

Research on The Status Quo And Problems of Mental Health of Sexual Minorities in China

Xinyu Xiao ^{1,a}, Hengxuan Zhou ¹, Tianyi Li ², Yihan Wang ³, You Wu ⁴

¹ IB International Curriculum Center, High School Attached to Shanghai Jiaotong University, Shanghai, China;

² JPED Academy, District 4, Anzhenxili, Chaoyang District, Beijing, China;

³ Shanghai Pinghe Bilingual School AP Department, Shanghai, China;

⁴ Shenghua Zizhu Academy AP; Shanghai, China

^a 15618517686@163.com

Abstract

In recent years, with the development of the Internet, the originally marginalized sexual minorities have appeared more and more frequently in the public field of vision, but due to the existence of proximal pressure and distal pressure, the psychological problems of sexual minorities still cannot be ignored. In order to better understand the living situation and mental health level of sexual minorities, reduce public opinion and disputes caused by gender knowledge errors, through literature collection, case interview, questionnaire survey, spss statistical analysis and other research methods, we integrated the definition, status and type of sexual minorities, stressors, social support status, mental health status and influence. The results show that the stressors faced by sexual minorities can reduce their perception of social support and thus reduce their mental health level. Therefore, increasing social support for sexual minorities can improve their mental health level. Finally, through the form of innovative programs to let more people pay attention to and understand this marginalized group, and strive to eliminate the public's cognitive bias towards sexual minorities.

Keywords

Sexual minorities; Pressure source; Social support; Mental health; Innovation design.

1. Introduction

With the development of the Internet and social media, sexual minorities, who were originally marginalized in society, are becoming better known, and at the same time, more and more studies are focusing on the mental health and survival challenges of sexual minorities. Much of the literature suggests that sexual minorities are more likely than heterosexuals to experience psychological disorders such as anxiety and depression, and even more suicidal ideation and excessive alcohol consumption. There are multiple reasons for the negative mental health of sexual minorities, and Meyer (2003) proposed a Minority Stress Model and suggested that distal and proximal stressors experienced by sexual minorities constitute their unique stressors. unique stressors. Distal Stressors are defined as objective stressors from the

outside world such as discrimination, stigmatization, and physical and verbal violence. Proximal stress is defined as the internalization and processing of distal stressors, including self-stigmatization, negative expectations of social reactions, and concealment of sexual orientation/gender identity. Distal stress can be manifested through nicknames, verbal discrimination, rumor mongering, stigmatization, and labeling, such as “masculine” and “feminine,” and many studies over the past two decades have shown that distal stress is negatively correlated with the mental health of sexual minorities. Many studies have found that self-stigmatization and negative expectations of social reactions significantly mediate the relationship between experiences of discrimination and levels of anxiety. However, there is still a gap in national research on proximal stress and the mental health of sexual minorities. Current research suggests that sexual minorities experience more negative psychological states than heterosexuals, and therefore preventive measures to reduce proximal stress by minimizing or buffering distal stress from external sources and by modulating psycho-cognitive processes are a priority for subsequent research.

2. Literature Review

2.1. Definition, current situation, types of sexual minorities

Sexual minorities are groups of people who differ from the majority of society in terms of sexual orientation, gender identity, sexual identity or sexual behavior, and are often referred to in the media as LGBT+. Gay, lesbian, bisexual, asexual, transgender, intersex, etc. are all sexual minorities.

Although the sexual minority affirmative action movement is gradually emerging worldwide, the current situation of sexual minorities is still not optimistic. Sexual minorities are more vulnerable than others to violence and injustice in their work, study and life, and have less visibility. The social pressure they face also leads to sexual minorities being more prone to physical and mental health problems. In 2018, the International Technical Guidelines on Sexuality Education (Revised) released by UNESCO showed that students who do not adhere to the mainstream sexuality and gender norms are more likely to suffer from violence in schools than others. The International Technical Guidelines on Sexuality Education (Revised) released by UNESCO showed that sexual minorities are more likely to suffer from violence in schools than others. Therefore, in order to improve the survival of sexual minorities, comprehensive sexuality education on relevant topics and an increase in relevant educational programs are needed to ensure the health and well-being of sexual minorities

2.2. Stressors faced by sexual minorities

Meyer (2003) proposed a Minority Stress Model and suggested that the distal and proximal stressors experienced by sexual minorities constitute their unique stressors. Distal Stressors are defined as objective stressors from the outside world such as discrimination, stigmatization, and physical and verbal violence. Proximal stress is defined as the internalization and processing of distal stressors, which is manifested in self-stigmatization, negative expectations of social reactions, and concealment of sexual orientation/gender identity.

And another unique stressor for sexual minorities - proximal stress - is defined by Meyer (2003) as the process of internalizing and processing distal stress, manifested in self-stigmatization, negative expectations of social reactions, and the concealment of sexual orientation/ concealment of sexual orientation/gender identity.

2.3. Status of social support for sexual minorities

On May 15, 2016, the United Nations Development Programme (UNDP) released a report on its official website, "Survey on the Survival of Sexual Minorities in China," which showed that sexual minorities suffer discrimination in all aspects of their lives, especially within the family, where rejection and abuse from family members are the most entrenched. The report also recommended that China needs to draft and adopt an anti-discrimination law to guarantee equal access to legal rights for all citizens.

The UNDP report also makes recommendations for China's treatment of sexual minorities, suggesting that health authorities urge the China Classification and Diagnostic Criteria for Mental Disorders, 3rd Edition (CCMD-3) to revise the description of "sexually oriented disorder" and reach a complete depathologization of homosexuality and bisexuality. At the same time, it is recommended that the health department and the industry and commerce department strengthen the supervision of medical institutions and psychological counseling institutions to ensure that they provide mental health services in accordance with China's mental illness classification scheme and diagnostic standards, and to put an end to illegal treatments such as "reversal therapy" for sexual orientation. Because the survey found that the current domestic psychiatrists also recognized that homosexual sexual orientation is not a mental illness.

2.4. Mental health status of sexual minorities

A survey on the mental health status of sexual minority college students based on a national sample showed that sexual minority college students scored significantly higher than heterosexual college students on depression, anxiety, and suicidal ideation, while their scores on mental health of sound personality orientation were significantly lower than those of heterosexual college students. (Zhang, Yudi Fu, Fang, 2019) This is consistent with the research of foreign scholars. Herek's literature review illustrates that sexual minorities are more likely to have anxiety and depressive disorders than heterosexuals, and that sexual minorities report more suicidal ideation and more problems with excessive alcohol consumption than heterosexuals. (Herek & Garnets, 2007) At the same time, evidence from intergroup studies clearly indicates that the prevalence of psychiatric disorders is higher among LGB people than among heterosexuals. (Ilan H. Meyer, 2003) The results of a study revealed significant differences in mental health among Chinese lesbian, gay, and bisexual college students, with higher prevalence rates of depression (48.1%), anxiety (57.1%), and stress (37.5%). Approximately half of lesbian, gay, and bisexual students (48.1%) met criteria for depressive symptoms, with 14.9% being mild, 19.1% being moderate, 7.5% being severe, and 6.6% being extremely severe.

3. Research methods

(1) Subjects

The object of this study is LGB population. Convenient sampling was used to collect data, and questionnaire star website was used to collect data. A total of 135 data were collected.

(2) Experimental materials can be found in the following documents:

"Scale content.docx" "CES-D Scale.docx"

"Specific questionnaire content.docx"

Questionnaire information list:

Social Discrimination Scale -14items-6 points: Q10-Q23 Reverse entry: No internalized Homophobia scale -9items-4 points: Q24-Q32 Reverse entry: 25 Identity Hiding scale -5items-4 points: Q33-Q37 Reverse entry: 36 Social Support Scale -12items-7 points: Q38-Q49 Reverse items: all reverse

Depression scale -10items-4 points: Q50-Q59 Reverse items: 54, 57 Anxiety scale -7items-4 points: Q60-Q66 Reverse items: None

(3) Statistical methods

SPSS 26.0 software was used for descriptive statistics, reliability and validity analysis, correlation analysis and mediation effect test.

- Research results

(i) Descriptive statistics

There were 135 valid samples, including 67 male subjects and 68 female subjects. Among them, 26 were gay, 33 were lesbian, 70 were bisexual, and 6 were of other sexual orientations.

Among them, 26 were gay, 33 were lesbian, 70 were bisexual, and 6 were of other sexual orientations. The age distribution was between 16 and 69 years old. There were 33 unemployed, 16 students, and 86 employed. 54 were in a relationship, 28 had never been in a relationship, 41 had been in a relationship but were single, and 12 were married. All of them have high school education, including high school or junior college, college, bachelor's degree, master's degree, and doctor's degree.

(iii) Correlation analysis

External and internal stressors were significantly positively correlated, Pearson $r = 0.865$, $p < 0.001$.

External stressors and social support were significantly negatively correlated, Pearson $r = -0.529$, $p < 0.001$. external stressors and depression were significantly positively correlated, Pearson $r = 0.805$, $p < 0.001$. external stressors and anxiety were significantly positively correlated, Pearson $r = 0.826$, $p < 0.001$.

Internal stressors and social support were significantly negatively correlated, Pearson $r = -0.503$, $p < 0.001$. internal stressors and depression were significantly positively correlated, Pearson $r = 0.847$, $p < 0.001$. internal stressors and anxiety were significantly positively correlated, Pearson $r = 0.857$, $p < 0.001$.

Social support and depression significantly negatively correlated Pearson $r = -0.360$, $p < 0.001$.

social support and anxiety significantly negatively correlated, Pearson $r = -0.458$, $p < 0.001$.
social support and anxiety significantly positively correlated, Pearson $r = -0.458$, $p < 0.001$.

Depression and anxiety were significantly positively correlated Pearson $r = 0.842$, $p < 0.001$.

(iv) Results of mediated effects analysis

a. Mediation effect model of external pressure, social support and depression

Model 1 is significant, and its regression equation is: social support = $-0.1746 \times \text{external pressure} + 6.2701$. where, $\beta = -0.1746$, the regression coefficient is significant, $p < 0.001$.

Model 2 is significant and its regression equation is: depression = $0.4197 \times \text{external pressure} + 0.1366 \times \text{social support} + 0.3400$. where, the regression coefficient of external pressure β_1 is significant with $p < 0.001$. however, the regression coefficient of social support β_2 is not significant with $p = 0.1310$.

Model 3 was significant with the regression equation of depression = $0.3958 \times \text{external pressure} + 1.1962$. the regression coefficient β of external pressure was significant with $p < 0.001$.

The total effect of the mediated effect model is 0.3958, and its confidence interval is [0.3458, 0.4459], which indicates that there is a mediated effect of social support because its confidence interval does not contain 0. The direct effect is 0.4197, and the confidence interval is [0.3610, 0.4783]. Since its confidence interval does not contain 0, it indicates that there is a direct effect of external stressors to depression, so social support plays a partial mediating effect. And since the indirect effect is -0.0238, the partial mediation coefficient of social support is -0.06.

Table 1: Mediating effects model: external stressors, social support, and depression

variable	Social support		depression		depression	
	β	t	β	t	β	t
External pressure	-0.1746	-7.1931***	0.4197	14.1535***	0.3958	15.6563***
Social support			0.1366	1.5195		
R		0.529		0.8089		0.8051

* $P < 0.05$ 、** $P < 0.01$ 、*** $P < 0.001$

Thus, the more external stressors an individual experiences, the less social support he or she perceives, which triggers a greater sense of helplessness, leading to more severe depression. Social support plays a partly mediating role. On the one hand, external stressors can directly and positively predict the degree of depression, and on the other hand, they can also affect the development of depression by decreasing social support. The mediation model is shown in Figure 2.

b. Mediation effect model of external stress, social support and anxiety

Model 1 is significant and its regression equation is: social support= $-0.1746 \times \text{external pressure} + 6.2701$. where, $\beta = -0.1746$, the regression coefficient is significant at $p < 0.001$.

Model 2 is significant and its regression equation is: Anxiety= $0.5922 \times \text{External Pressure} - 0.0628 \times \text{Social Support} + 0.8435$. where the regression coefficient β_1 for External Pressure is significant with $p < 0.001$. however, the regression coefficient β_2 for Social Support is not significant with $p = 0.6240$.

Model 3 was significant with the regression equation of anxiety= $0.6032 \times \text{external pressure} + 0.4497$. the regression coefficient β of external pressure was significant, $p < 0.001$.

The total effect of the mediation effect model is 0.6032, and its confidence interval is [0.5326,0.6737], which indicates that there is a mediation effect of social support since its confidence interval does not contain 0. The direct effect is 0.5922, and its regression equation is: anxiety= $0.532 \times \text{external pressure} + 0.4497$. The direct effect is 0.5922 with a confidence interval of [0.5088,0.6756]. Since its confidence interval does not contain 0, it indicates that there is a direct effect of external stressors to anxiety, so social support plays a partial mediating effect. And since the indirect effect is 0.0110, the partial mediation coefficient of social support is 0.0182.

Table 2: Mediating effects model: external stressors, social support, and depression

Variable	model 1		model 2		model 3	
	Social support		anxiety		anxiety	
	β	t	β	t	β	t
External pressure	-0.1746	-7.1931***	0.5922	14.0412***	0.6032	16.9032***
Social support			-0.0628	-0.4913		
R	0.529		0.8264		0.8261	
R ²	0.2801		0.6829		0.6824	
F	51.7401***		142.1652***		285.7188***	

* $P < 0.05$ 、 ** $P < 0.01$ 、 *** $P < 0.001$

Thus, the more external stressors an individual experiences, the less social support he or she perceives, which triggers a greater sense of helplessness, leading to more severe anxiety. Social support plays a partly mediating role. On the one hand, external stressors can directly and positively predict the level of anxiety, and on the other hand, they can also influence the level of anxiety by increasing social support. The mediation model is shown in Figure 2.

c. Mediation Effect Model of Internal Stress, Social Support and Depression

Model 1 is significant and its regression equation is: social support= $-0.3141 \times \text{internal stress} + 6.4923$. where, $\beta = -0.3141$, the regression coefficient is significant at $p < 0.001$.

Model 2 is significant and its regression equation is: depression= $0.8287 \times \text{internal pressure} + 0.1315 \times \text{social support} - 0.3212$. where, the regression coefficient of internal pressure β_1 is significant with $p < 0.001$. however, the regression coefficient of social support β_2 is insignificant with $p = 0.0988$.

Model 3 was significant with the regression equation of depression= $0.7874 \times \text{internal pressure} + 0.5323$. the regression coefficient β of internal pressure was significant, $p < 0.001$.

The total effect of the mediated effect model is 0.7874, and its confidence interval is [0.7024,0.8723], which indicates that there is a mediated effect of social support because its confidence interval does not contain 0. The direct effect is 0.8287 with a confidence interval of [0.7310,0.9263]. Since its confidence interval does not contain 0, it indicates that there is a direct effect of internal stressors to depression, so social support plays a partial mediating effect. And since the indirect effect is -0.0413, the partial mediation coefficient of social support is -0.0525.

Table 3: Model of mediating effects: internal stressors, social support, and depression

Variable	model 1		model 2		model 3	
	Social support		anxiety		anxiety	
	β	t	β	t	β	t
Inner pressure	-0.3141	-6.7158***	0.8287	16.7893***	0.7874	18.3392***
Social support			0.1315	1.6624		
R	0.5032			0.8500		0.8465
R ²	0.2532		0.7224		0.7166	
F	45.1016***		171.7757***		336.3275***	

* $P < 0.05$ 、 ** $P < 0.01$ 、 *** $P < 0.001$

Thus, the more internal stressors an individual experiences, the less social support he or she perceives, triggering a greater sense of helplessness, which can lead to more severe depression. Social support plays a partly mediating role. On the one hand, internal stressors can directly and positively predict the degree of depression, and on the other hand, they can also affect the development of depression by decreasing social support. The mediation model is shown in Figure 2.

d. Mediation Effect Model of Internal Stress, Social Support and Anxiety

Model 1 is significant with the regression equation: social support = -0.3141*internal pressure +6.4923. where $\beta = -0.3141$, the regression coefficient is significant with $p < 0.001$.

Model 2 is significant and its regression equation is: Anxiety=1.1593*Internal Pressure-0.0780*Social Support-0.0219. where the regression coefficient β_1 for Internal Pressure is significant with $p < 0.001$. however, the regression coefficient β_2 for Social Support is not significant with $p = 0.4976$.

Model 3 was significant with the regression equation of Anxiety = 1.1838*Internal Stress - 0.5281. the regression coefficient β of Internal Stress was significant, $p < 0.001$.

The total effect of the mediated effect model is 1.1838, and its confidence interval is [1.0618,1.3059], which indicates that there is a mediated effect of social support since its confidence interval does not contain 0. The direct effect is 1.1593, and its regression equation is: anxiety=1.1838*internal pressure-0.5281. The direct effect is 1.1593 with a confidence

interval of [1.0178,1.3009]. Since its confidence interval does not contain 0, it indicates that there is a direct effect of internal stressors to anxiety, and therefore social support plays a partial mediating effect. And since the indirect effect is 0.0245, the partial mediation coefficient of social support is 0.0207.

Table 4 Models of mediated effects: internal stressors, social support and anxiety

variable	model 1		model 2		model 3	
	social support		anxiety		anxiety	
	β	t	β	t	β	t
Inner pressure	-0.3141	-6.7158 ***	1.1593	16.2002***	1.1838	19.1817***
Social support			-0.0780	-0.6801		
R	0.5032		0.8576		0.8570	
R ²	0.2532		0.7354		0.7345	
F	45.1016***		183.4560***		367.9363***	

* $P < 0.05$ 、 ** $P < 0.01$ 、 *** $P < 0.001$

Thus, the more internal stressors an individual experiences, the less social support he or she perceives, triggering a greater sense of helplessness, which can lead to more severe anxiety. Social support plays a partially mediating role. While internal stressors can directly and positively predict anxiety, they can also affect anxiety by reducing social support. The mediation model is shown in Figure 2.

4. Verification Results

4.1. Depth Interviews

Team member Wu You conducted an in-depth interview with Mr. H, a 40-year-old gay man who was born in southern Anhui Province, China, and studies and works in Shanghai. In the interview, Mr. H said that only a few members of his family knew about his sexual orientation, but most of his close friends and colleagues did. In terms of resistance in his social environment, Mr. H. believes that his relatively liberal upbringing did not put much pressure on his family, but the only possible resistance was the scrutiny and vitriol from his classmates in middle school and high school, which created a bit of a psychological imbalance for him. Despite Mr. H's more inclusive upbringing, like most sexual minorities, his approach to confronting stressors is still limited. In the WuYu related stressor question, he said, "The Internet is not developed, it is almost a closed environment, for me, there are too few channels to get information, and my way of relieving my personal psychological condition is to divert my attention." Fortunately, however, with the rapid development of the Internet today, Mr. H also sees a new hope for sexual minorities to alleviate their stress - the number of public interest organizations about sexual minorities is increasing, and with the increased exposure of these organizations, he can also access them more easily. He recognizes the work of these

advocacy and education efforts in communicating about the protection of privacy. Referring to the serious problem of depression among sexual minorities today, Mr. H. said that the most crucial thing is that people are depressed.

Mr. H said that the key thing is the neglect of people, who do not feel it is a problem and are not self-aware of their mental health issues. He also said that if a gay young man can have real psychological problems because of his gay expression, such psychological problems are largely related to his family of origin upbringing. He believes that people with mental illness should have the cause of mental illness at a very early age, in their family of origin during their upbringing. And the label of sexual minority becomes the trigger for the disease. This cause and effect relationship is something that Mr. H has slowly come to realize. He believes that a family that can prevent mental illness does not necessarily have to be open, but it has to be healthy, and the parents can guide and educate their children on how to face the psychological difficulties they encounter, so as to solve them. Meanwhile, Mr. H talked about his own family in the interview. He and his husband are exotic lovers, and they really became a married couple under the witness of the embassy, and they live a plain and happy life like every other couple. At the end of the interview, Mr. H acknowledged our interview. Feeling our concern and support for sexual minorities, he believed that with the assistance of everyone who is eager to help sexual minorities, the general environment for sexual minorities will become better and better.

4.2. Discussion and Conclusion

In this topic research, we have achieved some results, but also encountered some problems.

First of all, we have accomplished the basic research of the topic and our own small goals, and we have achieved some more valuable research results. Through case interviews and questionnaires, we collected data from 135 sexual minorities and analyzed them in depth. We found some interesting patterns and trends, and these findings can help us better understand the topics we studied. In order to make more people pay attention to sexual minorities, we have developed different innovative programs, such as popularizing the knowledge about sexual minorities through WeChat and shooting short videos, as well as conducting case interviews to gain a deeper understanding of the current situation and stressors of this group. Our innovative programs have received good feedback and attracted some public attention, and we will continue to publicize them in order to provide more social support for sexual minorities and help improve their mental health.

However, there are some shortcomings in the research process. For example, our sample size is not large enough, and the research methodology could be more diversified. In addition, there were some problems with our schedule, which led to a lack of tightness in the study. This makes us waste some time in the research process, and we need to organize our time more rationally to improve efficiency. In order to improve these shortcomings, we have taken some measures. We pay more attention to time management to improve research efficiency. In addition, we have also strengthened teamwork to ensure that each member can utilize his or her own strengths and work together to promote the progress of the research.

In conclusion, although this research has achieved some results, there are also some shortcomings. We continue to improve our research methods and ideas to lay a more solid

foundation for future research. At the same time, we also need to learn the lessons seriously, strengthen teamwork and time management, and improve the efficiency and quality of research.

References

- [1] D'Augelli, A. R., & Grossman, A. H. (2001). Disclosure of sexual orientation, victimization, and mental health among lesbian, gay, and bisexual older adults.
- [2] *Journal of Interpersonal Violence*, 16(10), 1008–1027. <https://doi.org/10.1177/088626001016010003>
- [3] Diplacido, J. (1998). Minority stress among lesbians, gay men, and bisexuals: A consequence of heterosexism, homophobia, and stigmatization. *Stigma and Sexual Orientation: Understanding Prejudice against Lesbians, Gay Men, and Bisexuals*, 138–159. <https://doi.org/10.4135/9781452243818.n7>
- [4] Frable, D. E., Wortman, C., & Joseph, J. (1997). Predicting self-esteem, well-being, and distress in a cohort of gay men: The importance of cultural stigma, personal visibility, community networks, and positive identity. *Journal of Personality*, 65(3), 599–624. <https://doi.org/10.1111/j.1467-6494.1997.tb00328.x>
- [5] Frost, D. M., Parsons, J. T., & Nanín, J. E. (2007). Stigma, concealment and symptoms of depression as explanations for sexually transmitted infections among gay men. *Journal of Health Psychology*, 12(4), 636–640. <https://doi.org/10.1177/1359105307078170>
- [6] Hetrick, E. S., & Martin, A. D. (1987). Developmental issues and their resolution for Gay and Lesbian Adolescents. *Journal of Homosexuality*, 14(1–2), 25–43. https://doi.org/10.1300/j082v14n01_03
- [7] Kosciw, J. G., Greytak, E. A., Bartkiewicz, M. J., Boesen, M. J., & Palmer, N. A. (2012). The 2011 National School Climate Survey: The experiences of lesbian, gay, bisexual and transgender youth in our nation's schools. Gay, Lesbian and Straight Education Network (GLSEN). 121 West 27th Street Suite 804, New York, NY 10001.
- [8] Lehavot, K., & Simoni, J. M. (2011). The impact of minority stress on Mental Health and substance use among sexual minority women. *Journal of Consulting and Clinical Psychology*, 79(2), 159–170. <https://doi.org/10.1037/a0022839>
- [9] Meyer, I. H. (1995). Minority stress and mental health in gay men. *Journal of Health and Social Behavior*, 36(1), 38. <https://doi.org/10.2307/2137286>
- [10] Ngamake, S. T., Walch, S. E., & Raveepatarakul, J. (2016). Discrimination and sexual minority mental health: Mediation and moderation effects of coping. *Psychology of Sexual Orientation and Gender Diversity*, 3(2), 213–226. <https://doi.org/10.1037/sgd0000163>
- [11] Riggle, E. D., Rostosky, S. S., & Danner, F. (2009). LGB identity and eudaimonic well being in midlife. *Journal of Homosexuality*, 56(6), 786–798. <https://doi.org/10.1080/00918360903054277>
- [12] Yudi Zhang, Fang Fu. (2019). A survey of mental health status of sexual minority college students based on a national sample. *Chinese Journal of Clinical Psychology* (05), 997–1002. doi:10.16128/j.cnki.1005-3611.2019.05.029.