

# Nomophobia May Increase the Risk of Anxiety, Depression, and Social Isolation

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Mobile phones are powerful communication devices, first demonstrated by Motorola in 1973, and became popular during the cellular revolution that started in the 90s. In 1990, there were around 11 million mobile phone users; by 2023, there are 7.33 billion mobile phones (including both smart and feature phones) users worldwide or 91.21% of the world's population.<sup>1</sup> The first smartphone (the cellular phone with an integrated computer and other functions that weren't necessarily intended for phones) was invented in 1992 by International Business Machines Corporation (IBM) and made available to the public in 1994. In 2023, there are 6.92 billion smartphone users worldwide or 86.11% of the world's population.<sup>1</sup> The statistics indicate that the mobile phone is becoming an integral part of human life.

In the last decade, the cell phone has become one of the most ubiquitous communication gadgets. The development of technology has both pros and cons. It's also applicable to the mobile phone revolution. Truly the smartphone helped during the COVID-19 pandemic period to all age groups of people and made life very easy without travelling, especially for students, academicians, officers and IT staff. Same time, prolonged use of smartphones is caused mobile phone dependency. Mobile phone dependence/overuse of mobile phones may lead to mental problems, mood dysfunction, behavioral problems, decreased real-life social interaction, relationship disorders and reduced job/ academic performance.<sup>2</sup>

*“Mobile phone addiction, also known as mobile phone dependence or problematic mobile phone use, is a combined state in which excessive psychological craving and mobile phone overuse lead to significant physiological, psychological, and social impairment”*<sup>3</sup> The prevalence of mobile phone addiction is increasing among adolescents and young adults. According to studies, mobile phone addiction can have a serious negative impact on an individual's physical and mental health. It can disrupt attention, affect academic performance, lower life satisfaction, increase

depression, anxiety, and stress, and potentially lead to sleep disorders, suicidal thoughts, and non-suicidal self-injury.<sup>3</sup>

Losing a signal, running out of battery or losing sight of the phone causes a negative impact on health and it causes “no-mobile-phone phobia” or “nomophobia”. Nomophobia is defined as “the fear of being out of mobile phone contact”<sup>4</sup> Nomophobia has been labelled as a “phobia for particular/specific things”, based on definitions given in the Diagnostic and Statistical Manual of Mental Disorders, 4<sup>th</sup> Edition (DSM-IV).<sup>5</sup>

The word "NOMOPHOBIA" was coined in 2008 by the United Kingdom Post Office during a survey commissioned by YouGov, a UK-based research organisation. According to research on mobile phone use in the UK, more than half of the population suffers from nomophobia.<sup>6</sup> The reasons for nomophobia are usually self-evident. Addiction to mobile phones is the main cause of nomophobia. Risk factors of nomophobia include low credit on mobile account, no service, lost mobile phone or fearing that the phone could be lost or stolen, fear of no mobile signs, broken or malfunctioning mobile phone and running out of battery. The signs and symptoms of nomophobia include anxiety, respiratory alterations, trembling, perspiration, agitation, disorientation and tachycardia.<sup>7</sup> Tolan *et al.*, studied the relationship between the nomophobia levels of university students and their Depression-Anxiety-Stress Levels using Depression Anxiety and Stress Scale (DASS-42) and found a positive correlation between nomophobia and depression-anxiety-stress levels.<sup>8</sup>

The prevalence of nomophobia is increasing among the youngster which is an alarming condition that needs to be addressed. Dixit *et al.* 2009 reported that about 73% of students kept their mobile phones for 24 × 7 hr and 20% of students stressed when they do not have their mobile phones or their mobile batteries is drained. In this study, authors also found that 19.26% of hostellers and 17.58% of day scholars were found to be nomophobic. The study also revealed that 50% nomophobias never switch off their mobile phones.<sup>9</sup> Kumar *et al.*, investigate nomophobia in 2061 Indian students (52.9% of the respondents were male, and 47.1% were female) and found that 74.8% of the participants had moderate levels of nomophobia, whereas 18.9% of the individuals had severe levels of nomophobia. This study revealed that males have nomophobia to a greater extent than females.<sup>10</sup> Among adolescents, males' gender have more



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Nomophobia Questionnaire (NMP-Q) scores than females.<sup>11</sup> In another study, Husniesham *et al.*, observed no significant difference in the level of nomophobia across gender among study participants.<sup>12</sup> In meta-analysis study on nomophobia among Turkish people revealed that females had higher mean nomophobia scale scores than males.<sup>13</sup>

Nomophobia is also linked to the fear of being unable to communicate, losing one's connection, feeling lonely, and losing one's comfort.<sup>14</sup> Mushtaque *et al.*, conducted a study of nomophobia, and social isolation among Pakistani students and found a positive relationship with coronavirus anxiety ( $r=0.311$ ) and a positive relationship with social isolation ( $r=0.112$ ) with mobile phone usage. Also observed a positive relationship between nomophobia and social isolation ( $r=0.161$ ).<sup>15</sup>

Nomophobia is associated with problematic internet use, an increase in time spent online, and it relates to the unjustified panic that arises when someone is away from their mobile phone.<sup>14</sup> Nomophobia progresses through different stages (initiation, affirmation, need, and dependency) and manifests in a multitude of ways, including socially, physiologically, and physically. This strong dependency results in feelings of anxiety, fear and panic when not being able to use the mobile phone. The feeling of dependence on mobile phones leads people to avoid the real world in favour of their own, emotional instability, attention problems and poor performance at work. Additionally, this uncontrollable dependence can lead people to sacrifice or limit their hours of sleep, food, interpersonal relationships, loss of empathy, psychosomatic symptoms such as discomfort in the bones, joints, eyes or ears, and psychological symptoms such as sadness and depression.<sup>16</sup>

Nomophobia is an emerging mental health condition and can be provided in many ways including encouraging face-to-face conversation, making phone-free periods every day and keeping the phone at least 15 feet away from the bed during sleep.<sup>7</sup>

## CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

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