



# The Impact of Malocclusion on Adolescent Mental Health: An Analysis and Intervention Perspective

Yu Wu

School of Medicine, Hainan Vocational University of Science and Technology, Haikou 571126, Hainan, China

**Abstract:** Malocclusion, a common oral health issue among adolescents, has impacts that extend beyond the physiological dimension, increasingly manifesting at the psychological level. As teenagers place growing emphasis on personal appearance and social interaction, this condition often leads to a range of psychological responses, including social withdrawal, self-identity challenges, and emotional fluctuations. To promote the harmonious physical and mental development of adolescents and to raise awareness among healthcare and educational professionals, this paper examines the mechanisms through which malocclusion affects adolescents' social behavior, self-perception, and emotional well-being. Furthermore, it discusses feasible intervention strategies aimed at mitigating these adverse psychological effects.

**Keywords:** malocclusion; adolescent; mental health; social anxiety; self-esteem

## 1. Introduction

With the development of society and the enhancement of aesthetic demands, personal appearance has become increasingly important, especially during the sensitive period of adolescence. Malocclusion, including crooked teeth, protrusive teeth, and abnormal jaw relationships, is one of the most common oral deformities[1-4]. If adolescents are unable to properly cope with the inner experiences and external evaluations caused by malocclusion, they are prone to mental health problems. A survey report found that the incidence of anxiety and social avoidance tendencies among adolescents with significant malocclusion was significantly higher than that among their peers with normal occlusion[5]. Especially in social situations such as campus life, adolescents with malocclusion are more likely to experience negative emotions such as inferiority and anxiety, affecting their normal social development[6]. Therefore, to maintain the physical and mental health of adolescents and promote their comprehensive development, it is necessary to deeply explore the psychological impact of malocclusion and propose corresponding coping strategies.

Malocclusion refers to the abnormal arrangement of teeth or discrepancy in jaw relationship beyond the normal range[7]. From a biopsychosocial perspective, its impact is not only physiological but also extends to psychological and social functional levels[8]. When adolescents face psychological stress caused by malocclusion, timely attention and intervention are particularly important. Effective intervention can prevent the deepening of negative emotions and, at least in the short term, help clients alleviate psychological stress and return to a normal social life.

## 2. The Impact of Malocclusion on Adolescent Psychology and Its Manifestations

The psychological impact of malocclusion on adolescents is typically divided into social interaction disorders and negative internal self-cognition. Each dimension affects the adolescent's mental health.

### 2.1 Social Interaction Disorders

In social situations, malocclusion, as a visible aesthetic flaw, can easily become a source of stress for adolescents, leading to obstacles in interpersonal communication. Healthcare workers and educators need to understand how malocclusion affects social interaction. The following are specific manifestations:

#### 2.1.1 Social Avoidance Behavior

In the initial stage of social interaction, the first impact is that adolescents may develop avoidance behaviors due to concerns about their dental appearance. They may avoid smiling, covering their mouth when talking, or even reducing participation in group activities that require extensive interpersonal interaction, such as class speeches or parties. This avoidance behavior can, to a certain extent, lead to a reduction in social opportunities, hindering the development of social skills.

### **2.1.2 Verbal Communication Barriers**

In the entire process of interpersonal communication, verbal expression is crucial. The quality of communication directly affects the establishment of friendships. Adolescents who are overly concerned about their dental appearance may exhibit tension and restraint during conversations, unable to express themselves freely. Some may even fear being laughed at because of unclear pronunciation caused by dental issues (e.g., anterior open bite), further exacerbating communication difficulties. When peers initiate normal conversations, these adolescents may respond briefly or remain silent due to anxiety. Over time, this may lead to them being perceived as "unsociable" by their peers, forming a vicious cycle.

## **2.2 Negative Internal Self-Cognition**

Internal self-cognition refers to the individual's perception and evaluation of themselves. Malocclusion can trigger a series of negative internal cognitions in adolescents, affecting their mental health.

### **2.2.1 Low Self-Esteem**

Low self-esteem is a core issue in the psychological impact of malocclusion. Adolescents in their growth stage are highly sensitive to external evaluations. Negative comments from peers (such as being nicknamed "buck teeth") or subtle changes in others' expressions can deeply hurt their self-esteem, leading them to believe they are "unattractive" or "inferior to others." This sense of low self-esteem can extend from appearance to overall ability evaluation, affecting their enthusiasm for participating in various activities, even leading to a decline in academic performance.

### **2.2.2 Anxiety and Depressive Emotions**

Prolonged negative self-suggestion and social pressure can place adolescents in a state of chronic stress, prone to emotional problems. They may frequently feel anxious, especially in social situations requiring exposure, and may experience emotional lows, loss of interest, and other depressive tendencies. If these emotions are not alleviated in time, they may evolve into more serious psychological disorders over time.

### **2.2.3 Obsessive Concerns About Appearance**

Some adolescents may develop excessive preoccupation with their dental defects, even to the point of body dysmorphic disorder. They may frequently look in the mirror to observe their teeth, repeatedly compare them with others', or excessively seek reassurance. This obsessive state consumes significant mental energy, affecting normal life and learning.

## **3. Intervention Strategies and Recommendations**

Addressing the psychological issues caused by malocclusion requires a multi-faceted approach, combining professional orthodontic treatment with psychological support.

### **3.1 Professional Orthodontic Intervention**

The most fundamental measure is to correct the malocclusion through orthodontic treatment. With advancements in technology, orthodontic methods (such as fixed appliances and clear aligners) can effectively improve dental alignment and facial aesthetics. Successful orthodontic treatment can directly eliminate the source of psychological stress, significantly boosting adolescent self-confidence. Parents and healthcare providers should provide scientific information about orthodontics, encouraging adolescents to actively undergo treatment when necessary.

### **3.2 Psychological Counseling and Support**

While awaiting or undergoing orthodontic treatment, psychological support is essential. Cognitive Adjustment: Help adolescents correctly understand that malocclusion is a common condition, not a flaw, and that it can be improved. Guide them to shift focus from excessive concern about appearance to developing inner qualities and abilities. Emotional Management: Teach adolescents methods to cope with anxiety and stress, such as deep breathing and relaxation training. Encourage them to express their troubles and provide emotional support and acceptance. Social Skills Training: For adolescents with significant social barriers, social skills training can be provided in small groups or individually to enhance their communication skills and confidence.

### **3.3 Creating a Supportive Environment**

The role of schools and families is crucial. Teachers should avoid making inappropriate comments about students' appearance and create an inclusive, friendly class atmosphere. Parents should give more encouragement and affirmation, avoiding blaming the child, and actively seek and provide solutions to help the child face the problem positively.

## 4. Summary and Prospect

The impact of malocclusion on adolescent mental health is a issue worthy of attention from both the medical and educational sectors. It is not merely a dental problem but also an important psychological and social issue. Unlike simple disease treatment, addressing this issue requires collaboration among orthodontists, psychologists, parents, and schools. In the future, with the increasing emphasis on mental health, early screening and intervention for psychological problems related to oral issues should be strengthened. By advancing orthodontic technology and popularizing mental health knowledge, adolescents can be helped to achieve both physical and mental health, injecting positive energy into their healthy growth.

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