

Analysis of Gender and Mental Health Differences

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Abstract: With the rapid development of modern civilization, the increasing pressures of contemporary life, the fast pace of living, and the influence of social media, an increasing number of people are suffering from mental health issues. Mental health is an important aspect that everyone should be concerned about. Research has revealed that depression can significantly impact a person's professional and interpersonal skills, potentially affecting one's career trajectory. However, while both men and women face mental health issues, gender differences persist. Numerous studies have indicated that disparities exist in both brain structure and function between males and females. For instance, females may exhibit a greater advantage in emotional processing and social cognition, whereas males may demonstrate enhanced spatial cognition abilities. This study aims to explore gender differences in mental health across four factors. The result shows that, family intergenerational relationships have a greater impact on girls than boys. During their student years, interpersonal relationships within dormitories have a greater influence on boys. In the social sphere, women are more prone to depression than men. From a personal perspective, females are also more likely to experience negative emotions compared to males.

Keywords: gender difference, mental health, impact, Cognitive Differences.

1. Introduction

In recent years, the serious harm caused by mental health problems has aroused widespread concern in society, with growing awareness of the importance of mental well-being. According to a report from World Health Organization (WHO), depression affects at least 300 million people around the world, impairing their ability to work and cope with daily life [1]. This highlights the urgent need to pay attention to mental health and work towards achieving universal health coverage. At present, some children are faced with a lack of parental care and love, which has a negative impact on their psychological state, while others face excessive expectations that create significant psychological pressure. What's more, students may experience mental health challenges when dealing with interpersonal relationships, particularly when frictions arise due to differing approaches. In addition, after entering the workplace, people will suffer psychological trauma due to the pressure of work and external expectations. Finally, personal factors like mental resilience and self-esteem also influence one's mental health. While previous studies have focused on the serious psychological effects of these factors, they often lack a comprehensive analysis, such as whether there are gender differences in mental health status caused by these factors. Based on this, this paper attempts to explore gender and mental health differences. In the process of exploration, we can gain a more

complete understanding of the complexity of human mental health, and provide a scientific basis for formulating more effective mental health intervention strategies, such as promoting gender equality and inclusiveness, eliminating gender bias, rationally allocating resources to those in need, raising public awareness and encouraging people to seek psychological support.

2. The intergenerational relationships in the family

The first factor we are going to look at is the gender difference caused by intergenerational relationships in the family. Family factors mainly include parents' education mode, family structure, parents' expectation of children, family atmosphere and other related factors. Indeed, parental expectations, family dynamics, and other factors play a crucial role in shaping children's mental health outcomes. According to the research findings of Wang Jiwen et al. [2], emotional closeness and frequent interactions, which have a positive effect on mental health, show gender differences in depression scores of young and middle-aged people, which is reflected in that women benefit more from emotional closeness, while men benefit more from frequent interactions. From the perspective of emotional dimension, the effect of emotional closeness to the mother in improving of female mental health is significantly greater than that for male mental health. From the association dimension, the positive effect of frequent interactions with parents on women's mental health was significantly smaller than on men's mental health. Some left-behind children in remote areas and at an immature age need more care and attention from their families, and also need appropriate and effective communication guidance to stabilize their emotions. However, due to the influence of traditional gender concepts, rural elders usually give more care to boys than girls [3]. Therefore, gender differences in communication and interaction between parents and adolescent left-behind children after going out may contribute to gender differences in their mental health. Studies indicate that in terms of parent-child communication, the negative psychological impact of parents being absent on left-behind girls is greater than that on left-behind boys [3]. However, a high family socioeconomic status does not always result in a positive psychological impact on children. For example, some parents with high socioeconomic status have higher achievements and rich educational resources, so they will provide their children with a higher starting point, which means they have higher expectations for their children's education [4]. Parents' expectations can promote and strengthen children's achievement motivation, but excessive high expectations can negatively impact their mental health [5]. At the same time, these parents are unable to balance the relationship between work and family, and their focus is more on their careers, thus ignoring the feelings of their children, resulting in intense family conflicts. The study found that family conflict weakens the positive relationship between family socioeconomic status and adolescent mental health. It can be seen that the positive effect of family socioeconomic status on adolescents' mental health will be offset by family conflicts [6]. Therefore, family conflicts tend to be more prominent for male students, and the improvement of family economic status will cause more frequent conflicts in male students' families, which can affect their mental health. Girls tend to have higher psychological sensitivity [7]. On the one hand, girls are more aware of conflicts between their parents, and their mental health is more likely to be affected. On the other hand, when family conflicts occur, boys pay more attention to objective aspects such as the frequency and solution of conflicts, while girls pay more attention to the subjective cognition of the threat and responsibility of conflicts to themselves [8]. Therefore, it is easy for girls to have self-doubt and self-criticism. The dataset of the histogram is based on a survey conducted in 2014, which covers 1259 valid samples. From the figure 1, it can be seen that the proportion of girls with mental health problems is about 20% more than that of boys, which also demonstrates that the overall mental health status of girls is lower than that of boys.

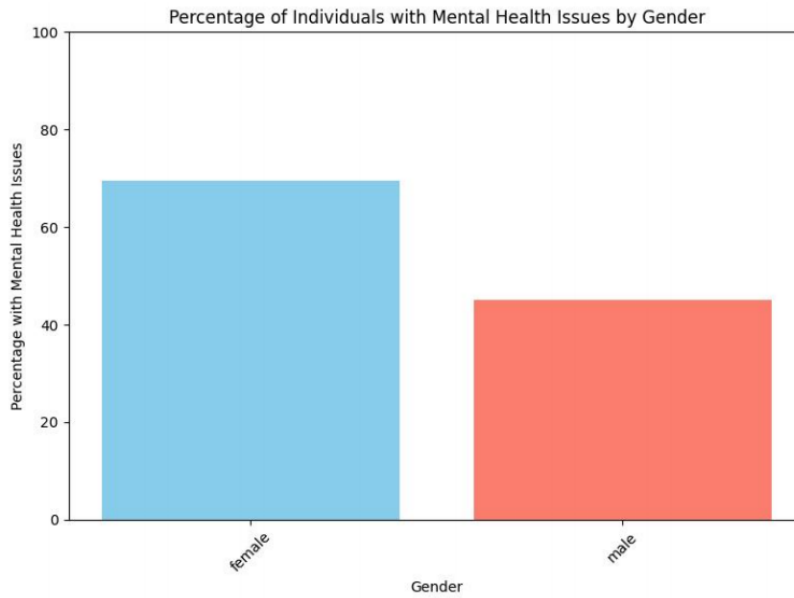


Figure 1: Percentage of individuals with Mental Health Issues by Gender

3. School factors

This section discusses the difference in the mental health states of male and female students during their time in school. According to Xiao Jianwei's research, personality and dormitory interpersonal relationship can both affect the mental health of college students, and personality factors can further affect the mental health of college students by acting on dormitory interpersonal relationships [9]. In a dormitory as a group, it is usually necessary for individuals to engage in some conformity behaviors for the unity of the group, which is conducive to a good dormitory relationship. However, once an individual fails to abide by the group norms, some conflicts may arise. It is found that there is a significant correlation and mutual influence between dormitory interpersonal harmony and mental health. A dormitory with low harmony tends to have members with lower mental health levels, while a dormitory with high harmony tends to have members with higher mental health levels [10]. However, due to the different physiological makeup, psychological traits and other factors, male and female students may experience difficulties in interpersonal communication when living together in the dormitory [11]. Relevant studies have pointed out that male and female students have significant differences in various factors of interpersonal relationships [12]. In contrast, girls are higher than boys in interpersonal intimacy, deep communication, active coping and importance cognition, while boys tend to ignore, evade or even intensify conflicts in dealing with interpersonal problems [12,13]. When girls have strong dormitory interpersonal relationships, their mental health levels do not increase rapidly, but remain relatively stable. However, the mental health levels of male students are lower than that of female students when they experience poor dormitory interpersonal relationships. Therefore, interpersonal relationships in male dormitories have a greater impact on their mental health [13].

4. Social factors

This section explores the differences in mental health between male and female students as influenced by social factors. Women may face gender bias and be treated differently in the job search process. Gender discrimination refers to unfair prejudice against a certain group because of their gender, thereby depriving them of their legitimate rights and interests. In the field of

employment, gender discrimination manifests as the unfair treatment of women, including restrictions and discrimination in areas such as promotion, salary, and the working environment. Although modern society has gradually become more accepting of women in the workforce, gender discrimination still exists in some fields and industries. First, it is often difficult for women to receive the same promotion opportunities and pay levels as men in the workplace. Some companies prefer to hire men in the recruitment process, believing that men are more capable and more suitable for senior management positions [14]. For example, in the fields of technology, finance and management, men dominate. Secondly, women often face more difficulties and pressure in their work. For example, balancing the demands of work and family life. However, under the influence of entrenched gender traditions, women are often expected to make professional sacrifices and concessions for family life, and this stereotype often forces them to be more cautious and conservative in their career choices. Women also suffer from gender discrimination and even sexual harassment in the workplace [15]. Women's biological differences may put them in vulnerable situations and lead to feelings of insecurity [16]. This can lead to more anxiety in women than in men. Occupational stress is positively correlated with anxiety and depression. When occupational stress becomes a long-term chronic experience, it may lead to psychological trauma, including symptoms of anxiety, exhaustion and depression in general [17]. Some studies have found that 75.86% of female managers experience occupational stress. Even after accounting for other factors, female managers with occupational stress remain at a higher risk of anxiety and depression [18]. Moreover, women face greater expectations and pressures across various fields of society. For example, rigid social standards often lead women to feel dissatisfied and anxious about their body image: due to the uncertainty of the future, they need to constantly learn to improve themselves to adapt to the workplace environment [19]. Studies have shown that depression and anxiety are related to occupational stress, and high levels of occupational stress can negatively impact mental health [20,21,22]. These expectations and pressures can make women more prone to mental health problems. As a result, women are more prone to depression and anxiety than men.

5. Psychological resilience

Finally, this paper studies individual self-evaluation and the adaptability in the face of frustrated. Studies have shown that adolescents of different genders have different levels of mental health, with mental resilience and self-esteem serving as direct protective factors [23,24]. Psychological resilience is a dynamic process of development and positive adaptation under significant adversity [25]. It also reflects individuals' ability to cope with difficulties. The higher the psychological resilience, the less psychological pressure and tension in the face of adversity and difficulties, and the less negative impact adverse situations have on individuals [26]. Mental resilience is a direct protective factor for mental health [27]. High mental resilience can mitigate the negative emotions caused by negative events, reducing the occurrence of adverse mental health conditions and harmful health behaviors [28]. Other studies show that self-esteem positively predicts psychological resilience [26]. Self-esteem refers to an individual's overall positive self-evaluation and plays an important role in personal development [28]. Enhancing self-esteem and social support increases resilience in the face of stress and adversity, thereby effectively improving mental health [26]. In terms of mental health, girls are more likely to have problems such as academic pressure, interpersonal tension and sensitivity, depression, anxiety, obsessive behaviors and emotional instability than boys, which may be related to girls' lower levels of mental resilience and self-esteem compared to boys. Self-esteem has a stronger protective effect on mental health than resilience, and it can also affect the mental health level of middle school students through the mediating role of resilience [29].

6. Conclusion

This paper studies the different effects of four factors on the mental health status of male and female students. Insufficient family attention or excessive expectations can affect the health effects of adolescents, with a greater psychological impact on girls. In terms of the dormitory relationships, the mental health level of male students declines as the decrease of dormitory interpersonal relationships. In the process of job hunting, women face more pressure from all aspects than men, which leads to lower mental health levels. Additionally, from a personal perspective, girls generally exhibit lower levels of psychological resilience and self-esteem compared to boys, making them more prone to emotional instability. This study did not track the long-term psychological changes of left-behind children as they grow up. Future improvements should focus on establishing relevant departments to provide male and female students with corresponding psychological counseling, enhancing the management of occupational stress and creating more equal promotion opportunities for women. Future studies could explore differences in mental health levels in more detail in terms of age and different social statuses.

References

- [1] World Health Organization.(2017). *Depression and other common mental disorders global health estimates*.
- [2] Wang Jiwen, Wu Xiaolan. *The effect of family intergenerational relationship on mental health of middle-aged and young adults: gender difference and age pattern [J]. Population and Development*, 2002, 28(06): 98-108.
- [3] Li Xiaoxiao, Liu Yue, Zhou Dongyang, et al. *Left-behind junior middle school students parent-child interaction and sex differences in mental health [J]. Journal of school health in China*, and 2021 (6) : 876-878 + 882. DOI: 10.16835 / j.carol carroll nki. 1000-9817.2021.06.018.
- [4] Yap MBH, Jorm AF. *Parental factors associated with childhood anxiety, depression, and internalizing problems: a systematic review and meta-analysis*
- [5] Dai Yingying, Wen Yong, Zong Zhanhong. *The effects of family environment on adolescents' mental health and gender differences [J]. School Psychology*, 2019, 22(3): 203-212. (in Chinese) DOI: 10.19521 / j.carol carroll nki. 1673-1662.2024.03.004.
- [6] Lewis AJ, Kremer P, Douglas K, et al. *Gender differences in adolescent depression: differential female susceptibility to stressors affecting family functioning[J]. Aust J Psychol*, 2015, 67(3): 131-139. DOI: 10.1111/ajpy.12086.
- [7] Zheng Shanshan, Kong Yanhong, Li Feifei. *The effect of parental relationship quality on adolescent depression [J]. School Psychology*, 21, 19 (3) : 234-237. (in Chinese) DOI: 10.19521/j.cnki.1673-1662.2021.03.009.
- [8] Zhang Xin-He, Li Huan-Jia, Zhou Lin-Miao, et al. *Feature perception of parental conflict and adolescent depression: the chain mediation role of cognitive evaluation and sense of control and gender differences [J]. Chinese Journal of Health Psychology*, 2019, 31 (7) : 1114-1120.
- [9] Xiao Jianwei. *Research on the relationship between college students' personality, Dormitory interpersonal relationship and mental health [D]. Shijiazhuang: Hebei Normal University*, 2005. (in Chinese)
- [10] Huang Weidong. *Investigation and reflection on the interpersonal harmony of college students' dormitory: Based on the research of Zhangzhou Normal University [J]. Journal of Zhangzhou Normal University (Philosophy and Social Sciences Edition)*, 2012 (3) : 176.
- [11] Chi Lijie. *An analysis of female college students' Dormitory Interpersonal Relationship in the New era [J]. Journal of Chifeng University (Chinese Philosophy and Social Sciences Edition)*, 2012 (3) : 87. (in Chinese)
- [12] HE Linjiao, Zhao Jianxin, Fang Su. *Investigation on the status quo of dormitory interpersonal relationship of college students [J]. Chinese Journal of Health Psychology*, 2013 (5) : 766. (in Chinese)
- [13] Wang Shuhua, Su Tao. *The influence of dormitory interpersonal relationship on mental health of college students: the moderating role of gender [J]. Journal of Lishui College*,2022,44(04):102-108. (in Chinese)
- [14] Fu Haixia. *Research on employment support for women of childbearing age under the background of three-child policy [D]. Jinan: Shandong University*, 2023, China.
- [15] In the summer, Tong Gaofang. *Problems and countermeasures of women's high-quality employment and entrepreneurship in the context of Chinese modernization [J]. Market Weekly*, 2019,37(19):183-186. (in Chinese)
- [16] Wang Yifan. *Study on the correlation between workplace violence emergency response and mental health of health technicians in medical institutions and its gender differences [D]. Shandong university*, 2023. DOI: 10.27272 /, dc nki. Gshdu. 2023.001163.

- [17] Yu Shan Method. Evaluation and control of occupational stress [M]. Beijing: People's Medical Publishing House, 2018:197.
- [18] Gu Yiting, Kou Zhenxia, Yu Changyan. Women managers tend to investigate and influencing factors of depression and anxiety analysis [J]. Journal of industrial hygiene and occupational disease, 2024, 50 (03) : 213-218 + 257. DOI: 10.13692 /j.carol carroll nki gywszyzb. 2024.03.004.
- [19] Sung JM, Kim YJ. Sex differences in adolescent mental health profiles in South Korea[J]. Arch Psychiatr Nurs, 2020, 34(6): 563-571. DOI: 10.1016/j.apnu.2020.10.001.
- [20] Li Y, Cheng Z, Fan H, et al. Epigenetic changes and functions in pneumoconiosis[J]. Oxid Med Cell Longev, 2022: 2523066.
- [21] Rennie DL, Watson KD, Montiero AM. The rise of qualitative research in psychology[J]. Canadian Psychology, 2002, 43: 179-189.
- [22] Chen J, Cao B, Wang F, et al. Mediating effects of self-efficacy, coping, burnout, and social support between job stress and mental health among young Chinese nurses [J]. J Adv Nurs. 2020, 76(1): 163-173.
- [23] Liu Jing, Yang Xiaoyan, Yang Yang, et al. Analysis on the changes and influencing factors of mental health of rural left-behind junior middle School students in Zizhong County, Sichuan [J]. Chinese School Health, 2014, 35 (11) : 1648-1653.
- [24] Ye Man, Zhang Jingping. Analysis on influencing factors of mental health of 2406 rural middle school students [J]. Chinese Journal of Behavioral Medicine and Brain Sciences, 2010, 19 (6) : 547-549.
- [25] Luthar S S. (Ed.). Resilience and vulnerability: Adaptation in the context of childhood adversities. New York: Cambridge. 2003
- [26] Xu Min, Xu Xiaoyan. Secondary specialized school students' resilience, the relationship between self-esteem and social support [J]. Chinese journal of health psychology, 2011, 12 (02) : 211-212. The DOI: 10.13342 /j.carol carroll nki CJHP. 2011.02.046.
- [27] Huang Jie, Zhang Huiyong, Shang Shijie. The mediating effect of mental resilience on the relationship between mental stress and mental health of college students [J]. Psychological and Behavioral Research, 2014, 12 (6) : 813-818.
- [28] Sowislo J F, ORTH U. Does low self-esteem predict depression and anxiety? A meta-analysis of longitudinal studies[J]. Psychol Bull, 2012, 139(1) : 213-240.
- [29] Yao Qiang, XU Huanyu, JI Yuanyi, et al. In southern sichuan rural middle school students' mental health and the relationship between psychological elastic self-esteem [J]. Journal of school health in China, 2017, 38 (10) : 1503-1506. The DOI: 10.16835 /j.carol carroll nki. 1000-9817.2017.10.019.