Loneliness and Virtual Group Identities ~ A Correlational Study

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Abstract

In a fast-changing world, social media has become an important platform to exchange knowledge globally. Apart from this global phenomenon of exchanging knowledge, people may have various reasons to join certain groups. It has been observed that individuals, specifically belonging to the young generation, look for mutual positive support and the mere pleasure of affiliation in virtual reality; inorder to avoid loneliness (Peplau& Perlman, 1982, as cited in Hoggs& Vaughan, 2018). The groups chosen by these people not only affect their behaviours but also their identities. According to social identity theory, individuals tend to derive their sense of self from the group memberships so that the driven identity becomes a part of their self-concept, therefore creating a dependence on the shared connection with the respective social group (Tajfel& Turner, 1979, cited by Kaakinen et al., 2018) [20].

Studies have shown the role played by social media platforms like Facebook, in the search for social identification by individuals for the gratification of affiliation needs [6] It has been found that young people might identify strongly with their online communities, in some cases even stronger than with their offline friends [27]. Several studies show that loneliness can play a role in an individual's need to find identification and belongingness through social media.

In the present paper, the researchers have aimed to measure the extent to which individuals of the youth are able to socially identify through social media platforms and find its correlation with the loneliness that the respective individuals may experience by using the questionnaires: Identity Bubble Reinforcement Scale [20] and the UCLA Loneliness Scale [51]. The study was conducted on participants of ages 19-24 (n=62) who were based in Delhi NCR and had an affinity to social media. It was found that with the increase in the online social media identification, the participant's loneliness seemed to decrease. Moreover, the findings of the study also suggested that among the three subdimensions of online social identification, homophily is seen to be the most dominant factor which plays the major role in

reducing the loneliness of the participants. The results may be utilized to help people cope with loneliness and subsequent mental health issues with a balanced use of social media and online communities. Group therapy may also be employed through online mediums as well as a platform for people to showcase their talent, get appreciation, build a community and earn money can be created with safety measures regulated by social media developers.

Keywords: Social Identification, Loneliness, Social Media, Youth

Introduction

In the earlier days of the creation of the Internet, there were only a few social networking mediums available to people. ARPANET, which was created by the Advanced Research Projects Agency (ARPA), USA, in 1969, was one of the earlier forms of networking between computers through the internet. CompuServe and email were developed and invented in the 1960s as well; however, the latter was only made available to the world in 1991 and soon became an integral and concrete part of social networking used by everyone to this day [9].

Several social networking sites were invented in the 1990s, such as Six Degrees, BlackPlanet, Asian Avenue, and MoveOn, where people could interact with each other online [9]. WELL, which is Whole Earth 'Lectronic Link [47], is considered to be among the first examples of virtual communities. The programme was commenced in 1985, is an online computer conferencing that enabled human beings from throughout the globe to go through public conversations and exchange personal e-mail [47].

The 2000s witnessed a boost in the emergence of social networking websites [9]. MySpace, LinkedIn, Facebook and other such successful social media sites were founded. In today's world, we don't only have a plethora of social media platforms such WhatsApp, YouTube, Snapchat, TikTok, Tumblr, etc, available to us, but we also have larger amounts of people who can to get access to the internet, and they are also able to launch themselves on these platforms.

The invention of social media platforms has given a new meaning to communication, social interactions and friendships altogether in the current age. While it hinders real-life interactions, it provides a smooth and easy medium to create, develop and sustain relationships. People can even join communities and make new friends through social media according to their interests. This search for friends, interaction and communities through

social media can be said to be driven by human's inherent need to affiliate and find belongingness.

The Need to Belong

Abraham Maslow, the pioneer of Humanistic Psychology, proposed the Hierarchy of Needs which classified the needs in an ascending hierarchy where the needs at the lower level, namely, physiological needs, safety needs, and need to belong, required to be fulfilled before individual progress to fulfil their higher needs, that are esteem needs, cognitive needs, aesthetic needs and finally self-actualization needs. According to Maslow, the basic lower-level needs have to be fulfilled before a human can move on to their higher needs.

The need to belong, social acceptance and companionship, is one of the basic human needs [41]. According to Baumeister and Leary (1995), the need to belong essentially drives human beings, and they have a powerful desire to create and preserve lasting attachments with others [5]. The need to belong drives people to affiliate, commit and remain together, and it makes them reluctant to live alone. Being rejected or excluded from social relationships is a painful event for most people, and exclusion evokes a desire for social reconnection [41].

Baumeister and Leary (1995), in their study, found that there is a primary desire in humans being to form social attachments with others, through which they form social bonds readily, even under seemingly adverse conditions [5]. People form friendships or other attachments with people with whom they share common interests and experiences, even unpleasant ones. Repeated explosion to a person can also result in the formation of an attachment. Moreover, their findings also suggested that people would resist losing or breaking attachments even if there are pragmatic reasons available and maintaining the relationship is no longer feasible [5].

Loneliness

Loneliness is said to be the painful awareness that one's social relationships are less meaningful than they desire, which makes them want more human contact [36] [4]. Being alone cannot be considered to be the same as being lonely. It is possible for one to experience even when they are surrounded by people and have multiple social relationships. Loneliness can result in an increase in the risk of health problems [36]. A number of studies point to the link between loneliness and stress, depressive symptoms, heart diseases, blood pressure, etc.

People use various methods to cope with loneliness. Coping techniques may additionally regulate (1) the desired degree of social interaction, (2) the accomplished stage of social contact, and (3) the significance and/or recognized magnitude of the space among an individual's preferred and accomplished levels of contact [43].

A method to socialise with others to seek social support and acceptance in today's world is to connect with people through online mediums. According to the hypothesis of our study, people who are found to experience more loneliness should have increased socialisation and search for social identity through social media. This could be to avoid the pain of exclusion and fulfil their need to belong and be socially accepted.

A study conducted by Matthew Pittman, 2015, found that the loneliness experienced by students decreased with their increased consumption and creation of content on Twitter and Instagram [45]. Morahan-Martin and Schumacher (2003) did a study on undergraduate students and found that lonely individuals are much more likely to make use of the internet and electronic mail for emotional support than others. Their social behaviour was continuously amplified online, and they represented a higher tendency of recording to make online friends and heightened satisfaction with them [35]. The findings of a longitudinal cross-lagged evaluation finished on postsecondary Chinese students stipulated that loneliness has a greater on Internet addiction than vice versa. [59]

Groups and Social Identity

People expand their affiliations and social interactions by becoming part of groups. Groups provide us with a consensually recognised and validated definition and evaluation of who we are, how we are supposed to behave and how we will be treated by others [19].

People can be a part of social groups for mutual positive support and the gratification brought by mere affiliation, which might them keep away from loneliness [19].

The groups that people choose, influence their behaviour, choices, decisions and even their identities. Consistent with the Social Identity Theory given by Tajfel and Turner, individuals often define themselves and are defined by others as members of a group [54]. Group membership becomes a part of a person's self-concept [19] and therefore leads to the formation of their social identity. It can be based on a person's identification with their nationality, religion or political group, occupation, economic class or other social affiliation [1].

Since social media has become a pathway of finding people and groups to affiliate and socialise with, it can also impact a person's social identity. Similar to the offline setting, the online social identity is an individual's perception that they belong to a social group that bears a significant meaning to them [22]. The findings of a study conducted by Zhou (2011) indicated that within online communities, user participation was significantly affected by the two variables, namely, social identity and the norms of the group [60].

A study about how people with threatened social identity use social media to cope with it found that those who highly identified as "Penn Staters" utilised social media to grapple with the news of the Sandusky Scandal [52]. Another study related to social identity and social media revealed that social media content is essential given as it facilitates the meeting members' need to apprehend themselves, a sense of uniqueness and confidence about themselves, and experience support and connection [11].

Virtual Identity

When communicating through online platforms, people do not use their real-life identities; instead, they use a created virtual identity through which we communicate, share, express, find friends and communities on the internet.

Virtual identity, which is more commonly called Online Identity or Internet Identity as well, is an idea this is utilized by consumers in social networks, wherein people create their individual social profiles [58].

The initial researches on online identity have mostly dwelled upon issues of anonymity and experimentation on the concept of identity rather than exploring the tactics via which individuals establish and discover their very own identities [57]

A framework that defined social media using seven basic constituent elements was presented by Jan H. Kietzmann et al. (2011) [25]. The seven elements are; identity, conversations, distribution, presence, relationships, reputation and groups. According to them, the identity component depicts the degree to which the properties that form the identities of the users in a social media environment such as their demographics and other information about themselves [25].

In social media sites, people express and present their identities by using the customization tools made available on the particular application. Creators of online material inclusive of blogs, web pages and online profiles, such as a Facebook profile, can use a multiple numbers

of digital symbols such as photos or pictures, avatars, icons, pseudonyms, stickers, styled fonts, music, and video to represent themselves. These items symbolise their personal identity (Papacharissi 2002, as cited in Marwick, 2013) and they serve a function similar to a person's clothing, accessories and such: to establish and display their identity [32]. The presentation of a person's identification can frequently appear through the conscious or unconscious 'self-disclosure of subjective information inclusive of thoughts, emotions, likes, and dislikes (Kaplan &Haenlein, 2010, as cited in Kietzmann et al., 2011). People use social media with different aims and preferences. Individuals participating in various online activities would be known by their title name or "handle", which can be their real names or nicknames [25]. The results of a study done by Shaafie, Nayan and Osman (2013) suggested that students used pictures and information to display their online identities as a combination of their real identity and their ideal self. Moreover, male users were found to be more comfortable with using their real pictures and name than female users [53].

For example, a person who wants to portray themselves as a graphic designer while using the social media application Instagram would specify a unique handle name by which others can refer to and search about them. They would write a description about themselves in their biography stating details about their graphic designing skills, experiences, etc., they could add their personal life details such as their gender, the food they prefer, their nationality, etc. The posts on their account would all relate to the image that they have created for themselves and further propagate this online identity to other users on the internet.

The results of a study about the online identity construction done by gamers suggested that they engage in unique techniques to redefine their identities. Gamers use their avatars and digital possessions to broaden and show their achievements, extending their online selves through virtual ownership. They further used self-aggregation strategies to aggregate their selves online and used assembling identities to bring their online identity to "real life" [44].

Socialisation through Online Settings

In the online setting, the group desired by the individual user is targeted for membership or friendship, after which the group norms of the same are assessed. The individual would then modify their self-presentation in one that would be pleasing to the desired identity group. The online environment allows the identity to be changed at a much larger extent than in the offline world. Online identities are easy to create and dispose of, therefore allowing users the flexibility to change themselves and fit in the communities that they want to. It is easy to

have a fresh start with a new group by putting in new attempts to join and at the same time avoiding the repetition of any unfavourable experiences shared with the past online groups. One is not even obliged to disclose that information to the new online group or community he or she joins. The search for online identity and communities can have global influence and reach. Profiles created for specific purposes of validation can attract positive attention due to the particular characteristics added to them for that very intention [22]. It is easy to access others, especially like-minded communities through online social networks. Social support and validation can be accessed through the Internet which just a click or a mere text message sent to online friends a person has. Therefore, the Internet provides a smooth and flexible platform that enables the user to efficiently fulfil their social needs. [22].

Another quality of online groups is that they can provide reinforcement and encouragement to ways a user expresses and explores their identity online, which in turn complements the mechanisms that affect the individual's behaviour offline as well (Davidson &Martelozzo, 2013 cited by Keipi, Näsi, Oksanen, &Räsänen, 2017). The sense of worth and importance derived from online groups can facilitate the identity development of an individual, especially when they share interests with the group and thus, this gives the use prime motivation to seek them out (Panek et al., 2013, as cited in Keipi et al., 2017). Although on the other hand, these online communities may also promote negative effects which can take place through the production and targeting of material and sentiment that might be unhealthy and offensive (Oksanen et al., 2014, as cited in Keipi et al., 2017), for example, advocating racist and hateful ideas by the members of the community. [22].

Virtual Communities

Howard Rheingold (1993), who is considered to be one of the first people to talk about this concept, described "*virtual community…* as a group of people who may or may not meet one another face to face, and who exchange words and ideas through mediation of computer bulletin boards and networks" (p.58) [16].

Another definition given by him explained that "*virtual communities* are social aggregations that emerge from the Net when enough people carry on those public discussions long enough, with sufficient human feeling, to form webs of personal relationships in cyberspace" (p. 5) [47]. The term Net here is used to refer to the network formed globally between people through interconnections facilitated by computer-based technologies [47].

Romm, Pilskin& Clarke (1997) stated, "that *virtual communities* are groups of people who communicate with each other via electronic media and are a relatively new phenomenon" (p.261) [49].

In his book *Virtual Community*, Rheingold (1993) stated:

> "People in virtual communities use words on screens to exchange pleasantries and argue, engage in intellectual discourse, conduct commerce, exchange knowledge, share emotional support, make plans, brainstorm, gossip, feud, fall in love, find friends and lose them, play games, flirt, create a little high art and a lot if idle talk. People in virtual communities do just about everything people do in real life, but we leave our bodies behind. You can't kiss anybody and nobody can punch you in the nose, but a lot can happen within those boundaries. To the millions who have been drawn into it, the richness and vitality of computer-linked cultures is attractive, even addictive" (p. 3) [47].

Every online community can have exclusive structures and sizes and with the members being in a few dozens or even more than a million. These communities may consist of forums that are either active or passive. They can include group discussions, chat rooms, e-mails or bulletin boards. These communities are not restrained by geographical boundaries and can, therefore, have a much larger size than real-life communities. Millions of such communities may exist on the Internet [50].

In the earlier days of the development of the Internet, people used email, Multi-User Dungeons, Internet Relay Chats to create virtual identities and communities. Nowadays we can say that the creation and building of virtual communities have been largely facilitated by social media. People can form groups on WhatsApp and Facebook to chat with each other, they can form a writer's community on Tumblr, and they can build pages on Instagram or Twitter to unite people in order to organise protests.

Internet forums are also an example of virtual communities. A content analysis about social support through online HIV/AIDS support groups revealed that they offered support in the form of information, esteem, network and emotion to the users. Therefore, the results suggested that support groups are popular mediums that can offer social support to those suffering from HIV/AIDS [33].

Ridings and Gefen (2004), in a study to understand why people join virtual communities, found that the most popular reason was information exchange. Members of communities related to health or professional themes chose social support as their second most common reason to join virtual communities, whereas people dealing with personal interests showed friendship as another popular reason for them to be a part of these groups [48].

Types of Virtual Communities

Henri and Pudelko (2003) categorised virtual communities into four types on the basis of what led to their emergence, the features of their interactions, activities as well as the interests that are common between the members of the community. The four communities were differentiated into communities of *a) interests, b) learning, c) interest in a common goal, and d) practice* [18].

Hagel and Armstrong (1997, as cited in Roy, 2009) also proposed four main categories of virtual communities in accordance with the desire to meet their basic humans need by people, which are namely, *interest, relationship, transaction and fantasy* [50].

Myra Stark (1998, as cited in Adler & Christopher, 1999) also defined five varieties of virtual communities on the basis of the primary interest that motivates participation [2]. They are as follows:

- Just Friends: These are people who want to socialise and meet others.

- Enthusiasts: They share a specific interest and prefer to talk about it more than socializing.

- Friends in Need: They are support groups built around specific problems, for example, internet forums made for HIV/AIDS patients.

- Players: They people come together to play various online games.

- Traders: They seek to trade possessions with one another [2]

Components of Online Communities

In an adapted version of a model about the integration of different elements of an online or virtual community originally presented by Rayport and Jaworski (2004), Roy (2011) illustrated the motivation of the members for joining the network, their mode of participation,

network's level of connectedness which could decide the network's traits and the benefits that the contributors search for in such communities [50].

Motivation: Members' motivation for joining could be several, the major ones listed by Roy are affiliation, information, recreation and transaction [50].

Mode of Participation: Participation can take place through emails or bulletin boards. Nowadays the prevalence of social media means that platforms such as Facebook, YouTube, WhatsApp, Tumblr, Discord give space for making group chats, comment sections, etc., to facilitate the socialisation among the members [50].

Characteristics of Community: Roy described six elements of community given by Adler and Christopher (1999). They are-

Cohesion: Members have a sense of group identity over time and belonging to the group.

Relationships: The members interact individually and form friendships.

Effectiveness: The group has an impact on members' lives and the outside world.

Help: The members are able to ask for help from each other as well as give it.

Language: Members develop a specific language to communicate with within the community.

Self-Regulation: The community has the ability to police itself [50].

Benefits of Community: The benefits that a community can give to its members are inclusion, shared information and experiences, need fulfilment, and mutual influence, among others [50].

Degree of Connectedness: The degree of connectedness would depend upon the degree of interactivity between and among members. It can be *weak* if the members have no opportunity to interact one to one with each other. It can be *limited* if the opportunities to interact with the members is limited. Finally, the degree of connectedness would be considered to be *strong* if interaction can take place through chat rooms and message boards to make the community bond stronger [50].

While online groups and social identification enables people to find a place to express themselves and fulfil their need to belong, it could also have some negative outcomes if the groups they affiliate with promote dangerous ideologies such as Nazism and hatred.

Extremist groups also try to spread their ideologies through the medium of the internet. For example, Stormfront was the first white nationalist website created in 1995 by Don Black, who was also associated with the extremist, violent racist organisation called Ku Klux Klan. It was estimated that the website had as many as 268000 registered users. Several other such websites and pages have been created on platforms like Twitter and Facebook as well. Emilsson (2015) explained that such websites recruit people by creating an Echo Chamber, which spurs on the distaste for "them" and then using the concept of Filter Bubble to confine one's view making it hard to see the other side of the argument [10]. Social identification or social categorization in virtual communities can also lead to depersonalization which is when people perceive themselves as interchangeable group members and ascribe the group's typical characteristics to themselves [26]. Some studies also indicate significantly lower loneliness in those students who are addicted to internet [17], other studies also show that excessive use of internet would eventually result in more loneliness. Thus, a vicious cycle between loneliness and internet addiction may be created, which needs to be avoided [56].

Virtual communities do have their positives; they enable their participants to minimise their experience of isolation and allow them to interact in and keep up social interactions [31]. It gives them a sense of belonging, enables them to find social support and like-minded people with whom they can discuss their interests. Gamers usually like to play with others and can find friends through their games. The virtual community has no geographical bounds; hence it means that people can interact and make friends from across the globe. As a result, the barrier of culture, race, gender, ethnicity, etc., gets diminished, which may have been present in real life.

The fulfilment of the needs of the participants would determine the potential and possibilities of both favourable and unfavourable outcomes of user activity in and outside online communities [22].

Literature Review

Loneliness breeds into the generation of young adults; according to Konrad Adenauer Stiftung (2017), conducted a survey analysing the different aspect such as attitudes, anxieties and aspirations of the young Indian population (aged 15-34 years). The findings, launched in April 2017, discovered that 12 % of the youngsters stated feeling depressed frequently, and 8 % of them said that they felt lonely pretty often [24]; traditionally, the blame for a secluded self is placed upon the quick-moving technology; however, researchers believe that social

media's impact on someone's feelings of loneliness is determined through how they utilise social media.

Researchers at the University of British Columbia found that even mild distraction caused by a phone vibration may lead to individuals to experience a decrease of interest in the present and make them further distracted, detached and tired [3], whereas in a study, it was observed that students who make use of social media to converse about academics generally tend to earn better grades [30]. Contrary to both the believes, some studies find no correlational aspects between loneliness and social media activity [14][37].

The negative, positive and neutral aspect vary across the different studies however focusing on the loneliness experience the results were of a positive connotation, there is a correlation between the affinity of content creation and content consumptions increase to decrease in the self-reported loneliness in social media applications like Twitter and Instagram [45]. Another study indicates that image-based social media platforms one uses might decrease loneliness, whereas the happiness as well as life satisfaction increases [46].

Similarly, the correlation between Pinterest and loneliness was negative, pointing out that there was a decrease in loneliness with an accelerated usage of the platform rather than a growth in loneliness as anticipated [15]. The differential nature between text and pictures can be reasoned by the intimacy visual image offer over short comprehensions [46].

When social media struck the mainstream space on the internet and gained millions of audiences, the pundits of the industry acclaim it to be the beginning of the demise of associational group behaviour. But in contrast, the association sustained and multiplied in a more significant manner; young adults and teenagers had even been found to socialize with online communities, in some cases even at a higher rate than with their offline peer groups which reflects their high social likeability as well [27].

Since social identity is expressed through self-categorization and social identification, those who strongly associate themselves with their online social networks may also consider themselves to be the members of the online community, which facilitates their online interactions [13][20]. A major factor that could contribute to the sense of loneliness in an individual is when someone's "interests and ideas are not shared by those around me" [37] therefore these association both offline or online projects as a sense of affections the primary goals of group formation is similar ideas and interests shared amongst the association members.

Organization membership and social engagements improve the social health elements, including loneliness and social support amongst older adults [28]. In another study, membership straight elevated physical pastime and self-rated fitness, directly reduced social isolation, and incidentally lead to the reduction in loneliness. Reduced social exclusion and loneliness were found to be related with improved self-rated fitness [6].

Lonely individuals convey a choice for making use of the internet for social interplay and are much more probable to utilize it in a manner that replaces the amount of time invested in offline social activities. This indicates that individuals experiencing loneliness may require assistance concerning their social media usage so that they utilize it in a manner that complements current friendships and, if required, enables them to form new ones [38]. A study proved the activity of anonymous chatting on the Internet, lead to a decrease in loneliness and depression parameters [28]. The online presence of sites like Netmums is there with 2.6 million visitors seeking support groups for postnatal depression creating a virtual association among individuals struggling on the same goals helping with feelings of loneliness and exclusion [12].

Hence, combining the aspects of social identification through online association and loneliness, the negative correlational aspect among the components can be seen. Therefore, the hypothesis for the study is the correlation between loneliness and people's search for social identification through social media would be high.

Method

Participants Profile:

For the purpose of the study, a sample of 62 individuals were approached from the age group of 19-24 years old with an affinity for social media usage was taken from the youth age group population, with daily indulgence in social media engagement and activities. All 62 participants were chosen from ***Delhi-NCR***. The participants were fluent in both written as well as spoken English. Furthermore, they had easy access to internet and the requisite knowledge to fill the survey online.

Design of the Study:

The data was collected using convenience and snowball sampling techniques. Two standardized questionnaires were distributed among the participants by researchers, and then further, it was forwarded by the participants to increase the outreach of the questionnaire. The

UCLA Loneliness Scale by Russell, D, Peplau, L. A. & Ferguson, M. L. (1978) [51] was used to measure the Loneliness variable in the participants, whereas the Identity Bubble Reinforcement Scale-6 (IBRS-6) by Kaakinen, M., Sirola, A., Savolainen, I., &Oksanen, A. (2018) [20] was used to measure the Online Social Identification variable in them. The Identity Bubble Reinforcement Scale-6 has three subdimensions, namely, Social Identification, Homophily and Information Bias [20]. The participants were asked about their preferred choice of social media platform as well.

The *independent variable* in the study was **Online Social Identification**, and the *dependent variable* was **Loneliness**.

The subdimensions of the Identity Bubble Reinforcement Scale, ***Social Identification***, ***Homophily*** and ***Information Bias*** were also studied in correlation with ***Loneliness.***

In total, 70 responses from ages of 19-26 were received, out of which 62 fulfilled the age criteria of youth. The ages of the final sample taken ranged from 19-24.

Procedure:

The sample of the study consisted of individuals between the ages of 19-26 from Delhi NCR. A sample of 62 participants was taken into consideration with the help of convenience/snowball sampling. The sample consisted of 30 females, 29 males and 4 who preferred not to mention their gender. It was made sure that the sample being selected was fluent in English and tech-savvy. After the sampling was over, the participant was given a brief about the aim of the survey, which is about studying the co-relation among loneliness and associative behaviour on online platforms. The debriefing was done, and it was made sure that if the participant was not comfortable with sharing their results, then their responses were not included. The participants were later thanked for participating and were assured regarding the confidentiality of the data. Formal consent was taken as well. Once it was accepted, administration took place. The participants were asked to select a day and set aside a convenient time of 10 mins to fill the questionnaires. For any doubts that might occur while filling the questionnaire, the participants were also given an option of being on a phone call. In case the responses were not submitted on time, a gentle reminder was given for the completion of the task and that the responses reach on time.

After the administration was done, scoring was done for both the dimensions as well as the subdimensions of the IBRS-6 scale. Further, the mean and standard deviation was calculated. Karl Pearson's correlation coefficient was taken out to test the hypothesis, and t-test was employed to find the significance of the result. The percentage of participants using different social media platforms was also calculated according to their answers. The statistical calculation was carried out with the help of STATA software.

Results

Table 1

Mean and Standard Deviation of Data

Variables	Mean	Standard deviation
Online Social Identification	36	1.390646
Loneliness	18.85484	1.705878
Social Identification	12.46	5.51
Homophily	14.43	3.96
Information Bias	9.09	3.91

Note n = 62
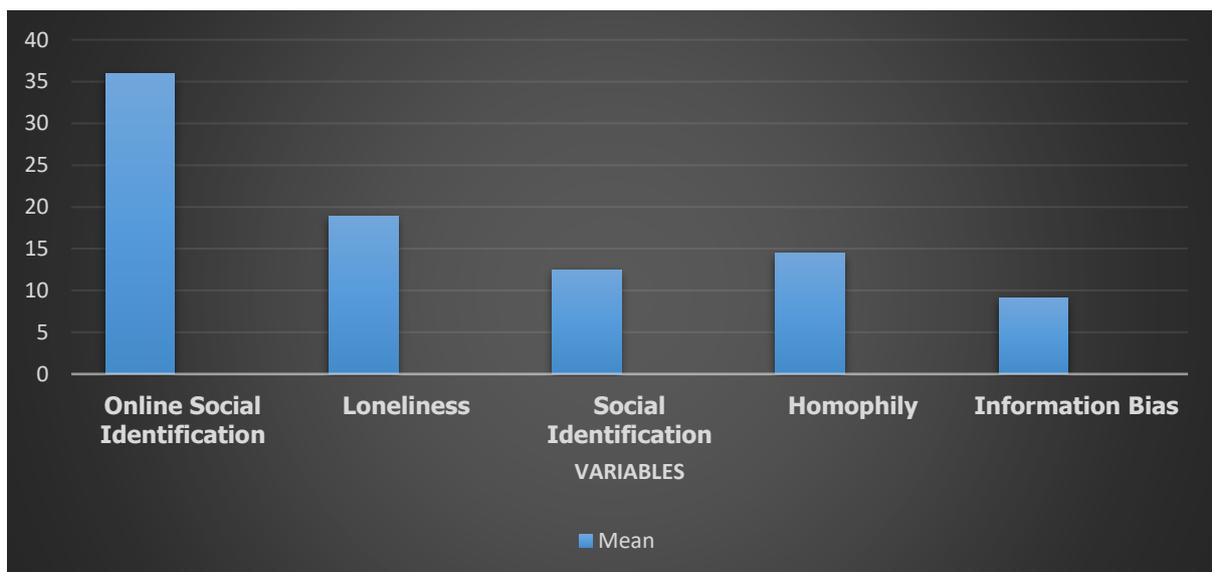
Graph 1: The graph depicts the Mean and Standard Deviation of the Data

Table 2

Pearson's Correlation Coefficient of Variables (n-62)

	Online Social Identification	Social Identification	Homophily	Information Bais	Loneliness
Online Social Identification	1.00	0.84*	0.79*	0.80*	0.25*
Social Identification		1.00	0.46*	0.47*	-0.24
Homophily			1.00	0.56*	-0.36*
Information Bais				1.00	0.0084
Loneliness					1.00

Note. p = 0.05*
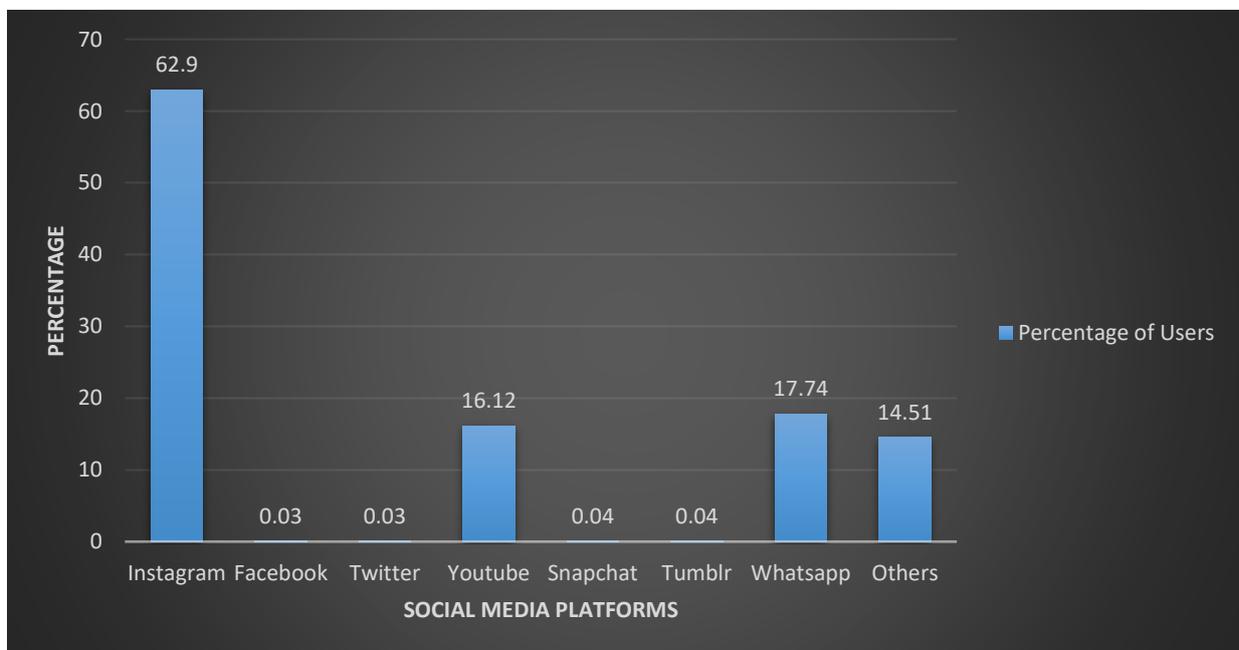
Graph 2: The graph depicts the percentage of total participants that prefer to use different social media platforms.

Note. n= 62

Discussion

In the present study, we have investigated the correlation between loneliness and online social identification in youth which was expected to be high. Our results indicate a negative correlation (r= -0.2510) between loneliness and online social identification (refer to Table 2).

Furthermore, the correlation between loneliness and the subdimensions of the Identity Bubble Reinforcement Scale was also correlated (refer to Table 2). A low, negative and insignificant correlation was found between loneliness and social identification (r=-0.2428). The correlation between homophily and loneliness was found to be negative and low as well; however, it was found to be significant (r=-0.3639, p=.05). The correlation between loneliness and information bias was found to be extremely low and insignificant as well (r=0.0084).

The participants also showed a high user preference for Instagram (66.29 %), with WhatsApp (17.71 %) YouTube (16.12 %) being the second and third most used among the social media applications (refer to Graph 2).

The loneliness scores of the participants were in the moderate category with a mean of 18.85 with 1.70 as the standard deviation among the participants. This indicates that loneliness experienced by the participants of the study wasn't particularly high, but rather seems to fall in a moderate range. The variable of Online Social Identification was found to be higher in the sample taken for the study as most participants seemed to have been able to socially identify themselves with the online groups they interact with and perceive themselves as a part of those groups as well, as is reflected by the mean of the data that which is 36 with a minimum standard deviation of 1.39 among the participants.

The mean and standard deviation of the data obtained under the sub-dimensions of IBRS-6, which are Social Identification, Homophily and Information Bias, were also calculated. The most dominant factor among the participants was found to be Homophily with a mean score of 14.43 and a low standard deviation of 3.96, which indicates that most of the participants prefer to and are able to interact with those people whom they find similar to themselves in the virtual communities. The other sub-dimension of Social Identification bias has a mean of 12.46, however, the deviation is quite high among the participants, coming to be 5.51. It can, however, be said that several participants do socially identify with the members of the online

communities they interact with, if not all of them. Lastly, Information Bias was found to be the least impactful in affecting participant's interaction and Online Social Identification with a mean of 9.09 and a standard deviation of 3.91

While the Pearson's Correlation Coefficient between Online Social Identification and Loneliness was not found to be high in magnitude, it does indicate the presence of a negative correlation between our two variables, meaning that when online social identification is high in the youth, their loneliness seems to decrease. This could be because of their need to belong being is fulfilled to some extent through social media platforms. They are able to find online communities to integrate themselves in and identify with, which gives them a sense of socialisation and belonging. The studies previously mentioned in this paper show that people join groups and socialise online to fulfil their need to belong, to feel less lonely, to find social support and people with similar interests, among other factors.

Perlman and Peplau (1981) suggested achieving the desired level of social contact as a coping strategy for loneliness [43] which may be the reason why the participants sought social contact through online platforms and communities. The results of a study by Lehdonvirta&Räsänen (2011) support our findings as they found that the identification of members of youth is strong with online communities, even more than with offline groups. They also found that this closeness and understanding towards online groups tend to be an indicator of their greater sociability than a scarcity of it [27]. Morahan-Martin (2009) also found that lonely individuals are drawn to online interactions because of the potential opportunities of connection, friendship, and communities that are offered by them [34], which comes in line with our results as well. Evidence of internet and email usage for emotional support and making online friends, as well as heightened satisfaction with those friends were found by Morahan-Martin and Schumacher (2003) [35]. These could also be contributing factors as to why our results showed a decreased loneliness with increased online social identification in the participants.

According to the Social Identity Theory, the group identity is internalised among the group members to become a part of the internalized self-concept. Therefore, the identity is dependent on the relations shared with the group (Tajfel& Turner, 1979, cited by Kaakinen et al., 2018) [20]. The connectedness shared by the individual with the group is referred to as the social identification with that group. In the present study, the data analysis has revealed that the correlation between social identification, the first sub-dimension of the IBRS-6 scale,

and loneliness was low, negative and insignificant (r=-0.2428). The higher social identification in subjects should coincide with the lower level of emotional and social loneliness [42]. However, since the data in our study is insufficient to support this notion, we would suggest that further research needs to be conducted to further explore the relationship between social identification and loneliness.

Homophily refers to the tendency of people to form social relationships with those who they find similar to themselves [20]. Upon analysing the data collected from the participants of the present study, it was found that the correlation between homophily, the second subdimension of the IBRS-6 scale, and loneliness was moderate, negative and significant ((r=-0.3639, p=.05). It indicates that when homophily is high for the participants during online interaction, loneliness decreases. Since the correlations between the other two dimensions and loneliness were found to be low and insignificant, it can be said that the need for social identification or the ability to socially identify with others in the participants with other people might not be as strong as the feeling of similarity with other members of online groups. Therefore, homophily could be a major motivator or attractive factor that plays a role in people's online interaction, and this kind of interaction could lead to a decrease in their experience of loneliness. Social platforms provide a wide range of varieties to choose from as the globalised network several social media platforms that enable interaction with several other people, therefore individuals choose to interact with the individuals reflecting similar interests and issues, (Hawdon, et al., 2014, cited by Kaakinen et al., 2018) [20] the phenomenon is observed in the social media as similar interests among the individuals lead to formation communities within the media space, and individuals with similar interests add on to it.

Information bias refers to the congruence among the opinions and information of the individuals engaged in a particular group setting, it consists of selective exposure to information and perception. It was found that the correlation between information bias, a sub-dimension of the IBRS-6 scale, and Loneliness was low, negative and insignificant (r=0.0084). Online web space enables higher selectivity over the choice of information consumption. Thus, the like-mindedness of the group members enhances the ingroup bias among the members that does impact the social identification and loneliness among the members however, due to insufficient data no concrete statements can be made, and it would be suggested to conduct further research to project similar results.

Online social support is often another reason due to which people may seek online socialisation. Internet forums that are made for people suffering from diseases such as cancer or HIV/AIDS are seen to provide emotional support to their participants as well. Chung (2013) found that the features of online support groups such as making friends and the ability to share personal stories satisfy the need for emotional support [8]. Furthermore, 66.29% of participants showed a preference for using Instagram, an image-based social media, which may also play contribute to their decreased loneliness. Pittman and Reich (2016) also found that loneliness might reduce whereas happiness, as well as life satisfaction may improve as a consequence of using image-based social media. The differential nature between text and picture is due to the intimacy visual image offer over short comprehensions [46].

The search for friendship and connectedness with loved ones through social media can also be seen in the Covid-19 Pandemic situation, which called for lockdown, quarantine and social distancing as safety measures to prevent the spread of the virus. Even when the offline face to face meetings became difficult, the internet and social media offered a way for people to stay connected with others in order to avoid feelings of loneliness and social exclusion. The telecom ministry data showed a 13 percent rise in internet consumption in India during the lockdown in March [29], which may indicate a coping mechanism with loneliness, but further research would be required in that area.

Apart from common social media and internet forums, online gaming communities also seem to provide a sense of belonging and group membership in gamers. The communication and involvement generated by these communities might provide a source of happiness, and lead to a decrease in loneliness. In 2017 a research team identified that engagement in multiplayer online games is in correlation to an enhanced perception of social identity among the players, and the regularity of player's engagement and affiliation with gaming groups may also build their self-identity. That social identification can then lead to increased self-esteem and social competence, which can decrease the degrees of loneliness as determined by the researchers [21].

Social groups are considered to necessary core components upon which most human societies are built. Our social interactions in the real world have always been constrained by geography due to practical difficulties [39], but social media connects us beyond these geographical constraints with 3.96 billion active users around the worldwide which keeps growing every day [23]. This connects people beyond the barriers of language, age, race, ethnicity as well as

geographical constraints as every individual engages and connects on the same virtual platform.

Ong, Chang and Wang (2011) conducted a study to understand the relationship between their participants' intention to engage in online conversations and three different dimensions of loneliness, namely, social, familial, and romantic. They found that online chatting offers excellent online relationships, which may contribute to reducing social loneliness but may also worsen familial loneliness [39]. This result highlights the positive as well as a negative effect on online interaction as well as they may even increase loneliness for some people. Yao and Zhang (2014) also pointed out that people may get caught in a vicious cycle of loneliness and internet addiction [56] which must be avoided.

While reaping the benefits of online communities, one must also find a balance and not let virtual life take place of real life. There also exists the risk of extremist hate groups taking advantage of online communities to influence people with their agendas. For keeping a check upon the users and reduce the engagement of negative content social media developers and regulators can pay attention particularly to devising methods that'll keep users away from harmful content and people so that adverse effects on the mental health of those who seek online communities may be prevented.

The findings of the study can be utilised in the existing social media platforms to help people cope with loneliness and subsequent mental health issues, for example, anxiety, stress or depression, by providing an associative online platform and community as a replication of offline support groups where people may be able to find social and emotional support through social identification as they'll find people with similar struggles and there will be a feeling of homophily among them. These virtual or online social identifications could help loneliness issues with easy and global reach as while our social interactions in the real world have always been constrained by geography due to practical difficulties [40], social media connects us beyond these geographical constraints with 3.96 billion active users around the world which keeps growing every day [23]. This connects people beyond the barriers of language, age, race, ethnicity as well as geographical constraints as every individual engages and connects on the same virtual platform, which gives a wider scope of social interaction and connection.

Similar to the support group settings, group therapy could be also devised for individuals facing similar issues and it can be enabled in healthy ways to deliver to those in need,

especially for the younger community since young people have an affinity towards online peers and community.

Social Media influencers get the opportunity to show their talent, earn money, get recognized as well as appreciation from others through the platform of social media. They monetize upon the principles of social media community and identity by giving similar identity to their audience. The audience becomes a part of a community that gives support to each other as well as the influencer. This gives the audience a sense of association, togetherness and pride which drives them to support the creators and even engage in behaviour like buying merchandise. People showcase their art through YouTube, Instagram, Tumblr, and other social media platforms.

Limitations

The sample size taken in the study is very small and may have accurately represented the population size as there may be less diversification due to the adopted sampling method and the mode of data collection. The researchers reach to the population was limited due to quarantine and social distancing settings caused by the ongoing Covid-19 Pandemic. The correlations between loneliness and social identification as well as between loneliness and information-bias were found to be insignificant, contrary to expectation and therefore, more research needs to be done to find further evidence on their relationships. There could be a reflection of biasedness in responses since both the questionnaires employed for the data collection in the study were self-report scales, therefore the participants may not have answered honestly, and may have been reluctant in truly showing the loneliness that they experience or their social media activity in an order to portray themselves in a positive light. Further, though the sample population was chosen to be the youth age group, there were no responses collected from the ages of 15-18, thus the findings of this study may not be generally applied to the whole of youth.

The contextual nature of social media usage, demographics of gender, relationship nature, education level and personality are also some aspects which may impact the loneliness components in individuals as given by the different previous researches but have not been explored in detail in this study [8][55].

Conclusion

The current research aimed to understand the correlation between loneliness and online social identification in youth. A significant result was found with a negative correlation between loneliness and virtual group identities, which reveals that if virtual group identities may be high, loneliness will decrease. A significant negative correlation was also found between homophily and loneliness, which indicates that among other factors, such as social identification and information, homophily could play a stronger role in attracting users to social media platforms as well as in reducing their experienced loneliness. Online social interaction can be explored as a coping mechanism for those experiencing loneliness given that there is a healthy balance between online (virtual) and real life. Social media developers may work on promoting mental health awareness through their platforms as well as make sure that users do not get exposed to harmful content or people. Further research needs to be done on virtual identities, communities, socialisation and social factors to find more negatives and positives.

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