

# Summary of the effects of approach and inhibitory temperament on individual social behaviors

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## **Abstract:**

This paper reviews the influence of approaching temperament and inhibiting temperament on individual social behavior, aiming to provide support for the research and practice of individual temperament development. Temperament, as an innate behavioral response tendency, is the main factor affecting individual social behavior. Individuals with close temperament tend to have higher social enthusiasm and exploration desire, easy to establish friendship and gain recognition from peers, while individuals who inhibit temperament tend to be too alert to the new environment, show social withdrawal and anxiety, and develop less prosocial behaviors. This paper discusses the role of genetic and physiological factors, family function, social cultural factors and attachment relationship on the performance of both temperament types in social behavior, and proposes intervention strategies for different temperament types, including emotional regulation training, social skills training, emotional understanding training, gradual exposure method and family support. Finally, this paper highlights the fact that future studies should further explore the interaction between these factors to develop more effective interventions to promote the development of social adaptation in individuals with different temperament types.

**Keywords:** Approach temperament, Inhibiting temperament, Social behaviour, Influencing factors, Intervention strategies

## **1. Temperament**

Temperament (temperament) refers to the innate behavioral response tendency of children, which is the relatively stable individual differences in biolo-

gy-based emotional response, activity level and other aspects [1].

Temperament is innate, exists from birth, and has a certain degree of stability during individual development. More and more people find that some

children are stubborn and irritable, while others are more docile, and that the same upbringing will have different or even opposite effects on different children. Therefore, since the 20th century, researchers have begun to focus on the temperament of children, and strive to seek a matching parenting style. Early Thomas and Chess, based on infant parent interviews, and later school observation, and teacher interviews (New York Longitudinal tracking study), divided children into three temperament types: easy, difficult, and slow heat [2]. Later, Kagan, Reznick, Clarke, Snidman and Garcia-Coll proposed the laboratory observation of children, for behavioral suppression (inhibition) and non-inhibition (noninhibition) [3]. Subsequent investigators Fox, Henderson, Rubin, Calkins, & Schmidt more comprehensively considered behavioral tendencies and emotional responses, and further refined them into three types of: approach (exuberance), inhibition, and low reactivity (low reaction) [4].

This paper mainly reviews the related research of approaching temperament and inhibiting temperament on individual social behavior, in order to help the research and application of child temperament development.

## **2. Close to the temperament and suppress the temperament**

Individuals with close temperament usually show high social motivation and desire to explore. They are curious about novelty and strangers, willing to actively participate in social interaction, and show more positive emotions and extroversion [5]. This trait makes it easier for them to build friendships and gain peer recognition and support for [6].

Children are always alert to their surrounding environment and show inhibitory responses and high negative emotions to new stimuli [7]. In the process of socialization, children with suppressed temperament are more likely to have social withdrawal (social withdrawal), social silence (social reticence), anxiety and other poor social adaptation problems [8-9]. When seeing others who need help, children who suppress temperament often choose to retreat and fail to pay attention to the needs of others, thus showing less prosocial behavior [10-12].

## **3. Factors affecting approaching temperament and inhibiting temperament on individual social behavior**

### **3.1 Gene and physiological factors**

Genes are also important factors influencing approach

and inhibiting behavioral development in children with temperament. The short allele of the serotonin transporter-associated polymorphism region (5-HTTLPR) was associated with inhibitory temperament [13-14]. However, contrary to the findings of most Western studies, the 5-HTTLPR short / short allele in Chinese children was inversely associated with behavioral suppression [15-16]. In the study of dopamine receptor gene (DRD 4) and childhood temperament, infants with the long allele of DRD 4 showed more converging behavior in the face of sudden or novel stimuli [17]. However, some was also found that infants carrying the long allele of DRD 4 showed higher levels of negative affective [18]. The researchers speculate that these contradictory results may result from the interaction of genes with the environment or other biological factors [19].

Researchers believe that individual temperament has a physiological basis and continues to be influenced by physiological factors. The approach and inhibitory temperament in childhood is associated with the heterolateral-ity of frontal EEG activation (frontal EEG asymmetry). Among them, right frontal EEG high activity was associated with withdrawal behavior or negative affect, and left frontal EEG high activity was associated with approach behavior or positive affect [20]. Infants with greater right frontal EEG activity were more suppressed in both 9-and 14-month behavioral measures and showed more negative affective for novel stimuli [21]. Conversely, infants with greater left frontal EEG activity would show more converging behaviors and positive affect for novel stimuli, are more likely to develop good social skills and are more likely to develop externalizing problems [22].

### **3.2 Family function**

Family function has a very important impact on children's social behavior. Studies have shown that families with good family function, where members follow each other in life, can increase their positive psychological state and produce more pro-social tendencies, thus reducing the risk of psychological and social problems [23]. Children with dysfunctional families, who are difficult to communicate with others during adolescence, will choose to close themselves off to avoid frustration. Emotional connections between family members, role expression, and effective response to external stimuli are all important factors influencing children's social behavior [24].

### **3.3 Social and cultural factors**

The temperament development of children will be influenced by the social culture. A cross-cultural study by Rubin et al. found higher levels of behavioral inhibition in

Chinese children than in Western children [25]. This may result from differences in responses to child temperament across cultural settings. In the context of western culture, people are more likely to accept the challenges, decisive confidence and independent behaviors. On the contrary, the withdrawal behavior of children with suppressed temperament is often considered immature and needs to be corrected. Therefore, restrained children in western culture are more likely to have social maladjustment, such as low social ability, social withdrawal and peer exclusion. Instead, traditional Chinese culture attaches great importance to interpersonal harmony and emphasizes the proper control of their emotions and behaviors in interpersonal communication. The characteristics of suppressing temperament are often associated with good qualities such as maturity, modesty and self-control [26]. Therefore, Chinese restrained children have better social adaptation, such as fewer behavioral problems, more cooperative behaviors, better peer acceptance, outstanding academic performance and other [27].

However, with the rapid development of social economy, the competitive environment in cities makes Chinese parents change their concept of parenting, and encourage their children to be independent and pay attention to their social interaction and interpersonal communication [28]. This change in social beliefs affects the development of social behavior in China, and then develops results similar to Western culture [29]. Recent studies have found that inhibitory children in Chinese urban environment are more likely to be rejected by peers or have depressive symptoms, and teachers have low evaluation of social ability of inhibitory children. However, rural China still attaches great importance to the traditional social rules such as interpersonal harmony, social responsibility and self-restraint. Therefore, in today's rural environment in China, children with suppressed temperament are more likely to be accepted by their peers, have stronger social ability, and have less academic difficulties [30].

### **3.4 Attachment relationship**

The relationship between child behavioral inhibition and social fear during adolescence is regulated by parent-child attachment type and maternal parenting style [15-16]. Behavioral inhibition is an innate, relatively stable temperament, and is observed early in infancy [31]. Children with this temperament have a very high alert to new things. Rubin et al suggested that this vigilance would allow parents to over-protect, interfere and control their children, thus establishing insecure parent-child attachment relationships [32]. After entering the school age, the negative feedback from peers and teachers can also promote the negative

self-evaluation of children. In the long run, children will fear the social environment, and thus develop social fear. Secure attachment can weaken the effect of behavioral inhibition on social fear, while nonsecure attachment intensifies this relationship.

## **4. Intervention strategies**

### **4.1 Intervention for promoting individuals with a temperament**

#### **4.1.1 Emotional regulation training**

For individuals with approaching temperament, emotion regulation training can help them to better control their impulsivity and anger, and reduce the occurrence of aggressive behavior. Through cognitive behavioral therapy (CBT) and other methods, children are taught to identify and manage their emotions and enhance self-control [33].

#### **4.1.2 Cultivation of social skills**

To cultivate the social skills of individuals with close temperament, we can help them learn how to deal with conflicts, express their needs and establish good interpersonal relationships through role-playing and simulating social scenes. [34].

### **4.2 Intervention for individuals with inhibitory temperament**

#### **4.2.1 Emotional understanding training**

Improving the emotional comprehension of inhibitory temperament individuals is key to improving their social behavior. Through emotion recognition, empathy training and other ways, to help them to better understand the emotional needs of others, so as to overcome the influence of behavioral inhibition, and increase the social initiative [35].

#### **4.2.2 Step-wise exposure method**

The highly exposure exposure is an effective intervention. Help them to adapt and reduce anxiety responses by gradually guiding them to unfamiliar environments and new relationships [7].

#### **4.2.3 Family support**

The family environment has an important influence on the social behavior of the inhibitory temperament individuals. Parents should provide moderate support and encouragement to avoid overprotection or negative control, help children build self-confidence and enhance social courage [32].

## 5. Conclusion

Temperament has a very important influence on an individual's social behavior. Promote temperament and inhibit temperament individuals in social performance has their own advantages and disadvantages. Promoting temperament individuals should pay attention to the cultivation of emotional regulation and social skills, while inhibiting temperament individuals need to improve their ability of emotional understanding and gradually adapt to the unfamiliar environment. Family environment, attachment relationship, cultural background, parenting style and other factors all influence the relationship between temperament and social behavior to a certain extent. Future studies should further explore the interaction of these factors and develop targeted intervention strategies to help individuals with different temperament types better adapt to the environment and promote the development of their physical and mental health and social adaptability.

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