

The Influence of Test Anxiety on Teenagers

Li Li *

College of Liberal Arts, Auburn University, City, Auburn, Alabama, America

* Corresponding Author Email: lzl0089@auburn.edu

Abstract. With the rapid development of information dissemination methods, people can more easily access news and learn about other people's lives. Although the popularity of information has brought convenience to people's lives, it has also further increased the anxiety of some people. As one of the main groups on the Internet, adolescents will inevitably be affected. Test anxiety is one of them. This article will take you through test anxiety in a systematic and as comprehensive way as possible. The article will focus on basic information about test anxiety, the similarities, and differences between test anxiety and other anxiety, the effects, causes, and ways to relieve it. The article will help those who want to explore test anxiety in more depth to have a more comprehensive perspective. The article will help open the minds of those who want to conduct special studies on test anxiety in the future. The findings of this study provide enlightenment for alleviating teenagers' test anxiety and promoting their good academic development.

Keywords: Test anxiety, Neurotic Personality, Pressure, Family, CBT.

1. Introduction

As students in all countries face this different pressure to advance to higher education, it leads to a high incidence of test anxiety. Especially in East Asian countries, more and more young students are facing exam pressure due to the increasingly stringent educational resources. The pressure from various sources has led to the spread of test anxiety. Test anxiety is a form of performance anxiety. It is a type of anxiety that occurs in important or stressful situations. In addition, to testing anxiety, it also includes public speaking, performing on stage, or attending an important interview. The most obvious and biggest impact of test anxiety on adolescent students is that it can lead to poor grades and may even cause students to miss out on their ideal college. The reasons for the frequent occurrence of test anxiety include both personal reasons: such as students' over-sensitivity, and environmental reasons: such as comparison and supervision by parents and teachers, the gap between peers, and pressure from social aspects. Test anxiety can easily be confused with generalized anxiety in the early stages of judgment. Although the symptoms of both types of anxiety are similar and the result is the same, causing the student to fail the test, the triggers are very different. This article will focus on test anxiety, the effects of test anxiety, the similarities and differences between test anxiety and other anxieties, and treatment methods.

2. Test anxiety

Test anxiety is a form of performance anxiety. It is a type of anxiety that occurs in important or stressful situations. In addition, to test anxiety, it also includes public speaking, performing on stage, or attending an important interview.

2.1. Basic Definition

When you are a student, there are always students who can perform at their true level or even exceed their level on the test. However, some students are very good at their studies but get a score below their level when they are so nervous about the test. This is likely to be a problem caused by test anxiety. As we all know, anxiety is a way for the brain to help people to avoid harm. In psychology, we call this the inverted U hypothesis, also known as the "Yerkes-Dodson Law"[1]. The hypothesis itself is a theory used to explain the relationship between psychological stress, job difficulty, and job performance. When it comes to test anxiety, it can be seen when students' performance is affected by

high or low levels of stress. In other words, anxiety can motivate students to pay more attention to their studies and to revise early. In this way anxiety is a good thing. However, excessive anxiety can lead to doubts about oneself before the exam, loss of appetite, insomnia, and many other conditions. You may also experience hand tremors and rapid heart rate in the exam room [2]. This will largely affect the final result of the exam.

2.1.1. Identification of judgment

Because of the specific nature of test anxiety, it can be very easily confused with generalized anxiety disorder. First of all, because test anxiety and generalized anxiety disorder are both types of anxiety, they have similar expressions. Also, both test anxiety and generalized anxiety have resulted in getting bad grades on the test. It also means that they both cause the same results. Generally, test anxiety is a condition that appears for a short period, from a few weeks before the end of the test, while generalized anxiety disorder is anxiety that exists for a long time. They possess different cyclical systems. In the case of test anxiety, students are nervous about the test because of different triggers, which leads to poor performance and ultimately failed to get the desired grade. Because of the poor performance, leads to more nervousness before the exam. Thus, a vicious cycle is formed. Of course, this is only an analysis of the general aspects, the reasons for this test anxiety accounts for a different weight. Ultimately, the two causes of poor performance are the inability to complete the review tasks due to excessive stress and the deficiencies in learning skills that go hand in hand [3]. The closed-loop of generalized anxiety, on the other hand, is the student's belief that he or she is not smart enough to study, which leads to an aversion to learning. Because of their aversion to learning, students are reluctant to study, so they are more nervous about getting good grades on exams because they do not have enough knowledge reserves. Students form a vicious circle by their bad grades corroborating the view that they are not good at studying. In addition to this obvious difference, the difference between generalized anxiety and test anxiety is that generalized anxiety may have a genetic component while test anxiety does not [4].

2.1.2. Test Anxiety Symptoms

First of all, how can we tell if a person is suffering from test anxiety? The symptoms of test anxiety are divided into two main categories; pre-exam anxiety and mid-test anxiety. Symptoms of pre-exam anxiety include fidgeting, forgetfulness, self-doubt, negativity, and insomnia. Students with mid-test anxiety may experience sweating, rapid heartbeat, dry mouth, shaking hands, and so on. In severe cases, students may even experience nausea, dizziness, or even fever, and a range of other physical discomforts. All of these can seriously affect the student's grade in the exam. In the long run, this anxiety can lead to a fear of studying because the student's performance in the exam is not commensurate with their level. It may even lead to substance abuse, alcoholism, and other problems.

2.2. Causation

There are many causes of test anxiety, which are divided into two parts: personal factors and environmental factors. In turn, environmental factors are subdivided into different causes: family causes, peer causes, social environment, and so on.

2.2.1. Personal Factors

In the field of personality psychology, we often use a model called the "Big Five personality traits", also known as the "OCEAN" model. This model lists five universal personality traits, including extraversion, neuroticism, agreeableness, conscientiousness, and openness to experience. These five traits cover almost all aspects of human description. These five traits are influenced by genetics, but they can also be influenced by the acquired environment [5].

One of the most noteworthy of these is the neurotic personality of the Big Five. This classification includes people's emotional tendencies, (whether a person is an extrovert or introvert), whether a person is emotionally stable, and whether they can adjust their emotions and moods more quickly. A higher score in this category means that the individual is more likely to experience negative emotional

conditions such as stress, anxiety, and depression [6]. Of course, students are also more likely to face test anxiety. They are more likely to be nervous before the test and almost always have a negative prediction of the final result of the test. Such thinking can lead to increased anxiety and a vicious cycle.

2.2.2. Environmental Factors

Environmental factors refer to what circumstances, other than their influence, can cause test anxiety to spread among students or lead to high levels of test anxiety. In turn, this is divided into three parts: parental factors, peer factors, and social environmental factors. Of these, parental factors and peer factors have a high degree of similarity.

2.2.2.1. Parental Factors and Peer Factors

All of us are part of human society, and with the advancement of technology, people have a more convenient way to learn about the lives and circumstances of others. In such a situation, comparisons are more likely to occur. Especially when parents can learn about student rankings or college acceptance rates and the performance of good students via the internet or teachers, it is easy to put pressure on their children. Of course, some parents are worried that their children will not get a better education and will suffer in their future social life. Others simply because their child's grades can be a tool for comparison. Either of these reasons can put invisible pressure on the child, which can lead to test anxiety. Peer influence has the same situation. When students can visualize the gap between their academic grades and other peers of their age. It can cause stress. This may be exacerbated when the student has siblings or cousins of the same age in the family. The odds are that the situation will become one of both parental and peer influence.

2.2.2.2. Social Environment Impact

In today's society, the majority of teenagers choose to further their education as a way to build a foundation for their future work and life. This has led to a situation where students in countries with tight educational resources and large populations have to work much harder than usual to reach their goals to get into better universities. Although we have been able to learn from the research, the stereotype that "students in East Asia have a very high suicide rate due to the high pressure of exams" is a stereotype [7]. However, this also confirms the fact that the international community recognizes the importance of examinations in East Asian countries and the fact that young people have to face a tough educational environment. In China, many children face not only the college entrance exam but also the secondary school entrance exam, which puts many students in a passive situation when choosing a school for high school. If a student is unfortunate enough to fail the midterm exam, the probability of being able to get into the desired college is drastically reduced. According to our experience, in populous provinces such as Zhejiang, Shandong, and Henan, half of the junior high school students will be screened out and shifted to technical schools or private high schools. This and the college entrance exam, the average difference of one point will be nearly two thousand people or so. This leads to tremendous pressure on students, which leads to test anxiety.

2.3. Therapies

There are many ways to relieve test anxiety, and different methods can be used for different levels. For example, anxiety-relieving medications, psychological suggestions, and CBT. We will focus on psychological cues when test anxiety is low and CBT, which requires professional access when test anxiety is high.

2.3.1. Psychological Suggestions

In the case of mild test anxiety, students can relax by taking deep breaths, starting to prepare for the test in advance, taking care of themselves, and other ways which can make them relax. Deep breathing, by providing sufficient oxygen to your lungs, can help you reduce anxiety, focus, and stay calm. And getting enough sleep can help you focus and improve your memory. The last thing you want to do is study all night, which is not only inefficient but will cause you to stress even more. Of

course, you can also eat something delicious, take a bath or listen to music to soothe your emotions. One thing to keep in mind when you are doing mental cues is to try to use positive words. Don't use words like "I'm not nervous" or "I'm not anxious" with negative meanings, which will increase your anxiety. You can choose "I can do it!" "I can pass this exam." These are the types of sentences you can use to cheer yourself up.

2.3.2. CBT

If your anxiety is so severe that you experience vomiting, headaches, and other physical discomforts during the exam, your best option is to seek professional help to alleviate the symptoms of test anxiety through anti-anxiety medication or CBT. CBT is short for Cognitive Behavioural Therapy, which is used to treat a variety of mental illnesses, including anxiety, anger problems, eating disorders, and depression. CBT is a less risky form of psychotherapy, but the process of using CBT for treatment is likely to cause you emotional discomfort. Because CBT is to uncover what is causing you pain, including your emotions, experiences, and so on. During this process, you may experience a lot of emotional ups and downs, you may cry and get angry because you remember unpleasant experiences, and you may experience physical exhaustion. CBT also requires a professional psychotherapist to help you de-escalate your emotions. For test anxiety, CBT will help clients better identify misconceptions in their thinking, such as, if I don't get an A, I'm not a good student; if I don't get into a prestigious university, I won't succeed. As well as helping the visitor learn better ways to cope with test anxiety, thus further alleviating symptoms and improving life and learning. [8] Of course, all psychotherapies are not able to help people get better immediately, so CBT takes a lot of time. CBT is usually a short-term treatment that requires 5-20 face-to-face sessions, but your therapist will help you plan your time better, and more sessions will be needed if the test anxiety is severe.

2.3.3. Medication

In addition to the above psychotherapy skewed, if the patient's test anxiety is too severe has developed into anxiety disorder this time need to consider medication for treatment as appropriate. For example, benzodiazepines, its representative drugs are lorazepam, alprazolam, oxazepam, diazepam, etc. This drug has the advantage that the onset of action is relatively fast and can be taken as needed. There are also aminoglycosides, phenmetrazine, and other classes, such as fenugreek and glutamate. There are some new-generation simple anxiolytics, like buspirone and tandospirone [9]. At the clinical time, it is very possible to have co-morbidities because the patient's anxiety is too severe. For example, suffering from depression, bipolar disorder, etc. at the same time. This is where the doctor needs to be more careful in judging the medication and controlling the dosage. Also, the next interview is to understand the feedback of the patient's body after taking the medication. At the same time, patients are advised to give feedback and discuss with the doctor if they encounter special circumstances, such as feeling that the existing drug dosage cannot control the disease or feeling unwell after taking the drug. Do not increase or decrease medication without permission. In the article "To continue or discontinue antidepressants in anxiety disorders? A dilemma for patients and clinicians. A dilemma for patients and clinicians. In the article, a 35-year-old woman was worried that stopping the medication would lead to a relapse and finally decided to stop gradually after discussing it with her doctor [10]. Of course, each patient's situation is different, and the actual situation needs to be judged by the doctor.

3. Future implications

As the pressure to advance in society increases, more and more attention will be paid to educational resources. Since educational resources are already in short supply, competition in terms of exams, grades, etc. will only get stronger. In today's society where psychological problems are becoming more and more serious. This will inevitably lead to the prevalence of test anxiety among adolescents. However, our knowledge and research on test anxiety have not kept up with what is likely to happen. There is a lack of data to support many aspects of test anxiety, both in terms of the causes of test

anxiety and in the analysis of data for treatment. The article explores a possible research direction for those who want to conduct future research on test anxiety. For example, is there a correlation between children in only-child versus large families and whether they are more likely to face test anxiety? Especially due to the epidemic, there has been a major shift in the way many courses are studied and how exams are taken. The impact on students is very significant. For adolescents, it is the study that can cause greater anxiety when faced with life at school, where everyone around them can be engaged. Still, the anxiety faced by preparing for exams alone at home alone requires self-resistance to outside temptations such as video games, cell phones, short videos, etc. is even more severe. There are many aspects of test anxiety that we can study and explore in more depth.

4. Conclusion

The effects of test anxiety on adolescents have always been present, and we have less research on it. This piece of writing starts with the most basic aspects of test anxiety. It highlights the differences between test anxiety and generalized anxiety. Although the symptoms and outcome are very similar, there are major differences in the causes of the two. Understanding this difference can help to provide more accurate psychological support for test anxiety patients in the future. The article also explains the symptoms of test anxiety, from mild to severe. Of course, different levels of anxiety require different treatment techniques. The direction of treatment also ranges from mild self-referral to CBT and medication. The causes of anxiety, which are not supported by more data, for the time being, were also analyzed systematically through two major aspects: personal and environmental factors. I hope it will be useful for future research on test anxiety.

References

- [1] M. Damian, N.S. Justin, S.M. Jennifer, Pitching a Yerkes–Dodson curve ball?: A study exploring enhanced workplace performance for individuals with anxiety disorders, *Journal of Workplace Behavioral Health* 31 (2016) 71–86. DOI: <https://doi.org/10.1080/15555240.2015.1119654>
- [2] H. Fearn-Wannan, *Test Anxiety: Its Causes and Consequences*. Distributed by ERIC Clearinghouse 35 (1980) 1–29.
- [3] S. Tobias S, *Test Anxiety: Cognitive Interference or Inadequate Preparation?* Distributed by ERIC Clearinghouse 90 (1984) 1–8.
- [4] D.J. Stein, A.E. Kazdin, A.M. Ruscio, Perceived helpfulness of treatment for generalized anxiety disorder: a World Mental Health Surveys report, *BMC Psychiatry* 21(1) (2021) 1–14. DOI: <https://doi.org/10.1186/s12888-021-03363-3>
- [5] T. Nishimura, T. Suzuki, T. Basic Psychological Need Satisfaction and Frustration in Japan: Controlling for the Big Five Personality Traits, *Japanese Psychological Research* 58(4) (2016) 320–331. DOI: <https://doi.org/10.1111/jpr.12131>
- [6] J. Mostowik, M. Mielimąka, K. Rutkowski, T. Ostrowski, Time in the mental health context: Neurotic symptomatology, defense mechanisms and the perception of time perspective among patients diagnosed with neurotic and personality disorders—A clinical study, *Psychological Reports* 125(1) (2022) 232–255. DOI: <https://doi.org/10.1177/0033294120978164>
- [7] K. Zeng, G. Le Tendre, Adolescent suicide and academic competition in East Asia, *Comparative Education Review* 42(4) (1998) 513–528. DOI: <https://doi.org/10.1086/447526>
- [8] A. Lungu, R.E. Wickham, S.Y. Chen, J.J. Jun, Y. Leykin, C.J. Chen, Component analysis of a synchronous and asynchronous blended care CBT intervention for symptoms of depression and anxiety: Pragmatic retrospective study, *Internet Interventions*. 28 (2022) 100536. DOI: <https://doi.org/10.1016/j.invent.2022.100536>
- [9] I.M. Puspitasari, R.K. Sinuraya, C. Rahayu, Medication Profile and Treatment Cost Estimation Among Outpatients with Schizophrenia, Bipolar Disorder, Depression, and Anxiety Disorders in Indonesia, *Neuropsychiatric Disease and Treatment* 16 (2020) 815–828.

- [10] A. Muntingh, N. Batelaan, W. Scholten, A.J. van Balkom, To continue or discontinue antidepressants in anxiety disorders? A dilemma for patients and clinicians, *Journal of Psychiatry and Neuroscience* 46(3) (2021) 388-389. DOI: <https://doi.org/10.1503/jpn.200099>