

# Constructed Emotion on Adolescence in Depression and Anxiety: A Summary and Applications

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## Abstract:

Adolescence Depression and anxiety are so prevalent that they have become a public concern. However, the causes of depression and anxiety and their treatment remain largely unknown. This paper investigates constructed emotion, which is the process of constructing emotions in brains to respond to different circumstances. Through this new theory, psychologists can explain the formation of depression and anxiety in adolescence through peer pressures, past experiences, or the development of brains. This paper indicates some statistics about Adolescence Depression and anxiety while proposing some possible causation of these mental disorders investigating several reasons for the causation of Adolescence Depression and anxiety, and trying to explain them in terms of constructed emotion theory. Besides, this paper proposes some general treatments for depression and anxiety, such as flexible treatment that requires individual treatment and case studies. However, constructed emotion is still in the stage of development, and further research needs to be applied to understand the process of depression and anxiety fully.

**Keywords:** Constructed Emotion, Depression, Anxiety, Adolescence

## Analysis of constructed emotion:

The brain is designed to ensure animals' growth, survival, and reproduction by maintaining the physiological systems [1]. Based on this purpose, the brain's main function is to regulate the autonomic nervous system, immune system, and endocrine system, and all the behaviors belonging to the brain are designed to help the brain with it. [2]. Derived from "embodied simulation", which is a mechanical system that the brain utilizes in the daily world around people to shape and reuse for perception and imagination [3], it is proposed that the brain simulates the world inside it for the body's physiological needs. That is, simulations can guide people's reactions to the environment and construct perceptions.

From simulations, utilizing past experiences to guide people and respond seems reasonable. It is further constructed that the brain conducts its model through concepts that categorize sensations, which are given meanings. And once it is completed, it maintains physiological regulation, guides actions, and constructs perceptions based on response.

Thus, the brain uses emotional concepts to categorize sensations into certain emotion sets. It is mentioned that instances of emotions are constructed in the same way that other perceptions are constructed. Emotions then con-

tribute to body regulation and can be changed based on the situations of the environment. It can also be self-constructed once people meet unfamiliar conditions and derive a new set of perceptions based on that. Besides, sensory prediction errors can happen and still be included in the conceptions in response to certain environments. [2]. The other characteristic of such simulations is that it is highly embodied brain states that can be multi-dimensional and emerge as the default mode. Furthermore, precision signals, which are the errors that can be linked to regulations and thus worth paying attention to, can be applied to emotions and sent to every sensory system in the brain [2]. As mentioned above, all of them are combined to construct an ultimate instant of emotional concepts that can be identified as three parts: (i) What arises the emotion. (ii) What reactions shall be constructed to respond to the circumstances. (iii) What plans can be constructed through the unanticipated response or conditions from the environment (and formed new instants from the examples if the original one is too off) [2].

Through it, I hypothesize that emotions are only a set of perceptions combined with a leading concept, which are usually long in effects and harder to adjust throughout time because they can be constructed in the early years of life and be treated wrongly through perception errors into

people's familiar emotional concepts. We can potentially create many emotions or instants of emotions if our language systems (or the classifications) are large enough to give every different emotional concept a definition or a word to it. And such specifications can be applied especially to mental disorders for adolescents.

### **Prevalence of Anxiety disorder and depression:**

Anxiety disorder, though controversial sometimes, is usually considered as people with anxiety and fear, who respond anxiously to signals that can be either a threat or not. They also react to aversive stimuli with more stress, have an attentional bias to stimuli especially if it is threat-relevant, and have very active amygdala responses to threat-relevant stimuli [4].

Depression, on the other way, is defined as a medical illness that negatively affects the way people think and act, which can result in sleep patterns, weight, restlessness or irritability, negative evaluations of oneself, difficulties in thinking and making decisions, and thoughts of suicide and death. Sometimes the symptoms can be life-threatening. It is so prevalent that nearly one in 10 adults per year can have depression [5].

How can adult depression become so dominant? One noticeable approach points to adolescent depression, which increases the risk for depression later in adulthood and even anxiety disorders [6]. Although adults have an overall more significant depression than adolescents in coping strategies such as acceptance, positive reappraisal, and others. It is noticeable that the cognitive coping strategies of self-blame, rumination, catastrophizing, and positive reappraisal all function similarly and may lead to depression. It may indicate the significance of prevention and intervention programs in adolescence to help with depression [7].

### **Adolescence development:**

Adolescents, who are usually identified from 11 to 21 years old, develop physically, cognitively, emotionally, and socially. During adolescence, teenagers develop hormones and bodies linked to human productivity, raise the difficulties of regulating their emotions, change their sleep patterns, recognize peers as important relationships, and adjust their self-evaluation. Besides, childhood situations play a significant role in it such as family factors, inherited genes, and social vulnerability. All these characteristics make adolescents vulnerable to social-emotional disorders [8]. For instance, anxiety disorders have a median age of

14 years, and the majority of people experiencing anxiety disorders are at the age of 8 to 18 years [9], while depression, similarly to anxiety, is dominant at the age of 16 with higher risks among girls [10].

### **Constructed Emotion's relationship with depression and anxiety:**

I hypothesize that constructed emotion can become an alternative explanation to the reason for the high risks of adolescents experiencing emotional disorders. Teenagers are exposed to many circumstances that they did not anticipate before in their lives and develop their brains unexpectedly, thus constructing different examples of emotions and being able to make wrong predictions throughout the times due to those "accidents" that they did not experience before. Or, teenagers set their concepts early in life, which is horrible for their mental health and can be further developed through adolescence. Children's disorders, for example, may recur in adolescents at a 75% chance [11], which can become an indication of how far the unhealthy concepts set in childhood may go.

Researchers now apply a dynamic approach to social-emotional disorders in that people set up plenty of concepts until they fulfill most examples happening in real life [2]. It can sometimes be if the brain realizes that anxiety or depression helps people throughout life (sometimes), develops concepts of depression and anxiety in response to harmful situations, and leads to depression and anxiety throughout life. Such developed concepts can help people perceive, categorize, and interpret information. It also leads to decision-making. And the feedback adjusts the simulations [12]. It can be usually fitted into the model that the children experience anxiety and depression which develops later on when they become teenagers. The cause of this kind of example is usually parenting in young children's early life experience [13], but it can be also associated with elementary school, culture, and other unexpected experiences. For instance, positive peer relationships are found at the individual level for young and school-aged children, but media and individual levels also play an important role in children's healthy peer relationship development [14].

However, for teenagers, social factors can also drive them to depression and anxiety. For example, peer rejection seems to contribute to adolescent depression. Peer rejection shapes adolescent tragedy projection in both magnitude and longitude ways. It can be attributed to adolescents' tendency to interpret ambiguous situations in negative ways [15]. It can be explained through construct-

ed emotional theory that the adolescents set the instance firstly negatively (especially because peers play a larger role during adolescence, thus the adolescents are more sensible to the rejection of peers). Therefore, after several concepts are built, adolescents tend to interpret the same instance in a negative way, thus developing depression through peer rejection.

In contrast, adults have less risk of getting depression, which may indicate some specific characteristics of adolescence [12]. However, for cognitive coping strategies, adults experience a much greater extent than adolescents, especially in aspects of acceptance, catastrophizing, other-blame, positive reappraisal, putting into perspective, refocus on planning, positive refocusing, rumination, and self-blame [7]. It may become an indication of the effects of adolescent mood disorders into adulthood. The reasons for these characteristics are still unknown to us, but constructed emotion may provide an insight into this.

One specialty of constructed emotion is that individuals develop different emotions based on people's conceptions and instances. For instance, the difference in self-schema affects people's personalities, perceptions, and evaluations significantly. A negative self-scheme tends to provide negative output with respect to the self, emotions, and even behavior. And it can be the actual cause of depression and anxiety. In contrast, positive self-schema seems to regulate people's emotions very well. This result provides an insight into the role of individual differences and cognitive factors in the experience of emotion [16]. One possible explanation for this result is constructed emotion theory. People's concepts and worlds are built negatively so that they can respond to the circumstances self-depressively, causing depression or anxiety. This can be potentially applied to adolescents.

From the neuroscience perspective, dorsolateral prefrontal activity during a non-emotion-related working memory task is connected with mood and anxiety symptoms and cognitive reappraisal that can be a possible mechanism that functions cognitively to mood and anxiety symptoms that can also be an implication of getting depression or anxiety [17].

### **Possible treatment for adolescents' depression and anxiety:**

Researchers have long discussed the treatments for depression and anxiety, but constructed emotion provides a new way to discover the best treatments for every person. One approach is emotion differentiation. Research proves that high emotion differentiation can reduce the risks of

developing mood symptoms when exposed to stress [18]. It may be because these people develop more concepts and instances of emotions, thus responding to different circumstances in different ways and putting them into different categories. However, people who fail to develop such an advantage cannot respond to different circumstances in different ways, thus combining all the circumstances into one category which can potentially cause depression and anxiety if the concepts they build are negative. As stated above, the treatment that can be applied is setting more circumstances by indicating different outcomes of an event, thus leading brains to develop more categories and concepts about different environments.

Another implication of constructed emotion may be consonant with flexible emotion regulation, which chooses different regulatory strategies for individuals based on situational demands and individual differences. That is, building flexibility to the treatments instead of overall effective strategies for people with different personalities in different situations [19]. Although it needs further research to develop, this can be a potential application of constructed emotion regulation because people have different perspectives of emotions and emotion regulations. Therefore, engaging in people's symptoms through investigating individuals and supporting them may work out.

### **Discussion of constructed emotion's application:**

It has been aware by many researchers that emotions are not universal but vary depending on people. Constructed emotion as one potential theory can explain the causes of depression and anxiety, the symptoms, and even the treatments. Still, further research shall focus on individual differentiations and what causes these to happen. A general approach to a group of people cannot be fully presented to each individual.

Besides, constructed emotions can be a possible explanation for all the brain's activities. People's brain constructs instances and categories applied everywhere, including unconsciousness and consciousness. But it still needs further investigation.

### **Conclusion:**

Overall, constructed emotion is a new theory that can become an explanation for depression and anxiety during adolescence. It also implies the ways to the treatment of depression and anxiety, which indicates a potential direction for people to develop the emotion that covers the older traumatic formation. However, more research is needed

to illustrate this idea fully, and it is very limited due to our technology so we may not fully understand people's actual mindset. Besides, it may need to be varied from person to person, which further increases the difficulties of applying constructed emotion to the formal treatment. We are still at the early stage of applying this idea to our practices, and the final destination seems too far away from what we gain right now. We are still at the ignorant stage, and understanding emotions is still a hard topic to reach. However, the new direction does indicate the way that we may now explain psychology based on the mind's function on bodies instead of fully focusing on behaviors. Therefore, we believe that the proposal of Constructed Emotion may become a new start for understanding and changing people's minds, and we believe in the further usage of it in real life.

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