

# *A Study on the Causes, Impacts, and Intervention Strategies of Social Anxiety among Adolescents*

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**Abstract.** This study focuses on Social Anxiety Disorder (SAD) among adolescents, a prevalent mental health issue that threatens their social adaptability and overall well-being. Guided by the biopsychosocial model, the research systematically analyzes the multi-dimensional causes of adolescent SAD, which fall into two categories: external environmental factors (frequent negative social evaluations, traumatic social experiences, and lack of social support in new environments) and internal individual factors (sensitive personality traits, cognitive biases, and insufficient social skills). Additionally, the study explores the specific impacts of SAD on adolescents' academic performance (reduced class participation and declining grades), psychological and behavioral health (social withdrawal and sleep disturbances), and interpersonal relationships (decreased parent-child communication and limited friendship formation). Based on these findings, targeted prevention and intervention strategies are proposed: non-judgmental communication at the family level, development of social skills courses and cultivation of an inclusive atmosphere at the school level, and "small-step attempts" and cognitive restructuring at the individual level. Furthermore, the study identifies limitations in existing research, such as inadequate exploration of cross-cultural differences in adolescent SAD and lack of long-term effectiveness verification for some interventions. Future research directions are suggested, including expanding the sample scope to cover groups from diverse cultural backgrounds, exploring a collaborative intervention model involving families, schools, and society, and applying social media language feature models to improve the timeliness of early SAD identification. This study provides empirical evidence for school-based mental health education and clinical interventions for adolescent SAD.

**Keywords:** Adolescents, social anxiety disorder, biopsychosocial model, mental health.

## **1. Introduction**

In contemporary society, social anxiety has become a common mental health challenge among adolescents. Mild social anxiety manifests as temporary discomfort during interpersonal interactions or public activities, while severe cases meet the diagnostic criteria for "Social Anxiety Disorder (SAD)" specified in the Diagnostic and Statistical Manual of Mental Disorders (5th Edition) (DSM-5): persistent excessive tension and fear in social situations, intense worry about negative

evaluations, and avoidance behaviors that last for more than 6 months and impair daily functioning [1].

Epidemiological data underscores the urgency of addressing this issue: the global prevalence of SAD among adolescents ranges from 7% to 13%, with local reports in China indicating a rate between 8.2% and 12.6% [2]. The COVID-19 pandemic has further exacerbated the problem—long-term home isolation significantly reduced adolescents’ opportunities for in-person social interaction, leading to difficulties in readjusting to normal social settings and a subsequent increase in SAD incidence [3]. This focuses on social anxiety, exploring the mental health problem from its causes, impacts, and intervention strategies, especially focusing on the adolescents group.

The biopsychosocial model serves as the core theoretical framework for this study. This model posits that SAD arises from the interaction of biological factors such as genetic susceptibility, neural mechanisms, psychological factors such as cognitive regulation ability, and social environmental stressors [4]. A review on the influencing factors and treatment methods of adolescent SAD further validates this multi-factor interaction from the perspectives of physiological genetics, family, and society, providing theoretical support for the current research [5].

This study holds both theoretical and practical value. Theoretically, existing research has paid insufficient attention to the uniqueness of high school students—who face academic pressure and identity crises—and has yet to conduct in-depth exploration of cross-cultural intervention programs. Practically, a systematic analysis of adolescent SAD not only fills the aforementioned theoretical gaps but also provides empirical evidence for school-based mental health education and clinical interventions (e.g., development of school-oriented Cognitive Behavioral Therapy) [6].

## **2. Causes of social anxiety disorder among adolescents**

The development of SAD in adolescents is the result of interactions between multiple factors within the biopsychosocial system, which can be divided into two categories: external environmental triggers and internal individual drivers.

### **2.1. External environmental triggers**

#### **2.1.1. Frequent negative social evaluations**

Frequent negative social evaluations are a key trigger for SAD. For instance, when adolescents are mocked by peers for academic mistakes or compared with others by their parents, they may develop excessive sensitivity to social evaluations, which in turn leads to anticipatory anxiety [7]. A typical example is that some students experience persistent fear of speaking in class after being laughed at by classmates for answering a question incorrectly, and subsequently avoid similar situations intentionally.

#### **2.1.2. Traumatic social experiences**

Traumatic social experiences—such as peer rejection and unresolved conflicts with significant others—can exacerbate SAD. These experiences easily lead adolescents to form negative cognitive schemas about interpersonal interactions, making them more inclined to avoid social contact [8]. A follow-up study on victims of school bullying found that this group had a significantly higher incidence of anxiety symptoms in subsequent social interactions compared to non-victims, and a higher proportion of them actively reduced interpersonal engagement [9].

### **2.1.3. Adaptation to new environments and lack of social support**

Uncertainties brought about by new environments (e.g., transitioning to a higher grade or transferring to a new school) increase the risk of SAD if adolescents lack a stable social support network. Strange interpersonal relationships and rules in new environments cause stress, and when support from family and friends is insufficient, adolescents struggle to integrate quickly, thereby triggering anxiety. A study on social anxiety and adolescent mental health growth clearly states that an unstable social support system significantly increases the incidence of SAD among adolescents [10].

## **2.2. Internal individual drivers**

### **2.2.1. Sensitive personality traits**

Sensitive personality traits are important internal factors for SAD. However, “sensitive personality” is not a pathological classification; its academic designation is often “high neuroticism” or “social sensitivity traits” [11]. Adolescents with such traits are highly perceptive of others’ words and behaviors, and they tend to misinterpret normal actions as negative evaluations during social interactions, which triggers anxiety. Records from relevant psychological experiments show that in simulated social scenarios, the activity of anxiety-related brain regions (e.g., the amygdala) in this group is significantly higher than in the general population [12].

### **2.2.2. Cognitive biases and catastrophic thinking**

Cognitive biases—particularly catastrophic thinking—can amplify the negative impact of social mistakes. For example, an adolescent who momentarily forgets their words during a group discussion may convince themselves that they performed poorly and are being looked down upon, leading to increased timidity in subsequent social interactions [13]. Modifying this thinking pattern through cognitive restructuring training can effectively reduce anxiety levels—a conclusion validated by cognitive intervention studies mentioned in a review on the influencing factors and treatment methods of adolescent SAD [5].

### **2.2.3. Lack of social skills and vicious cycles**

A lack of social skills (e.g., inadequate communication skills and weak nonverbal expression abilities) leads to a “avoidance-insufficient skills-further avoidance” vicious cycle: adolescents with SAD avoid social interactions due to low self-confidence, and this avoidance hinders the improvement of their social skills, which in turn exacerbates their anxiety. Relevant tests show that the social skill scores of adolescents with SAD are significantly lower than those of non-anxious groups, and there is a negative correlation between anxiety levels and skill proficiency ( $r=-0.42$ ,  $p<0.01$ ) [14].

## **3. Specific impacts of Social Anxiety Disorder (SAD) on adolescents**

### **3.1. Impacts on academic performance**

SAD significantly reduces adolescents’ class participation: due to fear of being laughed at for making mistakes when speaking, they often avoid answering questions actively or participating in

discussions, which impairs their absorption of knowledge. Long-term avoidance also leads to decreased academic motivation. A follow-up study shows that students with higher levels of social anxiety experience an average decline of 15%-20% in their academic rankings within one school year, severely affecting their academic performance [15]. A study on social anxiety and adolescent mental health growth further points out that SAD indirectly causes grade decline by reducing learning engagement [10].

### **3.2. Impacts on psychological and behavioral health**

#### **3.2.1. Behavioral impacts**

SAD reduces adolescents' social activities and narrows their life scope. They are more likely to choose solitude, thus missing opportunities to form friendships [16].

#### **3.2.2. Psychological impacts**

Long-term anxiety may lead to problems such as low mood and insomnia—some adolescents struggle to fall asleep because they repeatedly ruminate on social mistakes, which harms their physical and mental health in the long run [17].

### **3.3. Impacts on interpersonal relationships**

In peer interactions, adolescents with SAD dare not communicate proactively for fear of rejection, resulting in fewer friends and a greater tendency to feel lonely. When communicating with elders, they hide their true thoughts for fear of disapproval, which affects parent-child and teacher-student relationships. A study on family relationships shows that the weekly communication frequency between adolescents with SAD and their parents (an average of 2.3 times) is significantly lower than that of normal groups (an average of 5.1 times), and the incidence of parent-child conflicts is 30% higher [18].

## **4. Prevention and intervention strategies for social anxiety disorder**

### **4.1. Prevention measures**

#### **4.1.1. Family level: non-judgmental communication**

Parents can reduce their children's social pressure by adopting "non-judgmental communication": listening more to their children's thoughts and feelings, and reducing criticism. This helps cultivate a positive social mindset in children. For example, when a child shares school conflicts, parents' understanding and guidance—rather than criticism—can reduce the child's fear of social conflicts [19]. A study on social anxiety and adolescent mental health growth emphasizes that positive family communication is an important guarantee for preventing SAD in adolescents [10].

#### **4.1.2. School level: social skills courses and inclusive atmosphere**

Schools can improve students' social skills by offering social skills courses (e.g., simulated conversations and conflict resolution exercises). At the same time, reducing malicious evaluations in classes and creating a safe environment for students to attempt social interactions are also crucial.

Practice shows that the incidence of SAD among students in schools with such courses (8.7%) is significantly lower than in schools without them (15.2%) [20].

## **4.2. Intervention Methods**

### **4.2.1. Individual level: small-step attempts and cognitive restructuring**

Individuals can adopt the “small-step attempt” strategy: starting with simple social behaviors (e.g., greeting others proactively) and gradually participating in group discussions to accumulate successful experiences. Meanwhile, cognitive restructuring—such as reminding oneself that “others pay more attention to themselves than to my small mistakes”—can improve cognitive biases and enhance social confidence [21].

### **4.2.2. External support: professional counseling and peer support**

School psychologists can provide Cognitive Behavioral Therapy (CBT) to help students identify and change negative thinking and behavioral patterns. Organizing peer support groups allows adolescents with similar experiences to support each other, reducing feelings of loneliness. Studies show that adolescents participating in peer support groups experience an average 28% reduction in SAD symptom scores within 3 months [22].

## **5. Conclusion**

This study systematically sorts out the multi-dimensional causes of adolescent Social Anxiety Disorder (SAD) through the lens of the biopsychosocial model, shedding light on the uniqueness of high school students—who face academic pressure and identity crises. This study confirms that the etiology of adolescent SAD is multifaceted, stemming from a complex interplay between external environmental triggers—such as frequent negative evaluations, traumatic social experiences, and inadequate social support in new settings—and internal individual factors, including sensitive personality traits, maladaptive cognitive patterns, and deficits in social skills. The repercussions of SAD are profound and pervasive, significantly impairing academic achievement, psychological and behavioral health, and the quality of interpersonal relationships, thereby threatening healthy adolescent development. Also, this study proposes prevention and intervention strategies at the family, school, and individual levels, providing references for relevant practices.

This study has limitations: first, it inadequately explores differences in adolescent SAD across different cultural backgrounds; second, the long-term effectiveness of some intervention strategies lacks follow-up verification. Future research can expand the sample scope to include adolescents from different regions and cultural backgrounds, conduct in-depth tracking of the long-term effectiveness of intervention methods, and explore a collaborative family-school-society intervention model. At the same time, by leveraging technical means—such as the social media language feature-based anxiety prediction model proposed in the study “Research on Language Expression Characteristics and Recognition Modeling of Interaction Anxiety in Social Networks” by the Institute of Psychology, Chinese Academy of Science—the timeliness of early SAD identification can be improved, securing more time windows for intervention.

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