

Response to Reviewer 1 Comments

Point 1: The manuscript in addition to face a relevant problem is well written and cover almost all causes and possible prevention measures of adolescent suicide. The authors should only better mention how the school, not only is essential in the ptrevention, but in some cases may be itself an element favoring suicide. Please spend a small chapteron how the bullying may represent a severe risk factor in ptredisposed subjects.

Response 1: Thank you for your kind comments. Based on your helpful suggestion, in the "*Environmental factors*" section, we have specified the implicit risk of adolescent suicide in the school environment, and have added a description of the risk of bullying in youth suicide. The changes are as follows:

Environmental factors. Adolescents spend the majority of their time in school, which serves as a primary setting for their learning and development. Schools provide opportunities for acquiring knowledge, developing skills, and cultivating relationships with teachers and peers. While schools offer unlimited potential for adolescent growth and achievement, they also lead to certain suicide risks. First, the school environment, which includes teacher support, peer support, the teaching and learning atmosphere, and school safety, has a crucial influence on adolescent suicide; negative perceptions of the school environment are significant risk factors for adolescent suicide, as an unfavorable school atmosphere may hinder the fulfillment of basic psychological needs^[错误!未找到引用源。]. Additionally, the school environment may

increase the availability of alcohol, tobacco, and illicit drugs^[错误!未找到引用源。], leading to the emergence of suicidal ideation or suicide attempts among adolescents. Second, there is a correlation between school material conditions and adolescent suicide risk. Underdeveloped material conditions and relative poverty in schools often indicate greater environmental stress, limited developmental resources, and inadequate psychological support. Students from impoverished schools may face greater risks of mental health problems, including suicidal behaviors^[错误!未找到引用源。]. Furthermore, while the school

environment offers valuable opportunities for peer interaction, it also entails specific group risks such as bullying. Bullying is considered one of the most common expressions of violence among peers during the school year^[错误!未找到引用源。].

1. Physical contact, verbal harassment, rumor spreading, deliberate exclusion of others from the group and obscene gestures are considered important

manifestations of bullying^[错误!未找到引用源。]. Young people who are not yet fully mature can easily become perpetrators or passive recipients of bullying behaviors due to the interaction of complex interpersonal interactions and family and social environments. For example, a study noted that victimization is associated with poor parental education, low parental occupation and poverty and that victims of bullying are more likely to come from families with a lower socioeconomic status^[错误!未找到引用源。]. This in turn creates challenges for the physical and mental health and overall well-being of adolescents. School bullying, as a stepping stone to poor life outcomes, is harmful and repetitive and is a strong risk marker for negative behavioral, health, social and/or emotional problems and is often associated with suicidal ideation and suicide attempts^[错误!未找到引用源。]. For example, during the puberty stage, individuals exposed to verbal bullying, negative rumors and unhealthy interpersonal relationships within schools can present significant self-identity challenges and psychological burdens for adolescents. A survey of 1811 Chinese middle school students revealed a positive correlation between negative rumors in school and suicidal ideation, with the increase in suicidal ideation being mediated by increased academic burnout^[错误!未找到引用源。]. Finally, academic performance during the school years is closely associated with adolescent suicide-related behaviors. A systematic study on the relationships between academic stress and adolescent depression, anxiety, self-harm, suicidality, suicide attempts, and suicide demonstrated a positive correlation between academic stress and psychological health issues among adolescents^[错误!未找到引用源。]. Suicidal ideation is also significantly associated with depression, test anxiety, academic self-concept, and adolescents' perceptions of parental dissatisfaction with their academic achievements^[错误!未找到引用源。]. In addition to the school environment, sudden environmental changes such as earthquakes, accidental fires, typhoons, tornadoes, hurricanes, mudslides, tsunamis, armed conflicts, particulate pollution, extreme temperatures and humidity, and the COVID-19 pandemic can also influence adolescent suicidal tendencies and risks, including suicidal ideation, suicidal behavior, and suicide completion^[错误!未找到引用源。], ^[错误!未找到引用源。]. Taking COVID-19 as an example, studies have indicated a 25% increase in suicide attempts among adolescents during the COVID-year, with a particularly significant increase of 195% in suicide attempts among girls during the starting school period^[错误!未找到引用源。].

