

Exploring the Impact of Social Media on Mental Health: A Comparison Between Young Students and the Elderly in Pakistan

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ABSTRACT

Objective: The basic aim of the study is to find the impact of social media on mental health a comparison between young students and the elderly in Pakistan.

Study Design: mixed-method approach study

Place and Duration of Study: This study was conducted at the Institute of Psychiatry, Benazir Bhutto hospital Rawalpindi from November 2022 to October 2023.

Methods: This mixed-method approach study was conducted in Institute of Psychiatry, Benazir Bhutto hospital Rawalpindi from Nov 2022 to October 2023 to investigate the divergent impacts of social media on the mental health of young students and elderly individuals. Data were collected through a combination of surveys, questionnaires, interviews, and focus groups. Structured surveys and questionnaires assessed social media usage patterns, mental health indicators, self-esteem, social comparison tendencies, and perceived benefits or drawbacks of social media.

Results: Data was collected from 300 participants of different age groups. Young students predominantly comprised undergraduate students (70%) engaged in full-time education, with a gender distribution of 45% male, 54% female, and a minimal representation of other genders (1%). For young students, social connectivity displayed a positive correlation (0.5) with reduced feelings of loneliness, while entertainment and recreation exhibited a moderate positive correlation (0.3) with improved mood. Additionally, information seeking did not exhibit significant correlations with stress or anxiety (0.2), whereas self-expression showed a mild correlation (0.2) with enhanced self-esteem.

Conclusion: It is concluded that social media usage manifests distinct impacts on the mental health of young students and elderly individuals, delineating divergent patterns in stress, anxiety, and feelings of isolation.

Key Words: Social Media, Mental Health, Young Students, Pakistan

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INTRODUCTION

The influence of social media on mental health has become a subject of profound interest in contemporary society, particularly concerning how it affects different age demographics. This study endeavors to delve into the nuanced impact of social media on the mental well-being of two distinct age groups: young students and the elderly^[1]. In recent years, social media platforms have rapidly evolved, becoming ubiquitous channels for

communication, information dissemination, and social interaction^[2]. However, the repercussions of prolonged social media usage on mental health have sparked debates, with concerns regarding its effects on psychological well-being. The juxtaposition of young students, often early adopters and heavy users of social media, with the elderly, who may engage in these platforms for varied purposes, offers a compelling comparative lens to explore these implications^[3].

People of all ages, adults and adolescents, utilize a diverse array of social media platforms to engage in meaningful connections, both in intimate settings with loved ones and in expansive networks encompassing friends, acquaintances, and professional peers^[4]. It is worth emphasizing that the younger generation is dedicating an ever-growing portion of their time to engaging in online networking platforms, indulging in e-games, exchanging messages, and immersing themselves in various forms of social media^[5]. A Research found that nearly majority of Americans use social media and the percentage of usage was higher of using Facebook. 68% Facebook and other on Twitter,

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Pinterest, and Instagram. Statistical scale shows that spending time on social media is significantly on higher rate. On average, 28% of the time internet is being used for social media interaction. The total population of the world that uses social media is 4.48 billion, making that 56.8% of the world population⁴, and 84% of those users are young adults. According to a graph, we found online, women use Facebook, Instagram, and Pinterest more whereas men use Twitter, LinkedIn, YouTube, TikTok, Reddit, and WhatsApp more. Both genders use Snapchat an equal amount^[6]. Considering one developing country i.e., the USA, has 72.3% of social media users⁴ whereas a developing country i.e., Pakistan 31.5% of social media users. Young students, amidst their formative years, navigate a digital landscape intertwined with social connectivity, self-expression, and peer validation^[7]. Their immersion in social media environments raises questions about its potential impact on stress, self-esteem, social comparison, and overall mental health. Conversely, the elderly population, often adapting to these platforms later in life, might experience distinct effects^[8]. For them, social media could serve as a means of connectivity, combating isolation, and accessing information. Yet, concerns persist regarding potential feelings of exclusion, information overload, and the impact of constant digital engagement on their mental well-being^[9].

This comparative exploration seeks to discern potential differences and similarities in how social media influences the mental health dynamics of these two disparate age groups. By scrutinizing various aspects such as usage patterns, psychological responses, coping mechanisms, and perceived benefits or drawbacks, this study aspires to shed light on the intricate relationship between social media usage and mental health across generations.

METHODS

This mixed-method approach study was conducted in Institute of Psychiatry, Benazir Bhutto hospital Rawalpindi from Nov 2022 to October 2023 to investigate the divergent impacts of social media on the mental health of young students and elderly individuals. Inclusion Criteria:

- Participants aged between 18 to 25 years, enrolled in college or university programs, actively engaged in social media platforms.
- Participants aged 60 years and above, with varied levels of familiarity with and usage of social media platforms.
- Willingness to provide informed consent for participation in the study.
- A minimum level of social media engagement, ensuring an active presence on social platforms at least several times per week.

Exclusion Criteria: Participants unable or unwilling to provide informed consent for their involvement in the study.

Participant Selection: The study involved a comprehensive participant selection process to ensure representation from both young students and elderly individuals. Random or stratified sampling methods were employed to recruit participants from diverse socio-economic backgrounds. Inclusion criteria specified age brackets for young students (18 to 25 years) and elderly individuals (60+ years), aiming for a balance in gender and demographic characteristics. Participants were required to provide informed consent for their participation, and a minimum level of social media usage was a criterion for inclusion.

Data Collection: Data were collected through a combination of surveys, questionnaires, interviews, and focus groups. Structured surveys and questionnaires assessed social media usage patterns, mental health indicators, self-esteem, social comparison tendencies, and perceived benefits or drawbacks of social media. Interviews and focus groups provided qualitative insights into participants' experiences, emotions, and coping strategies related to social media use and mental health. Quantitative metrics, such as the frequency of social media use, types of platforms used, duration, and content consumption, were collected for objective analysis. The study focused on various variables to provide a comprehensive understanding of the impact of social media on mental health. Social media usage patterns, mental health indicators (stress, anxiety, depression), psychological factors (self-esteem, social comparison tendencies), and perceived benefits or drawbacks were considered. The research explored how these variables differed between young students and the elderly, shedding light on unique aspects within each age group.

Statistical Analysis: Data were analysed using SPSS v29.0 The data analysis involved both comparative and correlational approaches. Comparative analyses were conducted to statistically compare social media usage patterns and mental health indicators between young students and the elderly. Correlation studies explored associations between specific social media habits and mental health outcomes within each age group. Thematic analysis was applied to qualitative data from interviews and focus groups, identifying recurring themes and narratives.

RESULTS

Data was collected from 300 participants of different age groups. Young students predominantly comprised undergraduate students (70%) engaged in full-time education, with a gender distribution of 45% male, 54% female, and a minimal representation of other genders (1%). Conversely, the elderly cohort demonstrated a diverse educational background, with 60% holding a

Bachelor's degree and 30% possessing higher qualifications, while employment status showcased a majority retired population (70%) and a relatively balanced gender distribution (40% male, 58% female, and 2% other).

Table 1 No: Demographic data of participants

| Demographic Variable | Young Students (%) | Elderly Individuals (%) |
|--------------------------|--------------------------------------------|-------------------------------------------------------------|
| Gender Male/Female/Other | Male (45), Female (54), Other (1) | Male (40), Female (58), Other (2) |
| Age (years) | 18-25 (100) | 60-75 (95), 75+ (5) |
| Education Level | Undergraduate (70), Graduate (30) | High School (10), Bachelor's Degree (60), Master's/PhD (30) |
| Employment Status | Part-time Job (20), Full-time Student (80) | Retired (70), Part-time Work (30) |
| Socio-economic Status | Lower (25), Middle (50), Upper (25) | Lower (40), Middle (50), Upper (10) |
| Urban/Rural Residence | Urban (80), Rural (20) | Urban (60), Rural (40) |

Young students, on average, spent 2.5 hours daily, with a predominant focus on Instagram (35%) and messaging apps (65%) for their social interactions. In contrast, the elderly allocated 1.2 hours per day to social media engagement, displaying a preference for Facebook (60%) and WhatsApp (40%) as their primary platforms for connectivity and information exchange.

Table No. 2: Social media usage pattern among both groups

| Age Group | Average Daily Usage (Hours) | Preferred Platforms |
|---------------------|-----------------------------|---------------------------------------|
| Young Students | 2.5 | Instagram (35%), Messaging Apps (65%) |
| Elderly Individuals | 1.2 | Facebook (60%), WhatsApp (40%) |

Table No. 3: Mental health indicators in both groups

| Age Group | Stress Level (out of 10) | Anxiety Level (out of 10) | Depression Level (out of 10) |
|---------------------|--------------------------|---------------------------|------------------------------|
| Young Students | 6.0 | 6.5 | 4.8 |
| Elderly Individuals | 3.8 | 3.0 | 4.2 |

Young students reported higher stress levels (6.0 out of 10) and anxiety levels (6.5 out of 10), while

experiencing lower levels of depression (4.8 out of 10). Conversely, elderly individuals exhibited comparatively lower stress (3.8 out of 10) and anxiety (3.0 out of 10), with slightly elevated levels of depression (4.2 out of 10).

Table No. 4: Psychological factors in both groups

| Age Group | Social Comparison Tendencies (%) | Self-Esteem Level (out of 10) |
|---------------------|----------------------------------|-------------------------------|
| Young Students | 70 | 6.2 |
| Elderly Individuals | 20 | 7.1 |

Table No. 5: Association between Social-Media Platform Usage for Different Purposes and Mental Well-Being

| Age Group | Purpose of Social Media Usage | Mental Health Indicator Correlations |
|---------------------|-------------------------------|------------------------------------------------------------------|
| Young Students | Social Connectivity | Positive correlation with reduced feelings of loneliness (0.5) |
| | Information Seeking | No significant correlation observed with stress or anxiety (0.2) |
| | Entertainment & Recreation | Moderate positive correlation with improved mood (0.3) |
| Elderly Individuals | Self-Expression | Mild correlation with enhanced self-esteem (0.2) |
| | Social Connectivity | Strong negative correlation with feelings of isolation (-0.6) |
| | Information Seeking | Moderate positive correlation with mental stimulation (0.4) |
| | Entertainment & Recreation | No significant correlation observed with mood or anxiety (0.1) |
| | Self-Expression | Positive correlation with a sense of fulfillment (0.3) |

For young students, social connectivity displayed a positive correlation (0.5) with reduced feelings of loneliness, while entertainment and recreation exhibited a moderate positive correlation (0.3) with improved mood. Additionally, information seeking did not exhibit significant correlations with stress or anxiety (0.2), whereas self-expression showed a mild correlation (0.2) with enhanced self-esteem. Conversely, among the elderly, social connectivity revealed a strong negative

correlation (-0.6) with feelings of isolation, while self-expression exhibited a positive correlation (0.3) with a sense of fulfillment. Information seeking demonstrated a moderate positive correlation (0.4) with mental

stimulation, while entertainment and recreation did not show significant correlations with mood or anxiety (0.1).

Table No. 6: Gender Variation in Social-Media Platform Usage for Different Purposes and Mental Well-Being

| Age Group | Gender | Purpose of Social Media Usage | Mental Health Indicator Correlations |
|---------------------|--------|-------------------------------|------------------------------------------------------------------|
| Young Students | Male | Social Connectivity | Positive correlation with reduced feelings of loneliness (0.6) |
| | | Information Seeking | No significant correlation observed with stress or anxiety (0.1) |
| | | Entertainment & Recreation | Moderate positive correlation with improved mood (0.4) |
| | | Self-Expression | Mild correlation with enhanced self-esteem (0.3) |
| | Female | Social Connectivity | Positive correlation with reduced feelings of loneliness (0.5) |
| | | Information Seeking | No significant correlation observed with stress or anxiety (0.2) |
| | | Entertainment & Recreation | Moderate positive correlation with improved mood (0.3) |
| | | Self-Expression | Mild correlation with enhanced self-esteem (0.2) |
| Elderly Individuals | Male | Social Connectivity | Strong negative correlation with feelings of isolation (-0.7) |
| | | Information Seeking | Moderate positive correlation with mental stimulation (0.5) |
| | | Entertainment & Recreation | No significant correlation observed with mood or anxiety (0.2) |
| | | Self-Expression | Positive correlation with a sense of fulfillment (0.4) |
| | Female | Social Connectivity | Strong negative correlation with feelings of isolation (-0.6) |
| | | Information Seeking | Moderate positive correlation with mental stimulation (0.4) |
| | | Entertainment & Recreation | No significant correlation observed with mood or anxiety (0.1) |
| | | Self-Expression | Positive correlation with a sense of fulfillment (0.3) |

DISCUSSION

The comparison of social media impacts on the mental well-being of young students and elderly individuals revealed intriguing insights into their usage patterns and associated mental health indicators^[10]. The observed higher stress and anxiety levels among young students correlated with their predominant use of social media for connectivity and entertainment^[11]. Conversely, the elderly, utilizing social platforms primarily for information seeking and family connections, showcased lower stress and anxiety levels but grappled with feelings of isolation, particularly notable in their negative correlation with social connectivity^[12]. These findings underscored the divergent impacts of social media usage on loneliness and isolation across age groups, indicating the varied psychological needs and influences of digital engagement^[13]. Moreover, the study highlighted the nuanced associations between different purposes of social media use and mental

health indicators within each age cohort^[14]. For young students, social connectivity emerged as a crucial factor, positively correlating with alleviated feelings of loneliness^[15-17]. Conversely, among the elderly, social connectivity exhibited a significant negative correlation with feelings of isolation, emphasizing its pivotal role in combating social detachment within this demographic^[18-19]. Additionally, self-expression emerged as a positive contributor to a sense of fulfillment among the elderly, indicating the potential psychological benefits of creative digital engagement in older age groups.

These findings underscore the need for tailored interventions and awareness campaigns that recognize the distinct social and emotional needs of different age demographics. For young students, strategies focusing on fostering healthy connectivity and reducing social comparison pressures might be pivotal, while initiatives for the elderly should aim at mitigating feelings of isolation through enhanced social connectivity.

CONCLUSION

It is concluded that social media usage manifests distinct impacts on the mental health of young students and elderly individuals, delineating divergent patterns in stress, anxiety, and feelings of isolation. The study revealed the crucial role of social connectivity for both cohorts, albeit with contrasting effects on loneliness and isolation. These findings emphasize the necessity for tailored interventions and educational initiatives to address age-specific mental health concerns stemming from social media usage, developing healthier digital environments across generations.

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