

The Effects of Anxiety on Children and Learning

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Abstract

Anxiety has extensive effects on a person's daily life. The impact of anxiety on children and adolescents needs to be examined in order to better understand the influence that mental health disorders, such as generalized anxiety disorder, separation anxiety, and social anxiety, have on the abilities and skill development of children. The aim of this review is to provide an overview of the causes and development of anxiety during the early stages of life, focusing on the role of fear and increased media exposure in these processes. Additionally, the effects that anxiety has on learning, explicitly in school, as well as potential solutions for this heightened problem, are further investigated. Lastly, new and innovative treatments for stress-related mental health disorders, such as Ketamine IV for anxiety relief, are discussed.

Childhood Development

The subject of anxiety disorders in children is one that requires extensive research and attention. Differentiating the types of anxiety, as well as understanding the various causes of anxiety and the role it plays in early cognitive developmental stages, can potentially be beneficial for treatment of such disorders and for improvement of a child's learning abilities. When considering cognitive development, it is crucial to acknowledge Jean Piaget, a 20th century psychologist, whose theory of the stages of development have made an exceptional impact in cognitive psychology as his ideas are still quite prevalent today (Barrouillet, 2015). According to Piaget's theory, the first stage of child development is the sensorimotor stage, which lasts from birth to two years of age. In this stage, intelligence is shown through motor activity and children acquire object permanence, which is the knowledge that objects continue to exist even when they are not seen. Then, development continues with the preoperational stage, from two to seven years, when the use of symbols and language is key and egocentric behavior is apparent. A child then reaches the concrete operational stage, from seven to eleven years old. During this period, the ideas of conservation, reversibility, and logical thinking are dominant. Finally, the formal operational stage, beginning at age twelve, is when abstract concepts are understood (Huitt & Hummel, 2003; McLeod, 2007). However, most cases of childhood development do not exhibit a process that goes as smoothly as may be theorized by Piaget and other psychologists who focus on stages defined by the age of a child.

Fear and Anxiety

Childhood anxiety results in deviations from standard development that conflict with Piaget's theory of cognitive development. Examinations on the role childhood anxiety disorders have on developmental milestones has revealed the emotion of fear to have a central role (Craske, 1997). Fear can be defined as an emotion that is apparent when there is an imminent threat, resulting in an immediate reaction and triggering psychological changes (American Psychological Association, 2015). It is an emotion that exists in a person, starting from the earliest stage of development. While fear is a vital aspect of one's life, this emotion's causes and ways it is presented still undergo major changes throughout a person's life. When a child is still young, fears stem from immediate and tangible subjects, whereas in adults fear can stem from more conceptual and less tangible ideas (Craske, 1997). The fears that children experience change over time. They are greatly based on the perception of potential dangers and the

emotion of fear is more evident when the child does not fully understand the situation and is not able to exert control over it (Ollendick et al., 1991). This is one aspect of fear that can be related to the overall issue of anxiety since anxiety is rooted in the fear of the unknown and a sense of lack of control. Moreover, fear is a highly adaptive emotion, meaning that its causes differ based on the situations surrounding a person as fears are protective responses to uncontrollable stimuli. As fears persist for a child, “anxiousness” is promoted, so a premise can be made that there is a direct relationship between fear and feeling anxious. This means that there are cases in which a child is not officially diagnosed with generalized anxiety disorder (GAD), but still expresses such symptoms (Craske, 1997). Once a fear persists over time and these symptoms stay with a person for long enough, the chance for a GAD diagnosis is increased significantly.

Childhood Anxiety Disorders

GAD is one of the most prevalent mental health disorders in children (McLoone et al., 2006). The major characteristic of this disorder is excessive anxiety for at least six months, which is not caused by one specific subject or topic and is difficult to control. A key part of diagnosing this disorder is that the fear is of an irrational nature (McLoone et al., 2006). Some of the symptoms include fatigue, difficulties with concentration, sleep disturbances, restlessness, and irritability (American Psychiatric Association, 2022). In cases of GAD, children’s worries are most commonly related to school. Struggling with GAD can be overwhelming as the disorder comes with extreme self-doubt, high sensitivity to criticism, and a need for reassurance (Wagner, 2001). Children with an anxiety disorder are more likely to report higher levels of depression, lower levels of achievement, and difficulties with peer relationships (McLoone et al., 2006).

Another type of anxiety disorder is social anxiety disorder. Social anxiety disorder can be characterized as the persistent fear of social interactions. Symptoms may include sweating, respiratory distress, and palpitations (Jefferson, 2001). Similar to GAD, social anxiety disorder may provoke and coexist with other mental health disorders, such as depression. Social anxiety disorder shares symptoms and characteristics with other disorders including panic disorder, agoraphobia, atypical depression, and body dysmorphism, and thus requires a differential diagnosis, which is the process of looking at the different disorders that share symptoms and signs in order to determine the appropriate diagnosis (Jefferson, 2001). As children incorporate themselves into new groups of people and encounter various unknown social and performance situations, anxiety can be extremely prevalent and impact a child’s everyday functioning. Children may fear that they will present themselves in a way that is humiliating in some common feared situations, such as speaking in front of a larger group, meeting new people, and performing in front of an audience (McLoone, 2006). As these and many other social activities become a significant part of one’s life once they start school, a child’s life can become dominated by this fear and limit their ability to develop like others.

While a substantial part of a child’s life is spent in school, the topic of separation anxiety disorder also comes into play. First, separation anxiety is an anxiety disorder which is commonly encountered in children. It often reaches its peak when a person is still a child and the issue may get resolved as the person ages (American Psychiatric Association, 2022). The disorder is characterized by excessive worry when separated from attachment figures, which are usually family members. Distress is shown in children before or during the separation. Issues that may appear with a child presenting with this anxiety disorder include sleep disturbances, as well as difficulties with adapting to the school environment (Dabkowska, 2011). Since the symptoms of

separation anxiety disorder are associated with daily tasks in a child's life, challenges in development become existent as they age.

Media Exposure as a Cause of Childhood Anxiety

Causes of anxiety vary widely based on the specific diagnosis type and the situation of the child. One major cause of anxiety disorders is media exposure (Rhodes, 2020). Technology has become more advanced, making it easier to manufacture, cheaper for consumers, and therefore more accessible, turning media exposure into a widespread issue. People have constant access to different forms of media, including social media. The content that a person may encounter on social media and the internet can be deeply disturbing and even traumatizing at times because of the easy access to any kind of information. This can be an issue with adults, but it becomes an even greater concern with children because their brains are still developing (National Institute of Mental Health, 2023). Due to the sensitive topics that may be viewed and learned about by a child, there is an increase in fear, which can lead to anxiety (Hoge et al., 2017). Moreover, the exposure to these topics happens at a fast rate which can affect a child's mental state because of the little time to properly process the information. There is also a correlation between the content that is provided on social media and burnout, which is an individual's exhaustion due to excessive job-related stress, especially for adolescents (American Psychological Association, 2022). Furthermore, social media can oftentimes be harmful to a child's self-esteem (Rhodes, 2020). Social media, such as Instagram and TikTok, lets a person curate a version of themselves that seems perfect but can be completely unrealistic. When a teenager, whose brain is developing, is exposed to this "perfect" image but cannot achieve it themselves, there is an immediate decrease in self-esteem. This has contributed to an increase in depression levels and higher suicide rates in teenage girls (Rhodes, 2020). It is important to acknowledge that depression and anxiety are closely linked together (Hoge et al., 2017). In sum, due to the advances in technology that have led to easier access, children are particularly vulnerable to negative impacts of exposure to traumatic or distressing content online.

Childhood Anxiety and Education

Anxiety causes kids to have lower self-esteem, which can also become very prevalent in the classroom. Reassurance is key in addressing this issue. Specifically, verbal reassurance coming from an external source, who is also seen as the authoritative figure in this case, can be quite helpful for the child's difficulty with self-confidence (McLoone et al., 2006). An important aspect in a child's life is their education. As they are growing up and developing, they acquire new knowledge that will potentially aid them in the future. However, when a child is struggling with anxiety, their learning is ultimately affected as well. One way of measuring learning can be through school performance. School performance can be defined by the grades the child receives, as well as the participation they exhibit during class time. This is significant because it is a way to measure the academic skills the child is gaining, as well as their level of comfortability in class. When a child is dealing with anxiety, there are also other issues that can be encountered, such as depression, difficulty with concentration, and difficulty creating peer relationships, especially when a child is experiencing social anxiety. In more extreme situations, school phobia (i.e., the intense fear of school that can contribute to school avoidance or refusal) can be developed. These issues directly impact a child's ability to learn by limiting their access to academic content (McLoone et al., 2006). Therefore, they may not develop the skills

necessary to perform well in the school environment. This would mean a major deficit in the developmental stages when a child is supposed to acquire academic skills.

There are different ways in which educators can support their students who are dealing with anxiety disorders in order to make their experience in school more accommodating. In order to design the best approach for such situations, a way of measuring a student's anxiety needs to be established. One way to measure anxiety includes specific anxiety scales. These scales help determine the extent of anxiety, so it is easier to provide appropriate interventions to address the symptoms. Specifically, there are strategies such as self-report questionnaires and clinical interviews to help determine the extent of a student's anxiety and identify its specificities (McLoone et al., 2006). It is important to remember that a diagnosis can only be made by a psychiatrist, psychologist, or other mental health professional, but such strategies can be beneficial in a school setting to identify needs and plan interventions. Cognitive appraisal and interference are tactics that can be used by teachers with children struggling with anxiety (Comunian, 1993). Finally, school-wide prevention programs are extremely valuable. Preventing the issue rather than addressing it when it already exists, is key to real progress.

Treatment of Childhood Anxiety

Since GAD, social anxiety disorder, and separation anxiety disorder can act as major setbacks in any child's life and pose various difficulties regarding communication and overall development, beyond these accommodations discussed, treatments are also crucially important. One treatment that is widely used for anxiety disorders is cognitive behavioral therapy (CBT). CBT can be defined as a short-term, skills-focused treatment. Its goal is to improve a person's emotional responses by changing their thoughts and behaviors (Kaczurkin & Foa, 2022). Supported by studies, CBT is an evidence-based psychological treatment for children presenting with mental disorders, including anxiety (Seligman & Ollendick, 2011). One reason for its popularity would be that CBT can be efficient for treating anxiety disorders in children even when there are other conditions present in the patient. Moreover, it has shown success with people from different cultural and ethnic backgrounds (Seligman & Ollendick, 2011). Research supporting the efficacy of CBT states that approximately two out of three children treated with CBT have been expected to show positive results and an overall improved condition of their diagnosis after around 12 to 16 weeks (Seligman & Ollendick, 2011).

While CBT highlights that there are existing treatments for children who are dealing with different types of anxiety, other forms of treatment are also being researched in the field of psychology. This allows for more options to be available regarding treatment and increasing accessibility for people with different backgrounds. One example of an innovative treatment in the world of psychology is ketamine (Hudson Mind, 2023). Ketamine is a drug that could be used for treating anxiety, even in children. It is a psychedelic drug that does not have a spotless cultural reputation, so there may be people who are not open to such treatment (Hudson Mind, 2023). However, as more of ketamine's clinical uses are being discovered, it is seen that this drug can be and has already begun being an efficient alternative for treating anxiety disorders. Ketamine has been used as an IV anesthetic for more than 60 years and when administered with an IV, the patient falls in a trance-like state. Overall, the patient feels dissociated from the environment, as if in a dream, while still being awake. The patient has their eyes opened and keeps their corneal and light reflexes. Moreover, there is minimal risk of airway obstruction (Bali et al., 2022). This psychedelic can be used for treatment of mental disorders, such as PTSD, depression, and anxiety. It offers fast relief and an alternative for patients that have not



benefited from other forms of treatments. It is greatly encouraged that patients keep going to talk therapy, as well, to achieve optimal results (Hudson Mind, 2023).

Conclusion and Further Directions

In the final analysis, anxiety can present itself as an extreme issue in children's development. There are different types of anxiety disorders which affect a child's daily functioning in various ways, but they all commonly impact a child's opportunity for an optimal performance in school. The presence of high levels of childhood anxiety are partially due to the increase in media exposure, which is important to acknowledge in order for the best treatment techniques to be employed. In the school environment, strategies like cognitive appraisal can be beneficial, while overall both traditional treatments, such as CBT, and modern ones, like ketamine, are helpful alternatives. The purpose of this review paper is to help children, as well as their parents and educators, and to provide new interventions for preventing and treating childhood anxiety.

However, it is still important to recognize the complexity of childhood anxiety. One aspect that can greatly affect the prevalence of anxiety disorders is a child's socioeconomic background. Socioeconomic status can impact a child's accessibility to education and mental health assistance, as well as their stress levels. Notably, it has been found that 50-75% of children who suffer from separation anxiety come from a lower socioeconomic background (Masi et al., 2001). Moreover, anxiety is often comorbid with depression and other mental disorders. This factor should be considered when creating the best treatment plan for a child.

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