Streaming Wakefulness

Keywords: Gaming; Healthy lifestyle; Streaming equipment; Sleep quality; Computers

Editorial

Recent editions of Business periodicals such as Forbes revealed the earning capacity of online gaming and streaming [1]. A large population of online enthusiasts is growing due to both interest and now, documented increased earning power. The myriad of intrinsic and extrinsic reasons to begin online gaming and streaming is seen also in the variety of expressions of the gaming/streaming. From outlets to showcase skills at particular games to opportunities to provide helpful strategies to master various games, online gaming and streaming is well embraced by the populace. Statistics of the numbers engaging in online gaming and streaming, worldwide are unmeasured with estimates speculated at some 15% of the population. Indirect measurements such as game/game system/streaming equipment sales indicate a much higher number. Of note is that this is not an activity but a career choice for many. While the workspace is comfortable, and the work process engaging, the impact on healthy lifestyle is speculated to diminish. In striving for consistency in availability online, in presence online, personal lifestyle factors such as healthy diet, sleep and exercise/movement are minimized or eliminated. Ultimately, the need to sustain an online audience supersedes lifestyle factors. It is unknown if the process of the gaming, the online stardom of streaming or some other factors sustain the individual to consistent online gaming and streaming. The American Psychiatric Association has considered internet gaming disorder for future study and possible inclusion in the Diagnostic and Statistical Manual 5.

Sleep is a lifestyle factor that is minimized or ignored with online gaming and streaming. If an individual has work and family responsibilities, they are completed by a certain time to insure a substantive interval of online gaming/streaming time. This interval often places the individual in a schedule of late bedtime and reduced time of total sleep time. Then, the process of this type of schedule is continued the next night and onward. Additionally, the schedule may intensify in online gaming/streaming proximal to competition events. Intensifying this situation is the visual impact of the constant video screen exposure on the individual in terms of their sleep quality. Exelmans & VandenBuick [2] identified the negative impact of online gaming and sleep quality in adults using face to face interviews and standardized measures of sleep (i.e., Pittsburgh Sleep Quality Index) [2]. Analyses of sleep quality and online gaming self-reported variables indicated online gaming volume to be a predictor of poor sleep, fatigue, and insomnia [2]. Bedtimes were reported in the study to be delayed by 12 minutes with wakeup times delayed by twenty minutes. The attributable risk of having poor sleep quality due to gaming was 30% [2]. The screen exposure and arousal are concluded from both the Exelmans & VandenBuick [2] study as well as others to be significant influential factors to poor sleep. However, there are few studies of adult populations of online gamers/streamers and sleep quality in terms of screen exposure and arousal for informed medical decisions.

The situation of a large volume of adult gamers/streamers that is increasing, poses a challenge to Sleep Researchers and Sleep Specialists. The extent of the impact of the online gaming and streaming activity warrants further study. Longitudinal field studies measuring the impact in real time on these individuals would yield more information about the extent of the negative sleep quality obtained. Further, the video screen exposure and arousal factors merit a careful research focus as the experience and long term effects are unknown. Given the acceptance of computers, controllers, webcams and such, it may be a straightforward method of study to intervene by observation measurements on those variables (e.g., amount of online time, pupil size/changes via webcam measures, content analysis of verbal comments in terms of arousal levels, grading of game playing in terms of cognitive stimulation). This work is essential for the thoughtful planning of intervention to improve sleep quality and health in these individuals. The challenge to traditional interventions for poor sleep such as CBT will be for addressing the extent of online gaming and streaming in the initial needs assessment and the planning for limiting the amount and timing of this activity.

Acknowledgement

None.

Conflicts of Interest

The author declared that there are no conflicts of interest.

References


DOI: 10.15406/smdij.2018.02.00032