



Dimensions and Determinants of Psychological Adaptation Among Chinese College Students

Yang Xia¹, Mohd Muslim Bin Md Zalli^{1*}

¹Faculty of Human Development, Universiti Pendidikan Sultan Idris (UPSI), Tanjong Malim, 35900 , Perak, Malaysia.

Article Information

Article Type: Review Article

Dates:

Received: February 27, 2025

Revised: April 01, 2025

Accepted: April 09, 2025

Available online: April 10, 2025

Copyright:

This work is under [Creative Commons license](#) (cc) (i) ©2024.

Corresponding Author:

Mohd Muslim Bin Md Zalli

muslim@fpm.ups.edu.my

ORCID: 0000-0003-0908-686X

ABSTRACT

Psychological adaptation is recognized as a vital regulator and indicator of mental well-being. In recent years, mental crises among college students in China have primarily been attributed to psychological maladaptation. Therefore, this study aims to explore the different dimensions and determinants of psychological adaptation among Chinese college students. A narrative-style systematic review was undertaken in accordance with the Prisma statement's principles. The research sample consisted of an online database published in the time series (2015-2024) about college students' general and psychological adaptation. The analytical results indicate that psychological adaptation encompasses five prevalent dimensions: academic adaptation, environmental adaptation, interpersonal adaptation, self-adaptation, and emotional adaptation. It was noted that the factors which affect psychology can be categorized intrinsically at two levels: (a) internal and external factors; (b) micro factors, meso factors, and macro factors. The study concludes that college students' psychological adaptation is a multifaceted subject that needs to be considered from multiple perspectives for better understanding. Self-efficacy, also known as self-regulation, is a crucial and fundamental element that influences psychological adaptation. On the other hand, social support as an external factor has a significant effect at multiple levels including the micro, meso, and macro levels. The thorough evaluation of the literature provided us with vast and interlinked approaches for the psychological adaptation analysis of an individual or college student. Different researchers have adopted various approaches with the same purpose of achieving psychological health integrated into an individual's life.

Keywords: Psychological Adaptation; Mental Health; College Students; Literature Analysis; Dimensions; Determinants.

1. INTRODUCTION

Assessing the situation both at the domestic level (i.e., within a country) and internationally, the most frequent concern regarding college students is their well-being. The unemphatic role and lack of empathy by the stakeholders delay the disclosure and handling of the problem. On the other hand, the body of researchers who eventually assess and evaluate to resume an eclectic approach to heed the problem is embedded into the phase of sterility owing to the affected lack of development that ought to proceed with the consensus ushered in. The matter at hand escalates in its magnitude. It can be inferred owing to the fact that college years align with a crucial phase of development during which numerous prevalent mental diseases are likely to manifest (Jones et al., 2022). The challenges of transition into a new phase, along with the culminating pressure that comes with it, assume a definite role in some students' lives. Researchers

found that it is due to several causes, such as institutional, intellectual, social, and emotional pressures, that young people are facing challenges in staying in the higher education system (Araque et al., 2009; Ethington, 1990; Tinto, 1975; Donado et al., 2021). Based on a socioeconomic study conducted by Fonaprace (2014), it was found that 58.36% of federal university students reported experiencing anxiety, 44.72% reported feeling apathetic or lacking motivation, 32.57% reported suffering from insomnia or other serious sleep disorders, 22.55% felt abandoned or experienced despair, and 21.29% expressed feelings of loneliness. The prevalent condition is subsequently nurtured by the inability or inefficacy to tackle it. Furthermore, there are documented instances of individuals experiencing eating disorders, fear and panic, death anxiety, and suicidal ideation (Sahao & Kienen, 2021).

It is no better for Chinese college students, and the problem is exacerbated by the vast student population. First-year college students, for example, in China, frequently struggle to adjust to college life. As shown in Table 1, a survey done at a college in Beijing found that the vast majority of first-year college students face multiple external and internal-adjustment issues as they start their college studies (Ju et al., 2020).

Table 1: Difficulties Encountered by New Students when Enrolling in College (Ju et al., 2020)

Difficulty	Proportion
Adapt to new living habits and environments	55.33%
Pressure of the course	49.67%
Anxiety, fear, and depression related to school and life	45%
Thoughtfulness, loneliness	29.33%
Post-traumatic stress disorder caused by course content	6%
Drug therapy	0.67%
Other	2.33%
No difficulty	15.33%

In terms of the psychological adaptation of college students, it is worth mentioning that in recent years the majority of psychiatric crises encountered by college students in China have been associated with psychological maladaptation (Ren, 2022). Psychological adaptation serves as the mental readiness of students to engage in university studies, i.e., their capacity to handle the academic demands and cope with the stressors that may develop throughout their studies (Nugmanova et al., 2022). It will significantly influence the adjustment and psychological well-being of college students. Recent research has uncovered a troubling pattern. There has been a consistent rise in the incidents of suspensions, dropouts, severe mental disorders, suicides, and killings linked to psychological maladjustment among college students over time (Li & Zhou, 2017). It highlights the need to contemplate significant intervention.

Psychological adaptation facilitates the conversion of negative emotions into more positive ones for individuals (Oakes et al., 2016), facilitating students' comprehension of their own and others' cognitive and emotional states, hence reducing the occurrence of psychological distress (Hafida et al., 2022).

Psychological distress is the precursor that sabotages normal day-to-day life and daily activities. In light of this, addressing the psychological issues of Chinese college students must be commenced with their psychological adaptation. That is to say, the issue of enhancing the mental well-being of college students can be effectively tackled through an emphasis on their psychological adaptation (Ren, 2022).

However, "psychological adaptation" has typically been examined by cross-cultural psychologists (Doucerain, 2019), who have concentrated on the cultural adaptation of migrants and the adaptability to traumatic experiences (Li, 2021), rather than college students. In China, although scholars have shown interest in the psychological adaptation of college students, research has predominantly remained at the theoretical level, lacking empirical research and support. In summary, the psychological well-being of students and their adaptation to college life have always been subjects of research but the literature still reveals significant gaps (Sahao & Kienen, 2021). Efforts ought to be directed toward fortifying screening and intervention protocols for psychological symptoms, especially targeting college students in the era following COVID-19 (Wang et al., 2022). There is a need for additional theoretical and empirical research to better comprehend the psychological adaptation of college students.

Hence, this study aims to enhance knowledge and foster a more thorough understanding of psychological adaptation by organizing and summarizing the scientific literature on the mental health and psychological adaptation of Chinese college students. To achieve this, the study focuses on the following research issues.

1. What is the research status of college students' psychological adaptation in China?
2. How is psychological adaptation tested in college students, what are the most often utilized assessment dimensions?
3. What factors influence the psychological adaptation of college students in existing studies?

2. METHODS

In response to the research questions and objectives, a systematic review of the literature was conducted by researchers. This methodology seeks to systematically identify determiners by scrutinizing a maximum number of research materials on this topic, leading to a thorough, critical, and all-encompassing investigation of the chosen material. For a comprehensive understanding of the situation concerning the psychological adaptation of college students, published studies were obtained from a variety of channels.

The research was conducted utilizing electronic databases like CNKI, Scopus, ProQuest, Web of Science, Google Scholar, and ScienceDirect. The following descriptors were utilized throughout the global databases: ("university student" or "college student") and ("psychological adaptation" or "psychological adjustment," likewise "mental adaptation" or "mental adjustment") and ("China" or "Chinese"). In the national database, the advanced search engine is optimized with keywords such as "college/ university students". Other keywords like "psychological/ mental adaptation (or adjustment)" and "mental/ psychological health" were used. Furthermore, to avoid missing out on significant data, the most searched keywords were sought and probed falling in the database up to October 2023. Finally, the references of the selected papers were cross-examined for additional literature relevance to the topic but were not retrieved from the search engine database. This methodology was adopted to provide the most thorough and comprehensive data that will be analyzed for this research.

The exclusion criteria used in research are as follows:

- (1) Studies that do not focus on college/university students;
- (2) Research that does not examine psychological(mental) adaptation(adjustment) or mental(psychological) health;
- (3) Research papers published prior to 2014;
- (4) Studies that investigate the validity and reliability of measurement tools;
- (5) Research conducted in languages other than English or Chinese.

The search for relevant literature was carried out in two parts. In the first phase (initiated on March 2023), 263 pieces of relevant literature were selected for evaluation. The second phase of the literature probing took place in October with an updated search, resulting in the selection of 35 pieces of literature. After conducting a thorough examination of the title, keywords, and abstract, simultaneously taking into account the subject matter of this study, the exclusion criteria, a total of 25 pieces of literature were ultimately chosen. These include 20 empirical studies and 5 theoretical studies in all. The precise process is illustrated in Figure 1.

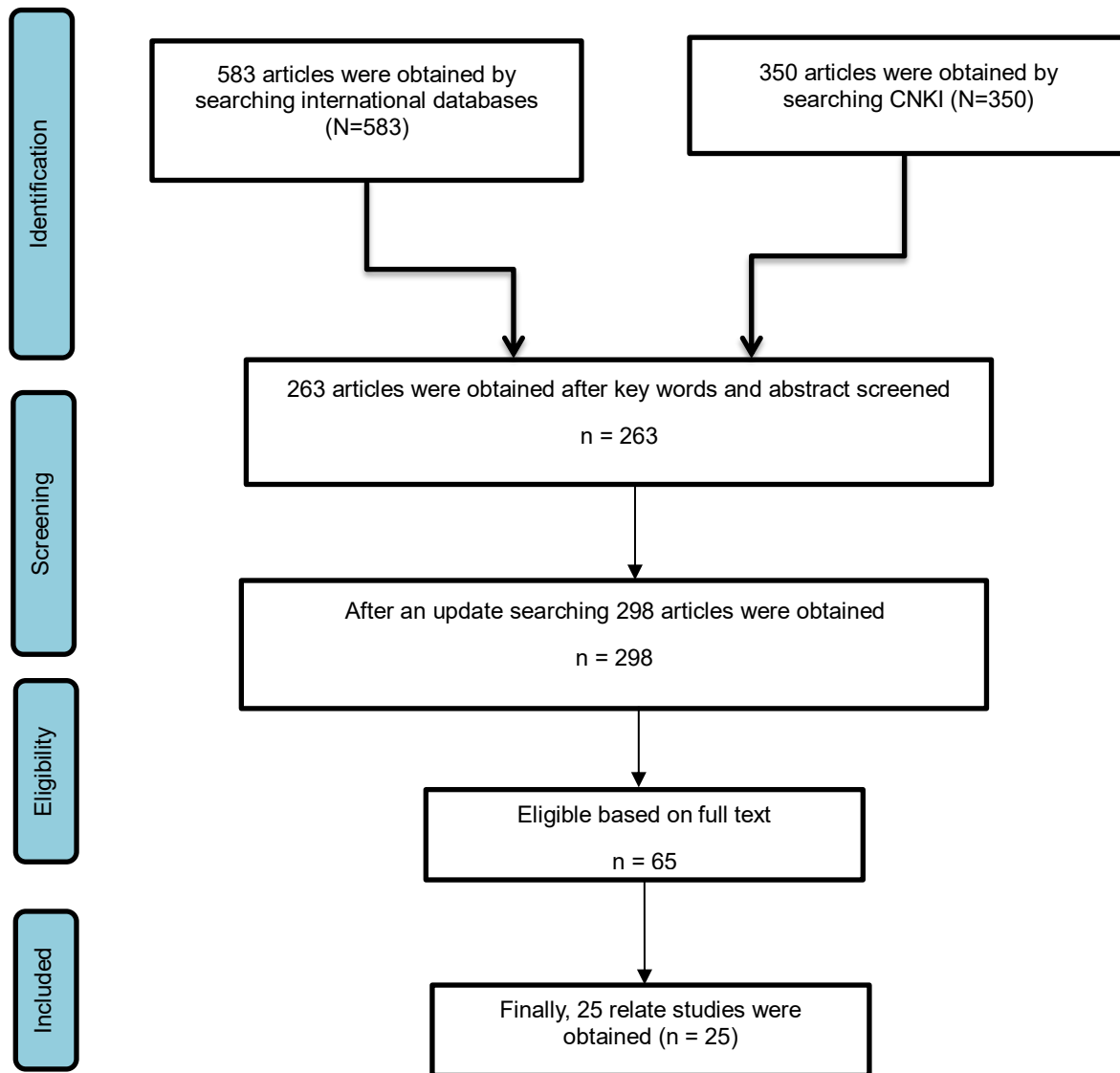


Figure 1: Flowchart of Systematic Review Process (Source: The Authors)

All the chosen publications are classified into two distinct categories: empirical literature and theoretical literature. The empirical literature offers the following information: (1) The college age is a crucial stage of development for individuals, necessitating adjustment and adaptation. (2) Students at the higher education level are susceptible to emotional, academic, and psychological issues that require careful consideration. (3) Factors that either facilitate or hinder students' adaptation to higher education. (4) The adaptation of students and the influencing factors within specific contextual circumstances. (5) Diverse characteristics of adaptation among various groups of college students. (6) The adaptation and testing of questionnaires. In contrast, the theoretical literature presents the following: (1) the present status of psychological adaptation and mental health among college students; (2) the dimensions of measurement for psychological adaptation and mental health among college students; (3) an analysis of the causes of

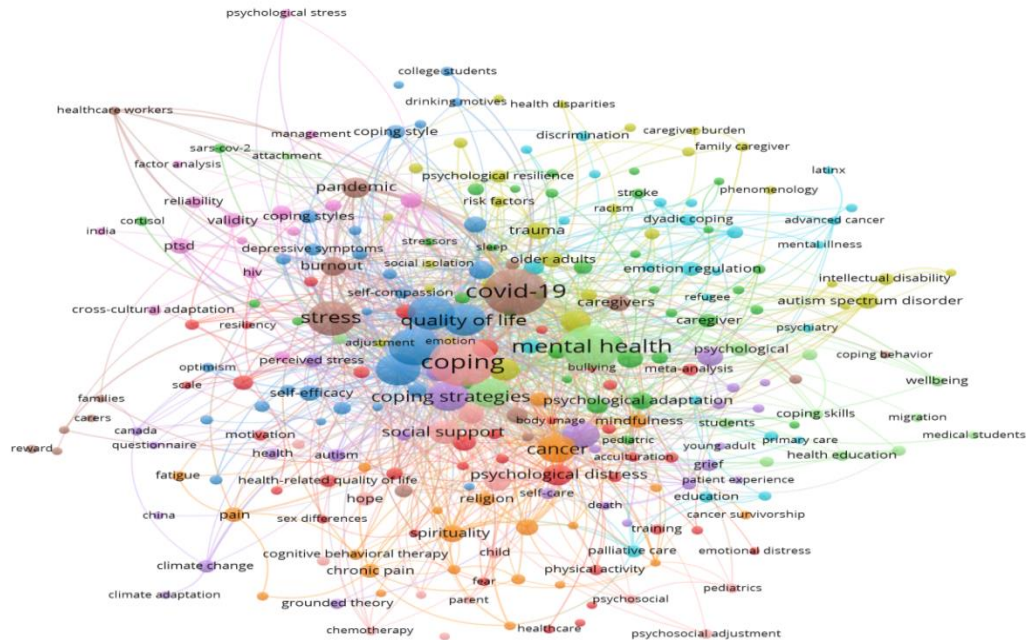
psychological adaptation; and (4) recommendations and countermeasures for psychological adaptation and mental health.

Furthermore, to enhance the process of recording and extracting literature information, a literature table was established. Table 2 includes part of the following details: (1) author, year, and subject; (2) research design, research objects, sample size, research methods, and findings; (3) article number, key information from the abstract, and crucial details from the literature. Additionally, to gain a comprehensive understanding of the research on college students' psychological adaptation, the VOSviewer was utilized to analyze the literature search results in the Scopus database and the WordArt tool was employed to assess the influential aspects in the 25 selected literature sources. The Mendeley Document Management software was employed for document storage and classification, ensuring easy access.

3. RESULTS AND ANALYSIS

3.1 Research Status of Psychological Adaptation in China

The literature analysis reveals a notable research gap in the psychological adaptation of college students. In general, the following characteristics can be identified: (1) The age distribution is relatively homogeneous, with a predominant concentration around the age of 20, which is directly influenced by the education system in China. Chinese college students exhibit more distinct group characteristics compared to college students in Western countries. This is evident in the higher concentration of age groups, typically ranging from 18 to 24 years old (Chen, Shan & Tian, 2011). (2) There is a need for more research that specifically focuses on the psychological adaptation of college students. By conducting a search of the literature from the past five years using the keyword "psychological adaptation" and analyzing the data obtained from the Scopus database through the VOSviewer software, as in figure 2, it is evident that the existing research does not primarily address college students or universities. Instead, it primarily focuses on topics such as mental health, Covid-19, coping strategies, epidemics, stress, social support, cancer, and psychological stress.



et al. (2017), Niu et al. (2022), Ning and Shi (2023), Ju, Zhang and Chen (2020), Chen (2019) and Li and Chen, (2021). Table 2 is given for more fundamental details.

Table 2: Characteristics of the Articles Analyzed Regarding the Research Design, Instrument, Sample Size and Data Analysis Method

Code	Research Design	Instruments	Research Population	Age	Sample Size	Data Analysis Method
Article1 Lin, W. (2022).	Quantitative Scales	China College Student Adjustment Scale (CCSAS)	Vocational students of Zhejiang Economic Vocational and Technical College	—	500	Correlation analysis, structural equation model
Article2 Jiao, T. M., Yu, W. J., & Niu, Y. B. (2019).	Quantitative Scales	Symptom checklist-90 (SCL-90), China College Student Adjustment Scale (CCSAS)	Nursing students enrolled from 2015 to 2017 in Yanbian University and Beihua University;	M=20.56 ±1.21	583	Variance analysis, correlation analysis, regression analysis
Article3 Zhang, H. Y., & Li, M. S. (2022).	Mixed-method Research	Zung Self-appraisal Depression RatingScale and Zhu's Tree-Dimension Adaptation Scales	SISs from a top Chinese university	M=20.5	155	Descriptive analysis, analysis of variance, correlation analysis
Article4 Chen, J. Y., & Tu, C. C. (2019).	Quantitative Scales	College Students' Learning Adaptation Scale, teacher support scale, Chinese version of the Mental Hardiness Scale	A kindergarten teacher's college in Changde	M=16.13	1148	Confirmatory factor analysis, correlation analysis, regulatory model analysis and non-parametric percentile test
Article5 Zhu et al., (2020).	Quantitative Scales	SCL-90 (Symptom Checklist 90)	4 majors in School of Computer Science(Wuhan Donghu University).	—	278	T-test

Article6 Baohua Yu, Anita S. Mak & Peter Bodycott (2021)	Quantitative Scales	Epidemiologic Studies-Depressed Mood Scale (CES-D), an adapted version of Cemalcilar and Falbo's (2008) 12-item scale, Mak and Kim's (2011) adaptation of Majer's (2009) Beliefs in Educational Success Test, Eight-item Quantity of Contact Scale, Acculturative Stress Scale, Perceived social support Scale Acceptance and ActionQuestionnaire-II (AAQ-II), Cognitive Fusion Questionnaire (CFQ), a 60-item scale developed by Fang et al. (2005), Index of Well-Being(IWB)	Chinese students studying in universities in Hong Kong	33.4% were aged below 20 years, 52.6% between 21 and 25 years	2201	Descriptive statistics, intercorrelations, regression analyses
Article7 Bi, D. D., & Li, X. Y. (2021).	Quantitative Scales	Teacher-Student Relationships Questionnaire, Student Adaptation to College Questionnaire	Participants from a Chinese vocational college	M=18.80	644	Latent profile analysis (LPA), analysis of variance, chi-square tests
Article8 Li, J. B. (2022).	Quantitative Scales	The Adaptability Questionnaire of Freshmen (SACQ), Social Support Scale, The Adaptability Questionnaire of Freshmen (SACQ),	Chinese freshmen in two colleges in Guangzhou	M = 18.72	1578	Descriptive statistics, bivariate correlation analyses, main analyses, RI-CLPM model
Article9 Fu et al., (2020)	Quantitative Scales	Self-compiled based on semi structured interviews and existing questionnaires	College students in Tangshan North China University of science and technology and Tangshan Normal University;	—	450	Descriptive statistics analysis, single factor analysis of variance, correlation analysis and structural equation model
Article10 Zhu et al., (2023)	Mixed-method Research	Learning adaptation scale, Peer Attachment Scale, Learning Conformity Behavior Scale	International colleges of 300 universities	Mainly under 30 years old, accounting for 81%	2540	Independent-sample t-test, homogeneity test, one-way analysis of variance, principal Component Analysis, structural equation modeling
Article11 Xu, C., & Tu, C. C. (2023).	Quantitative Scales		College students in Hengyang	—	650	Descriptive analysis, reliability and validity analysis, path analysis, and structural equation modeling

Article12 Sun, L., Wang, K. X., & Dong, W. J. (2022).	Quantitative Scales	Depression Scale, UCLA the Loneliness Scale, Self-rating anxiety scale, Self-esteem scale	The students of Hubei Second Normal University	—	443	Descriptive statistics, independent sample t test, Pearson correlation analysis, factor analysis, structural equation model
Article13 Huang, C. L., Zhao, X. C., & Cheng, L. N. (2017).	Quantitative Scales	Student adaptation scale and coping style questionnaire	A comprehensive university,	—	229	t-test, F-test and correlation analysis
Article14 Qin et al., (2022)	Quantitative Scales	Psychological resilience scale of college students, Adolescent Adap Fitness Scale	College students of a certain university	—	337	Comparison of differences, analysis of variance, correlation analysis
Article15 Wang, X. J., Zu, B. C., & Xue, L. M. (2017).	Quantitative Scales	Connor— Davidson resilience scale (CD— RISC), China College Student Adjustment Scale (CCSAS) , General Wellbeing Schedule (GWB)	A comprehensive university in Changsha, Hunan province	—	567	Independent sample T-test, correlation analysis, regression score analysis
Article16Zhang, X. L, Zhao, M. L., & Xie, X. C. (2017).	Quantitative Questionnaires	The questionnaire was designed as 20 single choices, which were divided into two aspects: language learning and cultural customs	Sri Lankan students' in Chongqing Normal University	M=21.5	80	Descriptive analysis
Article17 Li, J., Xue, E., Wei, Y., & Guo, Y. (2023).	Quantitative Scales	Learning adaptability scale	Overseas students studying at the undergraduate level at B University	19 and 23 years old	4660	Reliability and validity Test, model validation analysis, path analysis
Article18 Niu, H., Ren, S., & Li, S. (2022).	Quantitative Scales	The College Student Adaptability Inventory (CSAI)	Engineering undergraduate university in the city of Qingdao, in Shandong Province	M=18.21	5818	T-tests and correlation analysis
Article19 Ning, Q. L., & Shi, J. Y. (2023).	Quantitative Questionnaires	A structured online questionnaire (questions were based on the study topic)	First-year undergraduate university students.	—	555	Descriptive research design, two-factor model

Article20 Wang, Q., & Zhang, Q. (2015).	Quantitative Scales	Adolescents' Adaptability Scale (AAS)	College students in China ;	—	650	T-test, one-way analysis of variance
Article21 Ju, Y. T., Zhang, X. J., & Chen, Y. M. (2020).	Mixed- method Research	A comprehensive questionnaire, Psychological Elasticity Scale	A "double first-class" university in Beijing	—	300	Descriptive analysis
Article22 Chen, J. (2019).	Quantitative Questionnaires	Questionnaire of college students' study and life fitness, satisfaction and mental health education needs	West Anhui Health Vocational College	—	1900	Descriptive analysis
Article25 Li, J., & Chen, X. Y. (2021).	Quantitative Questionnaires	Questionnaire of college students' mental health status during the epidemic period	A normal major at a university in Zhejiang Province	—	484	Descriptive analysis

Source: The Authors analysis

3.2 Measurement Dimensions of Psychological Adaptation

Psychological adaptation is a complex process that involves multiple aspects, each of which has unique factors that can predict its outcome (Bulgan & Ciftci, 2017). Researchers utilize many criteria to assess psychological adaptation according to their particular research goals and methodologies. Wang N. (2019) conducted a study on the psychological adaptation of college students in the modern period. The study highlights frequent hurdles in psychological adaptation, including learning difficulties, difficulty in daily living, and problems in interpersonal interactions. A study on psychological adaptation in first-year college students classifies the factors (contributing to adaptation difficulties) into five main categories: environment, learning, interpersonal relationships, emotions, and self (Fan & Jian, 2018). Furthermore, Wang (2019) emphasizes that while studying psychological adaptation among college students in this new era, it is important to include common challenges in learning, daily life, and social relationships as significant factors. The literature analysis revealed that the aspects of domestic research on psychological adaptation align closely with those examined by the aforementioned researchers. The majority of research primarily examines variables that are strongly associated with students' academic and personal lives, such as learning, personal experiences, and social interactions.

Lin (2022) and Huang et al. (2017) utilized the Chinese College Student Adaptation Scale (CCSAS) developed by Fang et al. (2005). The CCSAS assesses the psychological adaptation of college students in seven dimensions: interpersonal adaptation, study adaptation, campus adaptation, career choice adaptation, emotional adaptation, self-adaptation, and satisfaction. This assessment involves interviews, pre-tests, norm collection, and assessments of reliability and validity. Furthermore, the Adolescent Psychological Adjustment Scale (APAS), created by Chen & Chen (1988), is a widely used tool for assessing psychological adaptability. The scale assesses the psychological flexibility of teenagers across various domains, including their capacity to adjust to sports competition, unexpected situations, learning environments, exam anxiety, and group activities. On the other hand, Zhang & Jiang (2006) developed a cost-based framework for adolescent adaptation, using a literature review and expert consultations as a foundation. This structure consists of physiological adaptation, emotional adaptation, interpersonal adaptation, learning adaptation, social adaptation, and life adaptation. These different adaptation scales assume different roles and dimensions to ultimately approach well-being of individuals at different levels.

The research also revealed that some academics used a different track when studying students' psychological adaptation. Li & Chen (2021) compiled a questionnaire on "Psychological Health Status of College Students during the Epidemic" to investigate the psychological adaptation of college students after the resumption of schooling from diverse perspectives like response to classroom teaching, anxiety, fear, behavioral performance, depression and anger. According to Sun et al. (2022), there are four measurable indicators of psychological adaptation among college students: loneliness, self-esteem, depression, and anxiety. The mean values of the four scales are combined and summed to provide an indicator of psychological adaptation, with lower scores suggesting greater adaptation and higher scores indicating worse adaptation. Similarly, research on college freshmen has found that those who experience psychological discomfort in the areas of learning, interpersonal relationships, career goals, independent living, and resource utilization are prone to symptoms such as depression, anxiety, hostility, fear, obsession, and somatization (Zhong & Zhang 2009; Ren 2022). This further substantiates the perspective that the psychological adaptation of college students can be assessed through psychological or physical manifestations, such as depression, worry, and apprehension. Though it is to be considered that different researchers employ various metrics.

conducted by Wang & Zhang (2015) revealed significant differences in psychological adjustment among Chinese college students based on their chosen field of study. Significantly, students majoring in physical education displayed the highest degree of adaptation, whilst those majoring in art exhibited the lowest. Moreover, notable disparities were noted among the different grades, with the second year exhibiting the most pronounced level of adaptation and the upper grades demonstrating the least amount of adaptation. Likewise, notable variations exist in the psychological adaptation of students belonging to distinct genders. In general, elements impacting college students' psychological adaptability can be divided into two categories: (1) internal and external factors; (2) micro (individual) factors, meso (intermediate social) and macro (wide environmental) factors.

Further investigation advocates internal factors as the primary influence conducive to psychological adaptation. This is also consistent with prior researchers' views that multiple levels of the surrounding environment influence an individual's development. Microsystems are the most influential level among them, as well as the most direct environmental design for individual development (Evans, 2024). To get to the specifics, the study by Lin (2022) discovered that Coping Tendency (+) => psychological adaptation; the study by Chen and Tu (2019) discovered that Hardiness (+) => learning adaptation; and the study by Yu et al. (2021) discovered that academic self-efficacy (+), perceived discrimination (-) => psychological adaptation. Among them, self-regulation (self-efficacy) is one of the influences that has received the most attention. This is also in correspondence with prior research conducted in the United States, which suggests that international students who possess higher levels of academic self-efficacy tend to have greater psychological adaptation (Bulgan & Çiftçi, 2017). Table 3 illustrates the examination of the variables that influence psychological adaptation.

Table 3: Influencing factors analysis on psychological adaptation

Factors		Articles	Method	Statistical findings	Outcome
Coping tendency	Psychological adaptation	Lin, W. (2022).	Qualitative	$r=0.765, p<0.01$	Positive
Social support				$r=0.599, p<0.01$	
Adaptation in life	Psychological adaptation	Zhang, H. Y., & Li, M. S. (2022).	Qualitative and quantitative	$r = -0.438,$ $p = 0.000;$	Positive
Adaptation in learning				$r = -0.365,$ $p = 0.000$	
Teacher support	Learning adaptation	Chen, J.Y., & Tu, C.C (2019)	Qualitative	$r=0.586, p<0.01,$ $\beta=0.432, p<0.001$	Positive
Hardiness				$r=0.518, p<0.01,$ $\beta=0.285, p<0.001$	
Refined push mode	Psychological Adaptation	Zhu et al.,(2020)	Qualitative	$P < 0.05$	Significantly
Extensive push mode				$P > 0.05$	No significant
Academic adaptation	Psychological adaptation	Baohua Yu, Anita S. Mak & Peter Bodycott(2021)	Qualitative	$r=0.49, p<0.01$	Positive
Academic self-efficacy				$r=0.43, p<0.01$ $\beta=0.32, p<0.001$	
Social support				$r=0.32, p<0.01$ $\beta=0.17, p<0.001$	
Perceived discrimination				$r=-0.38, p<0.01$ $\beta=-0.30, p<0.001$	
English proficiency				$r=0.16, p<0.01$	
. Cantonese proficiency				$r=0.13, p<0.01$	
Contact with locals				$r=0.14, p<0.01$	

Gender	Psychological adaptation	Sun, L.,Wang, K. X.,& Dong, W. J.,(2022)	Qualitative	t=13.051, p<0.000	Positive
Anyone around you has ever been diagnosed with COVID-19				t=18.188, p<0.000	
Gender				t=2.726, p<0.01	
Origin of student	Psychological adaptation	Huang,C.L.,Zhao,X.C h.,&Cheng,L.N.,(2017)	Qualitative	t=2.617, p<0.01	Positive
Solve the problem				r=0.436, p<0.01	
Seek help				r=0.318, p<0.01	
Fantasy				r=-0.308, p<0.01	
Self-accusation				r=-0.289, p<0.01	
Rationalization				r=-0.246, p<0.01	
Retreat				r=-0.252, p<0.01	
Gender	Psychological adaptation	Qin et al.,(2022)	Qualitative	t=2.344, P=0.020,p<0.05	Positive
Gender				F=5.494, P=0.020, p<0.05	
Psychological resilience				r=0.265, p<0.01	
Gender	Negative factors	Ning,Q.L & Shi, J. Y.(2022)	Qualitative	t=2.466, p<0.05	Positive
Sports activities	Positive factors			F=40.611, p<0.05	
Sports activities	Negative factors			F=27.246, p<0.05	
Gender	Psychological adaptation	Wang,Q & Zhang, Q.(2015)	Qualitative	t=7.21, p<0.01	Positive
Major				F=27.66 (df=2), p<0.01	
Grade				F=5.43 (df=3), p<0.01	

Furthermore, while the micro level of internal effects must be addressed, the meso and macro levels of external forces, particularly social support, cannot be overlooked (Lin, 2022; Chen & Tu, 2019; Yu. et al. 2021; Li, 2022; and Fu et al., 2020). These studies look at how social support affects Chinese students' adaptability (psychological adaptation) as well as international students studying in China. In conformity to this proposition, Li, Xue, Wei & Guo (2023) utilized the structural equation model and mediation analysis and investigated the factors influencing international students' learning adaptability in China. They discovered a link between social relationships and learning attitudes. Similarly, some researchers have investigated the adaptability of Mainland Chinese students studying in Hong Kong, including an examination of social support elements. The emphasis on the role and status of social support in college students' (psychological) adaptation appears to be global. A study on the psychological adaptation of international students in Northern Cyprus discovered that unmet expectations, low economic satisfaction, and limited social support predicted acculturative stress (Ladum & Burkhold, 2019) reinforcing the importance of social support from a different perspective. Besides, for international students studying in China, language proficiency is identified as the primary factor influencing their adaptation to college life.

4. CONCLUSION AND RECOMMENDATIONS

A detailed and in-depth investigation of the existing literature provided comprehensive research of dimensions and determinants of psychological adaptation. It entails evidence for the correlation between mental health and mental adaptability from a unique perspective. The study prompts the advancement of mental health initiatives for college students and prioritizes their psychological adaptation to enhance the concentration and performance of college students' psychological adjustment. This will simultaneously yield improved theoretical and empirical results to better meet the mental health requirements of students. Even though met against the odds of theoretical and empirical limitations, the current study on the psychological adaptation of college students provides an insightful review of the collected literature. Research on psychological adaptation is often intertwined with studies on other adaptations or psychological symptoms. So, it is noted that psychological adaptation research has typically been interlinked with the research conducted by cross-cultural psychologists.

Furthermore, there are various adaptation scales used by researchers variably to measure the psychological adaptation of an individual, implying that the dimensions of psychological adaptation measurement lack uniformity. Some researchers assess the psychological adaptation of college students by examining various components of their college experience such as academics, environment, life, etc. Others evaluate it by considering mental health or physical symptoms. Despite the scholars approaching psychological adaptation from various dimensions, the overall research encompasses five main dimensions: environmental (life) adaptation, interpersonal adaptation, academic adaptation, self-concept, and emotional adaptation. These are the five main dimensions that should be considered when addressing the psychological adaptation of college students and ultimately targeting a sustainable psychological adaptation of these students for their psychological health and well-being. Based on the examination and synthesis of the chosen literature, this study asserts that among the various determinants, self-efficacy (self-regulation) as an internal component significantly contributes to the psychological adjustment of college students. On the other hand, social support, as an external element, plays a crucial role in the psychological adaptation of college students at both the meso and macro levels.

5. RESEARCH GAPS AND FUTURE STUDY

It is critical to consider both subjective and objective limits when conducting research. In this study, the current status, dimensions, and affecting factors of college students' psychological adaption were examined utilizing the literature analysis approach. In this case, the impartiality and comprehensiveness of the literature selection have a direct impact on the scientific validity of the subsequent analysis. In addition to this, the selected literature focuses mostly on college students in China at both domestic and international level. However, there will always be limitations to the generalizability of research findings. Besides, the researcher's perspectives, preferences, and capacity to evaluate the topics will influence the discussion findings to some extent. Significantly, it is crucial to specifically focus on certain types of college students, namely first-year students, senior graduates, and rural college students, in order to address their psychological adaptability and happiness (Chen, J., 2019). Nevertheless, this study solely focused on the collective group of college students, and it is imperative that future research delves deeper into specific domains and strives for more robust investigation and expansion.

Author(s) Contributions: Yang Xia conceptualized the study, provided resources, performed formal analysis, and was responsible for writing the manuscript; Mohd Muslim Bin Md Zalli was responsible for reviewing the manuscript and contributed to the methodology. All authors have read and agreed to the published version of the manuscript.

Ethical Statement: The study proposal was approved by Faculty of Human Development, Universiti Pendidikan Sultan Idris (UPSI). The researchers followed all the required ethical guidelines provided by the host university.

Competing Interests The authors declared that this work has no competing interests.

Declaration Statement of Generative AI: The author(s) of this work declared that they did not use any AI tools except Grammarly to improve the language of the study.

REFERENCES

- Araque, F., Roldán, C., & Salguero, A. (2009). Factors influencing university drop out rates. *Computers & Education*, 53(3), 563-574. <https://doi.org/10.1016/j.compedu.2009.03.013>
- Bulgan, G., & Çiftçi, A. (2017). Psychological adaptation, marital satisfaction, and academic self-efficacy of international students. *Journal of International Students*, 7(3), 687-702. <https://doi.org/10.5281/zenodo.570028>
- Cemalcilar, Z., & Falbo, T. (2008). A longitudinal study of the adaptation of international students in the United States. *Journal of Cross-Cultural Psychology*, 39(6), 799-804. <https://doi.org/10.1177/0022022108323787>
- Chen, J. (2019). Perspective and reflection on college students' psychological adaptability and satisfaction from the perspective of mental health needs. *Journal of Jilin Normal University of Engineering and Technology*, 9, 23-25.
- Chen, J. j., & Chen, H. C. (1988). Testing and analysis of temperament, psychological adaptability and volitional qualities of primary and secondary school students. *Educational Theory and Practice*, 4, 26-30.

- Chen, J. Y., & Tu, C. C. (2019). A study on teacher support and learning adaptation among six-year normal university freshmen: The moderating effect of the hardiness. *Eurasia Journal of Mathematics, Science and Technology Education*, 15(12), em1827. <https://doi.org/10.29333/ejmste/115847>
- Chen, X. L., Shan, C. Y., & Tian, Y. P. (2011). Characteristics and laws of physical and mental development of contemporary college students. *Science and Education Journal*, 3, 15-17.
- Donado, M. L. G., Mercado-Peñaloza, M., & Dominguez-Lara, S. (2021). College adaptation among Colombian freshmen students: Internal structure of the Student Adaptation to College Questionnaire (SACQ). *Journal of New Approaches in Educational Research*, 10(2), 251-263. <https://doi.org/10.7821/naer.2021.7.657>
- Douceraín, M. M. (2019). Moving forward in acculturation research by integrating insights from cultural psychology. *International Journal of Intercultural Relations*, 73, 11-24. <https://doi.org/10.1016/j.intrel.2019.07.010>
- Ethington, C. A. (1990). A psychological model of student persistence. *Research in Higher Education*, 31(3), 279-293. <https://doi.org/10.1007/BF00992313>
- Evans, O. G. (2024, January 17). *Bronfenbrenner's Ecological Systems Theory*. SimplyPsychology. Retrieved June 11, 2024, from <https://www.simplypsychology.org/bronfenbrenner.html>
- Fan, P., & Jian, R. Y. (2018). Psychological adaptation problems of college freshmen and their solutions. *Reform and Opening Up*, 4, 128-129.
- Fang, X. Y., Wo, J. Z., & Lin, X. Y. (2005). Development of Chinese college student adjustment scale. *Studies of Psychology and Behavior*, 3(2), 95.
- Fonaprace. (2014, January 20). *IV Pesquisa do perfil do socioeconômico e cultural dos estudantes de graduação das instituições federais de ensino superior brasileiras*. ANDIFES. Retrieved June 11, 2024, from http://www.andifes.org.br/wp-content/uploads/2017/11/Pesquisa-de-Perfil-dos-Graduandos-dasIFES_2014.pdf
- Fu, D., & Ma, N. (2018). Rethinking the psychological adaptation education of college freshmen. *Heilongjiang Education*, 4, 81-83.
- Fu, Y. L., Li, P., Lv, S. B., Shen, Y. F., & Liu, X. L. (2020). The relationship between undergraduates' extroversion, social support and college life adaptation. In *Proceedings of the 2020 International Conference on Artificial Intelligence and Education* (pp. 433-438). IEEE. <https://doi.org/10.1109/ICAIE50891.2020.00106>
- Hafida, S. H. N., Isa, N. K. M., Jumadi, & Khotimah, N. (2022). Is psychological adaptability needed for high school students in disaster-prone areas of Mount Merapi Eruption? *IOP Conference Series: Earth and Environmental Science*, 986(1), 012040. <https://iopscience.iop.org/article/10.1088/1755-1315/986/1/012040/pdf>
- Huang, C. L., Zhao, X. C., & Cheng, L. N. (2017). Study on the relationship between psychological adaptation and coping styles among college freshmen. *Journal of Shaanxi Institute of Technology: Social Science Edition*, 1, 98-102+108.

- Jones, L. B., Judkowitz, C., Hudec, K. L., Munthali, R. J., Prescivalli, A. P., Wang, A. Y., ... & Vigo, D. V. (2022). The World Mental Health International College Student Survey in Canada: Protocol for a Mental Health and Substance Use Trend Study. *JMIR Research Protocols*, 11(7), e35168. <https://doi.org/10.2196/35168>
- Ju, Y. T., Zhang, X. J., & Chen, Y. M. (2020). Adaptation and growth of college freshmen from the perspective of overall health: A case study of a "Double First-class" university in Beijing. *Journal of Education of Chinese Minzu University*, 2, 49-62.
- Ladum, A., & Burkholder, G. J. (2019). Psychological adaptation of international students in the Northern part of Cyprus. *Higher Learning Research Communications*, 9(1), 24-26. <https://doi.org/10.18870/hlrc.v9i1.436>
- Li, J. B. (2022). Teacher-student relationships and academic adaptation in college freshmen: Disentangling the between-person and within-person effects. *Journal of Adolescence*, 94, 538-553. <https://doi.org/10.1002/jad.12045>
- Li, J. M. (2021). Psychological Adaptation and Predictive Factors in Left-Behind Rural Junior High School Students [Master's thesis, Southwest University]. CNKI.
- Li, J., & Chen, X. Y. (2021). Research on the current situation of psychological adaptation of college students returning to school in the post-epidemic era: A case study of normal students in a university in Zhejiang Province. *Journal of Jiangxi Electric Power Vocational and Technical College*, 7, 156-157+164.
- Li, J., Xue, E., Wei, Y., & Guo, Y. (2023). Interactive effects and mediating roles of multiple factors that influence learning adaptive growth of international students: Evidence from China. *Behavioral Sciences*, 13(8), 682. <https://doi.org/10.3390/bs13080682>
- Li, Y., & Zhou, X. L. (2017). Analysis of psychological adaptation problems and countermeasures of college students in independent colleges: A case study of the Business School of Yunnan Normal University. *Journal of Chifeng University*, 10, 145-147.
- Lin, W. (2022). Research on coping tendency, social support, and psychological adaptation of higher vocational students. *Chinese Journal of Multimedia and Network Teaching (China)*, 5, 229-232.
- Magnusson, D., & Stattin, H. (2007). The person in context: A holistic-interactionistic approach. In W. Damon & R. M. Lerner (Eds.), *Handbook of child psychology* (6th ed., Vol. 1, pp. 400-464). Wiley. <https://doi.org/10.1002/9780470147658.chpsy0108>
- Mak, A. S., & Kim, I. (2011). Korean international students' coping resources and psychological adjustment in Australia. *OMNES: The Journal of Multicultural Society*, 2(1), 56-84. <https://doi.org/10.15685/omnes.2011.06.2.1.56>
- Ning, Q. L., & Shi, J. Y. (2023). Psychological adaptation level optimization to attain the goal of sustainable education. *Journal of Community Psychology*, 51(4), 1607-1621. <https://doi.org/10.1002/jcop.22942>

- Niu, H., Ren, S., & Li, S. (2022). Characteristics of the school adaptation of college freshmen during the COVID-19 epidemic. *Frontiers in Psychology, 13*, 915403. <https://doi.org/10.3389/fpsyg.2022.915403>
- Nugmanova, D., Kozlova, I., & Kupriyanov, R. B. (2022). The peculiarities of adaptation of first-year students to the university during COVID-19 pandemic in Russia. *Revista de Psicología Clínica con Niños y Adolescentes, 9*(2), 4-38. <https://dialnet.unirioja.es/servlet/articulo?codigo=8453555>
- Oakes, L. E., Ardoin, N. M., & Lambin, E. F. (2016). "I know, therefore I adapt?" Complexities of individual adaptation to climate-induced forest dieback in Alaska. *Ecology and Society, 21*(2), 40. <https://www.jstor.org/stable/26270389>
- Ren, Q. P. (2022). Promoting psychological adaptation in university freshmen: A critical review. *Jiangsu Education, 64*, 7-9.
- Sahao, F. T., & Kienen, N. (2021). University student adaptation and mental health: A systematic review of literature. *Psicologia Escolar e Educacional, 25*, e2424238. <https://doi.org/10.1590/2175-35392021224238>
- Sun, L., Wang, K. X., & Dong, W. J. (2022). Investigation on the psychological adaptation of college students in provincial colleges and universities under the background of normal epidemic prevention. *Journal of Hubei Second Normal University, 3*, 85-90.
- Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research, 45*(1), 89-125. <https://doi.org/10.3102/00346543045001089>
- Wang, N. (2019). Psychological adaptation of college students in the new era. *Gaokao, 12*(17).
- Wang, Q., & Zhang, Q. (2015). An investigation of psychological adjustment differences among Chinese college students: From the perspectives of their gender, major, and grade. *Journal of Community Psychology, 6*, 2119-2124. <https://doi.org/10.4236/psych.2015.616208>
- Wang, X., Zhang, N., Pu, C., Li, Y., Chen, H., & Li, M. (2022). Anxiety, depression, and PTSD among college students in the Post-COVID-19 Era: A cross-sectional study. *Brain Sciences, 12*(11), 1553. <https://doi.org/10.3390/brainsci12111553>
- Yu, B., Mak, A. S., & Bodycott, P. (2021). Psychological and academic adaptation of mainland Chinese students in Hong Kong universities. *Studies in Higher Education, 46*(8), 1552-1564. <https://doi.org/10.1080/03075079.2019.1693991>
- Zhang, D. J., & Jiang, Q. (2006). Compilation of Adaptation Subscale of Adolescent Mental Health Quality Questionnaire. *Studies of Psychology and Behavior, 2*, 81-84.
- Zhang, H. Y., & Li, M. S. (2022). Factors affecting Chinese short-term international students' cross-cultural adaptation in psychology, learning, and life. *Discrete Dynamics in Nature and Society, 2022*, 5977713. <https://doi.org/10.1155/2022/5977713>
- Zhang, X. L., Zhao, M. L., & Xie, X. C. (2017). A survey of foreign students' cross-cultural adaptation in Chongqing Normal University-A case study of Sri Lankan students. *Theory and Practice in Language Studies, 7*(4), 287-294. <http://dx.doi.org/10.17507/tpls.0704.07>

Zhong, X. Y., & Zhang, L. (2009). Psychological adaptation of college freshmen and its related research on mental health. *Higher Education Exploration*, 4, 128-132.

Publisher's Note: All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations or the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim made by its manufacturer, is not guaranteed or endorsed by the publisher.