Internet addiction among Saudi Arabian youth

Juliann Saquib

Department of Clinical Sciences, Sulaiman Al Rajhi University, Al-Bukariyah 51941, Al-Qassim, Saudi Arabia

Address for correspondence:
Juliann Saquib, Sulaiman Al Rajhi University, PO Box 777, Al-Bukariyah 51941, Al-Qassim, Saudi Arabia. Phone: 966507136832. E-mail: jsaquib11@gmail.com

Internet addiction is a fast-rising problem in Saudi Arabia, particularly affecting adolescents and young adults. Among this age group, prevalence estimates for internet addiction in 2014–2015 were between 4% and 6%,\(^1\) while the estimates in 2019 are in the range of 30–60%.\(^2\) These studies generally indicate a steady rise in prevalence although some variation may be due to the differences between studies in sample composition and characteristics as well as the terminology and tools that were used to define and assess the addiction problem.

A number of reasons are potentially behind this rising prevalence of internet addiction. The internet coverage in Saudi Arabia has gone up ten-fold in the last decade, so more than 90% of its population now have an internet connection. Most adolescents have access to electronic devices (e.g., smartphones, tablets, and computers), and an overwhelming majority of them use it in excess of the recommended level (age: 14–19, use: > 2 h/day, boys: 84%, and girls: 91%).\(^3\) Some social media applications (e.g., WhatsApp, Snapchat, and Twitter) are particularly popular. The inclement weather of Saudi Arabia (e.g., extreme heat during summer months) likely increases their use of digital media by forcing them to stay inside during the daytime.

Among studies with high school and university student samples, the data indicate that Saudi females are equally, if not more, addicted to the internet than Saudi males. A study of female university students from Dammam reported that around two-thirds of the sample had either problematic internet use (38%) or internet addiction (30%).\(^4\) Another study from the Al-Hassa region showed that females were more likely to have internet addiction than males (50% vs. 38%).\(^5\) The fact that the prevalence is so high among females is understandable in the context of socio-cultural norms in the society; females spend more time indoors because there are fewer outdoor and extracurricular activities for them compared to males. In addition, the motivation for internet use for females is different than for males; while males tend to use it more for gaming, females use it for interpersonal reasons.\(^6\)

Internet addiction leaves an extensive negative effect on the lives of adolescents. The physical health consequences include, but are not limited to, obesity, decreased physical fitness, and vision and musculoskeletal problems.\(^7\) The psychosocial consequences of internet addiction include increased loneliness, stress, and depression, as well as lowered self-esteem. Internet addicts are more likely to report sleep problems, poor academic performance, and strain in relationships with friends and family.\(^8\) Quality of life (physical and mental health assessed with SF-36) is lower in addicts than non-addicts.\(^9\) Internet addiction during adolescence affects nearly every aspect of life.

Studies from around the world, particularly those from Southeast Asia, indicate that family plays a crucial role in the development of internet addiction. Addiction is more likely among families with single or divorced parents, interparental conflict, and parent-child conflict. Similarly, less quality time among family members is associated with internet addiction among children.\(^10\) Very few studies on the relationship between family factors and internet addiction have been conducted in Saudi Arabia. Those studies reported that lower levels of parental control and parents with low socio-economic status/income were more likely to have children with an internet addiction.\(^11\) One study showed that parents were keen to monitor their children but lacked effective strategies and resources to do so.\(^12\) Even these few studies lacked methodological rigor and generalizability because they had non-random sampling and were conducted locally. However, Saudi Arabia is an ideal environment to study family-related factors (both risk and protective) for internet addiction in depth. The Saudis have a hierarchical society where elders wield a great deal of influence on youngsters. They tend to have a large family (6+ children) and maintain close relationships with both first- and second-degree relatives. Many of them keep multiple wives in separate houses and see them and their respective children on a rotational basis. Saudi society is religiously conservative and greatly emphasizes modesty, abstinence, and restraint. However, these values are being fundamentally challenged in this information age, with the youth feeling the biggest impact.
The evidence available for the treatment of internet addiction is forthcoming, but most studies have been conducted in either Western countries or in Southeast Asia. None of them were from Saudi Arabia. Both pharmaceutical and psychological interventions have been tested on internet addicts. Pharmacological treatments have been focused on selective serotonin reuptake inhibitors and dopamine regulators (e.g., escitalopram, methylphenidate, and bupropion) because of their effectiveness in other psychological conditions such as obsessive-compulsive disorder (OCD), attention deficit disorder, and substance use disorder. Psychological interventions have included cognitive-behavioral therapy, family-based interventions, and counseling. There is some evidence that pharmacological and psychological interventions can reduce the severity of the addiction. Currently, it is recommended that these treatments be used in conjunction with one another. However, other reviews have identified a plethora of methodological issues in the studies related to internet addiction treatments, such as a lack of a control group, inconsistencies in terminology and definitions, and small sample sizes. More rigorous studies are needed before conclusions on the effectiveness of the treatments can be made.

The current scientific literature on internet addiction from Saudi Arabia has had several limitations. Most prevalence studies have been done locally or regionally and had a non-random sampling strategy, which limits the accuracy of the estimates and the generalizability of the findings. Epidemiological studies have not sufficiently investigated gender differences, family-related factors, or other potential risk factors associated with internet addiction. Furthermore, trials are needed to identify effective treatment methods.

**Recommendations**

- To conduct nationally-representative studies to investigate the prevalence of and risk factors for internet addiction in adolescents
- To understand the family factors associated with internet addiction
- To provide resources and information to parents to improve the family environment
- To provide community resources for families that have family members who are addicted to the internet.

**Conclusion**

These recommendations are directly in line with the Vision 2030 published by Saudi leaders. The Vision places high value on family unity and extended family relations. It also encourages parental involvement in children’s education and in planning for their future.

**References**

1. Alhantoushi M, Alabdulateef S. Internet addiction among secondary school students in Riyadh city, its prevalence, correlates and relation to depression: A questionnaire survey. Int J Med Sci Public Health 2014;3:1-2.
2. Abdel-Salam D, Alrowaili H, Albadawi H, Alesa A, Alifyadl H. Prevalence of Internet addiction and its associated factors among female students at Jaf University, Saudi Arabia. J Egypt Public Health Assoc 2019;94:1-8.
3. Al-Hazzaa HM, Al-Sobayel HI, Abahussain NA, Qalwaji DM, Alahmadi MA, Masaiger AO. Association of dietary habits with levels of physical activity and screen time among adolescents living in Saudi Arabia. J Hum Nutr Diet 2014;27 Suppl 2:204-13.
4. Barayan SS, Al Dabal BK, Abdelwahab MM, Shafey MM, Al Omar RS. Health-related quality of life among female university students in Dammam district: Is Internet use related? J Family Community Med 2018;25:20-8.
5. Khan H, Gadhoum Y. Measuring internet addiction in Arab based knowledge societies: A case study of Saudi Arabia. J Theor Appl Inf Technol 2018;96:1500-18.
6. Dufour M, Brunelle N, Tremblay J, Leclerc D, Cousineau MM, Khazaal Y, et al. Gender difference in internet use and internet problems among Quebec high school students. Can J Psychiatry 2016;61:663-8.
7. Bener A, Yildirim E, Torun P, Catan F, Bolat E, Aliche S, et al. Internet addiction, fatigue, and sleep problems among adolescents: A large scale study. Int J Ment Health Ad 2019;17:959-69.
8. Alhassan AA, Alqadhib EM, Taha NW, Alahmari RA, Salam M, Almutairi AF. The relationship between addiction to smartphone usage and depression among adults: A cross sectional study. BMC Psychiatry 2018;18:148.
9. Nafee H, Mohammed B, Al-Hamdan A. Effect of excessive internet use in Saudi and Egyptian teenagers’ health: Comparative study. J Nurs Educ Pract 2018;8:25-35.
10. Li W, Garland E, Howard M. Family factors in internet addiction among Chinese youth: A review of Chinese and English languages. Comput Hum Behav 2014;31:393-411.
11. Shek DT, Zhu X, Dou D. Influence of family processes on internet addiction among late adolescents in Hong Kong. Front Psychiatry 2019;10:113.
12. Alqahtani N, Atkinson S, Furnell S, Stengel I. Internet Risks for Children: Parents’ Perceptions and Attitudes: An Investigative Study of the Saudi context. Internet Technologies and Applications; 2017. p. 98-103.
13. Kim S, Noh D. The current status of psychological intervention research for internet addiction and internet gaming disorder. Issues Ment Health Nurs 2019;40:335-41.
14. Zajac K, Ginley MK, Chang R. Treatments of internet gaming disorder: A systematic review of the evidence. Expert Rev Neurother 2020;20:85-93.