

Stress Response on Phobia and Anxiety Experienced in Impact of COVID-19

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Abstract

Objective: This study aimed to explore the consequences of the various dimensions of psychological stress on the horror and anxiety old by faculty students throughout the COVID-19 pandemic.

Methods: The convenient sampling methodology was utilized to pick 169 respondents for the form survey.

Results: The correlation coefficients between the variables were important, and also the path analysis model registered satisfactory fitness.

Conclusion: Panic and sensitiveness ensuing from psychological stress will directly have an effect on anxiety, and sensitiveness also can indirectly have an effect on anxiety through horror. Conversely, noesis will solely operate in an exceedingly utterly mediating role within the effects of psychological stress on anxiety through horror.

Keywords: Psychological stress; COVID-19 pandemic; Panic; Sensitiveness; Anxiety.

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Introduction

The severity of the COVID-19 eruption that initial occurred in Dec 2019 transcended expectations and attracted abundant attention from all sectors of society. the globe Health Organization known it as a “public health emergency of international concern.” Relevant studies have incontestable that major communicable disease epidemics square measure probably to significantly injury and influence human physical and psychological state [1]. The COVID-19 pandemic is related to stress within the general public from 2 studies from completely different regions [2,3]. A study of pregnant girls found that Chinese pregnant girls were suffering from moderate to severe stress throughout the COVID-19 pandemic amount [4].

Compared with standard folks, so as to guard the health of school students, the govt. has enforced the policy of “classes suspended however learning continues”. because the longest isolated cluster within the country, faculty students’ psychological state can inevitably be affected. as an example, the COVID-19 pandemic is related to severe anxiety symptoms [5]. Some students have recommended that the unfold of COVID-19 and also the ensuing obstructions might cause a negative impact on the psychological

state of adolescents [6]. The prevalence of public emergencies will generate stress responses within the general public. Some researchers divide this stress response vis-à-vis the epidemic scenario into 3 dimensions: panic is that the most vital part, followed by the defense response; finally, noesis will discharge a major role within the regulation and inhibition of the strain response [7].

The living literature suggests that spreading to COVID-19 may lead to serious psychological state issues, as well as mood disorders, anxiety disorders, and panic attacks [8]. Psychological stress manifests in several ways in which in emotional noesis and physiological functions. antecedently conducted studies have found that emotional issues become outstanding throughout public emergencies occur [9]. Irrational emotions may lead to anxiety. Individual premonitions of unfavorable things lead to mental anxieties that come into sight as unhappiness, inner tension, irritability, so on [10]. Studies have found that people might exhibit an explicit intensity of phobic neurosis symptoms throughout the COVID-19 pandemic [11], which some folks might show sturdy concern toward triggers like open areas, public places, travel, others, and vehicles that might more cause them to expertise anxiety.

Scant studies presently exist on the mechanism of the strain response touching anxiety. However, some researchers have found that the Symptom Checklist-90 (SCL-90) phobic neurosis issue demonstrates a major correlational statistic with stress intensity in four styles of life events. Studies have additionally proved that psychological feature reassessment will regulate individual phobic neurosis symptoms to an explicit extent. The SCL-90 phobic neurosis issue is additionally found to correlate considerably with varied factors of defense vogue.

Therefore, the current study explores the variations discovered in psychological stress in its completely different dimensions with relation to phobic neurosis and anxiety levels. It analyzes the trail of SCL-90 phobic neurosis and anxiety in several response modes to COVID-19. In thus doing, it offers associate inquiring basis for the applying of relevant measures to alleviate the anxiety of the folks throughout the continued COVID-19 crisis.

Methods

Convenience sampling was utilized to distribute a complete of 169 questionnaires to varsity students from high incidence (Hubei Province) and low incidence (Anhui Province) areas. The study was conducted from could seventeen, 2020 to could twenty-eight, 2020. during this study, solely Chinese non pregnant native faculty students UN agency lived in metropolis, Hubei province or Hefei, Anhui Province from Dec 2019 to could 2020 (i.e. throughout the pandemic) and will offer consent were recruited. All participants provided consent before collaborating within the study. All participants during this study had no history of mental state. the inner a part of the form is about up with lie detection queries, and also the exclusion criteria square measure wrong lie detection queries and inconsistent logic.

Measurement Instruments

Tong Huijie developed the psychological stress response form [7], that comprised a complete of seventeen things measurement 3 dimensions. Firstly, there square measure five entries for COVID-19's psychological feature assessment: "I believe human race can conquer the epidemic." Secondly, there square measure six things in panic regarding the epidemic scenario, like "the worry regarding the epidemic scenario makes Pine Tree State feel physiological condition or shiver sometimes". Finally, there square measure six things within the defensive psychological and activity response to the epidemic scenario, like "to stop the epidemic scenario, I'll wear masks public ally places". The form adopts 4-point marking, 3 of that square measure reverse marking. the upper the score is, a lot of serious the individual's stress response is. during this study, the inner consistency coefficients of panic, defense and noesis were zero.72, 0.74 and 0.71 severally.

Symptom Checklist-90

DeRogatis et al. compiled the SCL-90 in 1973. it had been translated

into China and wide employed in the sphere of psychological state. the size includes ninety things and nine subscales, specifically somatization, obsessive-compulsive symptoms, social sensitivity, depression, anxiety, hostility, phobia, psychosis and psychoticism. during this study, seven things of phobic neurosis subscale square measure designated, that is largely according to the standard state of terror or sq. terror. the size adopts a 5-purpose score of "0-5", and also the total score of the sub scale is employed to live the individual's degree of terror. the upper the full score is, a lot of serious the degree of terror is. during this study, the inner consistency constant of the size was zero.92.

Self-Rating Anxiety Scale

SAS encompasses twenty things and was compiled by Chinese yankee academic Zung in 1971. SAS is employed to assess the anxiety standing of subjects by inquisitor their perceptions regarding their experiences over the past week. it's wide applicable and relevant to adults evincing anxiety symptoms. The Cronbach alpha constant of this scale was zero.84 for the current study.

Statistical Analysis

SPSS22.0 and Amos22.0 were utilized for the information analysis. Descriptive statistics were utilized to demonstrate the social demographic characteristics of samples. Pearson correlation analysis was deployed to research the correlations between the variables. per the hypothesis model, path analysis tests the relative model, and multiple fitting indices were utilized to gauge the adequacy of the model. Absolute match indices enclosed chi-square data point, the foundation Mean sq. Error of Approximation, Goodness-of-Fit Index, and Adjusted Goodness-of-Fit Index. progressive match indices contain Normed match Index, Relative match Index, progressive match Index, Tacker-Lewis Index and Comparative match Index. ungenerous match indices encompassed normed chi-square; it's usually believed that path analysis is administered once the sample size is over one hundred.

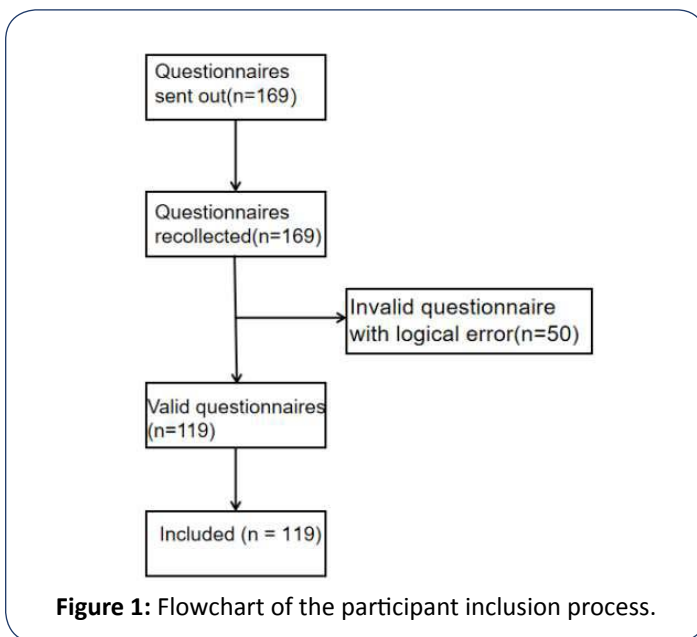
Results

Sample Description

Among 169 faculty students UN agency were invited to finish the form, 119 were enclosed within the end, with a completion rate of seventy.4% (Table 1) and also the inclusion method is shown in Figure 1. those that declined the invite explained that they didn't have abundant time to participate. The mean age of the participants was twenty.1±2.3 years. Most of the themes were feminine. Among all participants, humanities major accounted for the biggest proportion (47.9%), because the same time, the bulk of school students (77.3%) live between a thousand and 2000 yuan per month.

Table 1: Total, direct, and indirect effect of variables in this Model.

Independent/dependent variable	Direct effect	Indirect effect	Total effect
Panic/anxiety	0.40		0.40
Defense/anxiety	-0.27	0.45	0.18
Defense/SCL-90 phobia	0.34		0.34
Cognition/anxiety		-0.26	-0.26
Cognition/SCL-90 phobia	-0.19		-0.19
SCL-90 phobia/anxiety	0.43		0.43



Correlations Among Study Variables

Pearson coefficient of correlation was utilized for the analysis of the correlations between the study variables. A major correlational statistic was found between panic, sensitiveness, phobia, and anxiety, and a major correlation was discerned between noesis and concern and between phobic neurosis and anxiety.

Discussion

This study principally probes into that the defensive scientific discipline and behavior within the epidemic psychological stress can have completely different impacts on anxiety among the cluster of school students. Defensive scientific discipline and behavior have an instantaneous negative impact on anxiety, which suggests the upper the defense, the lower the anxiety of the individual performance. However, within the indirect impact of defense on anxiety, it's showed that defensive scientific discipline and behavior will produce to sweetening of the individual's phobic neurosis scientific discipline, which can lead to more deepen the individual's anxiety.

Moreover, the upper the defensive scientific discipline and

behavior in terms of total impact is, the upper the individual anxiety is. Preceding studies have projected that there's a major correlation between the protecting compliance behavior and anxiety of standard folks that segregated reception at the first stage of the epidemic [18], the upper the defensive behavior, the lower the anxiety state. Its value noting that the analysis object of this study is faculty students. Contrasted with different teams, faculty students square measure characterized by fast acceptance of recent info and robust mentality. Therefore, within the face of varied interference measures of COVID-19 from social media, faculty students square measure inclined to require actions in a flash and emphasize a lot of on comprehensive implementation. James Langer feeling Theory believes that the changes of body can directly have an effect on the individual's emotions, the external behavior of the individual can have a control on the individual's emotions. Therefore, compared with different teams, faculty students' defensive scientific discipline and behavior square measure higher, and their anxiety and phobic neurosis of the epidemic also are higher. additionally, time is additionally a vital consider the link between defense and anxiety. This study was administered within the early and middle stages of the epidemic. Previous studies have incontestable that within the later amount of the epidemic, individual phobic neurosis minimized considerably. Thanks to within the later amount of the epidemic in China, the epidemic has taken a flip for the higher, {and the|and therefore the|and additionally the} phobic neurosis of school students also bit by bit anesised. Their defensive behavior wasn't as sturdy as that in the epidemic, and that they were alert to the protecting impact of those behaviors on COVID-19, showing that the defensive behavior of school students negatively expected anxiety.

This study additionally disclosed that in faculty students, noesis in psychological stress will simply act negatively on anxiety through the whole intermediary of phobic neurosis. There square measure lots of previous studies that have found that incorrect epidemic noesis is considerably correlate with the prevalence of hysteria. within the meanwhile with high noesis of COVID-19, faculty students tend to alter of health behavior so as to scale back the anxiety. cheap feeling theory holds that people's noesis, feeling and behavior square measure cause and-effect connected, and suggests that spirit and behavior performance square measure result from thought, belief and means of thinking, that's to mention individual unreasonable belief is that the reason for individual phobic neurosis and anxiety. completely different from the direct impact of noesis and anxiety found within the non-acute anxiety study, the most reason for anxiety within the acute stress raised from the epidemic isn't any longer the individual's unreasonable belief. Thus, the noesis within the stress response model of the epidemic doesn't have associate direct influence on anxiety.

However, some studies have found that in the epidemic amount, people's acquisition of information and mistaking might lead to phobic neurosis. However, the faculty student's ability of data acquisition is far higher than that of the overall public. Therefore, among school students, the negative impact of knowledge on anxiety is manifested as that people with incorrect knowledge can show higher phobic neurosis science, and each phobic neurosis and anxiety belong to anxiety disorders [24]. Such phobic neurosis of the epidemic can provoke the individual to be additional anxious.

With the exception of the higher than conclusions, this study found that panic in psychological stress will considerably absolutely predict individual anxiety among school students, that is per the conclusion of previous studies. Previous studies have found that folks with high panic have higher anxiety within the acute stress response [7], and its anxiety that's one amongst the foremost distinguished psychological characteristics of faculty students within the panic amount of psychological stress response throughout the epidemic [5]. this can be in all probability owe to phobic neurosis and anxiety in COVID-19 existing in parallel, and at the same time the parallel existence of phobic neurosis and anxiety will more contribute to every different, resulting in larger phobic neurosis and anxiety

Through the strategy of path analysis, this study found completely different dimensions of the mechanism of action of individual anxiety in teams of faculty student's psychological stress, revealing the roles that phobic neurosis science plays in defensive science and behavior of psychological stress which psychological feature dimension plays. All higher than this paving the approach and providing a train of thought for faculty students to beat anxiety of acute psychological stress.

Nonetheless this study additionally has many limitations. On one hand, this study could be a cross-sectional study in order that consequent studies will more explore the impact of your time on the mechanism of psychological stress and anxiety that has not be talked over within the study. On the opposite hand, the number of subjects during this study is comparatively too little and thence later studies will more enrich the quantity of subjects.

Conclusion

In school students, the defensive science and behavior in epidemic psychological stress can have completely different effects on anxiety. The direct impact is that the upper the defensive science and behavior, the lower the anxiety. The indirect impact is that

the upper the defensive science and behavior, the upper the fear, and also the higher the anxiety. within the early and middle stages of the epidemic, the direction of total impact and indirect impact is that the same. Besides, in school students, knowledge in things of psychological stress more influences anxiety by being an entire treater of phobic neurosis. Finally, in school students, panic in psychological stress will considerably increase individual anxiety.

References

1. Ma ZF, Zhang Y, Luo X, Li X, Li Y, et al. (2020) Increased stressful impact among general population in mainland China amid the COVID-19 pandemic: a nationwide cross-sectional study conducted after Wuhan city's travel ban was lifted. *International Journal of Social Psychiatry*. 66: 770-779.
2. Zhang Y, Ma ZF (2020) Psychological responses and lifestyle changes among pregnant women with respect to the early stages of COVID-19 pandemic. *International Journal of Social Psychiatry*. 67: 344-350.
3. Liu SM, Yuan Y, Luo B (2020) Influence of COVID-19 on Depression and Anxiety of College Students and Analysis of Related Factors. *Journal of Clinical Research* 37: 819-823.
4. Sélim Benjamin Guessoum, Jonathan Lachal, Rahmeth Radjack, Emilie Carretier, Sevan Minassian, et al. (2020) Adolescent psychiatric disorders during the COVID-19 pandemic and lockdown - ScienceDirect. *Psychiatry Research* 291: 113264.
5. Tong HJ (2004) Model of SARS stress and it's character. *Journal of Psychology* 01:103-109.
6. Hossain MM, Tasnim S, Sultana A, Faizah F, Mazumder H, et al. (2020) Epidemiology of mental health problems in COVID-19: a review. *F 1000 Research* 9: 636.
7. Wang YN, Luo YJ (2003) Specialty of mood disorders and treatment during emergent events of public health. *Advances in Psychological Science* 4: 387-392.
8. Zhang K (2003) Healthy mind conquers SARS: psychological response to SARS. Science Press.
9. Zhang CY, Peng XB, Zhang L, et al. (2020) Novel coronavirus pneumonia during the first aid nurses in Wuhan: mental health status and coping styles. *Journal of Qilu Nursing* 26: 7-10.
10. Jing SJ (2000) A study on the relationship between stress intensity of daily life events and mental health of junior middle school students. *Youth research* 5: 22-26.
11. Cheng L, He YY, OuYang HL, et al. (2011) Regulation of terror: cognitive reappraisal is better than expression inhibition. *Psychological Science* 4: 925-930.