

# The conjecture of the therapeutic effect of Mindfulness based cognitive therapy on pre-exam syndrome

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**Abstract:** Although pre-exam syndrome is an obscure field in the academic world, it has a huge impact on students' mental health. As a brand new cognitive therapy emerging in recent years, mindfulness based cognitive therapy has excellent performance in the treatment of various disorders. Therefore, in this article, I explore the feasibility of mindfulness therapy in the treatment of pre-exam syndrome by reviewing the previous literature. Through the overall analysis of pre-exam syndrome, as well as the therapeutic effect of mindfulness therapy on various symptoms of pre-exam syndrome, to determine the overall effect of mindfulness therapy on pre-exam syndrome.

## 1. Introduction

There are very few studies on the pre-exam syndrome, however, the pre-exam syndrome has become an important threat to the mental health of modern students. According to the Guardian, an average of 96 people under the age of 25 take their own lives in April and May-exam season-each year in England and Wales and almost a third of the 145 suicides under the age of 20 in 2014-15 involved people in England who were either taking exams or were about to take them or were waiting for their results<sup>[1]</sup>. This is an alarming number, which proves that the pre-exam syndrome has greatly harmed students' mental health and even their lives. However, there hasn't been enough research. Luckily, in China, a test-obsessed country, there have been documented cases of pre-exam syndrome since 1999, the authors even offer some very specific therapy<sup>[2]</sup>. In the past 20 years, several treatments have been developed in China that are considered efficacious, although a large amount of traditional Chinese medicine is used in those treatments, some of them still are enough to provide reference value. For example, In Hui's article, she combined behavioral cognitive therapy and traditional Chinese acupuncture and moxibustion to treat pre-exam syndrome<sup>[3]</sup>.

## 2. What is pre-exam syndrome?

Although there is no universally accepted definition of pre-exam syndrome, I still found some cases in Chinese research. In China, pre-exam syndrome is also known as pre-exam anxiety, exam phobia, exam anxiety, etc. It is the fear before or during the test, causing a series of adverse physical and mental reactions, often manifested as nervous anxiety, dizziness, sweating, thinking disorders, fuzzy memory, slow reaction, absent-minded. Hui mentioned in her article 36 cases of pre-exam syndrome were treated by cognitive behavior method and traditional Chinese acupuncture<sup>[3]</sup> that pre-exam syndrome is a combination of some symptoms of depression, obsessive-compulsive disorder and anxiety, although the symptoms tend to be mild at first, but when untreated, can cause more serious problems like anxiety, depression, and bipolar disorder<sup>[3]</sup>. In Geng and Guo's 30 cases of pre-examination syndrome treated by acupuncture and psychological counseling<sup>[4]</sup>, they proposed three diagnostic criteria "1, the individual psychological quality and psychological bearing capacity becomes worse 2, mental tension, anxiety, fatigue and irritability, attention is not concentrated; Irritability and laughter, insomnia,

memory loss, need to go to the bathroom, cold hands and feet, *nacha* (Chinese medicine term for decreased appetite). They state that if two of these three symptoms appear within a month before the test, it is pre-exam syndrome. It is clear that in China, clinicians tend to think of pre-exam syndrome as a complex combination of multiple mental disorders which are often accompanied by some physical symptoms, while the mixture of symptoms of multiple mental disorders undoubtedly brings great difficulty to treatment. For these reasons, Chinese clinicians tend to use a combination of CBT and traditional Chinese medicine to treat pre-exam syndrome.

### **3. Treatments of pre-exam syndrome in China**

In the case study of Geng and Guo, the treatment they gave was mainly acupuncture, supplemented by psychological counseling<sup>[4]</sup>. What I paid most attention to was psychological counseling. In their article, the first thing they do is encourage patients to accept their failure in past exams, while at the same time, they are trying to build patient confidence to face the next exam. At the same time they asked the parents give cooperation to encourage and support patients give patients a better environment to calm down and accept the treatment better. In the end, they advise patients prepared for the exam better, and to get familiar with the examination room in advance<sup>[4]</sup>. In their treatment, they focus on enhancing patients' confidence, so that they no longer fear the exam, and do not create too much stress. I think the treatment should start from letting the patient accept the exam and get familiar with the exam. In Hui's case study, she used a range of traditional Chinese acupuncture treatments to relax the patient's mind and body, with cognitive behavioral techniques as an aid<sup>[3]</sup>. The therapy she uses is flooding, which involves asking patients to imagine taking an exam and then using cognitive behavioral therapy to help them get through it. Her treatment showed remarkable results, with 34 of the 36 patients cured within two to 10 sessions, and the remaining two patients also improved. In it, she lays out the key to using cognitive behavioral therapy, which, in her view, it is important to getting patients to focus on the present rather than spend time dwelling on past experiences, and to not seeking out vague results. At the same time, she proposed that patients should be taught to actively analyze their own psychological problems and their own behavior, so that patients keep a cool head and pay attention to their negative emotions, find their origins and solve them<sup>[3]</sup>. We can see that in Hui's therapy, there is already some prototype of MBCT, which is self-regulation by focusing on the present self and analyzing one's emotions and thoughts<sup>[3]</sup>.

### **4. Anxiety symptoms in pre-exam syndrome**

Anxiety is the most important component of test pre-test syndrome. Student's concerns about test scores and the tension brought by the approaching exam day can often cause anxiety. The stress caused by anxiety can lead to a range of mental disorders, such as depression and obsessive-compulsive disorder, which can lead to physical stress. This physical stress can lead to sweating, thinking disorders, fuzzy memory, slow reaction, absent-minded. Therefore, the therapeutic effect of MBCT for anxiety is very important, it determines the effect of MBCT in the treatment of the whole pre-exam syndrome.

Giommi et al. compared behavioral cognitive therapy with MBCT in patients with generalized anxiety disorder and panic disorder who received at least eight weeks medication. Results from both the Baker Anxiety Scale and the Pennsylvania Anxiety Questionnaire showed that MBCT improved significantly more than CBT. Moreover, patients who receive MBCT tend to have a greater chance of improving their condition in the future<sup>[5]</sup>.

Similarly, in the meta-analysis of Ghahari et al., the results of their analysis showed that MBCT has a very significant improvement in the treatment of GAD. In their analysis, comparing the six eligible studies up to November 2018, "MBCT significantly improved the treatment outcome of GAD in all studies, except one." leading us to conclude that MBCT is effective in the treatment of generalized

anxiety disorders<sup>[6]</sup>.

MBCT works well in anxiety because of its emphasis on self-acceptance, self-compassion, letting go, and the hope that patients will focus on the present rather than meaninglessly thinking about the future. When patients undergo mindfulness therapy, they are asked to pay attention to every thought, movement and even breath in the present moment. Keep your curiosity alive by seeing your thoughts from a third person's perspective and gaining fresh experiences. When patients focus on observing their own thoughts, actions. By focusing on the present rather than the future, they naturally have less time to feel anxious.

## **5. Depression symptoms in pre-exam syndrome**

Depression symptoms are perhaps the trickiest part of the exam syndrome, in which high school students in China take a nationwide test to decide which university they will attend. In a sense, the exam determines their future, and Chinese schools will schedule a large number of mock exams before the all-important test. The time, difficulty, rules and even the pressure of these mock tests are all simulated by Chinese teachers as much as possible. Therefore, students who fail to do well in these tests often bear great psychological pressure. This great psychological pressure will easily lead to low mood, loss of motivation for learning, loss of interest and a series of depression symptoms, and even directly lead to depression in some cases.

The students facing the Chinese university entrance exam have a higher risk of depression than the ordinary students<sup>[7]</sup>. They theorize it might be the large parents expectations of students, unstable performance in mock exam, education and employment pressure that cause the temporary symptoms, and they believe these symptoms in normal circumstances will disappear naturally after the exam<sup>[7]</sup>. However, this is a slightly older study, and while it does provide some evidence of a spike in depression rates before important exams, it is a bit out of date. Nowadays, students facing exams are much more likely to suffer from depression than before.

MBCT thought should not be billed for the treatment of depression, but in Thimm JC and Johnsen TJ's meta-analysis of 20 studies, they believe we can judge MBCT to alleviate symptoms of depression and the obvious effect, despite their state "the number of available studies was small, and the time period investigated relatively short. The results should therefore be considered preliminary<sup>[8]</sup>." we can still believe MBCT has certain prospects in alleviate symptoms of depression, as mentioned above, the pre-exam syndrome is not depression, but a variety of the product of the combination of the symptoms of some disorders, so we can reasonably think MBCT has some effect in the treatment of depression symptoms in pre-exam syndrome, however, further experiments are needed to confirm this effect.

## **6. Conclusion**

Although MBCT has been developed over the years, it is clearly a relatively immature field. In depression, MBCT has been used as an adjunct to CBT or to prevent relapse of depression, while in anxiety, MBCT has a very mature and reliable concept. There is a lot of evidence that MBCT is very effective in treating anxiety. Unfortunately, it's not enough. Pre-exam syndrome is a complex and variable mental illness that results from great stress and only exists in certain circumstances. Individual stress tolerance can lead to dramatic changes in the pattern of pre-exam syndrome. This makes it very difficult to define. It is a complex syndrome that contains both physical and psychological symptoms, too much psychological pressure caused the physical symptoms such as dizziness, sweating, thinking disorders, fuzzy memory, slow reaction, absent-minded will aggravate students' fear and anxiety about the exam, and eventually worsen the formation of those more serious mental disorders.

At the present stage, MBCT can only be proven to be effective for a few symptoms. However, according to existing studies, CBT has been used as a treatment for pre-exam syndrome in China. And

based on past experience, MBCT can be used as a supplement or even a substitute for CBT in many cases. So I think MBCT has the potential to be the primary treatment for pre-exam syndrome. In the future, I think it is necessary to study the overall effect of MBCT in the treatment of pre-exam syndrome, as well as the treatment effect of depression and obsessive-compulsive disorder caused by pre-exam anxiety. At the same time, I think the most important thing at present is to carry out a systematic study on the pre-exam syndrome, and to define and study the pre-exam syndrome by collecting a large amount of data.

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