

Original Paper

Exploring the Manifestations, Influencing Factors and Attitudes of Depression in Generation Z in Chengdu

Ziyi Zeng

Chengdu Foreign Language School, China

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Abstract

In this period of social transformation, as Generation Z faces a more complex macro-environment, they are exhibiting contradictory and negative emotional tendencies that can lead to depression. Through an investigation and analysis conducted in Chengdu, China, the study found that Generation Z youth primarily exhibit depressive mood, cognitive retardation, sleep disorders, loss of interest, fatigue, and other psychological or spiritual aspects as manifestations of depression. The key factors influencing depression in Generation Z include social pressure, family relationships, physical reasons, and sudden disasters. In terms of attitudes, Generation Z youth generally display a more positive outlook when experiencing depression, but they tend not to prefer psychologists or counselors as a solution.

Keywords

Generation Z, depression disorder, social value, influencing factors

1. Introduction

Depressive disorder, characterized by a prolonged negative mood, can be attributed to various contributing factors and mechanisms, with emotional problems regarded as one of the earliest manifestations of depression (Li, 2018; Chen et al., 2018). Individual with depression typically exhibit poor emotional stability, difficulty effectively controlling emotions, and even self-harming behaviors (Taliaferro L. A. et al., 2019). Furthermore, numerous studies have shown that depression have negative effects on both groups and individuals, significantly impacting the physical and mental health of individuals and increasing economic pressure on society.

In the context of an economic downturn, the modernization process in Chinese society has led to intensified competition and the solidification of social classes as a prominent feature of social transformation. Against this background, the values of young people have become increasingly complex, leading to the rapid accumulation of pessimism. They exhibit contradictory and negative

attitudes towards themselves and society, resulting in the development of negative emotions that can evolve into depression. Recent studies indicate that the detection rate of depression among Chinese adolescents in 2023 is expected to be close to 25%, the highest among all adult age groups (Fu & Zhang, 2023).

Compared to Generations Y and X, the focus of this research, Generation Z (born between 1995 and 2009), demonstrates distinct lifestyles, behaviors, and psychological characteristics influenced by their unique growing and living environment, including the fast development of the Internet and the emergence of individualism. In recent years, the anxiety experienced by young people has become more apparent, encompassing concerns such as "marginalization" anxiety, "countdown" anxiety, and "feeling out of control" anxiety. Emotional problems have become a tangible challenge that young people of Generation Z must confront (Li, 2023). In response, this group has developed a youth subculture characterized by the "bereavement" and "Buddha," representing a process of value reconstruction, which in turn reflects the emergence of a new youth subculture (Zhang & Ding, 2023). Depressive disorders often arise during this socialization process.

The research objective of this paper is to consider depression as a social phenomenon and focus on Generation Z youth to explore the following aspects: (1) the fundamental manifestations of depression; (2) the primary influencing factors contributing to depression; and (3) the attitudes of Generation Z youth towards depression.

2. Literature Review

It is generally agreed that the diagnostic criteria for depression include the following: (1) experiencing mood depression or loss of interest for a continuous 2-week period; (2) these symptoms causing clinically significant distress or impairment in social, occupational, or other important functions; (3) these symptoms not being attributable to the physiological effects of a substance or other physical illness; (4) never having had a manic or hypo-manic episode (DSM-5,2018). For persistent depressive disorder, an individual is in a depressed mood for most of the day and experiences more depressed days than non-depressed days for at least two weeks.

Most of the existing studies have defined and analyzed the connotation of depression in two ways. First, from the perspective of psychiatric medicine, depression is medicalized and equated with a mental disorder (Adelina et al., 2007; Araya et al., 2009; Frigerio et al., 2001). For example, Aguilera explored the biological and medical aspects of genetic influences on the emergence of depressive disorders, suggesting that serotonin transporter (5-HTT) and brain-derived neurotrophic factor (BDNF) play a critical role in depression (Anguilera M, et al, 2009). Similarly, Aslund et al. (2011) analyzed the potential interaction between functional polymorphisms of the MAOA gene promoter (MAOA-VNTR) and childhood depressive disorders, finding that its effects were expressed differently between males and females.

The second perspective stems from a sociological standpoint, which links the phenomenon of

depression with social structure. Dario Maglione et al. (2018) from the Department of Psychology at the University of Life and Health in San Rafael examined the impact of childhood experiences or early adverse life events on the development of depressive disorders in adults, finding that these events can contribute to adverse mental conditions. Caspi et al. (2003) from King's College London analyzed the influence of life pressures on depressive mood and discovered that an individual's negative response to the environment is a crucial factor in the development of depressive disorders.

As mentioned above, the prevalent biological or medical perspectives have clear advantages in understanding the congenital factors of depression, but they fail to explain the increasing prevalence of depression in social groups. Many depressive disorders often arise in the process of socialization with specific individuals, exhibiting distinct acquired characteristics (Kupferberg et al., 2016). Therefore, a greater effort is needed to comprehend depression from a societal perspective. Furthermore, within the Chinese cultural tradition, the medicalized understanding of depression may contribute to the "stigmatization" of affected individuals in mainstream media, further exacerbating their social status and impeding their ability to have a voice. The exploration in depression of Generation Z is not only interesting due to its uniqueness but also because it provides insights into different eras.

Therefore, the guiding question of this paper is: What are the manifestations, influencing factors, and attitudes toward depression in Generation Z?

3. Hypothesis

Based on a study conducted by Wang Ziyao et al. (2023), researcher hypothesized that study pressure will be the main cause of depression among Generation Z youth, particularly among students. Another significant factor contributing to depression would be family relationships, as described in a study by Hsu (1985).

In terms of attitudes, the researcher hypothesizes, based on a study by Xiang Ying and Gan Wenping (2011), that Generation Z's attitudes toward depression would be more positive compared to those of previous generations, while the preferred solution for Generation Z would be to friends.

4. Research Design

4.1 Method

To effectively address the research question, a survey was conducted on Generation Z in Chengdu from November 25th to December 12th, 2023. The survey used the WJX platform to collect qualitative data (translated version in appendix 2). Participants' contacts were randomly selected from public WeChat and QQ groups in local schools.

The researcher chose survey as the only research method, as survey can obtain a large data base and gain an overview of Generation Z in Chengdu. In terms of Internet surveys, this method offer advantages in obtaining large samples and accurate data on sensitive variables compared to traditional surveys (Kaynar O & Hamburge Y A, 2007). The WJX platform, as the only and most convenient

online survey platform in China, facilitates efficient research management (Liu, 2022). Random sampling was used to minimize errors and collect a large database (Emerson, 2015).

Before the survey, a preliminary online survey collected 160 questionnaires. It was found that the respondents were primarily concentrated in the Chengdu region due to the researcher's location, making it challenging to conduct a nationwide survey. Therefore, the study focused on Chengdu region and revised the questionnaire accordingly.

The final survey consisted of 40 questions across three sections, and 1460 questionnaires were obtained despite that researcher anticipated only 50 questionnaires. Given that a larger sample size is favorable, the researcher accepted this sample size. Among them, 713 participants showed mild or higher severity of depression based on the Beck Depression Inventory, forming the effective research sample.

4.2 Variables

4.2.1 Control Variables

To understand the true effect of independent variables (influencing factors) on depression levels, the researcher included control variables involving individual and regional characteristics, measured in question 1 to 5 in section 1 of survey. Individual characteristic variables include age, gender, education level and family economic conditions; regional characteristic variables are mainly reflected in the birth place.

4.2.2 Dependent Variable

The dependent variable--the severity of youth depression--was measured using the Beck Depression Inventory (BDI) from questions 1 to 21 in Section 2 of the survey. The BDI, created in 1961, asks participants to select the statement that best describes their feelings over the past two weeks from 21 sets of 4 items. It has advantages such as authority, internal consistency, and content validity, but also limitations including biases in self-assessment and controversial factorial validity (Richter et al., 1998). In this survey, the Beck Depression Inventory was modified. The options are expanded and clarified to make them more clear. The researcher also changed some words. The term "depression" was changed to "depressive mood" to align with the sociological perspective, and the word "suicide" in question 9 was replaced with "self-harming thoughts or behavior" to avoid causing distress based on suggestions from preliminary survey.

Each question in the revised BDI has four options with scores ranging from 0 to 3, which are summed for a total score. Scores of 10 to 15 indicate mild depression, 16 to 25 indicate moderate depression, and scores above 25 indicate major depressive disorder or severe depression.

4.2.3 Independent Variables

The key aim of this study is to investigate the influencing factors of depression in Generation Z youth. The core independent variable is the cause of depression, addressed in questions 1 to 14 of the third section of the survey, with 12 questions asking about all potential influencing factors and questions 13 and 14 asking people's attitudes toward depression.

Previous studies by Li (2018) and Chen et al. (2018) have identified three main categories of

depression causes: individual factors, family relationship factors, and social environment factors. These factors can be further refined using the Holmes and Rahe Stress Scale, a widely used scale listing common stressful events since its invention in 1967 (Noone, 2017). Individual factors encompass physical well-being and personal expectations, family factors relate to the status of family relations (such as family quarrels and divorce), and social environment factors encompass social pressure, work pressure, school learning pressure, interpersonal relationships, marital status, significant life changes, sudden disasters, and more.

4.3 Basic Information of the Sample

Table 1 provides an overview of the survey sample, showing the frequency and percentage of key control variables. The surveyed Generation Z youth are primarily 14-17 years old, with other age groups evenly distributed. Males account for 43.5%, females for 54.3%, and other genders for 2.2%. Regarding birthplace distribution, 43.8% live in small cities, 14.9% in metropolises, 10.8% in medium-sized cities, and 17.1% and 13.5% in counties and towns, respectively. Education-wise, 59.7% have a high school level of education, while 17.1% have a college level. The sample represents a relatively balanced data structure, with the majority falling within the middle class, while some belong to the upper and lower classes. Refer to the table below for detailed information.

Table 1. Basic Information of Sample (N=713)

Variables	Groups	Value	Number	Percentage(%)
Age	14 ~ 17	14 ~ 17=1	253	35.5
	18 ~ 21	18 ~ 21=2	151	21.2
	22 ~ 24	22 ~ 24=3	164	23.0
	25 ~ 28	25 ~ 28=4	145	20.3
Gender	Male	Male=1	310	43.5
	Female	Female=0	387	54.3
	Prefer not to Answer	Not Answer=-1	14	2.2
Place of Birth	Metropolis	Metropolis=1	106	14.9
	Medium City	City=2	77	10.8
	Small City	Small City=3	312	43.8
	County	County=4	122	17.1
	Town	Town=5	96	13.5
Education Level	Primary School	Primary School=1	4	0.6
	Middle School	Middle School=2	75	10.5
	High School	High School=3	426	59.7

	Junior College	Junior College=4	64	9.0
	College	College=5	122	17.1
	Graduate and above	Graduate and above=6	22	3.1
Family Condition	Upper class	Upper Class=1	14	2.0
	Upper Middle Class	Middle Class=2	62	8.9
	Middle Class	Middle Class=3	203	29.1
	Lower Middle Class	Lower Middle Class=4	232	33.3
	Bottom Class	Bottom=5	76	10.9
	Don't know	Don't know=-3	110	15.8

5. Results and Discussion

5.1 The Distribution Structure of Depression

Regarding depression severity, 314 people (44% of the sample) experienced mild depression, 251 people (35% of the sample) experienced moderate depression, and 148 people (21% of the sample) experienced severe depression. Figure 1 illustrates the distribution of depression severity. According to the 2020 National Mental Health Survey, severe depression accounted for approximately 30% of diagnosed adolescent depression on a national scale. In comparison, the proportion of severe depression among young people in Chengdu is lower than the national average, while the proportion of moderate and mild depression exceeds the average.

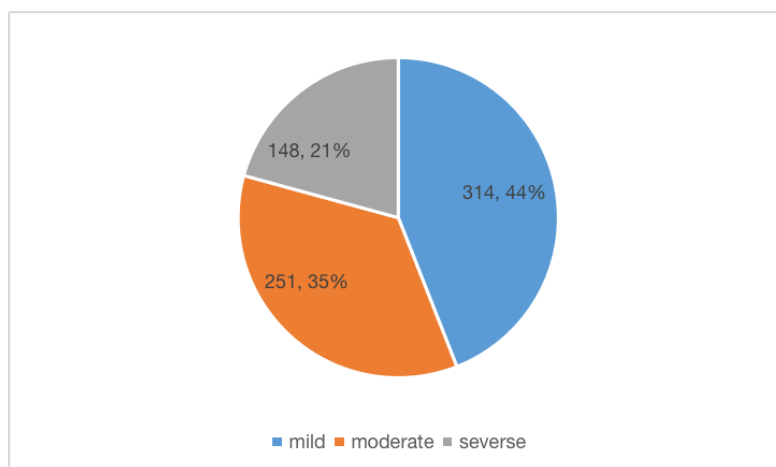


Figure 1. The Distribution Structure of the Severity of Depression

Figure 2 illustrates the distribution of depression severity among Generation Z youth in different birthplaces. Young people from small cities predominantly experience mild (58.01%) and moderate (22.76%) depression, with 181 and 71 individuals respectively. Severe depression is reported by 60 individuals (19.23%). In contrast, larger cities show higher levels of depression, with severe depression rates of 22.64% and 23.37% in large and medium-sized cities respectively. Notably, depression severity among youth in towns and counties presents a binary divide. Mild depression affects the majority (52.46% and 58.33%) while a considerable proportion endures severe depression (29.51% and 23.96%), forming a "high at both ends, low in the middle" pattern. This signifies that depression is no longer confined to urban areas, as rural youth migrating to cities contribute to its prevalence.

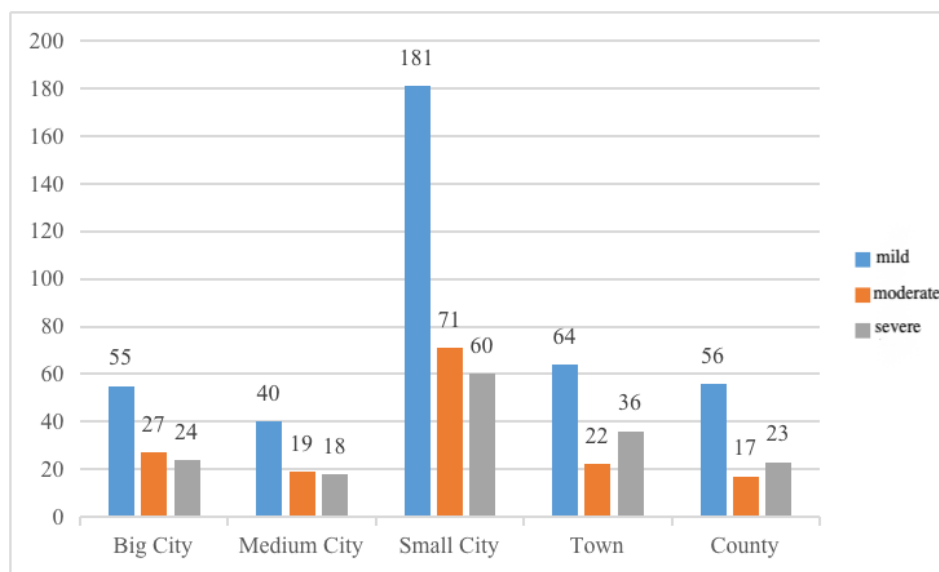


Figure 2. The Distribution Structure of the Severity of Depression by Birth Places

Figure 3 shows the distribution of depression severity among Generation Z youth based on family economic conditions. The upper class had 8 individuals with mild depression (57.14%), 5 with moderate depression (35.71%), and 1 with severe depression (7.14%). This group exhibits a "high in the middle and low at both ends" distribution, indicating a relatively higher level of depression without a strong tendency to develop into severe depression. The upper-middle class and middle class had proportions of severe depression at 24.32% and 20.53% respectively, suggesting a greater likelihood of progression from mild to severe depression. The bottom class had the lowest proportion of severe depression, with 16 individuals (17.20%). In conclusion, higher socioeconomic status has resources to prevent worsening depression, while the middle class faces challenges due to economic instability, resulting in different developmental trends of depression.

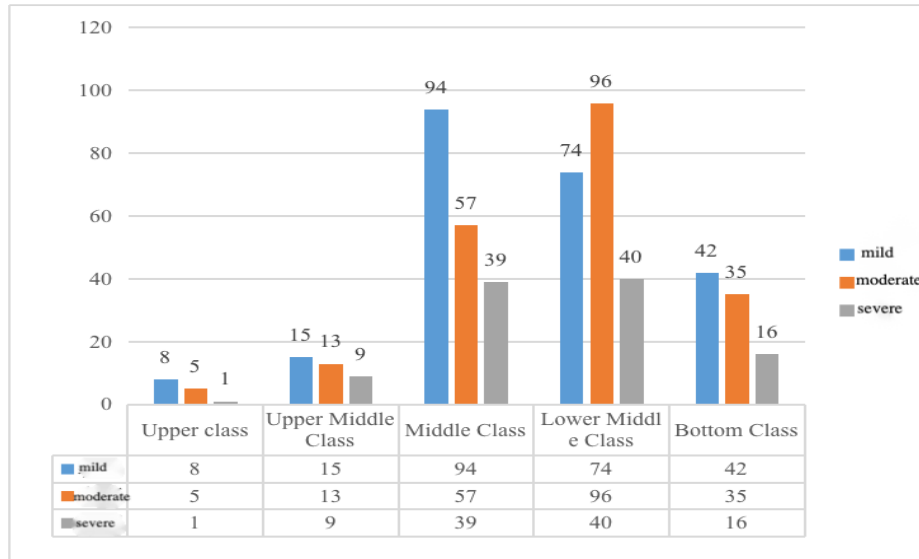


Figure 3. The Distribution Structure of the Severity of Depression by Family Economic Conditions

5.2 The Basic Manifestations of Depression in Generation Z

Figure 4 depicts the key manifestations of depression among Generation Z youth. The prominent depression categories include depressive mood (42.2%), retardation of thinking (34.8%), fatigue (30.9%), sleep disorder (30.3%), and loss of interest (30.2%), primarily affecting psychological and spiritual aspects. Regarding body perception, depressed Generation Z reported loss of appetite (17.5%), hazy memory (26.5%), and physical discomfort (21.3%). It's noteworthy that 13.7% of depressed youth experienced suicidal thoughts, which, although ranking last, still accounts for a significant proportion in absolute terms. Previous research on prior generations focused more on external manifestations of depression, with less attention to precise observation and measurement of psychological manifestations (Hui Zheng et al., 2023). However, this study highlights that Generation Z exhibits similarities to previous generations in terms of appetite loss, mental fatigue, and sleep disorders, but with more pronounced psychological manifestations.

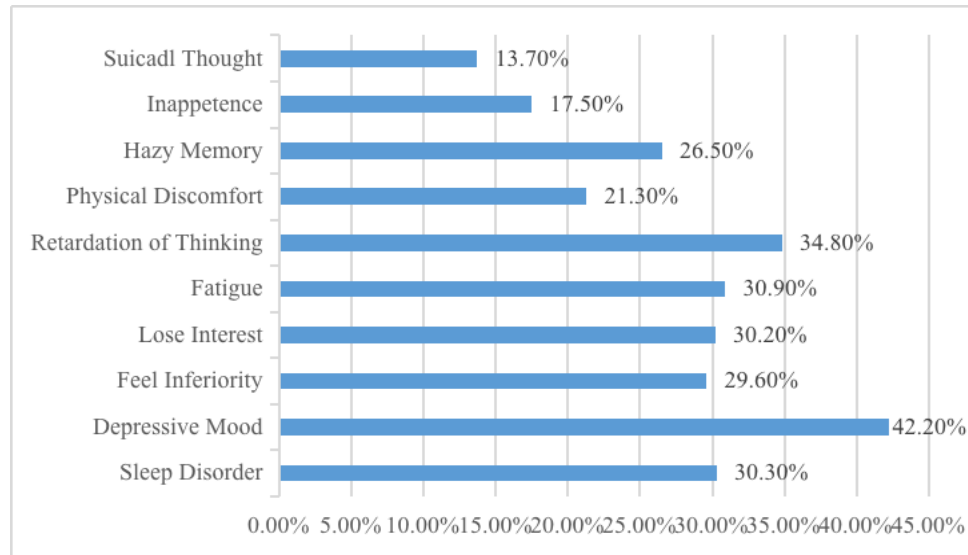


Figure 4. Basic Manifestation of Depression in Generation Z

By analyzing the manifestation of depression in Generation Z youth based on severity, notable differences in distribution among different severity groups can be observed (refer to Figure 5). It is evident that the proportion of youth with moderate and severe depression experiencing suicidal thoughts increased significantly, reaching 27.27% and 54.55% respectively. Mildly depressed Generation Z youth commonly experience hazy memory (27.51%), loss of appetite (26.53%), sleep disorders (25.93%), and depressive moods (24.58%). On the other hand, severely depressed Generation Z youth exhibit higher frequencies of suicidal thoughts (54.55%), loss of appetite (45.92%), and physical discomfort (42.76%).

As depression severity progresses, symptoms tend to concentrate more on physical aspects, often referred to as "somatization." Additionally, both groups of depression show symptoms of loss of appetite. According to Stockmeier (2003), over 90% of serotonin, a neurotransmitter, is produced in the gut. Serotonin in the gut can influence intestinal motility, aiding in efficient food movement. Consequently, serotonin levels affect digestive function, which, in turn, impacts appetite. This could explain the high proportion of participants exhibiting symptoms of loss of appetite.

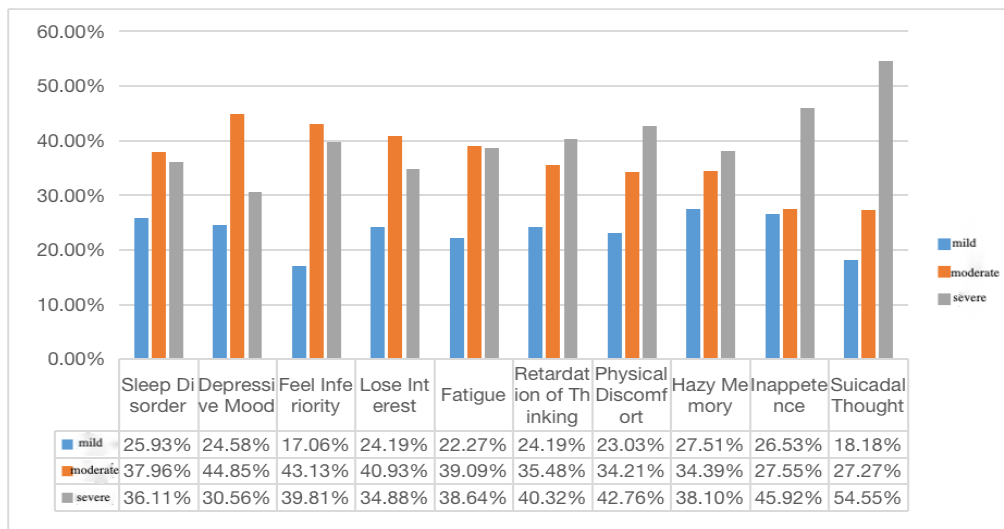


Figure 5. Basic Manifestations of Depression by Severity of Depression

5.3 Multiple Linear Regression Analysis of Influencing Factors for Depression in Generation Z

Compared to structural equation models, multiple regression models are suitable for testing and analyzing the simple impact of each independent variable on the dependent variable, selecting independent variables that have a significant impact, and establishing the optimal multiple regression equation (Xu & Frank, 2004). Given the numerous influencing factors for depression in Generation Z youth and the continuous nature of the dependent variable, which is the severity of depression measured by the Beck Depression Inventory score, this study employs multiple linear regression analysis to examine the independent effects of relevant variables while statistically controlling for other factors.

In the regression analysis, the self-rated depression score is used as the dependent variable to measure the severity of depression. The core independent variable is the cause of depression, while control variables include age, gender, birthplace, education level, and family economic conditions, all included in the regression model. The results are presented in Table 2.

From the regression results, it is observed that among the control variables, only education level passes the significance test at the 5% level. Education level has a positive impact on the severity of depression among Generation Z youth, with a standardized coefficient of 1.385. However, the influence of family economic conditions on depression severity is weak, with a coefficient of only 0.010. This suggests that economic factors have diminished influence as Generation Z experiences relatively improved material well-being, although this conclusion lacks statistical significance.

Regarding the core independent variables, only social stress, family relations, physical reasons, and significant life changes pass the significance test, showing a statistically significant impact on the severity of depression among Generation Z youth. Social stress is significant at the 5% level (Sig. = 0.037 < 0.05) and has a positive influence on depression scores. Family relationships show significance at the 1% level (Sig. = 0.000 < 0.01) and have a positive impact on depression scores. Physical reasons

are significant at the 1% level ($\text{Sig.} = 0.004 < 0.1$) and have a positive effect on depression scores. Sudden disasters are significant at the 5% level ($\text{Sig} = 0.085 < 0.1$) and also have a positive impact on depression scores. Furthermore, the explanatory power for depression scores among Generation Z youth follows the order of family relationships, learning pressure, physical reasons, and significant life changes, with standardized coefficients of 3.928, 3.909, 2.840, and 2.281, respectively.

In conclusion, social pressure, family relations, physical reasons, and significant life changes are key factors influencing depression in Generation Z. While physical reasons are unavoidable, it is evident that the main causes of depression in Generation Z youth are related to the social structure and occur within the process of individual socialization, with significant externalities. Unlike previous generations X and Y, whose depression is primarily influenced by expectations, traditional academic pressure, or interpersonal relationships (Ying X. & Gan W., 2011), Generation Z experiences depression more frequently within the family and in a broader social context (Wingo, J., 2019), indicating a more complex social relationship and a broader social environment compared to previous

Table 2. Multiple Linear Regression Analysis of Influencing Factors of Depression in Generation Z

	S.B.	S.E.	t	Sig
Control Variables				
Gender	-0.221	0.588	-0.375	0.707
Age	0.019	0.741	0.025	0.980
Birth Place	0.370	0.338	1.094	0.274
Education Level	1.105	0.553	2.000	0.046**
Economic Condition	0.010	0.306	0.980	0.327
Core Independent Variables				
Social Pressure	2.281	1.091	2.090	0.037**
Work Pressure	-0.007	1.262	-0.006	0.995
Learning Pressure	3.909	1.008	3.878	0.110
Interpersonal Relationship	1.760	0.818	2.152	0.332
Family Relationship	3.928	0.917	4.284	0.000**
Physical Reason	3.346	1.168	2.866	0.004**
Significant Life Change	2.840	1.648	1.726	0.085**
Sudden Disaster	0.257	1.526	0.169	0.866
Expectations	1.734	0.806	2.151	0.132
Constant Term	15.226	2.787	5.463	0.000

Note. The regression chi-square value is 10003.257, the degree of freedom is 15, the F-value is 6.562, and the significance is 0.000.

5.4 Attitudes toward Depression in Generation Z

Attitude, as defined in the Cambridge Dictionary, refers to a feeling or opinion about something or someone, as well as the corresponding behavior it elicits. In this paper, attitude encompasses not only the perception of depressed individuals towards depression but also their behavioral tendencies, such as their inclination to seek help when experiencing depression.

Figure 6 illustrates that 83.7% of Generation Z youth believe that depression can be cured or alleviated. Compared to ten years ago, less than 60% of young people believed that depression could be cured or relieved (Townsend et al., 2019). This finding suggests a change in their cognitive perspective, as Generation Z are less likely to hold a pessimistic attitude towards depression or stigmatize it as a disease, unlike previous generations (Abdullah & Brown, 2011). In contrast to young individuals from Generation X or Y, who often had depressive symptoms diagnosed as mental problems that gradually developed into serious mental illnesses due to a lack of relevant professional knowledge (Jia, 2013), Generation Z have experienced a shift in attitude. One possible reason for this shift could be the development and widespread availability of the Internet, which has facilitated better understanding of mental illnesses and has empowered young people to overcome the challenges associated with depression (Kupferberg A, Bicks L K, & Hasler G, 2016).

According to the 2022 *Blue Book on Functional Recovery of Adolescent Depression* survey, patients with depression who undergo complete medication and behavioral cognitive therapy have a clinical recovery rate of 67%. Therefore, the high level of awareness among Generation Z youth, who believe that depression can be cured or alleviated, is beneficial for their treatment.

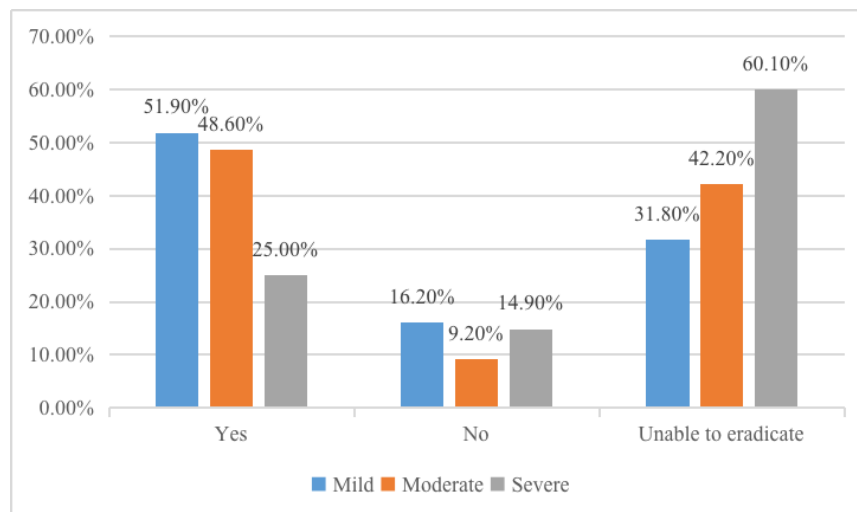


Figure 6. Basic Attitudes of Generation Z towards Depression

Figure 7 depicts the help-seeking preferences of Generation Z youth when experiencing depressive disorder. It is evident that, regardless of the severity of depression, friends, family, and self-adjustment are the primary sources of support. Among mildly depressed Generation Z individuals, 43.9% prefer

seeking help from friends, while self-adjustment and parental support account for 40.4% and 34.1% respectively. For moderately depressed individuals, seeking help from friends increases to 59.4%, self-adjustment remains significant at 56.8%, and seeking help from parents accounts for 34.7%. Conversely, the proportion of individuals seeking help from hospitals and psychological counseling is relatively low, averaging 5% and 10% respectively.

In summary, the help-seeking choices of Generation Z indicate a growing emphasis on individualism and peer relationships, gradually replacing the traditional teacher-student or close family relationships seen in previous generations (Jia, 2013). However, it is noteworthy that psychological counseling institutions and professional treatment at hospitals are still not widely accepted by Generation Z youth, which marks a significant difference from Western countries.

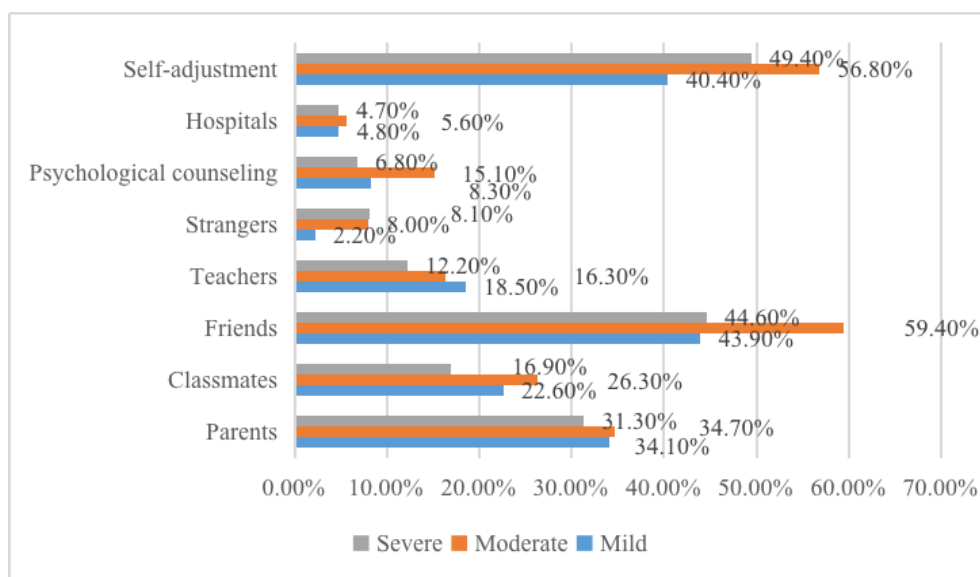


Figure 7. The Distribution of Gen Z youth's Sources of Assistance by Severity of Depression

6. Limitation

Thanks to the structured research design and smooth questionnaire collection process, this study successfully obtained comprehensive information on the depression status of Generation Z in Chengdu. This solid data foundation provides valuable insights for answering research questions. However, it is essential to admit the potential limitations of the paper, as they could act as confounding variables and influence the results. The following limitations should be further explored in future research:

First, based on ethical concerns, the word "depression" in the Baker Depression Scale in the section 2 of my survey was changed to "depressive mood." While the purpose of this was to protect the participants' feelings, it could have caused participants to overestimate the severity of their depression, resulting in the sample's dependent variable (degree of depression) being more severe than it actually was.

Secondly, in an effort to expand the coverage of data collection, internet channels were used. However,

in 2021 the internet penetration rate in Chengdu is 84.9%, meaning that there is a portion of Generation Z youth who cannot be included in the survey due to limited internet accessibility (People's Government of Sichuan Province, 2021).

Lastly, while this study aims to gain a deeper understanding of depression in Generation Z, there is a lack of specific figures for previous generations X and Y at some point. This deficiency hinders direct comparisons between generations, particularly when highlighting the differences exhibited by Generation Z. Furthermore, the lack of tracking surveys on depression data among people from different generations makes it challenging to analyze long-term changes between generations and understand the stage-based manifestations of depression.

In conclusion, while this study provides valuable insights into the depression status of young people in Chengdu, it is important to consider and address the aforementioned limitations in future research endeavors.

7. Conclusion and Implication

The research question "What are the manifestations, attitudes, and influencing factors of depression in Generation Z?" can be explored from three perspectives: manifestations, attitudes, and influencing factors. This research identified the top three manifestations as depressive mood, retardation of thinking, and loss of interest. Factors such as social stress, family relations, physical reasons, and significant life changes were found to contribute to depression. Interestingly, although Generation Z exhibits a more positive attitude towards depression compared to previous generations (Gen X and Y), they still tend to rely on self-adjustment, parents, and friends for help rather than seeking assistance from psychologists. This study suggests that in addition to congenital physical factors, some social factors are increasingly becoming important sources of depression, and the phenomenon of depression is also a product of social construction.

While the researcher's hypothesis, based on studies by Wang Ziyao (2023), Xiang Y and Gan P (2011), and Hsu (1985), was supported regarding the attitudes of Generation Z, it failed to predict their help-seeking tendencies (themselves, friends, and parents) accurately. Additionally, the researcher overlooked other influencing factors such as social stress, physical reasons, and significant life changes. The strong influence of social stress was unexpected, likely due to the researcher's limited social experience as a student, which led to an underestimation of its importance. Furthermore, the link between study stress and depression was not as significant as hypothesized, potentially influenced by the researcher's own biases and pressure as a student.

This study has several implications for youth depression. It provides insights into the manifestations, influencing factors, and attitudes of depression in Generation Z, which is of theoretical and practical significance for understanding and addressing youth depression. From a theoretical perspective, the study highlights that, besides congenital pathological factors, the social environment increasingly plays a role in influencing depression among Generation Z. Therefore, it offers an explanatory framework

that goes beyond the individual perspective, emphasizing the social causes of depression. From a practical standpoint, this study emphasizes the importance of not only treating depression but also focusing on prevention, promoting depression awareness and education, creating a supportive macro environment for youth development, and reducing the likelihood of youth experiencing depression. Consequently, the study suggests alternative intervention strategies for institutions like the China Center for Disease Control and Prevention and the Center for Adolescent Mental Health to develop prevention and treatment plans for youth depression, further enriching the policy framework for addressing this issue. Nevertheless, it is important to acknowledge that the unique characteristics of Generation Z will shape the future research.

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Appendices

Appendix 1 Consent Form

Title: Exploring the Manifestations, Influencing Factors and Attitudes of Depression in Generation Z Youth.

Thank you for considering volunteering for my AP research project. Please carefully review the following details. If you choose to participate, kindly sign below.

Project Purpose: This research project is an essential component of my academic requirements. Its objective is to gain deeper insights into depression among Generation Z. Your input through this survey is invaluable.

Survey Time: Estimated completion time is approximately 10-15 minutes.

Cost: Your participation involves no financial obligations.

Risk: Participation in this survey poses no specific risks beyond those you will encounter in daily life. However, certain questions may elicit discomfort. You have the freedom to skip any questions that make you uncomfortable.

Benefits: There are no immediate material benefits associated with participating in this survey. However, your contribution will aid in the completion of this research paper and potentially contribute to advancements in understanding youth depression.

Confidentiality Assurance: Your survey responses will be securely stored on the researcher's password-protected computer. Your personal information will remain strictly confidential and will not be shared with any third parties.

Voluntary Participation: Please note that your participation in this survey is entirely voluntary, and you have the freedom to withdraw at any time. If you decide to withdraw, kindly inform the student researcher.

By signing below, I confirm that:

I have thoroughly read and comprehended the information provided above.

I am voluntarily submitting this form and participating in the research project.

I have not been coerced, forced, threatened, or intimidated into participating.

Sign:

Appendix 2 Questionnaire (Translated Version)

Section 1

1. What is your age?

- A. Ages 10 to 14
- B. Ages 15 to 18
- C. Ages 19 to 24
- D. Over 25

2. What is your gender?
- A. Male
 - B. Female
 - C. I prefer not to answer this question
3. Which of the following areas do you live in?
- A. Big cities
 - B. Medium-sized cities
 - C. Small cities
 - D. Towns and cities
 - E. Rural areas
4. What is the highest degree or education you have now?
- A. Primary school
 - B. Junior high School
 - C. High school or technical secondary school
 - D. Junior College
 - E. Undergraduate
 - F. Graduate students
5. Where do you think your living conditions belong in the society?
- A. Upper level
 - B. Upper-middle class
 - C. Middle layer
 - D. Middle and lower levels
 - E. The bottom layer
 - F. I don not know

Section 2. There are 21 questions in the table below, each with 4 choices. Please choose the sentence that best suits your situation based on your feelings in the last 2 weeks.

[1] Please indicate how frequently you experience depressive mood:

- A. I rarely feel depressed.
- B. I occasionally feel depressed.
- C. I constantly feel depressed and unable to shake this feeling.
- D. I find it unbearable to cope with my sorrow.

[2] Please rate your level of disappointment about the future:

- A. I am not disappointed about the future.
- B. I have some concerns that the future may be depressing.
- C. I believe the future looks gloomy.
- D. I see no hope for improvement in the future.

[3] Please assess your perception of yourself:

- A. I don't consider myself a failure.
- B. I feel like a failure compared to the average person.
- C. I recognize several failures in my past life.
- D. I believe I am a complete failure.

[4] Please indicate your ability to find satisfaction in various things:

- A. I can find satisfaction in many things.
- B. I struggle to find pleasure in many things.
- C. I rarely experience true satisfaction in most things.
- D. I find everything boring.

[5] Please rate the frequency of feelings of guilt:

- A. I don't feel guilty.
- B. I have experienced guilt for a while.
- C. I feel guilty almost all the time.
- D. I feel guilty all the time.

[6] Please assess your perception of being punished:

- A. I don't feel like I am being punished.
- B. I think I might be punished.
- C. I expect to be punished.
- D. I feel that I am currently being punished.

[7] Please rate your belief in yourself:

- A. I believe in myself.
- B. I am somewhat disappointed in myself.
- C. I detest myself.

[8] Please assess your self:

- A. I don't think I am worse than others.

- B. I criticize myself for my mistakes.
- C. I blame myself all the time for the wrongs I have done.
- D. I blame myself for ruining everything.

[9] Please indicate your thoughts and intentions regarding self-harm:

- A. I have no intentions of self-harming.
- B. I have self-harming thoughts, but I will not act on them.
- C. I want to hurt myself or commit suicide.
- D. I will take my own life if given the chance.

[10] Please rate the frequency of your crying:

- A. I cry as I usually do.
- B. I cry more than I usually do.
- C. I can't stop crying at all times.

[11] Please rate your level of anger compared to usual:

- A. I am not more angry than usual.
- B. I get angry more easily than usual.
- C. I find myself becoming easier to anger all the time.
- D. What used to make me angry no longer affects me.

[12] Please assess your level of interest in others:

- A. I have not lost interest in others.
- B. I am less interested in others than usual.
- C. I have lost most of my interest in others.
- D. I have completely lost interest in others.

[13] Please rate the difficulty you experience in making decisions:

- A. I have no difficulty in making decisions.
- B. I tend to delay making decisions more than before.
- C. I have significant difficulty in making decisions compared to before.
- D. I am no longer able to make decisions.

[14] Please rate your perception of your appearance:

- A. I look good as usual.
- B. I am afraid of being old and unattractive.
- C. I believe there have been changes in my appearance that make me appear ugly.

D. I think my appearance looks terrible.

[15] Please rate your ability to work and accomplish tasks:

- A. I work as well as usual.
- B. I need to put in a little extra effort to start doing things.
- C. I must push myself hard to begin doing something.
- D. I cannot accomplish anything.

[16] Please rate the quality of your sleep:

- A. My sleeping quality is as good as usual.
- B. I do not sleep as well as before.
- C. I wake up 2 hours earlier than before and have difficulty falling asleep again.
- D. I wake up a couple of hours earlier than usual and cannot fall asleep again.

[17] Please rate your level of fatigue:

- A. I do not feel more tired than before.
- B. I feel fatigued more easily.
- C. I feel tired and weak no matter what I do.
- D. I am so tired and weak that I cannot accomplish anything.

[18] Please rate your appetite:

- A. My appetite is the same as usual.
- B. My appetite is not as good as before.
- C. My appetite has declined significantly.
- D. I have lost all my appetite.

[19] Please rate any weight changes you have experienced:

- A. My weight is approximately the same as before.
- B. I have lost more than 2.27 kg in weight.
- C. I have lost more than 5.54 kg in weight.
- D. I have lost more than 7.81 kg in weight.

[20] Please rate the your health conditions:

- A. I am not more worried about my health conditions than before.
- B. I worry about health conditions such as stomachaches or constipation.
- C. I am constantly worried about my health conditions, making it difficult to focus on other things.
- D. I am so worried about my health that I cannot think about anything else.

[21] Please rate your level of interest in sex:

- A. My interest in sex has not changed recently.
- B. I am not as interested in sex as I used to be.
- C. I am much less interested in sex than before.
- D. I have completely lost interest in sex.

Section 3

1. In the past six months, which of the following symptoms have you experienced? (multiple choices)

- A. Sleep disorders (such as insomnia or lethargy)
- B. Feeling down
- C. Feel inferior and can't do anything right
- D. Waning interest and not wanting to do anything
- E. Often feel low energy
- F. Slow thinking and difficulty concentrating
- G. Physical discomfort (stomach pain, headache, etc.)
- H. Blurred memory
- I. Loss of appetite/overeating
- J. Suicidal thoughts or behaviors

2. In the past six months, which of the following factors have caused you stress? (multiple choices)

- A. Social (e.g. social news, etc.)
- B. Work (e.g. work stress, unemployment, etc.)
- C. School learning (e.g. academic pressure, etc.)
- D. Interpersonal relationship (classmates/colleagues/friends)
- E. Family relationship (e.g. parents quarrel, divorce, etc.)
- F. Relationship or marital status (breakup, marriage, divorce, etc.)
- G. Physical reasons (e.g. illness, etc.)
- H. Significant life changes (e.g. moving, changing schools, etc.)
- I. Sudden disasters (e.g. death of a loved one, natural disasters, etc.)
- J. Your own expectations
- K. Other --

Please skip the following questions if you have no experience

3. On a scale of 1-5 (very poor to very good), how do you feel about the attitudes of the society and people around you?

1, 2, 3, 4, 5

4. On a scale of 1-5 (not at all to very stressed), please rate your stress at work

1; 2 ; 3 ; 4 ; 5

5, On a scale of 1-5 (not at all to very stressed), do you usually have stress in school?

1,2,3,4,5

6, On a scale of 1-5 (very poor to very good), how do you get along with your with your classmates or friends at school/colleagues at work?

1; 2 ; 3 ;4 ; 5

7, On a scale of 1-5 (poor to good), how are your family relationships?

1,2,3,4,5

8. On a scale of 1-5 (poor to good), what is your relationship status?

1,2,3,4,5

9. How many times have you been to the hospital in the past six months?

A.7-10 times

B. Four to six times

C.1-3 times

D. Never been there

10, Have you recently experienced major life changes, such as moving, transferring, studying or working abroad? If so, on a scale of 1-5, to what extent are you affected by this incident? If the answer is no, then skip this question

1;2;3;4;5

11. Have you experienced a recent disaster, such as the death of a loved one, or a natural disaster? If so, on a scale of 1-5, to what extent are you affected by this incident? If the answer is no, then skip this question

1;2;3;4;5

12. On a scale of 1-5, do you think your current fulfillment meet your expectations?

1,2,3,4,5

13, Do you think depression can be cured?

A. can

B. Can't

C. It can only be minimized, not eradicated

14. Which of the following helps you most to relieve your depressive mood? Please sort them.

"Patriarch

"Colleagues/classmates

"Friend

"Teacher

"The stranger

"Psychological counseling agency

"hospital

"adjust oneself

"others _____

Thank you again for your support, we believe that your participation will play a practical role in the improvement of relevant phenomena!