects their difficulties and requests for attention and help is especially significant.

1.1. Social network as a mean to meet the needs of today's users

A modern worldwide network provides many opportunities to satisfy a variety of human needs. Maslow's entire pyramid of needs can be met with a couple of mouse clicks:

- Physiological needs (online shopping, pornographic resources and the possibility of cybersex);
- Safety (network anonymity and cybersecurity);
- Belonging (social networks, opportunities for mutual communication and cooperation of a large number of users);
- Esteem (blogging, opportunities for remote professional development);
- Self-actualization (distance learning, online volunteering) (Bryzgalin & Voiskunskii, 2018)

Using the Internet to satisfy various kinds of needs, especially for self-realization, is more typical for adolescents and youth (Sveshnikova, 2016). It connects not only with the greater involvement of young users in the digital environment, but also with the features of their brain. Researchs in the field of neurocognitive science (Tamir & Mitchell, 2012) indicates the usefulness of publishing personal content to maintain the value of self-disclosure. By sharing information about themselves and their own experience on social networks, users demonstrate activation of the same areas of the brain that are associated with rewards. In adolescence and youth, identity and self-awareness are actively developing, so the positive reinforcement of these processes in social networks will contribute to the preference of this method of interaction and self-disclosure. So social networks form the individual space of youth, which prevails in their overall picture of the world (Golubeva, 2018).

Moreover, the active inclusion of adolescents in the information space is associated with the parameters of psychological well-being. In addition, network communication partially compensates for

some of the features of socialization in adolescence. For example, the feeling of loneliness is experienced more often in real communication than in social networks, but at the same time the experience of loneliness offline and online is connected with each other (Belinskaya & Martsinkovskaya, 2018)

Apparently, Internet interaction has a positive impact on the processes of socialization and coping with loneliness. According to the concept of the social brain, three types of groups of social connections are traditionally distinguished: the whole network of a person's social connections, a sympathy group (usually 12-15 people who are contacted about once a month) and a support circle (about 5 people who have emotionally close contact) (Acedo-Carmona & Gomila, 2016). It was found that the presence and size of an intimate support group is closely related to offline social activity, and the use of social networks and the number of contacts in them affect the size of the liking group and the overall social network. (Sutcliffe et al, 2018) That is, users expand the possibilities of their social interaction by creating a more extensive social network with different levels of affinity with other people.

At the same time, users often encounter content on the network that can have a negative effect on self-perception and self-disclosure. Various Internet trends, which are represented in abundance on social networks, can contribute to strengthening the problematic aspects of user identity. One of the most problematic aspects associated with the use of social networks is the violation of the body image of young users (Saiphoo & Vahedi, 2019). This is especially true for young girls who are more likely to have problems with accepting their body, comparing it with photos of other girls presented on social networks (Hogue & Mills, 2019). This, of course, does not contribute to self-disclosure and an increase in one's own value, but can become one of the factors in the development of depression and various psychological problems. So, in one of the experiments conducted at students at a University of Pennsylvania, it was shown that limiting the time of using social networks to 30 minutes a day reduces the degree of feeling of loneliness, anxiety and depression (Hunt et al., 2018).

Thus, on the one hand, digital space provides completely new opportunities for socialization and self-realization. Each user can easily find a circle of interests, friends, partners, learning opportunities, knowledge and creativity, get a response to their actions. On the other hand, the use of social networks can lead to distortion and substitution of real communication, give rise to anxiety, negative feelings and even depression, increasing the feeling of loneliness. In many respects, this will be connected with the content that the digital social space is filled with and how much it meets the needs of users.

2. Problem Statement

Modern Russian researchers believe that today it is impossible to consider the Internet as an alternative reality in relation to physical space. Due to its accessibility and prevalence in the everyday life of most people, Internet becomes very used and natural way of communication and different activities. The Internet is understood as the first widely accessible generative space, which is part of the general structure of interaction and socialization (Asmolov & Asmolov, 2019; Golubeva & Martsinkovskaya, 2011). That is why more attention is paid to the study of the characteristics of the identity and socialization of users in the context of digital interaction.

It is shown that for modern Russian youth, the Internet is the main space of socialization. (Grebennikova & Parkhomenko, 2013). In this case, the objective characteristics of the social space affect

information preferences (including social networks as an information source), while the features of the information space affect the content of sociocultural and personal identity and the process of socialization as a whole (Ayanyan. & Martsinkovskaya, 2016)

Much attention is also paid to user interaction methods and the impact of accessible content in personal accounts on social perception. Some researchers conclude that there is a high degree of stereotypical perception of a communication partner (Belinskaya & Bronin, 2015). At the same time, it is noted that the specificity of visual self-presentation of users of such social networks as Instagram is associated with the real social status of the user (Belinskaya & Gavrichenko, 2018). In addition, the information posted in the personal profile and the behavior of users on social networks are quite strongly related to their individual psychological characteristics (Agadullina, 2015).

Based on these data, it can be assumed that the shared content of users of social networks will reflect their personal characteristics and influence the nature of interaction with other users.

3. Research Questions

Research Question 1: Are users with negative loneliness more likely to make their profile available to other users?

Research Question 2. Do users who often post publications feel more lonely?

Research Question 3. Do users who share intimate information about themselves feel more lonely?

4. Purpose of the Study

The main goal of our study was to identify the relationship between personal content and its accessibility for others with a feeling of loneliness of users of social networks.

5. Research Methods

The choice of research methods was due to the need to disclose the experience of loneliness from different angles, taking into account both its negative and positive aspects. At the same time, it was necessary to develop criteria for processing information about user content.

5.1. Methods

- A questionnaire developed by the authors for users of social networks exploring the features of activity in popular social networks;
- Differential Loneliness Questionnaire (DOPO-3) to study the level and characteristics of the subjective experience of loneliness of users of social networks;
- Content analysis of accounts on social networks. All user publications on the most frequently visited networks for the six-month period from April 2019 to September 2019 were analyzed. We identified four groups of categories of content analysis: topics of publications, degree of authorship, expression of emotions, personal information. Each publication was analyzed and distributed in one of the categories in each of the four groups. A total of 3,937 publications were analyzed.

5.2. Participants

The study was conducted from April to October 2019. The sample consisted of 77 people, between the ages of 20 and 40, among whom were 55 women and 22 men. They passed an online survey via the Internet and provided access to view their pages on social networks. Participants were informed about the purpose of the study and gave their consent to participate. In addition, participants gave permission to analyze their pages on social networks and to use these data for scientific purposes.

All respondents are active users of social networks Vkontakte, Facebook, Instagram:

- 60% (n = 46) of users most often post content on Instagram.
- According to the survey: 56% of users (n = 43) share content several times a month; 29% (n = 22) post less than once a month; and only 16% (n = 12) of the sample share more often than once a week.

We compared the actual frequency of activity with how users estimated it. In general, users publish more often than they think: in fact, 29% of users share content more than once a week and 18% of respondents publish less often than once a month.

6. Findings

We investigated the relationship between the frequency of publications, the availability of the profile and the specifics of the content with the experience of loneliness among users of social networks. Significant correlation analysis results are presented below.

6.1. Publication frequency and availability of the profile

Correlation analysis (Table 01) showed a positive relationship between the frequency of publications and the feeling of loneliness as joy. We also see a negative relationship between the frequency of publications and the experience of loneliness as dysphoria and the need for friends. The amount of content just for friends is negatively associated with self-awareness, alienation and a general feeling of loneliness. Moreover, the number of personal photos negatively correlates with isolation. Based on these results, it can be assumed that the frequency of publications and the openness of the profile allow the user to feel less lonely and more accepted by other people. Apparently, the ability to publish private information only for friends and sharing your photos is of great importance. We suggest that this may also be some kind of compensation for the lack of close communication in real life.

Table 01. Correlation between publication frequency and availability of the profile and scales of Differential Loneliness Questionnaire

	Frequency of publications per month	For friends only	Personal photos in general content
Isolation			-0,36*
Self-awareness		-0,33*	
Alienation		-0,37*	
General experience of loneliness		-0,42**	

Loneliness as dysphoria	-0,53**		
Need for friends	-0,38**		
Loneliness as joy	0,34*		

Note: Spearman's rank correlation. *p<0.05; **p <0.01

Apparently, the experience of loneliness as a positive state of contact with oneself is more pronounced among users who often publish something on social networks. At the same time, users who feel the need for friends and negatively perceive loneliness are less active on social networks. In addition, the negative experience of loneliness, expressed in the alienation and perception of oneself as a lonely person, is less typical for users who provide access to their content only to friends. It seems that the variability of physical presence in digital communication, at least at the level of personal photos, is significant for a sense of proximity and contact with other users.

6.2. Expression of emotions

An analysis (Table 02) of the links between loneliness and emotional expression in publications indicates a positive correlation between the need for friends and humorous content. At the same time, the lack of expression of emotions or the aggressive tone of publications is negatively associated with the need for friends. In addition, a negative relationship is observed between loneliness as a problem and communicative dependence with aggressive.

Table 02. Correlation between expression of emotions and scales of Differential Loneliness Questionnaire

	Without emotional expression	Agression	Humor
Loneliness as a problem		-0,33**	
Need for friends	-0,3**	-0,24*	0,24*
Communication addiction		-0,34**	

Note: Spearman's rank correlation. *p<0.05; **p <0.01

Humorous and more emotional content is typical for users who feel the need for friendly communication. Moreover, the presence of aggressive publications is less likely on the pages of users, dependent on communication and experiencing difficulties in loneliness. Probably, the presence of positive emotional content is aimed at attracting the attention of other users and maintaining friendly and convenient communication.

6.3. Topics of publications

Topics such as travel and nature are positively associated with isolation, alienation, and a general experience of loneliness (Table 03). On the contrary, topics dedicated to social interaction are negatively associated with these feelings. Content dedicated to science, sports and art is negatively associated with alienation and positively with positive loneliness and loneliness as joy.

Table 03. Correlation between topics of publications and scales of Differential Loneliness Questionnaire

	Social interaction	Science, sport and art	Travel, nature
Isolation	-0,26*		0,25*
Alienation	-0,33**	-0,27*	0,29**
General experience of loneliness	-0,31**		0,27*
Loneliness as joy		0,3**	
Positive loneliness		0,25*	

Note: Spearman's rank correlation. *p<0.05; **p <0.01

Thus, users who are more satisfied in their loneliness focus on educational and entertainment content. In addition, they feel less alienated, unlike those users who often share information about nature and travel. Also, users who prefer to share their impressions of trips and walks are characterized by a feeling of isolation and loneliness. Those users who use publications as a way of communication are less prone to loneliness, alienation, and isolation. It can be assumed that travel and nature posts can be the most effective and universal way to attract the positive attention of a large number of users and create a space for friendly communication.

6.4. Personal information

Data on the relationship (Table 04) between personal information in publications with an experience of loneliness can be called contradictory. On the one hand, the negative relationship between the lack of personal information and such indicators of loneliness as need for friends, loneliness as dysphoria, communication addiction is shown. On the other hand, the presence of nude photographs is negatively associated with isolation, and the publication of intimate information negatively correlates with alienation.

Table 04. Correlation between personal information and scales of Differential Loneliness Questionnaire

	Candid photos	Intimate information	No personal information
Isolation	-0,25*		
Alienation		-0,3**	
Loneliness as dysphoria			-0,24*
Need for friends			-0,26*
Communication addiction			-0,23*

Note: Spearman's rank correlation. *p<0.05; **p <0.01

Based on these results, we can assume that the presence of detailed personal and intimate information and candid photos on the pages of social networks allows users to cope with negative feelings about their loneliness. Apparently, this creates some illusion of contact and closeness with other users, especially if such publications are supported by the attention of many people.

7. Conclusion

The results of our study confirm that the experience of loneliness in modern society is closely related to the possibility of using the digital world for self-presentation and interaction between people. Obviously, the presence of different levels of openness and accessibility of user profiles, as well as their content reflects the deepest feelings of the need to connect with others or to be alone. It is also likely that the content of

personal pages on social networks allows you to compensate for the lack of communication skills or to maintain a sense of involvement in a large community of people.

Based on the specific data of our study, we can describe the model of coping with loneliness through content on social networks. First of all, the frequency of publications, apparently, allows less to face with negative states of loneliness. Perhaps this is due to the opportunity to escape from the reality of loneliness when creating content and receiving positive feedback from other users. This confirms our second hypothesis and allows us to predict a more pronounced negative feeling of loneliness among users with a large number of publications than users with a small amount of content. The presence of personal and very intimate information on the profile page also clearly reveals users with negative feelings of loneliness. Moreover, they tend to share even candid photos in order to get as much attention as possible and to cope with a sense of isolation. This suggests a confirmation of the third hypothesis.

At the same time, the availability of the profile for other users is probably not a prevention of negative states of loneliness, it rather enhances this feeling. Most likely, this can be explained by the fact that the attention of many strangers with different intentions and assessments of the user's personality is not a good support for the sense of acceptance and intimacy. On the contrary, this can lead to negative experience and frustration, stimulating the avoidance of interaction and the strengthening of feelings of loneliness. Thus, our first hypothesis has not been confirmed.

The content of publications can be considered as a significant means to overcome negative loneliness and a feeling of alienation. It seems that among the Internet community there are a number of universal and effective topics to attract the attention of other users and their positive reactions. Obviously, publications about trips and beautiful places for modern users are the most accessible and common topics, on the basis of which friendly interaction and positive attention to user accounts are built. Such topics are quite popular, most users like it and cause positive emotions. Therefore, publications on nature and travel can be actively used by those users who feel isolated and alienated, trying to avoid their loneliness. But for the success of publications, emotional content is also important. Not too emotional and humorous publications are likely to create pleasant communication and receive positive attention than publications containing or causing negative emotions. Perhaps this is why emotionally neutral or humorous content is more common among users seeking communication and friendly attention on social networks. While publications containing aggression can be afforded by those users who do not seek friendly communication and support from other users, but use social networks for some other purpose.

In our study, we did not try to solve the problem of whether the use of social networks increases the feeling of loneliness among users or allows them to cope with it. We just tried to identify the features of the content shared by users experiencing loneliness and to identify some general trend. Today, unfortunately, the question of the relationship of loneliness and the use of social networks remains unresolved, and many authors (Nowland et al., 2018; Ortiz-Ospina & Roser, 2020; Yavich et al., 2019) talk about the inconsistency of research data on this topic. The relationship between experiencing loneliness and using social networks is dynamic and bidirectional. User behavior is determined by the ability to get the attention of other users or enhance the feeling of loneliness in social networks. Thus, social networks are only a means for social reunion. At the same time, studies show that the opportunities that the Internet

gives single people to enjoy their loneliness are rarely used by them. This means that users prefer to use social networks, first of all, to overcome loneliness through the search and achievement of social contacts.

Acknowledgments

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