Digital Overuse in Pakistan: Understanding the Mental, Social, Spiritual, and Physical Consequences of Mindless Scrolling

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ABSTRACT

Mindless scrolling, defined as the passive and purposeless consumption of digital content, has become increasingly prevalent worldwide. While its psychological and social consequences have been documented, less attention has been given to its impact on spiritual practices and cultural contexts. This study explored the mental, social, spiritual, and physical effects of mindless scrolling in Pakistan using a mixed-methods design. Survey data were collected from 57 participants (mean age = 21.4 years, 68% female) and complemented with in-depth qualitative interviews. The results showed that a majority engaged in purposeless scrolling, with late-night use strongly associated with fatigue, impaired focus, and disrupted sleep. Significant proportions also reported delaying religious practices, experiencing social withdrawal, and suffering physical strain such as eye discomfort. Qualitative narratives provided deeper insight, revealing cases of disrupted lifelong religious habits, exposure of children to harmful content, and youths engaging in risk behaviors influenced by online material. These findings demonstrate that mindless scrolling is not a harmless habit but a multidimensional issue intersecting with faith, family, and wellbeing in Pakistani society. The study underscores the need for culturally grounded interventions—such as digital literacy programs, time-tracking tools, and faith-based reminders—to mitigate risks and promote intentional digital engagement.

Keywords: Mindless Scrolling; Digital Wellbeing; Attention; Social Relationships

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1. INTRODUCTION

In recent years, the use of digital platforms has grown rapidly, with young adults spending a significant portion of their daily lives online. One emerging pattern of technology use is *mindless scrolling*; defined as the endless, passive consumption of online content without a clear purpose or intention. Unlike deliberate searching or communication, mindless scrolling often occurs automatically, consuming time without awareness and leaving individuals with little benefit from the content they engage with.

This behavior is increasingly relevant in today's digital era because of its broad implications for wellbeing. Rising screen time has been linked to sleep disruption, reduced productivity, impaired focus, and heightened mental health concerns such as stress, anxiety, and low mood. Beyond mental health, mindless scrolling has started to interfere with social relationships, as time spent online can replace meaningful face-to-face interactions or delay communication with others. And more than all people are drifting away from their spiritual or religious self because of over usage or mindless scrolling on phone. Additionally, frequent use during late-night hours can negatively affect physical health, particularly through eye strain, fatigue, and poor sleep quality.

While many studies have examined the psychological and social consequences of excessive screen use, less attention has been given to the spiritual or religious impacts of digital habits. In South Asian contexts, where spiritual and religious practices are an important part of daily life, technology use has interfered with prayer routines, focus, and reflection. This is a relatively underexplored dimension of digital wellbeing research and adds a unique contribution to the literature. The purpose of the present study was to explore the prevalence of mindless scrolling and examine its impact on multiple domains of wellbeing: mental, social, spiritual, and physical wellbeing.

2. METHODOLOGY

Design & Participants.

We designed a survey of people from different regions of Pakistan to know about their choices between 20 July and 15 August. We invited them to survey by putting Instagram stories, sending the survey in group chats of universities and by sending personal messages to many people who are living in rural areas. We conducted a survey of under 15 children under our supervision to

get the most accurate responses. We included people from every age group. Our inclusion criteria were age and areas they belong to, and if they own a digital device or not. The final analytic sample comprised of N = 57.

Measures.

Self-developed and anonymous questionnaire is used to conduct the survey named "*Mindless Scrolling Survey: Understanding Its Impact".* Mindless scrolling is defined as the habitual use of smartphones or digital devices without any clear purpose or motivation, characterized by prolonged engagement with content perceived as unimportant, non-educational, or personally irrelevant. The questionnaire included:

- **Demographics** (age, gender, location, education level, occupation).
- **Phone usage patterns** (e.g., daily hours spent on phone, most-scrolled content type, timing of scrolling).
- **Indicators of purposeless scrolling** (e.g., "Do you often scroll your phone without any specific purpose?").
- **Psychological outcomes** (e.g., feelings after long scrolling, trouble focusing, shame about time spent).
- **Religious/spiritual impacts** (e.g., delaying or skipping religious activities, feeling distant from spiritual self).
- **Social impacts** (e.g., ignoring people in real life, complaints from others).
- **Cognitive effects** (e.g., difficulty recalling recent content, forgetting tasks due to distraction).
- **Motivational factors** for continued scrolling.

Responses were collected through Google Forms and all items were self-reported.

Qualitative Methods.

In addition to the survey, semi-structured interviews were conducted with selected participants across different age groups. The purpose was to capture in-depth personal experiences of how smartphone overuse and mindless scrolling influence daily life, spirituality, relationships, and health. A total of six narratives

were collected, ranging from young children to older adults. The interviews were analyzed using thematic analysis, allowing key patterns and case examples to emerge. All participants' names were anonymized to protect identity.

Procedure & Ethics

It took almost 5-7 minutes for every person to complete this survey. We took their informed consent before starting. We also informed all participants that their identity will remain hidden and no identifying information would be collected. All responses were stored anonymously and analyzed in aggregate. Ethical guidelines for research with human participants were followed. At the end of the survey, participants were provided with a short guide on digital wellbeing and mental health.

Analysis Plan

Data was analyzed using descriptive statistics like frequencies, percentages, means and graphs to summarize phone usage patterns and check its impacts. Associations between mindless scrolling and mental, social, religious, and physical wellbeing indicators were examined using correlation tests and cross-tabulations.

Transparency Statement

Although the survey was completed before finalizing the analysis plan, all analytic decisions were documented before examining results. The dataset was preserved in its original form prior to statistical analysis.

3. RESULTS

Sample Characteristics

The demographic profile of the participants includes total responses as **N** = 57

age (categories): 15–20 (40.4%), 21–30 (26.3%), under 15 (17.5%), 41+ (14.0%), 31– 40 (1.8%), **gender distribution:** 77.2% female, 22.8% male, l**ocation:** Semi-urban 56.1%, Urban 26.3%, Rural 17.5%, **Occupation:** Student 49.1%, Employed 12.3%, Unemployed 10.5%, Intern 1.8%, **Other** 26.3%.

Table 3.1. *Participant Demographics*

Indicator	n	%
Gender (Female)	44	77.2
Gender (Male)	13	22.8
Location (Urban)	15	26.3
Location (Semi-Urban))	32	56.1
Location (Rural)	10	17.5
Occupation (Student)	28	49.1
Occupation (Employed)	7	12.3
Occupation (Unemployed)	6	10.5
Occupation (Other)	15	26.3

Phone Usage Patterns

Average daily phone use: M = 8.17 hours (SD = 5.10). Most commonly scrolled content (top): Reels, Funny, Mix, Instagram, YouTube Shorts (free-text). Peak scrolling time: Night is most common, 35.1% report scrolling "at night".

Indicators of Mindless Scrolling

- Scroll without a specific purpose: 66.7% Yes (17.5% Sometimes, 15.8% No)
- Feel ashamed about time spent: 27.3% Yes
- Forget tasks due to scrolling: 51.8% Yes
- Cannot recall 3–5 videos from yesterday: 69.0% No (i.e., unable to recall)

Table 3.2. *Mindless Scrolling Indicators*

Indicator	n	%
Scroll without purpose (Yes)	38	66.7
Feel ashamed on-screen time (Yes)	15	26.3
Forget tasks due to scrolling (Yes)	29	50.9
Cannot recall 3-5 videos from yesterday (No)	29	50.9

Impact on Mental Wellbeing

- Trouble focusing after phone use: 45.6% Yes, 28.1% Sometimes, 26.3% No
- Feelings after long scrolling: Negative/Drained 31.6%, Positive 14.0%, Neutral/Unclear 54.4%
- Correlation between daily hours and focus problems: $r = -0.10$

Impact on Social Life

- Ignored/delayed responding to someone in real life: 54.4% Yes
- People complain "you're always on your phone": 53.7% Yes

Impact on Religious/Spiritual Life

- Delayed or skipped religious activities: 47.3% Yes
- Feel spiritually distant due to scrolling: 35.2% Yes
- Consumed content against moral/religious values & felt regret: 49.1% Yes

Impact on Physical Health

- No direct sleep-disruption item in this survey. However, 35.1% report night-time as their peak scrolling window, which suggests potential sleep displacement.
- No direct item on eye/neck strain in this survey.

Interest in Reducing Screen Time

- Willing to join a workshop/challenge: 43.9% Yes, 28.1% Maybe, 28.1%

4. SUMMARY OF KEY FINDINGS

- Mindless/purposeless scrolling is common (≈ two-thirds report it).
- Memory/attention costs show up clearly: over half forget tasks, and ≈69% can't recall yesterday's short-form content.
- Social friction is notable (≈54% ignore/delay real-life responses; ≈54% receive complaints).
- Religious impact is substantial (≈47% delay/skip activities; ≈49% regret value-inconsistent content).
- Night-time use is frequent (35%), a likely risk for sleep disruption.
- Readiness to change is good: ~44% would join a reduction challenge,

Notes on the Data

Age was collected in ranges, so it was reported category percentages. Content type, feelings and some motivations were taken as free-text. The top labels were as written as; we can standardize these categories further if you like. Finally, hours were messy text (e.g., "5h", "5–6 hrs.") and were analyzed them to numbers at the 1st/99th percentiles
to soften extreme outliers.

5 QUALITATIVE RESULTS

Theme 1: Physical Health Impacts

Mindless scrolling was linked with visible physical consequences, particularly in children.

- **Case Example:** A 5-year-old child was reported to use a phone excessively. As a result, he developed eyesight problems requiring glasses. More critically, his social and cognitive abilities were impaired; he stopped interacting with people and showed little awareness of his surroundings. This highlights the developmental risks of early and uncontrolled digital exposure.

Theme 2: Mental Health and Body Image

Social media exposure reinforced negative beauty standards, leading to harmful behaviors.

- **Case Example:** A 7-year-old girl, previously cheerful, became depressed after constant comparisons with beauty ideals online. Believing she was "not fair enough," she experimented with multiple whitening remedies her mother used. Ultimately, she applied bleach on her face, which resulted in painful burns. This narrative reflects the psychological damage of online beauty culture on impressionable children.

Theme 3: Social and Relational Consequences

Digital reliance for social connection sometimes places individuals in dangerous situations.

- **Case Example:** A 17-year-old girl, feeling isolated and friendless, turned to social media for companionship. Encouraged by her new "friends," she met them offline, which led to sexual exploitation and eventual rape. The case reflects the vulnerability of adolescents who confuse virtual validation with authentic relationships.

Theme 4: Spiritual Disruption

Religious and spiritual practices were also negatively affected by phone overuse.

- **Case Example 1:** A 56-year-old woman, who had faithfully performed all daily prayers since her youth, reported that after owning a smartphone, she began missing her prayers frequently due to distraction and habit of scrolling.

Table 3. *Case Narratives Summary of Interview Findings*

Participant	Gender	Key Issue	Reported Impact
Case 1	Male	Excessive phone use	Developed eyesight problems, became socially withdrawn, impaired awareness of surroundings.
Case 2	Female	Body image influenced by social media	Became depressed, attempted skin whitening remedies, burned face with bleach.
Case 3	Male	Exposure to explicit content	Harassed cousin after imitating behavior learned on social media.
Case 4	Female	Online friendships	Met strangers from social media,

		leading to exploitation	exploited, experienced trauma.
Case 5	Male	Religious scholar influenced by sexualized content	Engaged in multiple immoral relations, got health problems linked to social media exposure

6 DISCUSSION

Overview of Findings

This study examined the phenomenon of mindless scrolling and its impact on multiple aspects of life, including mental wellbeing, social relationships, religious commitment, and physical health of people at different stages. Findings indicate that purposeless digital use is widespread among participants, with a substantial proportion engaging in prolonged scrolling sessions, particularly during late-night hours. Importantly, participants reported adverse consequences across several domains, suggesting that mindless scrolling is not merely a benign pastime but a behavior with tangible effects on daily functioning.

Night-Time Scrolling and Psychological Vulnerability

A central finding was that most respondents acknowledged scrolling without a specific purpose, often continuing despite recognizing the activity as unproductive. Night-time scrolling was particularly prominent, consistent with studies demonstrating that late-night screen exposure disrupts circadian rhythms and reduces sleep quality, leading to fatigue and impaired concentration.

In addition, late-night scrolling appeared closely tied to heightened sexual curiosity and risky behaviors. Participants described experiencing stronger sexual urges at night, a time when individuals are often alone and more vulnerable. Exposure to explicit online content during these hours intensified such urges, in some cases leading to compulsive consumption or experimentation. This finding aligns with neurobiological research suggesting that sexual arousal peaks at night due to hormonal rhythms, while the availability of unsupervised phone use increases the likelihood of engaging in risky behaviors.

This study's findings echo global concerns about children's digital safety. For instance, a case was raised directly to Mark Zuckerberg questioning how children under 15 were still able to access nudity on Facebook. Such incidents

underscore the failure of algorithmic moderation and the inadequacy of platform safeguards, especially in protecting minors. In the Pakistani context, where parental monitoring of digital activity may be limited, the risks are compounded."

Mental and Cognitive Health Consequences

The psychological and behavioral consequences reported here, including mental fatigue, concentration difficulties, and memory lapses, align with literature linking passive screen time to reduced attention span and cognitive overload. Social withdrawal and a decline in meaningful face-to-face interaction further illustrate the cognitive and emotional toll of overuse. For younger participants, developmental concerns such as speech delays and reduced social interaction were evident, suggesting that mindless scrolling can hinder early cognitive growth.

Social Relationships and Risks of Exploitation

Participants described delaying or neglecting real-life interactions, echoing concerns that digital overuse erodes interpersonal relationships. Qualitative narratives revealed more serious consequences among adolescents, including exposure to online grooming and peer pressure. One case illustrated a 12-year-old boy engaging in inappropriate behavior after encountering explicit material on social media, while another highlighted a 17-year-old girl who, seeking companionship online, was exploited. These cases emphasize how unregulated digital exposure can place adolescents at risk of exploitation and moral compromise.

Spiritual and Religious Practices

A notable contribution of this study lies in documenting the spiritual and religious dimensions of mindless scrolling. Several participants reported delaying or missing religious practices due to excessive scrolling, while others expressed regret after engaging with content perceived as incompatible with their moral or spiritual values. One striking case involved a 56-year-old woman who had never missed a prayer until she developed a habit of late-night scrolling, leading to frequent prayer delays. Another involved a young imam whose excessive online exposure contributed to behaviors that conflicted with his religious role, ultimately resulting in severe health consequences. Such findings highlight the cultural specificity of technology's impact, particularly in South Asian contexts where religion plays a central role in daily life. They underscore that digital addiction is

not merely a lifestyle issue but also a moral and spiritual challenge.

Physical Health Outcomes

Physical health consequences were also apparent. Disrupted sleep patterns, eye strain, and musculoskeletal discomfort were frequently reported, consistent with prior evidence linking extended screen exposure to posture-related discomfort and digital eye strain. For youth, the impact was more severe, including vision problems and developmental delays, illustrating the vulnerability of access users.

Case Study Insights: Human Costs of Mindless Scrolling

The qualitative cases collected in this study add depth to the survey findings by showing how digital overuse translates into real-life consequences The observations of children showed vision problems, delayed speech, and reduced awareness of their surroundings. Like adolescents faced exploitation, identity struggles, and self-harm behaviors (e.g., a girl burning her skin while attempting to lighten her complexion after online comparison). While young adults reported social isolation, risky relationships, and sexually compulsive behaviors influenced by online exposure. Finally older adults experienced disruption of lifelong religious habits and weakening of spiritual commitment. Overall, these narratives illustrate that in the Pakistani cultural and religious context, digital addiction intersects with faith, family honor, and moral values—dimensions rarely addressed in Western literature but highly significant in South Asian societies.

7. IMPLICATIONS FOR INTERVENTION

Despite these concerns, findings also point to opportunities for intervention. A large proportion of participants expressed willingness to reduce screen time and interest in structured strategies, such as workshops or digital detox programs. Tailored interventions could include digital literacy training, faith-based reminders, time-tracking apps and motivational prompts and Parental guidance workshops to safeguard children from harmful contact.

8. LIMITATIONS

Several limitations should be acknowledged when interpreting the

findings of this study. First, the sample size was relatively small (N = 57) and primarily composed of young female students, which may restrict the generalizability of results to other demographic groups such as males, older adults, or working professionals. Second, the study relied on self-reported data, which is inherently prone to recall bias and potential under- or over-estimation of phone use and its effects. Third, the cross-sectional design limits the ability to draw causal inferences between mindless scrolling and its reported consequences; it remains unclear whether scrolling causes these outcomes or whether individuals experiencing such difficulties are more likely to engage in purposeless device use. Finally, the study did not employ objective measures of screen time (e.g., digital tracking applications), which could provide more accurate and reliable insights into usage patterns.

9. CONCLUSION

This study demonstrates that mindless scrolling is not a trivial or harmless pastime but a behavior with measurable effects across mental, social, spiritual, physical, and even sexual domains. The findings show that purposeless digital use, particularly during late-night hours, disrupts focus, undermines interpersonal relationships, weakens spiritual discipline, and contributes to physical discomfort and health risks. The qualitative interviews further illustrate how scrolling can erode lifelong religious habits, expose children to harmful content, and encourage risky behaviors among adolescents. Importantly, the Pakistani context highlights that digital overuse is not only a personal issue but also one with moral, cultural, and religious implications. The overlap between faith, family honor, and digital behaviors underscores the need for a culturally grounded understanding of technology's influence.

Despite these concerns, the study also revealed an encouraging openness to change. Many participants expressed readiness to adopt healthier digital habits, suggesting that with appropriate tools and interventions, meaningful progress is possible. Taken together, these findings emphasize that mindless scrolling is both a public health issue and a cultural challenge, requiring interventions that are as multidimensional as the problem itself.

10. IMPLICATIONS FOR PRACTICE

The findings of this study carry important implications for educators, health professionals, and community leaders seeking to address the growing issue of mindless scrolling. First, the willingness of participants to reduce their screen time highlights an opportunity for preventive interventions, such as digital detox challenges, awareness campaigns, and workshops promoting intentional technology use. Second, since late-night scrolling was reported as a peak behavior, practical strategies like screen curfews, bedtime routines, and app-based usage reminders may be particularly effective in improving sleep quality and overall wellbeing.

On the social and relational level, incorporating family-based or peer-led accountability systems could help individuals balance online and offline interactions. The reported spiritual impact also underscores the need for faith-based initiatives—such as motivational reminders linked to prayer times or content promoting mindful engagement that may resonate strongly in culturally and religiously oriented societies. Finally, healthcare providers, particularly in mental health and primary care, should consider routinely assessing screen habits as part of lifestyle evaluations, just as they assess diet, exercise, or sleep. Addressing digital wellbeing through counseling, workshops, and integration into wellness programs could play a significant role in reducing the psychological, social, and physical strain associated with purposeless digital consumption.

11. RECOMMENDATIONS

Educational Programs

Develop school- and community-based awareness initiatives on the psychological, social, and spiritual harms of excessive scrolling and include digital literacy modules that teach intentional and value-driven use of technology.

Workshops and Challenges

Offer structured digital detox challenges, family-based screen-free routines, or university-led awareness weeks and send faith-based reminders (e.g., prayer notifications, Quranic verses) can be incorporated to align interventions with cultural values.

Technology-Based Self-Monitoring Tools

Encourage the use of screen-time tracking apps, app blockers, and bedtime mode features and promote reflection prompts or "are you scrolling with purpose?" pop-ups designed to break passive use cycles.

Healthy Alternatives

Provide access to safe leisure options such as exercise programs, in-person community events, and family-centered activities and encourage offline spiritual practices like group prayers or Quranic study circles to counter digital distractions.

Policy and Regulation

Advocate for stricter age-appropriate content filters on platforms accessible to Pakistani youth and collaborate with tech companies to prevent exposure of minors to explicit content, addressing cases where children as young as 12 encountered harmful material.

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