

Sunshine Always After the Rain, the Domestic Post-traumatic Growth Literature Review

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ABSTRACT

Post-traumatic growth (PTG) refers to the positive psychological changes experienced by individuals in the process of struggling with traumatic events. This paper discusses from the two dimensions of bibliometrics analysis and research content, and summarizes the research status of post-traumatic growth in China. The results show that the research field of PTG is mainly focused on medical disciplines, psychology and pedagogy, and the main research objects are patients with major diseases and special groups. In the follow-up research, the breadth of post-traumatic growth research should be strengthened and foreign measurement questionnaires should be combined with Chinese cultural background. At the same time, academic circles should also pay attention to the research on the relationship between post-traumatic growth and COVID-19 virus, so as to make greater contributions to people's mental health in the post-epidemic era.

Keywords: Post-traumatic growth, bibliometrics, research hotspots, frontier trends, literature review

1. INTRODUCTION

In the 1990s, psychologist Tedeschi and others put forward the concept of post-traumatic growth in the investigation of individual traumatic events[1], believing that the impact of traumatic events is not only negative, but also can make individuals have positive coping styles and psychological changes. In his follow-up study, he specifically defined it as "the positive psychological changes that individuals can experience in the process of struggling with traumatic events" [2]. With the vigorous development of positive psychology in recent years, scholars at home and abroad have paid more and more attention to the study of post-traumatic growth, especially since 2020, disasters have occurred frequently all over the country and even all over the world. United Nations Secretary General Guterres said in the policy briefing on "COVID-19 epidemic and Mental Health" that COVID-19 not only damaged our physical health, but also brought us increasingly heavy psychological pain. Mental health is the key to human nature. COVID-19 epidemic seriously affects the mental health and well-being of the whole society. Countries must take it as an important item to respond quickly. Will people see "sunshine" after "wind and rain"? What is the relationship between them? This study summarizes the research status of post-

traumatic growth in China in recent years, and discusses it from the two dimensions of bibliometric analysis and research content, in order to provide reference for understanding the post-traumatic psychological state and its mechanism in the post-epidemic era.

2. BIBLIOMETRIC ANALYSIS

2.1. The trend of post-traumatic growth

The number of articles published in a research field can represent the development direction, research status and research trend of this field to a certain extent. Through the statistics of the questions in the literature, it is helpful for researchers to understand the recent research situation and development trends in this field macroscopically. The researchers entered the China knowledge Network database (CNKI), on June 30, 2020 and searched with "post-traumatic growth" as the keyword or topic, and counted the number of articles published in China from 2008 to 2019. As can be seen from figure 1, since the study of post-traumatic growth began to be studied in China in 2008, the heat of the research has been rising rapidly, which shows that the academic circles pay more attention to the research on

post-traumatic growth. In the future, it will also attract more researchers to study in this field.

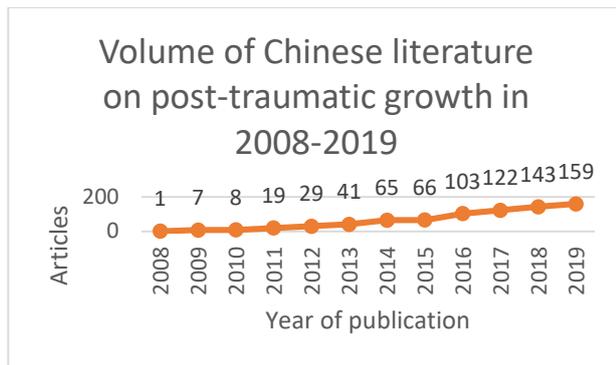


Figure 1 Volume of Chinese literature on post-traumatic growth in 2008-2019

2.2. Distribution of literature sources

By classifying the keyword or topic "post-traumatic growth" according to discipline distribution, figure 2 is obtained. Through the analysis of the chart, we can see the research distribution in this field clearly and intuitively, which provides a new direction for later researchers to consult related papers.

With regard to the subject distribution of papers in a certain subject journal, we can know the main research hotspots in this field. As can be seen from figure 2, the vast majority of studies on post-traumatic growth are concentrated in the field of medicine, especially in the direction of clinical medicine, and there are also many studies in the direction of psychology and pedagogy. Through the analysis of the classical literature in this field (those with high downloads and citations), it is found that most of the classical literature in medicine are distributed between 2010 and 2013. Most of the classical literature in education and psychology are distributed between 2012 and 2015, that is, the research in education and psychology is slightly later than that in medicine. This shows the strong development trend of pedagogy and psychology in the field of post-traumatic growth, which needs to be further strengthened in the future.

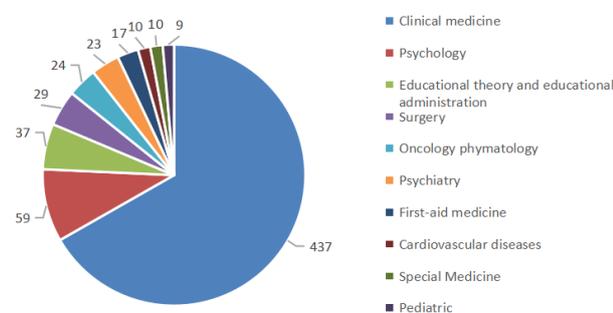


Figure 2 The domain distribution of domestic literature

In the distribution of literature sources in Table 1, it can also be seen that there are 6 medical-related research institutions. The information in the comprehensive chart

shows that the research on post-traumatic growth does not involve many disciplines, the scope of concentration is still relatively narrow, and its advantages are particularly prominent in the field of medicine, which shows the profound background and strong development trend of the current research on post-traumatic growth. In contrast, post-traumatic growth requires more exploration in breadth.

Table 1 Institutional distribution of the top 10 sources of the article

1. Institution	2. Number
3. Beijing Normal University	4. 31
5. Second military Medical University	6. 23
7. Taishan Medical University	8. 17
9. Zhengzhou University	10. 16
11. Dalian Medical University	12. 15
13. Anhui Medical University	14. 14
15. The First Affiliated Hospital of Zhengzhou University	17. 12
18. Nanjing Normal University	19. 11
20. The Second Affiliated Hospital of Wenzhou Medical University	22. 10
23. Institute of Psychology of the Chinese Academy of Sciences	25. 9

3. MAIN RESEARCH CONTENTS

Based on the existing literature in China, it is found that the research on post-traumatic growth is mainly focused on the following four aspects: (1) investigation on the current situation and influencing factors of post-traumatic growth, (2) review of research progress on post-traumatic growth at home and abroad, (3)intervention research on post-traumatic growth, (4) scale analysis of post-traumatic growth. The following will be introduced one by one.

3.1. Investigation on current situation and influencing factors

The formation of post-traumatic growth has many external factors and internal causes, and so far the research on it has emerged one after another. This kind of literature explores the different growth levels of different types of trauma, such as earthquake, cancer, myocardial infarction and so on, in different trauma experiences. And from the pathogenesis of the disease, social support, demographic factors and other aspects to explore the post-traumatic growth. Combing the existing literature, the research atmosphere of post-traumatic growth is divided into four aspects: major diseases (such as cancer, coronary heart disease, etc.), accidents (car accidents, burns, etc.), natural disasters (earthquakes, landslides, etc.) and special groups (people with disabilities, depression, etc.).

3.2. Review the research progress of post-traumatic growth at home and abroad

In this part of the research, the researchers sort out the relevant literature of PTG research at home and abroad, by summarizing and comparing the development process and intervention of PTG, in order to provide hot spots, methods and ideas for reference in the research of PTG in our country. In 2018, Awang Tsom reviewed the related concepts of traumatic events at home and abroad[3], and compared the relationship between post-traumatic stress disorder (PTSD) and post-traumatic growth in detail. The results show that PTSD and PTG have some common influencing factors, and the early PTSD can predict the later PTG to a certain extent, but PTG cannot predict the level of PTSD in reverse. Zhu Tingting and others used CiteSpace software to make a bibliometric analysis in the field of post-traumatic growth in 2019[4], pointing out that traumatic events, personal growth and change, PTG influencing factors and breast cancer are the research hotspots in this field, and future research can pay more attention to the study of PTG intervention programs.

3.3. Clinical intervention study on post-traumatic growth

PTG has a very high practical value in the prognosis of the disease. Reasonable psychological intervention can improve patients' confidence, mobilize patients' positive emotions, and then achieve the purpose of promoting patients' physical and mental recovery. Now, the psychological intervention research on PTG is deepening, and various intervention methods have their own characteristics. PARK et al pointed out in 2006 that PTG can be based on a variety of negative psychological intervention therapy for clinical intervention practice[5], which integrates the concepts of positive psychology such as PTG to better promote the growth and rehabilitation of patients. In this kind of literature, patients are intervened by cognitive behavioral therapy, mindfulness decompression, emotional expression, meaning therapy and empathy, so as to improve their post-traumatic growth level and achieve the purpose of psychological adjustment.

4. CONCLUSION

Today, more and more attention has been paid to positive psychology, post-traumatic growth has also been further concerned by researchers, and has become one of the hotspots of research in this field. Through the previous analysis, it is not difficult to find that PTG is the most widely studied in medical specialties, especially in clinical nursing. At the same time, psychological and pedagogical workers have paid more and more attention to the research trend of PTG in recent years. In the existing research in China, researchers have mainly adopted the way of cross-sectional research, longitudinal

studies and prospective studies are still too few, and the scope of the designed research is also slightly narrow, which shows the deficiency of PTG in the breadth of research. Zoellner and Maercker believed in 2006 that post-traumatic growth is a continuous process[6], and its level is constantly changing with the passage of time, and its positive effects will gradually become apparent. In the future, PTG needs to be more widely applied to some research scenarios, and its action mechanism and impression factors are more clearly defined and classified, and the intervention measures with high universality and strong pertinence are discussed. And then improve the post-traumatic growth level of the injured. In the domestic research on the measurement of post-traumatic growth, the vast majority use the translated foreign version of the questionnaire, researchers often ignore the further combination of the questionnaire with our culture and background, and need follow-up researchers to summarize the questionnaire to improve the reliability and validity. According to different fields, different trauma experience to develop targeted assessment tools, will further promote the development of PTG research. 2020 is also an extraordinary year, a variety of catastrophic events occur frequently, especially the raging of COVID-19 virus has a great impact on people's lives, but also caused a certain degree of psychological trauma. A study by Wang Wenchao and Professor Wu Xinchun in 2020 showed that PTG[7], as a post-traumatic psychological response, can have an impact on post-traumatic prosocial behavior. Will this influence affect the career planning decisions of college students, especially those in Wuhan? Can we combine the relevant characteristics of PTG and establish a set of normal and long-term response mechanism to respond quickly to the disasters that may occur in the post-epidemic era? All these are worthy of continuous exploration by follow-up researchers. Sunshine is always after wind and rain, and the research on post-traumatic growth is the "booster" of mental health of trauma experiences. Through continuous in-depth development, it will certainly bring more well-being to human society.

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REFERENCES

- [1] Tedeschi, R., G. & Calhoun, L., G. (1996). The posttraumatic growth inventory: measuring the positive legacy of trauma. *Journal of Traumatic Stress*, 9(3), 455-471.

- [2] Tedeschi, R., G. & Calhoun, L., G. (2004). Posttraumatic growth: conceptual foundations and empirical evidence. *Psychological Inquiry*, 15(1), 1-18.
- [3] Awang, T. (2018). Research status of traumatic event related concepts at home and abroad. *Tibetan Medicine*. 39(01), 90-92.
- [4] Zhu, T.T., Liu, D.L., Zhang, J., Gao, Q.Q. (2019). Bibliometrics and visualization analysis of posttraumatic growth research. *Chinese Mental Health Journal*. 33(02), 96-102.
- [5] Park, C., L. & Helgeson, V., S. (2006). Introduction to the special section: growth following highly stressful life events-current status and future directions. *J Consult Clin Psychol*, 74(4), 791-796.
- [6] Zoellner, T. & Maercker, A. (2006). Posttraumatic growth in clinical psychology: a critical review and introduction of a two component model. *Clinical Psychology Review*, 26(5), 626-653.
- [7] Wang, W.C., Wu, X.C., (2020). Mediating roles of gratitude, social support and posttraumatic growth in the relation between empathy and prosocial behavior among adolescents after the Ya'an earthquake. *Acta Psychologica Sinica*. 52(03), 307-316.