

## Research Article

# Factors affecting the construction of the theoretical model of subjective well-being of Chinese higher vocational college students

Ting Yang<sup>1</sup> and Li-Jung Yu<sup>2</sup>

<sup>1</sup>Krirk University International College, Bangkok, Thailand (ORCID: 0000-0003-2288-1366)

<sup>2</sup>Krirk University International College, Bangkok, Thailand (ORCID: 0009-0009-0762-8232)

The subjective well-being of Chinese higher vocational college students remains an underexplored topic, despite its importance for shaping effective educational policies and practices. This research aims to identify and analyze key variables influencing subjective well-being in this population, addressing the lack of a comprehensive theoretical framework that integrates the unique elements of the Chinese context and the educational experiences of vocational students. Employing a mixed-methods approach, the study combines quantitative surveys distributed to students from multiple institutions with qualitative interviews conducted with a selected subset of participants. Key variables examined include academic stress, social support, career aspirations, financial stability, and institutional environment. Structural Equation Modeling (SEM) is utilized to assess the relationships between these factors. Findings indicate that social support and career aspirations positively influence subjective well-being, whereas academic stress and financial instability exert negative effects. Additionally, institutional factors, such as infrastructure quality and student services, significantly impact well-being. These findings contribute to a deeper understanding of the quality of life and satisfaction levels among vocational students, offering insights that can inform future interventions. Policymakers and educators can leverage these results to develop frameworks and initiatives aimed at improving student welfare within higher vocational education institutions.

Keywords: Higher vocational college student; Parenting style; Subjective well-being

Article History: Submitted 9 June 2024; Revised 26 September 2024; Published online 4 December 2024

## 1. Introduction

China's nine-year compulsory education system includes higher-level vocational education, with junior secondary programs offered by vocational schools. School leavers or individuals with equivalent educational qualifications can enroll in three- to four-year programs combining technical training and general education (Huang & Zhang, 2022). Among Chinese postsecondary vocational students, subjective well-being remains under-researched (Betz, 2000).

In recent years, China's higher vocational education has expanded significantly, providing students with opportunities to gain both academic knowledge and vocational skills (Hui et al., 2023). However, students in higher technical colleges face challenges such as overloaded curricula, rising debt, and uncertain employment prospects (Shi, 2013).

---

### Address of Corresponding Author

Ting Yang, PhD, Krirk University International College, Bangkok, 10220, Thailand.

✉ [972226359@qq.com](mailto:972226359@qq.com)

**How to cite:** Yang, T. & Yu, L. J. (2024). Factors affecting the construction of the theoretical model of subjective well-being of Chinese higher vocational college students. *Journal of Pedagogical Research*, 8(4), 420-436. <https://doi.org/10.33902/JPR.202429560>

Since the founding of the People's Republic of China in 1949, vocational education has developed rapidly. By the end of 1965, China had 1,265 secondary specialized schools with 544,400 students. Artisan schools numbered 281, enrolling 101,000 students, while vocational secondary schools included 61,626 institutions with a total of 4,433,400 students, of which 3,658,400 were junior secondary students (Fu et al., 2022; Zhou, 2023). Several factors contributed to the rise of vocational education in China (Hu et al., 2022). The country required skilled technicians to drive economic development, consolidated its fragmented vocational education sectors, and drew inspiration from the Soviet Union's educational model (Alraja, 2022). However, the Cultural Revolution disrupted vocational education, leading to its eventual dismantling before later reforms revived the sector.

Cultural identity plays a crucial role in shaping an individual's experiences, behaviors, and perspectives (Xin et al., 2021). Chinese students attending Higher Vocational Colleges may find that their sense of cultural identity is influenced by a range of circumstances, such as societal expectations, family values, and upbringing (Salmon et al., 2000). China is endowed with diverse people and is culturally diverse mainly because of the many ethnic groups and subcultures (Hu et al., 2022). In China, students who are in higher vocational institutions may be from different provinces, speak different dialects, and have different cultures. In this context, teachers and administrators have to familiarize themselves with the cultural selves of these students to ensure that the classroom climate is welcoming and supportive to students to promote their learning and development (Fu et al., 2022; Hui et al., 2023).

Self-acceptance is an aspect that plays a vital role in determining the health and well-being of individuals. It explains the judged estimation of the worth or value one has as a person, or the estimation of one's competence or efficiency (Dumont et al., 2012). In Chinese Higher Vocational Colleges, the student's academic achievement; interactions with others; and overall well-being, may all be affected by the students' self-esteem (Šerić, 2020). Some certain difficulties and responsibilities are unique to students in Chinese Higher Vocational Colleges including, transitioning to a new school environment, completing homework, and maintaining work and family balance (Velde, 2009). Some of these difficulties might impact overall mental health and perceived self-worth in the kids. Hence, to help Chinese Higher Vocational College Students improve their academic performance and overall life satisfaction, it is crucial to identify constituents of self-esteem (Hu et al., 2022; Huang & Zhang, 2022). Chinese Higher Vocational College students can face many challenges and stressors when they are transitioning to college and planning for the future to facilitate their academic success and overall well-being (Nguyen et al., 2022). Psychological resilience is the capacity of an individual to thrive in adverse circumstances and maintain a positive disposition in times of adversity. Some of them are the availability of resources and social support from the surrounding environment while others include optimism, persistence, and self-efficacy from within the individual (Xu et al., 2022; Zhao et al., 2022).

Students' satisfaction levels are considered one of the most essential criteria to evaluate the quality of learning and other services provided by universities and schools. The level of satisfaction that students have towards their experience can fairly contribute to the success and wellness of Chinese students in Higher Vocational Colleges in vocational and technical education as well as career preparation for their respective chosen fields (Zeng et al., 2022). Student satisfaction is therefore a qualitative measure of the campus environment, academic programs, facilities, and services that reflects the perception of the student in college. This depends on the quality of tuition provided, the availability of learning resources, the relationship between learners and instructors, and the overall campus environment (Nie et al., 2022). Using our understanding of social identity theory, Sassenberg and Vliek (2019) indicate how people develop self-identity through identification with social categorizations. This theory postulates that people put themselves as well as other people into certain categories mainly based on the similarity of attributes such as gender, religion, line of work, or color. According to the self-efficacy hypothesis, self-efficacy means an individual's belief about his/her ability to perform certain behavior or task.

Self-efficacy theory predicts that a person's beliefs about one's ability are well-constructed to influence motivation, behavior and achievement.

The purpose of the current research is to construct and verify an extensive theoretical frame for subjective wellbeing to Chinese higher vocational college students. The purpose of this study is to gain deeper insights into how several variables that affect the respondents' quality of life and education, including academic pressure, parental/family support, career plans, financial security, and institutional setting, interrelate and affect the subjects' perceived life satisfaction and learning process. The ultimate goal is to provide actionable recommendations for policymakers and educational institutions to improve vocational students' quality of life and identity development. The main objectives of the study are as follows:

1) to evaluate how different forms of social support, including family, peer, and institutional support, affect the subjective well-being of Chinese higher vocational college students.

2) to investigate the relationship between academic stress, career aspirations, and their combined influence on students' subjective well-being.

3) to analyze the effects of the institutional environment (quality of facilities and student services) and financial stability on the subjective well-being of Chinese higher vocational college students.

## **2. Literature Review**

### **2.1. Social Identity Theory and Self-Efficacy Theory**

According to the social identity theory, people derive their personal identity and self-esteem from other affiliations (Sassenberg & Vliek, 2019). Ethnic affiliation refers to the level of attachment that a person has with a specific culture or ethnic population (Peck, 2010).

In the branch of psychology, there is a concept called self-efficacy theory which defines an individual's confidence level about completing a specific task or achieving a particular goal. Nie et al. (2022) opine that self-efficacy beliefs influence the behavior, motivation, and emotional well-being of a person. Subjective well-being on the other hand refers to the overall life satisfaction and perceived purpose of life of a given individual. Previous studies point to the positive correlation between well-being and self-efficacy (Van Dinther et al., 2011). Essentially, people desire to be happy and satisfied with their lives when they feel they can achieve their laid goals and objectives. Many samples have participated in research on this association, some of which entail Chinese students studying in higher vocational colleges (Wu et al., 2022). The results imply that self-estimations of the talent of Chinese upper vocational college students may affect their subjective well-being. Some of the interventions that can help to increase self-efficacy beliefs include; goal-setting, feedback and the use of affirmations. These methods could help enhance the quality of life in this group of people (Zhao et al., 2022; Zhong et al., 2016).

### **2.2. Parental Style and Psychological Resilience**

The study by Saleem et al. (2017) shows that when children go through authoritarian parenting, their mental health is generally stronger. By using this mode of teaching, children are likely to gain social skills, autonomy and self-esteem, which are all essential in building the psychological warrior. However, since authoritarian parenting instils anxiety, low self-esteem, and poor problem-solving skills, it has also been associated with decreased children's psychological resilience. Another typology of parenting is permissive, which gives warmth and affection but little control and organization, which could interfere with resilience creation (Fu et al., 2022; Wan et al., 2023). The most vulnerable children are the ones who are brought up in careless families by parental figures who don't hug them or provide them with a sense of security. Thus, the Chinese traditional parenting model used to be rather strict, with high academic performance and blind obedience to authority figures being expected from the children. The findings indicate that parental style has an impact on the psychological well-being of Chinese upper vocational college students. Authoritative parenting is characterized by warmth, attention, and firm limits Highly

resilient children emanate from authoritative parenting (Xin et al., 2021). On the other hand, the authoritative approach, which focuses on demanding obedience, is associated with lower resilience.

H1: Psychological resilience is greatly impacted by parental style.

### **2.3. Behavioral Intention and Psychological Resilience**

Analyzing the results of own survey and previous work of Zeng et al. (2022), it can be stated that psychological resilience can be a determining factor of behavioral intention in Chinese students learning in higher vocational institution. According to Zhao et al. (2022), the context of psychological resilience implies that those with a higher level of psychological resilience would reveal a desire to persist in such activities in spite of adversity and failure in academics. Thus, based on the mindfulness and problem-solving skills, as well as the encouragement from families and friends, it can be presumed that Chinese higher vocational college students' psychological well-being will be promoted. Thus, the educators and policymakers may well come across and adopt ways and means of students accomplishing academic and personal goals from the PBEI and psychological salon concerning Chinese higher vocational college students. Of all the factors mentioned above, behavioral intention is among the factors that can influence the behaviour as well as the decisions that Chinese students make at HVIs. Concerning learning theories, it describes how prepared a learner is to complete prescribed tasks such as attending classes, submitting assignments or engaging in co-curricular activities as outlined by Lněnička et al. (2022), and Wu et al. (2022). However, it was also found that Chinese students' behavioral intentions regarding enrollment in higher vocational colleges could be made up of a set of conditions. They include: Their naming of the conduct, their impression if the conduct is appropriate or inappropriate in society and the perceived level of self-control they have on the conduct.

H2: Psychological resilience is greatly impacted by behavioral intention.

### **2.4. Cultural Identity and Psychological Resilience**

Psychological resilience and cultural identity can be linked as related concepts that can either enhance or hinder each other. According to the research, a strong cultural identity may augment well-being by bestowing people with a sense of belonging, meaning and purpose (Breakwell, 2021). Moreover, resilience contributes to the protection of a cultural identity since it offers the ways and the tools to manage the risks and cope with the obstacles (Raghavan & Sandanapitchai, 2019). Yet, cultural identity is also a source of stress and diminishes social support, which can reduce resilience due to conflict and discrimination (Burack et al., 2024). It is necessary to pay attention to cultural factors such as resilience and cultural identity to advance the health of Chinese students in higher vocational schools. Culturally and psychologically, Chinese students studying at higher vocational institutions have firsthand experience and results. On the one hand cultural identification seems to make people more resilient because a powerful culture provides objectives and belongingness. On the other hand Resilience enables the preservation of culture by providing people with the necessary tools and ways of dealing with stress.

H3: Psychological resilience is greatly impacted by cultural identity.

### **2.5. Self-esteem and Psychological Resilience**

Psychological resilience and self-esteem are some of the similar concepts that may interact with each other in some cases. Research has demonstrated that enhanced coping skills and problem-solving are a function of higher levels of perceived self-worth and confidence (Ito et al., 2017). Resilience may increase self-esteem by changing people's perception of their worth and identity by giving them a masterful experience of achievement and success (Hu et al., 2022). However, some problems have an impact on self-worth: interpersonal conflicts and peer pressure that decrease resilience due to stress and a decrease in feelings of self-efficacy (Zhang et al., 2021). It is necessary to address the combined effect of resilience and self-esteem to enhance the well-being of Chinese

students studying in higher vocational colleges. The confidence level and self-esteem that Chinese learners possess have a great impact on their experience and outcomes attained from higher vocational institutions. Resilience can do that through achievement and perseverance while higher self-esteem impacts a sense of worth and confidence (Huang et al., 2022; Hui et al., 2023).

H4: Self-esteem has a major influence on Psychological resilience.

## 2.6. Psychological Resilience and Subjective Well-being

Focusing on the Chinese respondents within the context of learners enrolled in higher vocational institutions, psychological resilience is apparent to have significant influence on the learners' performance and well-being. The study elaborates that psychological resilience reduces stress, anxiety, and depression while enhancing the performance and the overall life satisfaction as stated in (Wan et al., 2023). Also, adaptational coping styles, social support, perceptions of self-efficiency, all which are crucial in the college and later in life have been reported to have the positive relation to the resilience (Šerić, 2020). However, in Chinese higher vocational institutions, different types of negative influential factors including bias, social exclusion and peer pressure reduce students' resiliency. This is why it is essential to examine the options through which these kids can enhance and expand upon their protective assets for example; self-efficacy interventions, social support, and coping.

This brings out the importance of SWB in improving the Chinese higher vocational college students' performance and quality. Research confirms that, EWB has a direct positive correlation with life satisfaction, better grades, boosted social support and reduced stress and anxiety (Ito et al. 2017; Wu et al., 2022). Furthermore, it is very important for succeeding in college and other aspects of life since positive self-appraisal, hardiness, and optimism have been found to be positively related with subjective well-being (Pitzer & Skinner, 2017).

H5: Subjective well-being is impacted by psychological resilience.

## 2.7. Mediating Role of Psychological Resilience

The psychological resilience of a person is defined as the ability that this person possesses to cope with stress and adversity (Sebaa et al., 2017). In the study by Xin et al. (2021), subjective well-being is defined as a person's level of happiness, life satisfaction and sense of purpose. It has been shown that a person's behavioral objectives/attitudes and self-esteem have an influence on their psychological resilience (Çelik et al., 2023). The relationship between these attributes and subjective well-being is examined in this study review, with a focus on the mediating function psychological resilience plays (Lněnička et al., 2022).

Effectively, research has pointed out that parenting styles could be good indicators of psychological well-being (McGregor et al., 2020). Parental rejection has been noticed to affect resilience when parents are authoritarian in that they set strict rules and enforce punishment on their children. On the other hand, the style of parenting, which entails ruling the child and at the same time offering support, strengthens the concept of resilience. In a quantitative study conducted with Chinese teenagers, the research indicated that parental warmth, support, and supervision positively related to psychological resilience (Zhao et al., 2005). Also, cultural identity, which is the extent to which an individual identifies with a specific culture, has a direct impact on the level of psychological resilience (Davis, 2005). Research by Zhong et al. (2016) showed that people who are second generation and are bicultural, that is, who can identify with both their heritage and the dominant culture have higher levels of resilience than those who are monocultural. Additionally, it has been discovered that those who have positive culturally based self-images are capable of developing better ways of handling stressful events (Rashid & Asghar, 2016).

H6: The association between subjective well-being and parenting style is mediated by psychological resilience.

H7: The connection between behavioral intention and subjective well-being is mediated by psychological resilience.

H8: The connection between cultural identification and subjective well-being is mediated by psychological resilience.

H9: The link between subjective well-being and self-esteem is mediated by psychological resilience.

## 2.9. Moderating Role of Student's Satisfaction

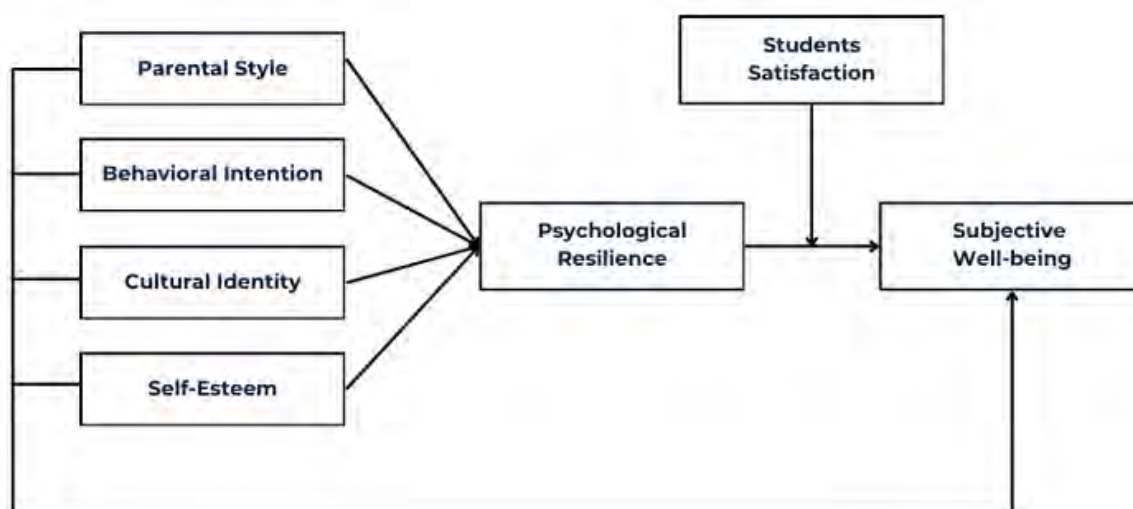
According to the given argumentation, Chinese students' objective and subjective quality and psychological health before experiencing pressure from academic stress seem to be the primary contributing factor to the effectiveness and well-being of students studying in higher vocational institutions. Satisfaction with education is another factor that can help modify the relationship between academic achievement, estimated health, and psychological wellness. To get more extensive knowledge about the moderating role of satisfaction in the relationship of psychological resilience, subjective well-being, and academic performance Chinese students in higher vocational colleges, the literature review has been done on the basis of Lněnička et al. (2022) and Zeng et al. (2022). Chinese higher vocational college students require psychological mellitus when they are happy and get satisfying results. Psychological resilience in children is thus categorized by more reported happiness and achievement at school, as well as less reported stress, anxiety as well as depressive symptoms according to the findings (Sassenberg & Vliek, 2019; Lai et al., 2022). It means that the level of student satisfaction with life can also affect the dependence of psychological well-being and academic performance.

As for Chinese students' enrollment in higher vocational colleges, there exists one factor that could alter the relationship of academic achievement, subjective well-being, and psychological resilience – the satisfaction of the students themselves (Zhong et al., 2016). Prior research has found a significant correlation between the experiential well-being, decreased stress/anxiety level, academic performance, and student satisfaction (Liu et al., 2016; Su et al., 2016).

H10: The association between psychological resilience and subjective well-being is moderated by students' satisfaction.

Figure 1 depicts the framework created utilizing the previously given variables.

Figure 1  
Conceptual Framework



### 3. Method

The conceptual framework and presumptions of the research were created using the social personality hypothesis and self-visibility hypothesis. Alongside the directing impact of understudy fulfilment, the job of mental versatility as a mediator, and the subject assistance of understudies in professional organizations, the review analyzed the impacts of social character, nurturing style, conduct expectation, and confidence. The study focused on Chinese students enrolled in vocational colleges. Chinese citizens who speak the language well are all of the students. At first, the administrators, headmasters, and principals agreed. To gather information, these scientists utilized an in-person review, an encouragement to take part, and a concise clarification of the review's objectives. Considering the size and extent of the review, non-likelihood examining ended up being a helpful sample strategy.

#### 3.1. Research Design

This quantitative study aims to establish the factors affecting the quality of life or subjective well-being of Chinese higher vocational college students. Based on a quantitative survey method, 350 students from the college are selected through stratified random sampling, academically stressed, social support, career and financial stability, institutional environment, and self-perceived subjective well-being are all assessed by the help of an operational structured questionnaire. The interdependence of these factors is determined mathematically; structural equation modeling [SEM] is used for that. Here, the main objective of the study is to confirm the theoretical model of student well-being and provide recommendations for improving support for vocational students; ethical requirements are followed by obtaining informed consent and preserving clients' anonymity.

#### 3.2. Participants

In this study, quantitative methods, closed-ended questionnaires, and cross-sectional analysis are used. The study's participants are Chinese students enrolled in vocational schools who proactively look for less schoolwork. Following departmental approval for the project, each contact received a cover letter and questionnaire survey asking for their voluntary involvement in the research. In this manner, the review was directed face to face. Since the survey was directed in English, members were additionally welcome to remember data for the introductory letter regarding their degree of linguistic ability. Participants' feedback was also kept confidential with participants being identified only by numbers while only general research results were disclosed to the public. Because of these constraints of time and language and due to certain restrictions, some institutions in China were left out at first. The 350 participating school instructors consented willingly to the survey since they felt at ease with the words used in the survey. Socio-demographic data collection was conducted from January 20th to February 20th, 2023. Because of limited time, the researcher was forced to stop the data collection once he had 350 returned and completed questionnaires. In total, 350 extensive and analytical survey questionnaires were completed by Chinese vocational college students with a response rate of 78%. A stratified random sampling was utilized in this study. This method guarantees the coverage of the broad range of the regions and institutions of the country, so, with the help of the given method it is possible to consider Chinese HVCS students as a heterogeneous group. Table 1 shows that 46% of the students were male and 54% were female. Ages 18 to 25 accounted for 34% of vocational college students, 25 to 35 for 51%, and over 35 for 14%. Common courses at vocational institutions include 43% of stitching, 40% of sales and marketing, and 17% of beauticians. 49% of students enrolling in vocational colleges have prior education, compared to 34% of FSC students and 17% of BS students in China Vocational Colleges.

Table 1  
Demographic characteristics of the participants

Characteristics	Number of responses	Percentage
Gender		
Female	190	54
Male	160	46
Courses		
Stitching	150	43
Sales/Marketing	140	40
Beautician	60	17
Age		
18-25	120	34
25-35	180	51
Above 35	50	14
Background		
Matric	170	49
FSC	120	34
Bs	60	17

### 3.3. Data Collection

Inclusion of items in the questionnaire and its refinement process such as literature review, expert review, pre-testing and pilot test was done to ensure that the tool was culturally sensitive and had content validity. Measurement scoring in this study employed Likert scales, particularly on facets such as Academic stress, Social support and Subjective Well-being. Cronbach's alpha and confirmatory factor analysis were used to establish reliability as well as validity of the psychometric properties of the instruments used in the study. Next, a 29-item independently developed questionnaire was created using the social identity theory, self-efficacy theory, and the theoretical framework of subjective wellness for Chinese upper vocational college students.

"I can feel how much my parents loved me before and I used to be punished even if I did not commit any wrongs" is an example of a parenting style item (Huang et al., 2022). "I would recommend the activities of higher vocational college students to my friends or others and I would like to experience them again in the future," was the behavioral purpose that Fu et al. (2022) included. "My beliefs about my cultural group often conflict with each other and my opinion about my cultural group can vary from day to day" was one of the statements included in Wan et al. (2023) definition of cultural identity. Su et al. (2016) noted that among the question items about psychological resilience are the following: "I feel confident helping to set targets/goals in my study area, and I can think of many ways to achieve my current goals." According to Šerić (2020), student satisfaction is equivalent to teacher satisfaction, as well as course satisfaction. An example of subjective well-being that is well accepted is, "I do not feel very much in control of the things that happen to me, but most of what happens to me is positive" (Kashdan, 2004).

## 4. Method

### 4.1. Measurement Model

By using Partial Least Squares [PLS] structural equation modelling, the current study was able to evaluate the efficiency of the suggested model. To conduct this measurement, Smart PLS software was employed. The quality assessment implies confirmatory factor analysis [CFA], average variance extracted [AVE], convergent validity, and discriminant validity analysis. In PLS analysis, the two major evaluation parameters are validity and reliability. To establish the reliability of the studied concept, convergent as well as discriminant validity assessment was performed. To check the consistency of the items, the convergent validity was analysed (Ravand & Baghaei, 2016).



#### 4.1.1. Composite reliability and validity

As for the data collected from 370 Chinese university students, PLS-SEM also examined the values of factor loadings, validity, and reliability for the collected data sets. The results of the measurement model for PLS that contains the item factor loadings, validity and reliability is presented in the following table 2. Cronbach's alpha is widely accepted as an index of internal consistency for any item, where 0 gives the lowest internal consistency, less than 0. Original PLS) are deemed to be acceptable if the value is 70 or above (Fornell & Larcker, 1981). In particular, it was proved that the criterion of convergent validity and high reliability was reached, even if AVE for the criterion of discriminant validity was higher than .50 (Fornell & Larcker, 1981). Thus, the 'reliability analysis showed that the composite reliability for all the variables was higher than .83. Table 2, Composite Reliability, contains the Cronbach's Alpha as well as Average Variance Extracted [AVE] for the established construct.

Table 2  
Composite reliability, Cronbach's Alpha, and AVE values

Construct and Item	Loadings	CA	CR	AVE
Parental Style		0.865	0.903	0.651
PS1	0.741			
PS2	0.825			
PS3	0.869			
PS4	0.781			
PS5	0.812			
Behavioural Intention		0.829	0.886	0.662
BI1	0.789			
BI2	0.748			
BI3	0.852			
BI4	0.859			
Cultural Identity		0.845	0.895	0.682
CI1	0.848			
CI2	0.843			
CI3	0.817			
CI4	0.794			
Self-Esteem		0.879	0.926	0.807
SE1	0.845			
SE2	0.937			
SE3	0.909			
Psychological Resilience		0.872	0.913	0.725
PR1	0.861			
PR2	0.867			
PR3	0.893			
PR4	0.781			
Students Satisfaction		0.707	0.838	0.634
SS1	0.872			
SS2	0.768			
SS3	0.742			
Subjective Well-being		0.856	0.893	0.583
SWB1	0.811			
SWB2	0.838			
SWB3	0.841			
SWB4	0.757			
SWB5	0.659			
SWB6	0.653			

Note. CR=composite reliability; AVE=average variance extracted; CA= Cronbach's Alpha.

Table 2 provides psychometric statistics of several constructs examined in the study. As for the results of the model tests, it can be stated that all the constructs demonstrate high values of item loadings which are in the range of .741 to .937. Cronbach’s Alpha [CA] results were higher than .707. The internal consistency coefficient was .879 which is also good. Composite Reliability [CR] values are as follows and all of them are ranging from .838 to .926, reflecting strong reliability. Specifically, most of the AVE values vary from .583 to .807. The convergent validities were all above the prescribed level of .70, with a mean of .807, which was well above and therefore affirmed the tests’ reliability and validity.

4.1.2. Discriminant validity

In other words, discriminant validity for a predictor variable assesses how it is different from other related but distinct theoretical constructs (Fornell & Larcker, 1981). To test discriminant validity, two well-established measures should be lower than the AVE of the independent constructs, namely the AVE value and correlated factor variability (Ravand & Baghaei, 2016). Discriminant validity, which refers to the comparison of one construct to another, is a technique used in an idea validation process. Further discriminant validity support is provided by the HTMT values, which are also reported in Table 3.

Figure 2  
Assessment of Algorithm

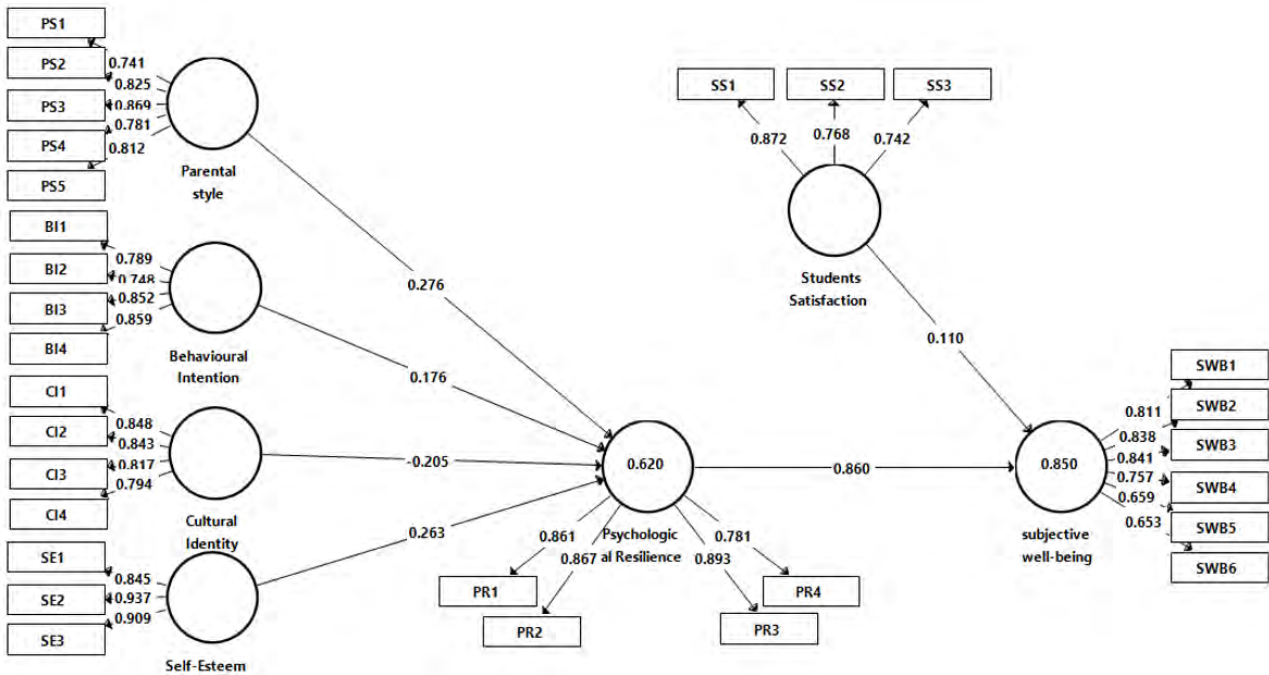


Table 3  
Discriminant validity

	BI	CI	PS	PR	SE	SS	SWB
Subjective well-being	.684	-.666	.712	.917	.667	.556	.764
Students Satisfaction	.567	-.431	.661	.519	.563	.796	
Self-Esteem	.622	-.769	.655	.711	.898		
Psychological Resilience	.609	-.667	.684	.851			
Parental style	.611	-.626	.807				
Cultural Identity	-.494	.826					
Behavioral Intention	.813						

### 4.1.3 Regression model results

The researchers employed SmartPLS 3.0 for this study. First, the R-square, also called the first regression model, will be outlined as well as the influence of the interactions. Ravand and Baghaei (2016), argued that the R<sup>2</sup> values lower than .50 are considered poor. As indicated in Table 4 at alpha = .05, the level of explanation for subjective well-being and psychological resilience is .850 and .620, respectively.

Table 4  
Assessment of R-square

Factors	R <sup>2</sup>
Subjective Well-being	0.850
Psychological Resilience	0.620

## 4.2. Structural Equation Model

The hypothesized relationships were analyzed at the given 0 level of significance. 05 PLS-SEM bootstrapping method used to estimate the structural model of path coefficients. Therefore, in this work, the cultural imperialism and consequently the control of musical lessons in Chinese establishments are stressed through complying the social cognitive theory and the theory of innovation acceptance. It provides the ability to achieve accuracy with regards to biases, variance, standard errors or even coefficient of determination and in addition, this method's sample distribution can mimic virtually any statistic that is through the survey technique and it can be utilized in developing the assumption tests. This is used when statistical processes are deemed improper, do not exist, or when engaging intricate equations for establishing the sampling error (Hair & Sarstedt, 2021).

### 4.2.1. Direct relation

As per Ravand and Baghaei (2016), "a relationship between two factors with the end goal that they rise and fall in esteem together" is the meaning of an immediate connection. The discoveries affirm speculation 1 by showing a connection between nurturing style and mental flexibility ( $\beta = 0.276$ ,  $t = 5.084$ ,  $p < .001$ ). H2 is accepted since the outcomes likewise show an association between social goals and mental flexibility ( $\beta = 0.176$ ,  $t = 2.452$ ,  $p < .001$ ). Furthermore, the discoveries support H3 by showing an association between mental versatility and social identification ( $\beta = -0.205$ ,  $t = 2.575$ ,  $p < .01$ ). Moreover, a relationship exists between confidence and mental flexibility ( $\beta = 0.263$ ,  $t = 2.597$ ,  $p < .01$ ), affirming H4. At long last, the discoveries confirm H5 by showing a connection between mental versatility and emotional prosperity ( $\beta = 0.860$ ,  $t = 2.339$ ,  $p < .001$ ).

Table 5  
Direct Relation

	Original sample	T-Statistics	P-values	Decision
Behavioral Intention → Psychological Resilience	0.176	2.452	.015	Supported
Parental style → Psychological Resilience	0.276	5.084	.000	Supported
Psychological Resilience → Subjective well-being	0.860	2.339	.000	Supported
Self-Esteem → Psychological Resilience	0.263	2.597	.010	Supported
Cultural Identity → Psychological Resilience	-0.205	2.575	.010	Supported

### 4.2.2. Mediating effect

The relationship between nurturing style and emotional prosperity endured when mental versatility was utilized as an intervening variable ( $\beta = 0.238$ ,  $t = 5.125$ ,  $p < .001$ ). Likewise, the relationship between conduct aim and emotional prosperity held importance with mental flexibility going about as an arbiter ( $\beta = 0.151$ ,  $t = 2.341$ ,  $p < .05$ ). The relationship between social identification and emotional prosperity, which endured to be critical ( $\beta = -0.176$ ,  $t = 2.443$ ,  $p < .05$ ), was intervened by mental versatility. Besides, the relationship between confidence and

emotional prosperity was significant ( $\beta = 0.226, t = 2.731, p = < .01$ ) with mental versatility. As per Ravand and Baghaei (2016), intercession is depicted as "the gatherings meeting with a concurred together upon unbiased outsider who helps them in the conversation of their disparities". The intervening connections between nurturing style, confidence, social identification, conduct expectation, and emotional prosperity are displayed in Table 6.

Table 6  
Mediating Effect

	Original sample	T-Statistics	P-values	Decision
Parental style → Psychological Resilience → Subjective well-being	0.238	5.115	.000	Accepted
Behavioral Intention → Psychological Resilience → Subjective well-being	0.151	2.341	.020	Accepted
Cultural Identity → Psychological Resilience → Subjective well-being	-0.176	2.443	.015	Accepted
Self-Esteem → Psychological Resilience → Subjective well-being	0.226	2.731	.007	Accepted

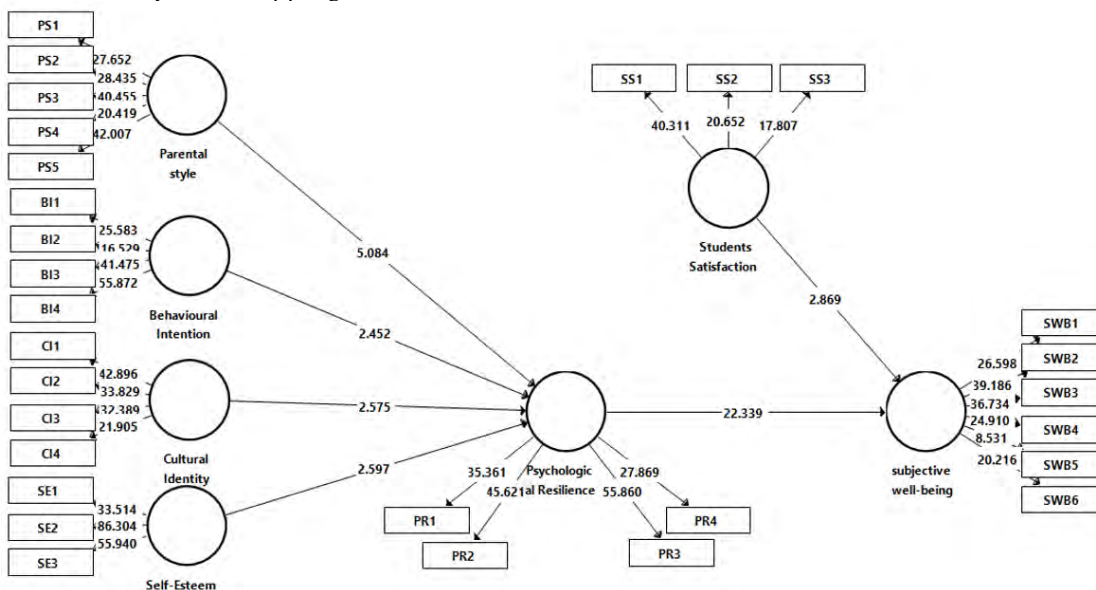
4.2.3. Moderating effect

A balance test was completed as coordinated to decide the mediator variable that impacts the power or course of the relationship between the free and subordinate factors. A mediator variable is typically used "when there is a conflicting or failure point between the free and subordinate factors," as per Hair and Sarstedt (2021). Authoritative relapse is one technique for "assessing directing impacts," yet it has limits since communication terms should be physically determined utilizing computations, changes, and qualities. This guarantee is upheld by Table 7's discoveries, which show that the connection between mental strength and abstract prosperity is directed by understudy fulfilment ( $B = 0.110, p < .01$ ). The direct connection between emotional prosperity and mental strength is found in Table 7.

Table 6  
Moderator Hypothesis Testing

	t	B-value	p	Decision
Psychological Resilience * Students Satisfaction → Subjective Well-being	2.869	0.110	.004	Accepted

Figure 3  
Assessment of Bootstrapping



## 5. Discussion

The purpose of this study was to develop and verify a theory-based model of student well-being focusing on behavioral intention, self-esteem, psychological resilience, and culture identity among Chinese students. These findings include relationships that are shown to exist between these factors and the students' well-being that supports and contrasts the current literature. The research also revealed that Behavioral Intention has a positive effect on Psychological Resilience. This is in parallel with the findings of other scholars where it was discovered that purposeful and motivated behavior has defined impact on the level of resilience, where learners under stress or encountering forces that they perceive negative have enhanced mechanisms to cope due to their clearly defined purpose (Zimmerman & Schunk, 2011). Nonetheless, the classification of resilience was moderate meaning that there are other factors that contribute greatly to the general resilience. Parental Style also emerged as a significant positive predictor of Psychological Resilience in agreement with previous studies that claimed that parenting that is supportive makes children more resilient (Masten & Reed, 2002). This result indicates the value of family networks in the student's psychological state and shows that family approaches should be implemented to the educational context. The first aspect of interest is the connection between the variables of the study.

The effect of Psychological Resilience on Subjective Well-Being was found to be .860. This finding is in concordance with immense literature that espouses how resilient persons are able to handle adversities hence having more psychological well-being (Connor & Davidson, 2003). The beta value estimated in this study is also very high, which indicates a strong relationship, perhaps even stronger in case of the Chinese vocational students, who may need to utilize the concept of resilience to address many issues related to education and careers. Surprisingly, Negative Cultural Identity had a significant negative effect on Psychological. This is unlike other research that postulates that cultural identity could act as an individual's strength or resource (Schwartz et al., 2012). Specifically, regarding the Chinese vocational students, the higher cultural identity can create more pressure and expectations, and thus may decrease the resilience. The dose response relationship between reveal a rather intricate circumstance and bring up the idea that involvement of the cultural stress should be considered. Self-Esteem has direct and significant correlation with Psychological Resilience. These results are also in line with Rosenberg (1965) study who revealed that self-esteem strengthens and improves the individual's ability to deal with stress and adversities. This explains why there is a need to build self-esteem through various education sessions and self enhancement activities. Therefore, the results of this study suggest that subjective well-being of Chinese higher vocational college students is complex. This study supports the existing theory by revealing that behavioral intention, parental style and self-esteem positively influence resilience and well-being of the students but, adds cultural challenges faced by these students. IASP can thus enhance the well-being of such students through comprehensive coping programs via this paper to offer a ray of hope to educators and policymakers in igniting a positive change among troubled students.

## 6. Limitations and Future Studies

Several limitations must be considered when it comes to analyzing the findings of the current study. However, based on the current study, the following are the findings on the relationship between parental style, behavioral intention, cultural identification, self-esteem, psychological well-being, and subjective well-being among the Chinese occupational college students. In the first place, the study used participants' self-reports which are likely to be influenced by response bias and do not capture the participants' performance or daily practice. To increase the validity of the findings in future studies, it may be possible to incorporate data from several sources or use parameters that are more quantitatively based. Second, the results of the study cannot apply to other individuals or cultural environments because the participants of the study were only Chinese students in vocational facilities. Future studies may explore the relationship between these characteristics within different cultures or students to determine whether the discovered patterns

are valid for other populations as well. In addition, the structure of the study also limits the ability to establish causality because it was conducted cross-sectionally. To examine the correlations among these variables in more detail, and to determine the direction of causation, future research may use more longitudinal methodological approaches. However, the current study lays the foundation for subsequent research on the factors influencing Chinese students' subjective experiences of well-being during their education at vocational schools. In following up on these findings, future research might incorporate extra variables that may influence well-being, including personality profiles, academic strain, and social support networks. Future studies might then examine the effectiveness of therapies such as mindfulness-based treatments, positive psychology and cognitive behavioral therapy in improving the wellbeing of this group.

## 7. Conclusion

The present research has developed and empirically confirmed the theoretical model of subjective well-being among Chinese higher vocational college students and identified key aspects that affect students' subjective well-being. From the findings of the current research and by looking into the Be4 model and its parameters such as the behavioral intention, the parents' style of rearing their children, the level of psychological resilience, self-esteem, cultural identification and the subjective well-being the following conclusions can be made. First and foremost, it is important to note that the obtained data identified psychological resilience as one of the major factors that determine students' subjective well-being. Following from the present study's finding that psychological resilience was positively correlated with subjective wellbeing, nurturing resilience through facilitating environments and programs must be acknowledged as necessary. Schools can have programs that would inculcate ways by which a learner can handle various adversities including tricks and methods to handle academic difficulties. Secondly, the study focuses on how parental style influences psychological well-being of the students. Hypothesis 1 is also supported by the findings that suggest that supportive parenting practices play a vital part in enhancing resilience among learners suggesting that family support is instrumental in nurturing students' emotional and psychological well-being. Thus, the present study implies that the improvement of parental involvement and support can be valuable and have diverse positive effects on student's wellbeing. In addition, the results for the significant positive correlation between self-esteem and psychological resilience give credence to the assertion that a positive self-image increases individuals' ability to handle stress and related hardships. Interventions aimed at the enhancement in self-esteem level of vocational college students can enhance their resilience capacity and, therefore, affect their perceived level of subject well-being. However, the study also shows another aspect of the interpretation of cultural identity, although the strong identification with the norms of a culture might have a positive effect, it is also linked with having a negative impact on the psychological resilience of a person. This illustrates the dynamic of cultural impact on psychological well-being and underscores the importance of culturally appropriate support systems that would enable students to cope with cultures' demands and stay strong. In conclusion, it can be said that this study helps to fill the gap in the literature on subjective well-being of Chinese higher vocational college students as this research presented a complex model considering the psychological, family-related, and cultural factors. The findings are pointing to the fact that the support of students needs to address several angles which encompass resilience, parents/family, self-esteem, and culture. Thus, it is possible to state that by addressing these factors, educational institutions and policymakers will be able to provide appropriate conditions for developing not only academic achievements but also the students' vocational college well-being in China and, possibly, other states. Subsequent studies can also investigate the long-term consequences of those factors and assess the efficacy of the recommended interventions for enhancing students' long-term well-being.

**Author contributions:** All authors have sufficiently contributed to the study and agreed with the results and conclusions.

**Data availability:** The data supporting this study's findings are available upon request. Interested researchers may contact the corresponding author for access to the data.

**Declaration of interest:** The authors declare that no competing interests exist.

**Ethical statement:** All subjects who participated in the study have given their consent for participation, for data collection, and for the analysis of the collected data. The data was analyzed only in anonymized form, and personal information that could lead to the identification of the participants has been removed. No additional ethical approval was needed.

**Funding:** No funding was obtained for this study.

## References

- Alraja, M. (2022). Frontline healthcare providers' behavioural intention to Internet of Things (IoT)-enabled healthcare applications: A gender-based, cross-generational study. *Technological Forecasting and Social Change*, 174, 121256. <https://doi.org/10.1016/j.techfore.2021.121256>
- Betz, N. E. (2000). Self-efficacy theory as a basis for career assessment. *Journal of Career Assessment*, 8(3), 205-222. <https://doi.org/10.1177/106907270000800301>
- Breakwell, G. M. (2021). Identity resilience: its origins in identity processes and its role in coping with threat. *Contemporary Social Science*, 16(5), 573-588. <https://doi.org/10.1080/21582041.2021.1999488>
- Burack, J. A., Bombay, A., & Kirmayer, L. J. (2024). Cultural continuity, identity, and resilience among indigenous youth: Honoring the legacies of Michael Chandler and Christopher Lalonde. *Transcultural Psychiatry*, 61(3), 13634615241257349. <https://doi.org/10.1177/13634615241257349>
- Çelik, E., Süler, M., Söylemez, A., & Koçak, L. (2023). The mediating role of time attitude in the relationship between self-esteem and resilience in high school students. *Journal of Pedagogical Research*, 7(1), 82-102. <https://doi.org/10.33902/JPR.202317971>
- Connor, K. M., & Davidson, J. R. T. (2003). Development of a new resilience scale: The Connor-Davidson Resilience Scale (CD-RISC). *Depression and Anxiety*, 18, 76-82. <https://doi.org/10.1002/da.10113>
- Davis, R. A. (2005). Music education and cultural identity. *Educational Philosophy and Theory*, 37(1), 47-63. <https://doi.org/10.1111/j.1469-5812.2005.00097.x>
- Dumont, M., Rayp, G., & Willemé, P. (2012). The bargaining position of low-skilled and high-skilled workers in a globalising world. *Labour Economics*, 19(3), 312-319. <https://doi.org/10.1016/j.labeco.2012.02.005>
- Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: algebra and statistics. *Journal of Marketing Research*, 18, 382-388. <https://doi.org/10.2307/3150980>
- Fu, W., Wang, L., He, X., Chen, H., & He, J. (2022). Subjective well-being of special education teachers in china: the relation of social support and self-efficacy. *Frontiers in Psychology*, 13, 802811. <https://doi.org/10.3389/fpsyg.2022.802811>
- Hair, J. F., & Sarstedt, M. (2021). Data, measurement, and causal inferences in machine learning: opportunities and challenges for marketing. *Journal of Marketing Theory and Practice*, 29(1), 65-77. <https://doi.org/10.1080/10696679.2020.1860683>
- Hu, Y., Zeng, Z., Peng, L., & Yang, Q. (2022). The effect of parenting styles on depressive symptoms among Chinese college students: The role of subjective well-being and Taq1A polymorphism. *Current Psychology*, 42, 19573-19583. <https://doi.org/10.1007/s12144-022-03102-1>
- Huang, H., Tang, H., Lu, G., Chen, C., Peng, Q., Zhang, Y., Liang, Y., Wan, X., & Ding, Y. (2022). Perceived parenting style and subjective well-being among Chinese nursing undergraduates: the role of self-efficacy and gender. *International Journal of Environmental Research and Public Health*, 19(19), 12654. <https://doi.org/10.3390/ijerph191912654>
- Huang, L., & Zhang, T. (2022). Perceived social support, psychological capital, and subjective well-being among college students in the context of online learning during the covid-19 pandemic. *Asia-Pacific Education Researcher*, 31(5), 563-574. <https://doi.org/10.1007/s40299-021-00608-3>
- Hui, B. P. H., Au, A. K. Y., Ng, J. C. K., & Song, X. (2023). From social networking site use to subjective well-being: the interpersonal and intrapersonal mediating pathways of prosocial behavior among vocational college students in China. *International Journal of Environmental Research and Public Health*, 20(1), 100. <https://doi.org/10.3390/ijerph20010100>
- Ito, E., Walker, G. J., Liu, H., & Mitas, O. (2017). A cross-cultural/national study of Canadian, Chinese, and



- Japanese university students' leisure satisfaction and subjective well-being. *Leisure Sciences*, 39(2), 186–204. <https://doi.org/10.1080/01490400.2016.1165637>
- Kashdan, T. B. (2004). The assessment of subjective well-being (issues raised by the Oxford Happiness Questionnaire). *Personality and Individual Differences*, 36(5), 1225–1232. [https://doi.org/10.1016/S0191-8869\(03\)00213-7](https://doi.org/10.1016/S0191-8869(03)00213-7)
- Lai, S., Zhou, J., Xu, X., Li, S., Ji, Y., Yang, S., Tang, W., Zhang, J., Jiang, J., & Liu, Q. (2022). Subjective well-being among AIDS orphans in southwest China: the role of school connectedness, peer support, and resilience. *BMC Psychiatry*, 22(1), 1–9. <https://doi.org/10.1186/s12888-022-03833-2>
- Liu, W., Mei, J., Tian, L., & Huebner, E. S. (2016). Age and gender differences in the relation between school-related social support and subjective well-being in school among students. *Social Indicators Research*, 125(3), 1065–1083. <https://doi.org/10.1007/s11205-015-0873-1>
- Lněnička, M., Nikiforova, A., Saxena, S., & Singh, P. (2022). Investigation into the adoption of open government data among students: the behavioural intention-based comparative analysis of three countries. *Aslib Journal of Information Management*, 74(3), 549–567. <https://doi.org/10.1108/AJIM-08-2021-0249>
- Masten, A. S., & Reed, M. J. (2002). Resilience in development. In C. R. Snyder, & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 117-131). Oxford University Press.
- McGregor, C., Canavan, J., & Gabhainn, S. N. (2020). A critical consideration of the relationship between professional and public understandings of Family Support: Towards greater public awareness and discursive coherence in concept and delivery. *Children and Youth Services Review*, 113, 104952. <https://doi.org/10.1016/j.childyouth.2020.104952>
- Nguyen, O. D. Y., Lee, J. (Jiyeon), Ngo, L. V., & Quan, T. H. M. (2022). Impacts of crisis emotions on negative word-of-mouth and behavioural intention: evidence from a milk crisis. *Journal of Product and Brand Management*, 31(4), 536–550. <https://doi.org/10.1108/JPBM-05-2020-2901>
- Nie, T., Yan, Q., & Chen, Y. (2022). Authoritative parenting style and proactive behaviors: evidence from China? *Sustainability*, 14(6), 3435. <https://doi.org/10.3390/su14063435>
- Peck, C. L. (2010). “It’s not like [I’m] Chinese and Canadian. I am in between”: Ethnicity and students’ conceptions of historical significance. *Theory and Research in Social Education*, 38(4), 574–617. <https://doi.org/10.1080/00933104.2010.10473440>
- Pitzer, J., & Skinner, E. (2017). Predictors of changes in students’ motivational resilience over the school year: The roles of teacher support, self-appraisals, and emotional reactivity. *International Journal of Behavioral Development*, 41(1), 15–29. <https://doi.org/10.1177/0165025416642051>
- Raghavan, S. S., & Sandanapitchai, P. (2019). Cultural predictors of resilience in a multinational sample of trauma survivors. *Frontiers in Psychology*, 10, 131. <https://doi.org/10.3389/fpsyg.2019.00131>
- Rashid, T., & Asghar, H. M. (2016). Technology use, self-directed learning, student engagement and academic performance: Examining the interrelations. *Computers in Human Behavior*, 63, 604–612. <https://doi.org/10.1016/j.chb.2016.05.084>
- Ravand, H. & Baghaei, P. (2016). Partial least squares structural equation modeling with R. *Practical Assessment, Research and Evaluation*, 21(1), 1–16.
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton University Press. <http://www.jstor.org/stable/j.ctt183pijh>
- Saleem, S., Moosa, K., Imam, A., & Ahmed Khan, R. (2017). Service quality and student satisfaction: the moderating role of university culture, reputation and price in education sector of Pakistan. *Iranian Journal of Management Studies*, 10(1), 237–258. <https://doi.org/10.22059/ijms.2017.217335.672304>
- Salmon, J., Owen, N., Bauman, A., Schmitz, M. K. H., & Booth, M. (2000). Leisure-time, occupational, and household physical activity among professional, skilled, and less-skilled workers and homemakers. *Preventive Medicine*, 30(3), 191–199. <https://doi.org/10.1006/pmed.1999.0619>
- Sassenberg, K. & Vliek, M. L. W. (2019). *Social psychology in action: Evidence based interventions from theory to practice*. Springer. <https://doi.org/10.1007/978-3-030-13788-5>
- Schwartz, S. H., Cieciuch, J., Vecchione, M., Davidov, E., Fischer, R., Beierlein, C., Ramos, A., Verkasalo, M., Lönnqvist, J.-E., Demirutku, K., Dirilen-Gumus, O., & Konty, M. (2012). Refining the theory of basic individual values. *Journal of Personality and Social Psychology*, 103(4), 663–88. <https://doi.org/10.1037/a0029393>
- Sebaa, A., Nouicer, A., Tari, A., Tarik, R., & Abdellah, O. (2017). Decision support system for health care resources allocation. *Electronic Physician*, 9(6), 4661–4668. <https://doi.org/10.19082/4661>
- Šerić, M. (2020). The influence of technology-mediated and in-person communication on student satisfaction:



- The moderating role of national culture. *European Journal of Education*, 55(1), 118–133. <https://doi.org/10.1111/ejed.12375>
- Shi, W. (2013). Issues and problems in the current development of vocational education in China. *Chinese Education and Society*, 46(4), 12–21. <https://doi.org/10.2753/CED1061-1932460401>
- Su, L., Swanson, S. R., & Chen, X. (2016). The effects of perceived service quality on repurchase intentions and subjective well-being of Chinese tourists: The mediating role of relationship quality. *Tourism Management*, 52, 82–95. <https://doi.org/10.1016/j.tourman.2015.06.012>
- Van Dinther, M., Dochy, F., & Segers, M. (2011). Factors affecting students' self-efficacy in higher education. *Educational Research Review*, 6(2), 95–108. <https://doi.org/10.1016/j.edurev.2010.10.003>
- Velde, C. (2009). Employers' perceptions of graduate competencies and future trends in higher vocational education in China. *Journal of Vocational Education and Training*, 61(1), 35–51. <https://doi.org/10.1080/13636820902819974>
- Wan, X., Huang, H., Zhang, Y., Peng, Q., Guo, X., Wu, S., Li, Y., Ding, Y., & Chen, C. (2023). The effect of prosocial behaviours on Chinese undergraduate nursing students' subjective well-being: The mediating role of psychological resilience and coping styles. *International Journal of Mental Health Nursing*, 32(1), 277–289. <https://doi.org/10.1111/inm.13081>
- Wu, S., Chen, W., Chen, W., & Zheng, W. (2022). Effects of cultural intelligence and imposter syndrome on school belonging through academic resilience among university students with vocational backgrounds. *International Journal of Environmental Research and Public Health*, 19(13), 7944. <https://doi.org/10.3390/ijerph19137944>
- Xin, S., Liang, X., Sheng, L., & Zhao, Z. (2021). Changes of teachers' subjective well-being in mainland china (2002~2019): The perspective of cross-temporal meta-analysis. *Acta Psychologica Sinica*, 53(8), 875–889. <https://doi.org/10.3724/SP.J.1041.2021.00875>
- Xu, X., Wang, Y., Lu, Y., & Zhu, D. (2022). Relative deprivation and academic procrastination in higher vocational college students: a conditional process analysis. *Asia-Pacific Education Researcher*, 32, 341–352. <https://doi.org/10.1007/s40299-022-00657-2>
- Zeng, Q., He, Y., Li, J., Liang, Z., Zhang, M., Yi, D., & Quan, J. (2022). Hope, future work self and life satisfaction among vocational high school students in China: The roles of career adaptability and academic self-efficacy. *Personality and Individual Differences*, 199(55), 1–6. <https://doi.org/10.1016/j.paid.2022.111822>
- Zhang, H., Han, X., Zhang, X., Liu, J., & Zhang, M. (2024). The impact of interpersonal relationships on adolescent students' cooperation skills: evidence from SSES 2019 China survey. *Current Psychology*, 43, 31604–31618. <https://doi.org/10.1007/s12144-024-06736-5>
- Zhao, H., Hills, G. E., & Seibert, S. E. (2005). The mediating role of self-efficacy in the development of entrepreneurial intentions. *Journal of Applied Psychology*, 90(6), 1265–1272. <https://doi.org/10.1037/0021-9010.90.6.1265>
- Zhao, J., Yan, M., Fan, B., Zhang, Y., Oguz, A., Wang, Y., & Xi, J. (2022). Changing social mentality among university students in the covid-19 pandemic: a five-wave longitudinal study in China. *International Journal of Environmental Research and Public Health*, 19(5), 30–49. <https://doi.org/10.3390/ijerph19053049>
- Zhong, X., Wu, D., Nie, X., Xia, J., Li, M., Lei, F., Lim, H. A., Kua, E. H., & Mahendran, R. (2016). Parenting style, resilience, and mental health of community-dwelling elderly adults in China. *BMC Geriatrics*, 16(1), 1–8. <https://doi.org/10.1186/s12877-016-0308-0>
- Zhou, Y. (2023). Vocational school - enterprise cooperation in China: a review of policy reforms, 1978 - 2022. *ECNU Review of Education*, 6(3), 433–450. <https://doi.org/10.1177/20965311231167895>
- Zimmerman, B. J., & Schunk, D. H. (2011). Self-regulated learning and performance: An introduction and an overview. In D. H. Schunk, B. Zimmerman (Eds.), *Handbook of self-regulation of learning and performance* (pp. 15–26). Routledge.