



## Smartphone Addiction of Adolescents, Not a Smart Choice

The smartphone market opened when Samsung and Apple launched “Omnia” and “iPhone,” respectively, in 2007. These remarkable devices eventually attracted development of applications that can be used for the treatment of mental illness, such as addiction, but at the same time is identified as a cause of addiction of thousands of people, leading them to be called smartphone zombies. Despite the various advantages of smartphones, smartphone addiction is quickly spreading and becoming a major problem in the world (1,2). This new phenomenon is rapidly increasing in a manner completely different from the prevalence of other addiction illness due to the ease of portability, excellent accessibility, and multiple internet-based applications unique to smartphones (1). This aspect is becoming a more serious and widespread problem in Korea, a so-called “wired nation,” than other countries (3).

However, there still is a disagreement in terms of measuring withdrawal and tolerance in psychiatry, and there is a tendency to use more non-pathological terminology, such as “Problematic Smartphone Use,” rather than the term smartphone addiction (2,4). In addition, since there have been very few papers aiming to clarify the disease entity of smartphone addiction, there is a serious gap between the growing academia and the physically and psychologically problematic situation including ophthalmologic, orthopedic, and sleep disorders due to smartphone use, which is soaring in the general society. In particular, adolescents have been identified as a major risk group for this smartphone addiction (3,4). Adolescence is a period when brain development is vulnerable to addiction and also is at a high level of risk culturally. Due to the dreadful, world-renowned Korean study schedule and scarce sleep of children, smartphones might be their only friend and entertainment. Nevertheless, academic research on smartphone addiction is directed at general adults or college students, therefore, studies of various forms of smartphone addiction for adolescents are required.

In this volume, researchers reported the incidence of smartphone addiction, patterns of smartphone use and risk factors associated with smartphone addiction among adolescents in Korea (5). In this study, the biggest reason for smartphone usage among teenagers in the addiction group was habitual use, and surprisingly, the most commonly used function was “online chat,” not “games,” or “SNS.” In addition, this study identified preoccupation, tolerance, lack of control, withdrawal, mood

modification, conflict, lies, excessive use, and loss of interest as a risk factors of smartphone addiction like in other addictions, and special attention is needed in adolescents since these factors could affect family relationships as well as peer relationships in schools and cause long term sequela. Moreover, the results of this study have more significant social implications since smartphone addiction affects more various aspects of everyday life than internet addiction or existing mobile phone addiction, according to previous studies. Another point that we should note in this study is that even though teenagers in the addiction group recognize that their use is problematic, their parents are more likely to use ‘punishment’ to correct this. This could be in line with a recent study analysis which reported both excessive parental expectation and lack of parental education increased the likelihood of children becoming addicted to smartphones (4). Finally, it should be noted that although the risk of general addiction was higher in boys than in girls, except for shopping addiction, smartphone addiction was higher in girls (3,5). Possible estimation theory for this phenomenon may be related to the findings of previous studies that smartphone addiction is associated with depression and that the proportion of depression in girls at this adolescent period is higher than that of boys (2). Problems of preoccupation and conflict symptoms are greater than the tolerance and withdrawal symptoms, which are more common major features than those of other addictions, should be considered as unique characteristics of smartphone use addiction differentiating it from other addictions.

Although careful attention should be paid in interpreting the results of the study since this is a cross-sectional study of only one junior high school in a Korean metropolitan area, it is significant that this study pointed out the need for not only clinicians’ but also policy makers’ recognition of the seriousness of adolescent smartphone addiction. The study also provides related risk factors and recommends correction and prevention methods. Specialists should focus on treating adolescent smartphone addiction and urgently prepare treatment guidelines for this in Korea.

### DISCLOSURE

The author has no potential conflicts of interest to disclose.

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