# Real vs Virtual Identity: A Contemporary Analysis of Social Displacement Accelerating Anti-social Behavior Among Youth

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**Abstract**

This study investigated the role of social media in creating anti-social behavior among active social media users. The researchers conducted survey to understand the difference between the real and virtual personalities of social media users. 256 students — aged 17 to 25 years — enrolled in different universities of Lahore were reached out conveniently to get their responses on 22 closed ended questions of questionnaire. The Social Displacement Theory guided the researchers to analyze the obtained data on SPSS to interpret their communication preferences in virtual and real life. The chi-square test approved the hypothesis as it showed a significant association between social media usage and anti-social behavior among users. This study concluded that higher social media usage paved the way for users to get isolated from the real world — pointing towards estrangement from social gathering. Hence, an individual must maintain a balance between real and virtual identities.

*Keywords*: Social displacement, virtual identity, real identity, active social media users

## 1. Introduction

Social media has been characterized as websites, services, and related tools that allow participants to create and share their content; hence, comprise a large part of the lives of people (Thomas et al., 2020; Gunduz, 2017; Boyd, 2014; Hampton et al., 2011; Zhan et al., 2016). 3.48 billion People were found to be using social media worldwide in 2019 — a rise of 9% since 2018 (Kemp, 2019). With Facebook, Twitter, and Instagram being the most prominent sites, these social networking sites have overwhelmed the digital landscape (Sun et al., 2023; Gokalpt et al., 2023; Ng et al., 2023; Kuss & Griffins, 2022). Instant messaging services — such as Snapchat, WhatsApp, Facebook, etc. — have recently reached a substantial part of the user base (Musetti et al., 2022; Lin et al., 2022; Mkhize, 2023; Pew, 2018). Social media users can upload or stream intimate content for others to react, share, and respond to; lastly, vlogging sites i.e., YouTube, is also widely popular among youth (Kuss & Griffins, 2022; Verduyn et al., 2022; Lin et al., 2022; Pew, 2018; Valkenberg, 2022).

Nowadays, despite being active on social media all the time, people are socially isolated (Kuss & Griffins, 2022; Wiwatkunupakam et al., 2022; Hajek & Konig, 2019; Cho, 2015; Das & Sahoo, 2011). Nevertheless, social media is evolving as a magnetic force that attracts and, somehow, fluctuatesthe real faces (Khosravi et al., 2016; Xiadong & Li, 2016; Arampatzi & Burger, 2018); it's appearing to be a major hurdle between conversations of people — enthusiasmto evolve (Campos et al., 2016; Gowens et al., 2012; Das & Sahoo, 2011). The current alarming situation requires us to think of the ways we can differentiate between the real and virtual personalities (Das & Sahoo, 2011; Harasemiw et al., 2018; Arampatzi & Burger, 2018). Likewise, social media is basically playing with the psyche of its users; it makes them feel that they are making bonds and improving relationships with their family and friends but actually, they are not!! (Chen & Schulz, 2016; Hampton & Sessions, 2009; Venkatesh, 2016).

The excessive use of social media has also resulted in the development of anti-social behavior among youth (Erreygers et al., 2017). Anti-social behavior is commonly defined as a behavior that disregards the basic rights of others (Moffitt, 2018; Millie, 2008). If a person is investing more time on social media, he will definitely end up having less time for interactions in the real life (Burbules, 2006; Saker & Frith, 2022; Karsazga, 2017). Over the prior decade, the co-occurring tendencies of increased social media usage and changes in psychological behavior among users is associated with each other (Chen & Wang, 2022; Karsazga, 2017; Venkatesh, 2016).). The behavioral phenomenon of risk taking as well as sensation-seeking among social media users has been indicated to transform in association with broader social and cultural aspects throughout history (Crone & Konijn, 2018; Matviyenko, 2010; Riberio, 2009). Frequent social media use replaces and dominates the time that is expected to be invested on other human-activities — particularly in-person social interactions, extracurricular actions, and physical activities (Saker & Frith, 2022; Hou et al., 2019; Hall, 2018; Nakaya, 2015).

In Pakistan, social media users have increased up to 22 million between 2021 and 2022 (Kemp, 2022). Social media platforms are constructed to grab your attention, keep you online, and make you scroll down your feed every other second — to get updates (Kuss & Griffins, 2022; Verduyn et al., 2022; Lin et al., 2022; Pew, 2018; Valkenberg, 2022). Similarly, just like a gambling compulsion or an obsession with nicotine, alcohol, or drugs, social media use has the

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likelihood to develop psychological yearnings (Boyd, 2014; Hampton et al., 2011; Venkatesh, 2016). When you get a like, a share, or a favorable reaction to a post, it releases dopamine in the brain — the similar "reward" chemical that pursuesgaining on a slot machine, carrying a bite of chocolate, or lighting up a cigarette. The more you're awarded, the more time you would like to spend on social media — even if it turns out to be detrimental to other aspects of your life (Venkatesh, 2016; Koles & Nagy, 2012).

We are living in an era in which technology possess the potential to dim the boundaries between reality and fantasy — the real and the virtual (Marsh, 2010; Xiadong & Li, 2016; Arampatzi & Burger, 2018; Primack et al., 2019). Through their avatars and associated digital profiles, virtual world residents can create their customized virtual identities —which can be molded according to their intentions and expectations (Moon et al., 2014; Brunskill, 2013; Boyd, 2014; Hampton et al., 2011; Koles & Nagy, 2012). No longer constrained by physical realities and existential restrictions, virtual environments anticipate individuals with a clean slate onto which they can conveniently design their desired virtual identities (Kennedy, 2006; Turkle, 1994; Moon et al., 2014; Brunskill, 2013) offering radical new chances for identity redefinition and self-recreation altogether (Matviyenko, 2010; Koles & Nagy, 2012; Riberio, 2009; Turkle, 1995; Turkle, 1994).

Social media has negatively impacted our lives because the assortment of isolation and global reach has destroyed our culture (Whaite et el., 2013; Al-sharqi et al., 2015; Primack et al., 2019; Parigi & Henson, 2014; LaRose et al., 2014). Social media has stolen the confidence and comfort thatwe once sighted in one another; it has displaced the human fellowship with the virtual connection — undermining the physical and emotional support that we once got from each other (Thomas et al., 2020; Primack et al., 2019; Gunduz, 2017; Primack et al., 2019; Henschkle, 2017).It robbed our sense of self-supervision as well as proficiency to do critical thinking; contrary to this (Primack et al., 2019; Koles & Nagy, 2012; LaRose et al., 2014), it compels us to join the social media group to keep ourselves updated with the perverse messages — that tickles our ears and fascinate our senses without even evaluating the consequences (Parigi & Henson, 2014; Koles & Nagy, 2012). Therefore, the increased span social media usage is leaving negative footprint among youth — social isolation, loneliness, envy, exhaustion, dissatisfaction, FOMO, and introverted behavior (Parigi & Henson, 2014; Whaite et el., 2013; Primack et al., 2019).

Ironically, social media is in-fact whirling us into one of the most anti-social generations till now (Whaite et el., 2013; Primack et al., 2017). People prefer texting over phone; online chat has replaced face-to-face meetings; many have renovated human interaction with useful platforms such as Facebook, Twitter, and Instagram (Lule, 2021). Jonathan Safran Foer in his dissertation, "How Not to Be Alone", explained that "Each step forward in social media has made it easier, just a little, to prevent the emotional work of being present, to transmit information rather than humanity." With each passing day, these words hoop truer and truer.

One cannot put the role of social media in empowering individuals with information related to every sector of life behind the curtain (Li, 2016; Lin et al., 2022; Pew, 2018; Valkenberg, 2022). Due to these social media platforms, there has been a lot of improvement and expansion in terms of getting linked with the entire universe and contribute to global evolution — global village (Grizane & Jurgelane, 2017; Lule, 2021; Leong et al., 2019). People have turned to social media to further explore all aspects of life (Koles & Nagy, 2012). Whereas, according tothe "super peer" concept (Strasburger, 2007; Lule, 2021), media has been declared as a "super peer" that putsforth an especially profound influence as well as an inordinate pressure on its users to connect in risky behaviors — that are primarily illustrated as normative (Lule, 2021).

### 1.1. Research Questions

Following are the research questions:

**RQ1:** How is social media affecting the real identity of people?

**RQ2:** What are the effects of social media on users' introverted and reserved behavior?

**RQ3:** What's the role of social media in creating anti-social behavior?

**RQ4:** What is the role of social media in ruining the real personality?

### 1.2. Hypothesis

**H1:** There is an association between social media usage and anti-social behavior amongactive social media users.

## 2. Literature Review

The notion of identity has a colorful history as it has been extensively explored in the discipline of social sciences (Yuki, 2023; Jenkins, 2014; Ellemers et al., 2002; Koles & Nagy, 2012). Erik Erikson proposed the improvement in the definitive meaning of identity in his foundational work on identity development in 1950s, recognizing the impact of various societal and cultural changes on an individual's identity along with the influence of globalization and modern technological innovations (Rosman, 2023; Koles & Nagy, 2012; Coutinho, 2023; Stryker & Burke, 2000). Identity development is believed to proceed through certain predictable stages: continuously integrating input and feedback from the environment (Liu et al., 2023; Pei et al., 2013; Henschkle, 2017; Marcia, 1966).

Amongst other facets, taking benefit of their freedom and relying on their own resources, social media users can improve and organize a unique identity for themselves by using a variety of symbolic materials available in the digital world (Clothier, 2005; Tubella, 2005; Coutinho, 2023; Stryker & Burke, 2000; Henschkle, 2017). Within this framework, it is no longer adequate to look at identity construction or identity development entirely in the traditional sense — in consideration of the real-physical world (Jenkins, 2014; Ellemers et al., 2002; Koles & Nagy, 2012; Asur & Huberman, 2010). Rather, in the case of virtual world residents, the central question of Who am I? needs to be allocated into two segments: one dealing with the real self and the other addressing the virtual self (Nagy & Koles, 2014; Kokswijk, 2007; Koles & Nagy, 2012). Similarly, these two selves should not be evaluated as distinct entities but rather ones that encapsulate several factors of an individual's personality (Sarma et al., 2008; Jerry & Tavares-James, 2012). The emergence of virtual environments has inaugurated the door for users to experience various virtual contests — manyof which would not be practical or possible in the purely physical real world (Yee et al., 2011; Asur & Huberman, 2010; Riberio, 2009; Henschkle, 2017).

Social behavior serves as the antagonistic, mutualistic, harmonious, altruistic, and parentalinteractions that occur between individuals in the community (Adali & Golbeck, 2012; Henschkle, 2017; Meshi & Ellithorpe, 2021; Asur & Huberman, 2010; Ruths & Pfeffer, 2014). The nature of any social system is finally discerned by ecological and social conditions, demography, and kinship (Loanas, 2020; Rubenstein, 2013; Henschkle, 2017). People who spend excessive time on social media are at least two times more apt to feel socially isolated (Meshi & Ellithorpe, 2021; Abbasi & Homayoon, 2014; Asur & Huberman, 2010). Social media usage expels the authentic social experiences because the more time people spend online, eventually, the less time they have for real-world interactions (Meshi et al., 2020; Asur & Huberman, 2010; Gil-Or, 2011).

The excessive usage of social media makes the users detached from real life; less connected with themselves, and others in their social circle (Asur & Huberman, 2010; Cao & Yu, 2019; Lerma et al., 2021). It's not the real-life multi-dimensional sense of human-connection and the feeling of 'belonging'; it's probable that one of the reasons people continue to use social media is their never-ending desire to fill a voidin their identity (Cao & Yu, 2019; Donnelly & Kuss, 2016). Nevertheless, social media ends up building a new void in their lives by drawingsocial comparison (Lerma et al., 2021; Yoon et al., 2019). As one gets more isolated from their real life, they're exposed to the dilemma of feeling more depressed and directionless (Donnelly & Kuss, 2016; Zheng & Lee, 2016; Lerma et al., 2021; Cao & Yu, 2019); furthermore, being entangled in social comparison affects your self-esteem and your self-worth. If an individual feels an overwhelming urge to say 'no' to real-life activities, it should be considered an indication that it's time to take a break fromtheir virtual identity on social media (Cao & Yu, 2019).

To measure the social isolation of people, the scientists utilized a tool called the Patient Reported Outcomes Measurement Information System (PROMIS). It assists people to report their functions, symptoms, attitudes, and feelings. Generally, those who had more social media presence, revealed that they experienced a low sense of social belonging, lower engagement withothers, and limited fulfilling relationships, even when researchers governed for demographic components — relationship status and living problems in the results (Heide et al., 2023). Participants who logged into various social media platforms 58 or more times per week had almost triple the odds of feeling socially as compared to than those who visited fewer than 9 times per week.

Several investigators have formulated a new phenomenon called 'Facebook depression', which is characterized as depression that evolves when individuals spend a huge amount of time on social media sites and then start to exhibit definitive symptoms of depression (Lee et al., 2023; Jelenchick et al., 2013; Yoon et al., 2019). Seeking social acceptance and staying connected with peers is a significant element of their social life (Moreno et al., 2011; Yoon et al., 2019). However, the zeal of the online world compels constant engagement and builds a factor of social life that may give birth to depression in some people (Belease, 2015; Heide et al., 2023). As with offline depression, people who tolerate Facebook depression are in danger of social isolation and sometimes turn to hazardous internet sites and blogs to seek help. Not to mention, this attitude may stimulate substance abuse,unsafe sexual practices, aggressive and self-destructive behaviors (Heide et al., 2023).

Past research about social media indicated that although social media is taken as a way to enhance social interaction, it does not generate the same results as face-to-face communication (Zheng & Lee, 2016). Virtual life is totally based on false statements and show-off materials — depicting the raw part of life ((Meshi et al., 2020; Yoon et al., 2019; Asur & Huberman, 2010; Gil-Or, 2011). These studies illustrated the side-effects of social media. The current study will extend their work to explore the impact of social media overuse on personality development. Social media not only affect the mental condition but also destroy the social behavior and personality (Clothier, 2005; Tubella, 2005; Coutinho, 2023; Stryker and Burke, 2000). The previous studies discussed the existence of virtual identity; whereas, thus study tends to analyse the virtual behavior of youth on social media. This research paper opens up a new way to differentiate between virtual and real personalities; to highlight how social media is affecting youth's social behavior without their actualization (Yoon et al., 2019).

This study tends to analyze whether social media is creating social isolation in real life; whether social media is making its users introverted and reserved in real life; the role of social media in personality development

### 3. Theoretical Framework

Social displacement theory states that the more time you spend in the world of social media, the less time you're liable to spend socializing with people in the real world (Hall et al., 2022; Ana, 2018). The social displacement theory also suggests that the decline in social interaction with other people will make it miserable — or, to use scientific language, "lead to a lowering in your wellbeing." (Ana, 2018; Hall et al., 2022)

This theory supports the narrative of current study as the significant use of social media alters the individuals' connectivity, some people flourish from it while other experience some negative consequences. Many solutions for this variability implicate the social displacement theory. One prospect of using social media is reducing the quality of in-person conversations. Next solution is that adolescents who commonly have negative social media experiences face poor quality interaction. This suggests that these individuals would not necessarily help from more face-to-face conversation. Hence, this theory would guide the researcher to look into the real vs. virtual behavior.

### 4. Methodology

The study attempted to connect with the active social media users and quantify their real and virtual behavior towards society. The population of the study is active social media users of Lahore — employing convenient sampling — who show the real and virtual behavior. Since this research used survey technique, the students studying in different universities of Lahore — aged 17 to 25 years as they are the active social media users — were asked to fill out the questionnaire that was comprised of 22 closed ended questions. Furthermore, the researchers collected the response of 250 university students and analyzed their response across different indicators in questionnaires to better evaluate their real and virtual identity.

### Table 1: Conceptualization & Operationalization

|  | Conceptualization | Operationalization |
| --- | --- | --- |
| **Social media** | According to Webster's dictionary, "forms of electronic communication (websites for social networking and micro blogging) through which users share information, ideas, personal messages, and other content is known as Social media." | A communication site for transferring information, and interaction. |
| **Real Behavior** | According to Merriam-Webster dictionary, Real behavior is "the actual or real way in which someone conducts oneself or behaves." | The actual way of communicating with people around you. |
| **Virtual behavior** | According to English Oxford dictionary, "The fake or fictitious way of someone conducting or acting." | The fake presentation of an individual in front of other |
| **Anti-social behavior** | According to Wikipedia, "Anti-social behaviors are actions that harm or lack consideration for the well-being of others" or "any type of conduct that disobeys the basic rights of another person and any behavior that is contemplated to be disruptive to others in society." | To cut off from the society or not having adequate interaction with people around you. |
| **Active social media users** | "Active social media user is someone who logs in to the site and/or performed some sort of action (liking, sharing, posting, etc.) within the last 30 days." (Social channels, n.d) | The user who is interacting with social media on regular basis is active social media user. |

### 5. Hypothesis Testing

In this section, the H1 is going to be tested by the chi-square test. The H1 is stated as:

**H1:** There is an association between social media usage and anti-social behavior among active social media users.

**H0:** There is not an association between social media usage and anti-social behavior among active social media users.

**Table 2: Association between social media usage and anti-social behavior (Chi-Square Tests)**

| Value | | df | Asymptotic Significance(2-sided) |
|---|---|---|---|
| Pearson ChiSquare | 244.622[a] | 20 | <.001 |
| Likelihood Ratio | 208.911 | 20 | <.001 |
| N of Valid Cases | 256 | | |

In Table 2, the p-value is lower (0.001) than the accepted alpha value (0.05), the H1 hypothesis has been accepted which states that the two variables are dependent on one another. Hence, there is an association between social media usage and anti-social behavior among active social media users.

## 6. Findings and Analysis

The data has been obtained from 256 students who were enrolled in different universities of Lahore. The questionnaire had 22 closed ended questions; all of them addressed the real and virtual identity among active social media users. The Chi-square test showed that there's an association between social media usage and anti-social behavior among active social media users. On the basis of the data, following are the answers to the initially derived research questions

**Table 3: How is social media affecting the real personality of people?**

| | | Frequency | Percent | Valid Percent | CumulativePercent |
|---|---|---|---|---|---|
| Valid | | 40 | 15.6 | 15.6 | 15.6 |
| | Agree | 58 | 22.6 | 22.6 | 38.1 |
| | Disagree | 59 | 23.0 | 23.0 | 61.1 |
| | Neutral | 49 | 19.1 | 19.1 | 80.5 |
| | Strongly agree | 13 | 5.1 | 5.1 | 85.6 |
| | Strongly disagree | 37 | 14.4 | 14.4 | 100.0 |
| | Total | 256 | 100.0 | 100.0 | |

According to the results gathered from 256 youngsters, only 22.6% people agreed that the social media has parted them away from each other in real life. 19.1% showed neutrality towards this statement. And 5.1% people strongly agreed. While 23%people disagreed and 14.4% people responded with strongly disagree. Hence, it was found that majority of social media users agree that the social media has parted them away from each other in real life.

Anti-social behavior is becoming one of the major issues in active social media users. Due to this, they avoid to meet public and it also increase depression issues in users. The social media overcomes the life of an individual. Social media is nowadays most widely used in this generation. The social media users are more active and make new relations with others as well as for better communication. But due to this causes he differences between the real and fake personality.

**Table 4: What are the effects of social media on user's introvert and reserved behavior?**

| | Frequency | | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | | 41 | 16.0 | 16.0 | 16.0 |
| | Agree | 90 | 35.0 | 35.0 | 51.0 |
| | Disagree | 32 | 12.5 | 12.5 | 63.4 |
| | Neutral | 64 | 24.9 | 24.9 | 88.7 |
| | Strongly agree | 22 | 8.6 | 8.6 | 97.3 |
| | Strongly disagree | 7 | 2.7 | 2.7 | 100.0 |
| | Total | 256 | 100.0 | 100.0 | |

As per the results, 35% people agree that they experience general sense of emptiness even though they interact with everyone on social media. While 24.9% people showed neutral response on this statement. And 12.5%% people disagreed from this statement. On the other side, 8.6% people strongly agreed with this. Hence, it is proved that majority of people agree that they experience general sense of emptiness even through interaction with everyone on social media.

**Table 5: What are the impacts of social media in creating anti-social behavior?**

| | | Frequency | Percent | Valid Percent | CumulativePercent |
|---|---|---|---|---|---|
| Valid | | 40 | 15.6 | 15.6 | 15.6 |
| | Agree | 58 | 22.6 | 22.6 | 38.1 |
| | Disagree | 59 | 23.0 | 23.0 | 61.1 |
| | Neutral | 49 | 19.1 | 19.1 | 80.5 |
| | Strongly agree | 13 | 5.1 | 5.1 | 85.6 |
| | Strongly disagree | 37 | 14.4 | 14.4 | 100.0 |
| | Total | 256 | 100.0 | 100.0 | |

According to the results, only 22.6% people agreed that the social media has parted them away from each other in real life. 19.1% showed neutrality towards this statement. And 5.1% people strongly agreed. While 23% people disagreed and 14.4% people responded with strongly disagree. Hence, majority of people agree that the social media has parted them away from each other in real life.

**Table 6: What is the role of social media in ruining the Real personality?**

| | | Frequency | Percent | Valid Percent | CumulativePercent |
|---|---|---|---|---|---|
| Valid | | 40 | 15.6 | 15.6 | 15.6 |
| | Agree | 56 | 21.8 | 21.8 | 37.4 |
| | Disagree | 80 | 31.1 | 31.1 | 68.5 |
| | Neutral | 23 | 8.9 | 8.9 | 77.8 |
| | Strongly agree | 30 | 11.7 | 11.7 | 89.5 |
| | Strongly Disagree | 27 | 10.5 | 10.5 | 100.0 |
| | Total | 256 | 100.0 | 100.0 | |

**Table 7: Feeling reserved and uncomfortable in family gatherings**

| | | Frequency | Percent | Valid Percent | CumulativePercent |
|---|---|---|---|---|---|
| Valid | | 40 | 15.6 | 15.6 | 15.6 |
| | Agree | 58 | 22.6 | 22.6 | 38.1 |
| | Disagree | 59 | 23.0 | 23.0 | 61.1 |
| | Neutral | 49 | 19.1 | 19.1 | 80.5 |
| | Strongly agree | 13 | 5.1 | 5.1 | 85.6 |
| | Strongly disagree | 37 | 14.4 | 14.4 | 100.0 |
| | Total | 256 | 100.0 | 100.0 | |

According to the results, 23.0% people disagree that they feel reserved and uncomfortable in family gatherings. 22.6% agree with this statement. Whereas, the 19.1% people showed the neutral response. On the other side, 14.4% people strongly disagreed and 5.1% people strongly agreed. Hence, majority of people disagree that they feel reserve and uncomfortable in family gatherings.

**Table 8: Being quite around other peers**

| Frequency | | | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | | 40 | 15.6 | 15.6 | 15.6 |
| | Always | 27 | 10.5 | 10.5 | 26.1 |
| | Never | 22 | 8.6 | 8.6 | 35.0 |
| | Often | 53 | 20.6 | 20.6 | 55.6 |
| | Rarely | 39 | 15.2 | 15.2 | 70.8 |
| | Sometimes | 75 | 29.2 | 29.2 | 100.0 |
| | Total | 256 | 100.0 | 100.0 | |

As per the results, 29.2% people told that they sometime quite when they are with other people. 20.6% people responded often to this statement and 15.2% people told that they are rarely quite when they are with other people.

10.5% feel that they "Always" quite when they are with other people. And 8.6% people never feel this. It is proved that majority of people said that they "sometimes" quite when they are with other people. Hence, social media ruins the real personality of an active social media user.

They have limited friends in real life as compared to social sites. Users agree that people who use social media cannot easily express their emotions in front of people. In social gatherings everyone is on their phone which parted their way for social interaction in the community. Majority of people agree that there should be a balance maintained between real and virtual life.

## 7. Conclusion

Since there's a difference between the real and virtual behaviors of active social media users, hence this study explored the role of social media in creating anti-social behavior among active social media users through survey method. 256 students who were studying in different universities of Lahore were reached out to fill out the questionnaire that composed of 22 close ended questions. The obtained data was analyzed on SPSS. The chi-square test showed an association between social media usage and anti-social behavior among people. The responses of 256 students, who were active social media users, showed that that they are well known of the effects of social media in creating antisocial behavior. The most used social sites that contributed towards creating anti-social behavior are WhatsApp, Facebook, and twitter. Active social media users agree that social apps parted their ways from each other. Majority of users agree that social media disturb their real life and make them fake personalities on social apps. Hence, in the light of social displacement theory, it can be concluded that social media is increasing antisocial connection day by day by lowering face-to-face communication.

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