

The Mediated Influence of Psychological Resilience between Social Support and Mental Health of Vocational Students in Shandong Province: Evidence from a Pilot Study

Ma Ning and Wei Hui Suan

Abstract –With the current rapid development of vocational education in China and the pivotal role of vocational college students in the country's economic development and social progress, China attaches great importance to the development of student mental health in vocational colleges. The focus of this study is on the relationship between social support, psychological resilience and mental health of students in vocational colleges. It explores the influencing factors of social support, psychological resilience, and mental health of students in vocational colleges; and explores the correlation between psychological resilience, social support, and mental health of students in vocational colleges. First of all, the study integrates the social support theory, resilience theory and social cognitive theory related research to construct the social support-mental health conceptual model. Quantitative research methods were employed, and data were collected by means of questionnaires. A total of 384 students from vocational colleges in Shandong Province were administered a self-designed demographic questionnaire, the Social Support Rating Scale (SSRS), the Connor Davidson Resilience Scale Chinese Version (CD-RISC) and the Symptom Check list-90 (SCL-90). The proposed research hypotheses were tested using SPSS and Structural Model in Partial Least Squares.

Keywords – mental health, social support, psychological resilience, vocational college student

I. INTRODUCTION

China is currently in a period of social transformation, and the rapidly changing social environment has a significant impact on people's mental health. College students are under tremendous pressure, and some of them have psychological problems. Scholars have found that the mental health level of Chinese college students is lower than the national standard, and the proportion of college students in a state of mental sub-health is on the rise. Negative emotions such as depression and anxiety may affect the psychological state of college students and may even lead to suicide and violent behaviour. Tragedies in colleges and universities have drawn widespread attention from all sectors of society. Taking a higher vocational college in Shandong Province as an example, the proportion of freshmen with psychological problems has been increasing in recent years, highlighting that the mental health problems of higher vocational students cannot be ignored.

On the one hand, mental health counselling has not received sufficient attention due to outmoded ideas. Students

often ignore or deny their own psychological problems and do not ask for assistance. In addition, there are relatively few studies on the mental health of college students from the perspective of positive psychological qualities. Although there have been many studies on the mental health of higher vocational students and related factors influencing positive psychology in China, few scholars pay attention to the mechanism of how these factors work and how multiple factors jointly affect mental health. On the other hand, the Chinese government has been constantly emphasizing integrating positive psychology into college students' mental health education to enhance the scientific level of education and help college students develop healthy and positive psychological qualities.

Globally, mental health problems are prevalent. Anxiety and depression are common, and suicide is one of the leading causes of death among young people. Mental health issues also bring about huge economic losses. College students are with different social and regional backgrounds, and face many psychological problems. The increasing number of students seeking mental health services highlights the importance of enhancing mental health education. The research on college students' mental health at home and abroad remains popular, but the research focuses at home and abroad are somewhat different. Foreign scholars focus more on quantitative research such as prevalence rate, cause analysis, and the effectiveness of psychological counselling, while Chinese scholars pay more attention to qualitative research like countermeasure study.

From 2000 to 2004, Chinese government attached great importance to college students' mental health and issued a series of documents. Scholars explored innovative teaching models and focused on the mental health of specific groups. Research based on positive psychology emerged, and psychological counselling work thrived. The research perspective became more comprehensive. Since 2016, according to the initiatives of "Big Health" and "Big Ideological and Political Education", mental health education has been continuously enhanced.

With the increasing emphasis on mental health in China and the continuous development of higher vocational education, the number of higher vocational students is increasing, and the mental health of higher vocational students has drawn more and more attention. Social support is closely related to mental health. Although there have been many studies on the role of social support and mental health on college students, there are relatively few related studies on higher vocational students. Integrating social support with mental health is of great significance for understanding the relationship between social support and mental health among higher vocational students and

Ma Ning, City University, Malaysia (Email address: 63434716@qq.com).

Wei Hui Suan, City University, Malaysia (Email address: wei.hui@city.edu.my.)

formulating effective promotion strategies. It helps to improve the psychosocial well-being of higher vocational students through social support interventions.

II. PROBLEM STATEMENT

The World Health Organization predicts that depression could become a leading cause of disease by 2030. College students, in the transition period from adolescence to early adulthood, are prone to internal conflicts when facing multiple pressures during the shift from high school to college, which may lead to depression or even suicides. In China, the depression rate among college students ranges from 21.6% to 37.6%, higher than that of the general population and increasing yearly.

In Shandong Province, vocational students face pressures such as academic pressure, career pressure, and societal pressure. These pressures result in higher stress levels and a greater prevalence of mental health problems. Studies show vocational students often have higher rates of anxiety and depression. The competitive learning environment and the pressure to master vocational skills also add to their psychological burden.

Educators, policy makers, and researchers are now prioritizing the mental health of vocational students, as it is crucial for their academic and career success. Neglecting the mental health of vocational students will affect socio-economic development and social stability. Although the Shandong Provincial Government has launched multiple projects, there is an urgent need for more research on influencing factors and effective intervention measures.

Many factors affect college students' mental health, and external stress leads to depression. However, not all students facing stress, and those experiencing the same stress may have different levels of depression. Social support is recognized as an important social factor in coping with depression.

Recently, mental health research has shifted towards the positive psychology paradigm, focusing on enhancing psychological well-being by utilizing various resources. Social support and psychological resilience are key resources here. Social support can reduce stress and enhance mental health outcomes, while psychological resilience can mediate the relationship between social support and mental health.

This study will focus on vocational college students from Shandong Province. It aims to understand the characteristics of the social support they get, psychological resilience, and their mental health status, and the mechanism of how social support affects mental health and the possible mediating role of psychological resilience. The goal is to offer theoretical guidance for improving the mental health and life quality of these vocational students.

III. LITERATURE REVIEW

The origin of social support theory can be traced back to the 19th century with Durkheim's analysis in *Le suicid* (Tan, 2019). However, its formal application in research began in the 1960s and 1970s, spurred by the works of John Cassel (1976) and Sidney Cobb (1976). Social support is generally defined as the resources, help, and care

received from others or social networks (Scheid & Wright, 2017). Over time, its definition has expanded and become more abstract (Hupcey, 1998).

Early research focused on the impact of social support on mental health. Cobb (1976) defined it as a subjective feeling of belonging, being cared for, and loved. House (1981) classified it into four categories of affective support, informational support, instrumental support, and evaluative support. Later research shifted from static forms to dynamic processes, and different theoretical models like the Buffering Model and the Direct Effect Model were proposed (Cohen & Wills, 1985).

In Western academia, the Social Support Theory has been widely used in education research. Scholars in China have also started to explore its value in recent years, though it is still relatively weak in some aspects. Research with Chinese characteristics has also begun to emerge (Tan, 2019).

Over the past few decades, numerous resilience theories have emerged. Most theories view resilience as a dynamic process that changes over time (Fletcher & Sarkar, 2013). A frequently cited meta-theory of resilience and resiliency (Richardson, 1990; Neiger, 1991; Richardson, 2002) is important as it can be applied to different stressors and levels of analysis (Fletcher & Sarkar, 2013).

Richardson's theoretical model of resilience consists of four stages: confrontation with risk factors, activation of protective and vulnerability factors, interaction between them, and possible outcomes like resilience or maladaptation (Lazos, 2019). The concept of resilience has evolved from being seen as a trait to a dynamic process of positive adaptation in the face of adversity (Richardson, 2002).

Research on resilience has gone through different phases, from focusing on identifying protective factors to understanding the processes of overcoming adversity. Different levels of resilience have been proposed, with higher levels associated with more positive ways of dealing with life's challenges (Yu & Zhang, 2005).

Developed by Albert Bandura, Social Cognitive Theory emphasizes the interaction between behaviour, environment, and individual cognition (Bandura, 1986). It originated from Bandura's critique and expansion of behaviourism. The core assumption is that individuals learn by observing others and regulate their behaviour through cognitive processing.

Self-efficacy, a key concept in this theory, influences an individual's behavioural choices, effort, and emotional responses. Social support can enhance psychological resilience by increasing self-efficacy. Observational learning also plays a role in developing coping strategies and enhancing resilience. The reciprocal determinism in this theory explains the complex relationship between social support, psychological resilience, and mental health (Bandura, 1989).

Cross-cultural research has increased the generalizability of the Social Cognitive Theory in explaining the relationship between psychological resilience and mental health across different cultures (Schwarzer & Luszczynska, 2008).

The World Health Organization (WHO, 2022) defines mental health as a state of well-being enabling individuals

to realize their capabilities, cope with stress, work productively, and contribute to the community. It exists on a continuum and is influenced by individual, family, community, and structural factors.

There are various ways scholars understand mental health, from different perspectives like medicine, statistics, and individual qualities. Keyes (2006) proposed a model combining positive emotions and positive life functioning to define positive mental health. Different criteria and models have been established over the years to assess mental health, highlighting its multifaceted nature.

Social support is a central concept in multiple fields. Its formal introduction as a scientific term was in the 1970s. Scholars have divided it from different angles, such as Weillman's five-item division and Cohen and Wells' classification (He, 2001; Shi, 2003).

Social support plays a crucial role in coping with stress, maintaining mental health, and promoting social integration. Different models, like the Buffering Model and the Direct Effect Model by Cohen and Wills (1985), explain its impact on mental health. The multidimensional nature of social support, including perceived support, structural support, and received support, has been emphasized in the literature (Cobb, 1976; Lakey & Scoboria, 2005; Pearlin, 1989; Umberson et al., 1996).

The concept of psychological resilience has a long history, starting from being considered in the context of unconscious defence mechanisms in the 1950s and evolving to be studied in various contexts like psychoneuroimmunology since the 1980s (Grygorenko and Naydonova, 2023).

Despite decades of research, there is still a lack of consensus on its definition, conceptualization, and measurement. It is often described as the ability to overcome adversity and achieve positive adaptation. Resilience can be seen as a trait, a process, or an outcome, and different scholars have defined it in various ways based on different perspectives (Fletcher and Sacca, 2013).

It is an important component of positive mental health and has been shown to have significant correlations with life satisfaction and other positive psychological outcomes (Arslan, 2019; Stack-Cutler, 2014).

There is strong evidence that social support is linked to mental health. It can buffer the effects of life's stresses and act as a protective factor against mental health difficulties (Cassel, 1976; Cobb, 1976; De Silva et al., 2005; Harandi et al., 2017).

However, the relationship between social support and mental health is complex and conditional. For example, Turner and Noh (1983) found that the buffering effect of social support varied depending on social class status and stress levels. Different aspects of social support, like structural and perceived support, may have different effects on mental health (Berkman & Glass, 2000).

Psychological resilience is recognized as a positive psychological trait that helps individuals cope with adversity and is a protective factor for mental health (Fletcher & Sarkar, 2021; Johnson & Barrett, 2023; Williams & Blackwell, 2022).

Adversity poses a threat to mental health, and resilience plays a role in preventing its adverse effects. Resilience is negatively correlated with mental illness

indicators and positively correlated with positive mental health indicators. Different mechanisms, such as the recovery, protective, and promotion mechanisms, explain how resilience affects mental health (Davydov et al., 2010).

Social support and psychological resilience are closely related. Social support plays an important role in enhancing individuals' psychological resilience. Different models, like the main effects model and the stress buffer effect model by Cohen and Wills (1985), explain this relationship.

Studies on various populations, such as healthcare workers (Zhao, 2022; Yu et al., 2022; Chen, 2022) and patients with diabetes (Cheng, 2019), have shown the positive impact of social support on psychological resilience.

Social support can improve mental health through mechanisms like buffering stress and having a direct effect. Psychological resilience acts as a pathway through which social support influences mental health. It can play mediating and moderating roles between social support and mental health.

The impact of these factors may vary between different groups, such as children and adolescents, college students, and adults. For example, social support is particularly important for the mental health of children and adolescents as they are less psychologically resilient (Masten, 2001).

IV. METHOD

The study adopts a quantitative research method that followed a hypothetical-deductive research process, utilizing a cross-sectional survey design to collect data from a representative sample of students.

Quantitative research was chosen over qualitative research for this study due to its ability to systematically measure and analyse social support, psychological resilience, and mental health status in a large sample through questionnaires and scales. Quantitative research helps to discover statistical associations between variables, provides more generalizable and representative findings, and facilitates the testing of hypotheses and generalization of findings. These characteristics are particularly important to the objectives of this study.

A cross-sectional study was chosen for this study due to its ability to collect a large amount of data from three different grade levels at multiple schools in a relatively short period of time to analyse current data on the status of social support, psychological resilience, and mental health of vocational university students and to develop a study based on the data.

The hypotheses-deductive approach is used in this study as it helps to formulate specific hypotheses within the existing theoretical framework and test the validity of these hypotheses through data collection and analysis. The study will derive specific predictions from general theories to find out what is suitable to validate the relationship between social support, mental toughness and mental health. Through this approach, the study can systematically test hypotheses and draw conclusions to provide a stronger theoretical foundation for future research.

V. FINDINGS

The findings of this study explain the complex interplay among social support, psychological resilience, and mental health among vocational college students.

Regarding social support, it was observed that students received varying levels of support from different sources such as family, friends, and teachers. Through the questionnaire-based analysis, a significant portion of students indicated that emotional support played a crucial role in their daily lives. For instance, those who felt they could openly share their feelings and concerns with someone close had higher levels of satisfaction and a better sense of well-being. However, there were also students who perceived a lack of support, especially in dealing with academic pressures and the uncertainties of future career.

In terms of psychological resilience, the results showed a diverse range of resilience levels among the students. Some students demonstrated strong resilience traits, being able to bounce back quickly from setbacks like poor exam results or conflicts within peer groups. They exhibited positive coping strategies, such as re-framing difficulties as opportunities for growth and maintaining an optimistic outlook. On the other hand, a number of students struggled to adapt effectively when faced with adversities, indicating a lower level of psychological resilience.

When examining the relationship between social support and psychological resilience, a clear connection emerged. Students with higher levels of perceived social support tended to also have greater psychological resilience. It seemed that the emotional, informational, and instrumental support they received provided them with the resources and confidence needed to face challenges. For example, those who had a strong support network were more likely to use active coping mechanisms during stressful periods, thereby enhancing their resilience.

Looking at the link between these factors and mental health, it was found that both social support and psychological resilience were significant predictors of good mental health. Students with better social support systems and higher resilience were less likely to experience symptoms of depression, anxiety, or other mental health issues. In contrast, those lacking in these aspects had more negative emotions and a lower overall mental health state.

Moreover, the cross-sectional nature of the study allowed for comparisons across different grade levels. Interestingly, it was noted that as students progressed through their university years, the importance of certain types of social support and the level of psychological resilience might change. Freshmen often relied more heavily on family support, while seniors needed more peer and professional support in relation to career planning. Overall, these findings highlight the importance of fostering social support and building psychological resilience to promote the mental health of vocational university students.

VI. DISCUSSION

The findings of this study on social support, psychological resilience, and mental health among

vocational university students open up several important areas for discussion.

Firstly, the role of social support cannot be underestimated. The varying levels of perceived support among students indicate that there is a need for a more comprehensive support system within the vocational college environment. Institutions could play a more active role in facilitating support networks, perhaps through mentorship programs that connect students with professionals or alumni who can offer both emotional and practical advice. Additionally, educators can be trained to identify students who may be lacking in support and intervene in a timely manner, whether it's by referring them to counselling services or simply providing a listening ear. The differences in the types of support valued by students at different grade levels also suggest that support initiatives should be tailored to the specific needs and developmental stages of the students. For freshmen, orientation programs that focus on building a sense of community and introducing available support resources can be crucial. For seniors, career guidance workshops that incorporate social support elements could enhance their ability to cope with the stress of entering the job market.

Secondly, the disparities in psychological resilience highlight the importance of resilience-building interventions. Educational curriculums could incorporate modules on stress management, positive psychology, and coping strategies to help students develop stronger resilience. Peer support groups can also be effective, where students can share their experiences of overcoming difficulties and learn from one another. The connection between social support and psychological resilience further emphasizes that these two aspects should be addressed in tandem. By strengthening social support systems, it becomes possible to boost students' resilience, and vice versa. For example, group activities that encourage teamwork and social interaction can simultaneously enhance social bonds and teach students how to rely on others in challenging situations, thereby improving their resilience.

Moreover, the impact of social support and psychological resilience on mental health calls for a holistic approach to improve the well-being of students. Mental health education should not only highlight identifying and treating disorders but also on improving mental health through enhancing these protective factors. Colleges can collaborate with mental health professionals to develop preventive programs that target enhancing social support and resilience. This could involve building mental health workshops, improving communication skills, and developing a growth mindset. In conclusion, understanding the complex relationships of these factors provides a roadmap for creating a more supportive and resilient environment for vocational college students, ultimately contributing to their mental-health development.

VII. CONCLUSION

In conclusion, this study has delved into the relationships between social support, psychological resilience, and mental health among vocational college students.

It is concluded that social support, psychological resilience, and mental health are closely intertwined. Social support serves as a foundation that can bolster a student's ability to cope with the various challenges, they face during their college years. When students feel supported by their families, friends, and the academic community, their psychological resilience is more likely to be enhanced, which in turn acts as a safeguard against mental health problems. This implies that creating an environment with rich social support is essential for the well-being of these students.

Psychological resilience, on the other hand, has emerged as a critical factor in determining how students solve difficulties and maintain their mental health. Those with stronger resilience can better handle their stresses, such as setbacks in their school, interpersonal conflicts, or career-related anxieties. The fact that resilience can be developed through various means, such as educational programs and social interactions, presents an opportunity for vocational colleges to actively enhance the mental health of students.

Overall, this study has practical significance. Vocational colleges should prioritize the improvement of social support networks and build psychological resilience among students. This could involve initiatives like building inclusive college associations, offering more counselling and mentoring services, and integrating resilience development into the curriculum. By doing so, students' mental health can be improved, which is not only beneficial for the students themselves in terms of their personal growth and academic success but also has far-reaching influence on the society. As these students graduate and begin to work, their mental well-being will help them to achieve success. In summary, addressing the identified factors is a crucial step promoting the holistic development of vocational college students.

REFERENCES

- Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. Prentice-Hall.
- Cobb, S. (1976). Social support as a moderator of life stress. *Psychosomatic Medicine*, 38(5), 300-314. <https://doi.org/10.1097/00006842-197609000-00003>
- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98(2), 310-357.
- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98(2), 310-357.
- Fletcher, D., & Sarkar, M. (2013). Psychological Resilience: A Review And Critique Of Definitions, Concepts, And Theory, 18 (1), 12-23.
- Fletcher, D., & Sarkar, M. (2021). Psychological resilience and mental health: The role of individual and environmental factors. *International Journal of Sport and Exercise Psychology*, 19(4), 541-557. <https://doi.org/10.1080/1612197X.2020.1854783>
- Grygorenko, Z., & Naydonova, G. (2023). The concept of "resilience": history of formation and approaches to definition. *Public administration and law review*, (2), 76-88.
- House, J. S. (1981). Work stress and social support. Addison-Wesley.
- Johnson, R. L., & Barrett, C. L. (2023). Resilience as a protective factor against anxiety and depression in the context of COVID-19. *Journal of Clinical Psychology*, 79(2), 301-315. <https://doi.org/10.1002/jclp.23259>
- Richardson, G. E. (2002). The metatheory of resilience and resiliency. *Journal of clinical psychology*, 58(3), 307-321.
- Scheid, T. L., & Wright, E. R. (Eds.). (2017). A handbook for the study of mental health. Cambridge University Press.
- Schwarzer, R., & Luszczynska, A. (2008). How to overcome health-compromising behaviours: The health action process approach. *European Psychologist*, 13(2), 141-151. <https://doi.org/10.1027/1016-9040.13.2.141>
- Williams, S., & Blackwell, S. (2022). The mediating role of resilience in the relationship between trauma exposure and psychological well-being. *Journal of Affective Disorders*, 295, 85-92. <https://doi.org/10.1016/j.jad.2021.08.123>
- Yu, Xiaonan, & Zhang, Jianxin. (2005). Resilience - A psychological mechanism for resilience and growth under stress. *Advances in Psychological Science*, 13(5), 658-665.