

Minor Gambling Poses Potential Risks to Adolescent Development

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Abstract: In recent years, the prevalence of gambling behavior among adolescents and the increasing trend of problem gambling has been supported by evidence in various countries. Therefore, the following literature content will integrate a variety of past research evidence to explore the question of “whether minor gambling behavior brings potential risks to adolescent growth.” However, most research data indicated that adolescents have psychological characteristics such as impulsivity and weak emotional regulation abilities, which make them more susceptible to external factors and increase the individual's risk of problem gambling. According to different gambling severity levels, which could be divided into four stages- non-problematic gambling, at-risk gambling, problem gambling, and pathological gambling. It is worth noting that the potential risks brought by gambling behavior among minors include cognitive biases behavior, psychological issues, indirect substance use, disharmony in family and social relationships, termination of academic schooling, and even participation in criminal or illegal activities. Since the potential risks brought by minor gambling will hinder their personal development in different aspects, schools and society should implement effective measures to help weaken teenagers' gambling intentions and prevent teenagers from developing serious level problem gambling. In addition to predicting adolescents' participation in gambling activities in advance through measures such as cognitive therapy, from an intervention perspective, effective strategies need to pay more attention to the minors themselves and their external environmental background.

Keywords: minor gambling illusion of control, cognitive biases behavior, psychological issues, indirect substance use

1. Introduction

In recent years, more adolescents have participated in gambling activities, and minor problem gambling phenomenon has been supported by evidence in various countries [1]. A study in Germany shows that approximately 40% of local adolescents participated in gambling activities in 2018, and minor problem gambling ranged from 1.7% to 2.2% [2]. Another study across 33 European countries showed that 22.6% of 16-year-old students have gambling experience [3]. Additionally, a 2019 study in Korea showed that 42% of adolescents had participated in gambling activities, and 1.1% of adolescents had problem gambling behaviors within the 3 months of the survey [4]. Notably, some psychological characteristics of adolescents such as impulsivity and weak emotion regulation ability

are more susceptible to external factors, increasing the risk of individuals developing Problem Gambling. Simultaneously, potential risks brought by minors' gambling behavior include cognitive biases behavior, psychological issues, indirect substance use, and school termination [5].

Moreover, with the convenience and accessibility of the gambling environment, especially the popularization of the Internet and mobile applications, the emergence of new forms of gambling (such as online sports betting, e-sports betting, and gambling games) has made it easier for teenagers to be exposed to gambling activities, thereby increasing their risk of problem gambling. It is worth mentioning that the prevalence of gambling among teenagers has led to differences in relevant laws and age supervision measures across countries. [6] In Hong Kong, the legal age for gambling is 18, but children and teenagers can participate in legal gambling activities under the supervision of adult family members [7]. Since 2011, Finland has officially raised the legal gambling age from 15 to 18 years old and removed some slot machines to reduce underage gambling [8]. In the UK, the Gambling Commission's 2022 annual report states that most gambling activities participated by children (11 to 16 years old) are legal or not subject to age restrictions, which means that these children and young people's gambling activities are not directly regulated by the Gambling Commission [9]. In general, minor gambling poses potential risks to adolescent development mainly related to cognitive level, physical and psychological levels, and school performance level of individual growth.

2. Potential Risks of Minor Gambling

First of all, cognitive biases increase gamblers' risk of problem gambling, which in adolescent gambling behavior mainly includes incorrect expectations of gambling results, overestimation of control, and reliance on luck and superstition. On the one hand, the "gambler's fallacy" that appears in adolescent gambling behavior leads adolescents to believe that they can implement specific strategies to control gambling outcomes, which increases the frequency of their continuous gambling and thus faces problem gambling [10]. Problem gambling refers to the behavior of individuals who continue to gamble frequently in the face of gambling losses and is related to individual psychological determinants, situations, and other influences [11]. On the other hand, the overestimated individual's ability to control gambling among adolescents is the illusion of control, thereby increasing the likelihood that they will frequently participate in gambling - in online activities with gambling characteristics (such as video games). These online gambling models not only provide young people with convenient gambling opportunities but also allow participants to ignore gambling losses through a continuous gambling mechanism. The study by Dr. Fu and Dr. Yu explored the cognitive prediction of problem gambling behavior among Chinese adolescents through a survey of more than 700 secondary school students in Hong Kong [12]. They found that the illusion of control may exacerbate gambling behavior and make adolescents psychologically dependent on gambling activities. Also, overestimating one's ability to control gambling outcomes continues to increase their financial burdens. The excessive illusion of control coupled with the inability to achieve the expected outcome may continue to cause other psychological problems in adolescents, such as anxiety and depression. Therefore, it is important to use cognitive therapy to identify and intervene in advance in the cognitive bias of the illusion of control in underage gambling [12].

Moreover, Except for the illusion of control, "luck and superstition" are also important predictors of underage problem gambling severity. First, when teenagers believe they have good gambling luck, they may become overly involved in gambling activities, Belief in Luck may lead them to have unrealistic expectations about winning in competitions; Next, the superstitious phenomenon in gambling is related to the cultural background of adolescents, especially in the Asian Chinese context: when the gambler feel lucky, the color Red may further stimulate gamblers' risk-taking awareness and behavior [13]. The evidence supports the correlation between minor gambling behaviors and cognitive bias, including erroneous overestimation of ability to control outcomes, gambler's fallacy,

and luck superstition. These cognitive distortions lead adolescents to have unrealistic expectations about gambling results, increasing their risk of problem gambling [10].

Furthermore, some teenagers use gambling to regulate and relieve negative emotions or stress as a form of negative reinforcement. Minor gambling behavior is related to escape coping strategies. Some adolescents choose to use "gambling escape" to cope with adverse environments [5]. The authors used a longitudinal research method to explore the relationship between different levels of adolescent development and gambling behavior intentions. Through surveying adolescents with an age range of about 10 years old in Hong Kong, China. It shows that different indicators in adolescent development are negatively related to adolescent gambling intentions. At the level of psychological development, these indicators include Impulsivity, Mental health factors, and ADHD. Also, research shows that adolescents use ineffective forms of "gambling escape" to avoid real-life stress and regulate negative emotions, the low self-regulation ability and high risk-taking tendency (impulsivity) aggravate minor gambling behavior, meanwhile, teenagers with gambling problems usually also show higher levels of anxiety. Adolescents who participate in frequent gambling activities tend to adopt more emotion-based, avoidant, and distracting coping strategies [5].

It is worth noting that minor gambling behavior is accompanied by substance use, which is also one of the potential risks in their development. It was found in an earlier 2014 study on disordered gambling behavior among Chinese students in Hong Kong, that participation in online gambling games was significantly related to substance use during gambling [12]. Additionally, in the study of Molinaro and other scholars, a survey on gambling behavior among teenagers in 33 European countries in 2018 found that participation in gambling behavior is highly correlated with substance use (alcohol, tobacco, marijuana, and high-risk level drugs). Many have argued that direct or indirect psychotropic substance use is harmful to health. The desires such as self-enjoyment and self-escape among adolescents will lose the ability to control themselves along with drug addiction, thus contracting the habit of "drug abuse". When drug users gradually shift from "substance use" to "drug abuse", this will cause irreversible psychological and physiological effects on themselves [14].

In addition, gambling behavior potentially affects the academic progress of adolescents. Underage gambling is positively related to school-related risk behaviors, such as running away at night, and truancy behavior [3]. In 2020, Stockholm collected data from students in 145 secondary schools, using data from more than 10,000 samples to investigate the relationship between adolescent gambling and school-related risks. These school-related risks include school experiences, academic performance in school, and truancy behavior. The researcher used Regression Analysis to study the correlation between gambling behavior and school experience satisfaction, school academic performance, and truancy behavior. Although the study showed that there was no significant relationship between adolescents' school experience satisfaction and gambling behavior, the research evidence supported youth gambling behavioral risks are associated with student truancy behavior and lower academic performance. They also concluded that schools creating a positive learning environment and providing students with more experiential care can help reduce adolescents' intentions to engage in gambling activities [15]. In summary, the negative consequences of adolescent gambling manifest in school-related risks, including poor school performance, such as reduced academic achievement, and disruption of academic progress by truancy behavior.

3. Conclusion

Overall, Minor gambling behavior poses potential risks to different aspects of adolescent development, including cognitive level, psychological and physiological level, and academic performance in their personal development. At the cognitive level and psychological level, due to cognitive biases such as the "illusion of control", adolescents overestimate their gambling abilities and frequently participate in gambling activities to ignore gambling losses. Moreover, adolescents'

insufficient self-regulation ability, impulsiveness, and other psychological characteristics increase the frequency of their participation in gambling. Clearer, teenagers' reliance and superstition on luck also stimulate their high risk-taking, which mistakenly increases their confidence in controlling the results of the competition. For emotional management, minor gambling behavior through an escape coping strategy — "gambling escape" to regulate their negative emotions, which reduces stress through negative reinforcement. Thus, the emergence of gambling behavior is more likely to be an early indicator of adolescent mental health problems and it is also related to the future development of substance abuse.

In terms of physical and mental health, underage gambling behavior is often accompanied by different substance use. These substance use-related risk factors not only appear in adolescence but may persist with age, thereby increasing the likelihood of developing substance abuse in adulthood, which is harmful to health whether psychologically or physically. Meanwhile, minor gambling behavior hinders personal academic development, and underage participation in gambling activities often shows poor school performance, such as lower academic performance and truancy behavior.

In conclusion, the potential risks brought about by minor gambling restrain their personal growth. Schools and society should implement effective measures to help weaken teenagers' gambling intentions and prevent teenagers from developing problem gambling. In addition to predicting adolescents' participation in gambling activities in advance through measures such as Cognitive Therapy. From an intervention perspective, effective strategies need to pay more attention to the adolescents themselves and their external environmental background. Family education and school education can be strengthened by raising the awareness of teenagers and their parents about the risks of gambling; At the policy level, it needs to restrict online and offline gambling advertising and strengthen supervision and management of gambling platforms and public places for adolescents [10].

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