

The Relationship Between College Students' Self-Efficacy and Subjective Well-Being: The Mediating Role of Psychological Resilience

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Abstract

Using survey responses gathered from 441 university students in China, this study asked whether psychological resilience helps account for the connection linking self-efficacy with subjective well-being. Four instruments were administered: the General Self-Efficacy Scale (GSE), the brief 10-item form of the Connor-Davidson Resilience Scale (CD-RISC-10), the Satisfaction with Life Scale (SWLS), and the Positive and Negative Affect Schedule (PANAS). Self-efficacy, resilience, and subjective well-being were moderately to strongly correlated ($r = .685, .787$, and $.643$, respectively; all $p < .01$). When resilience was entered into the mediation model, the path running directly from self-efficacy to well-being stayed significant (standardized $\beta = .469$, $p < .001$), while the route through resilience yielded an indirect effect of $.514$ (95% confidence interval $[.250, .777]$), corresponding to 31.5% of the overall effect. In other words, students who see themselves as able to cope with study and daily-life demands generally report greater well-being, partly because such students also possess stronger capacity for adaptation and recovery. For university mental health education, the findings highlight the value of combining efficacy-building strategies with resilience-oriented training.

Keywords

Self-efficacy; psychological resilience; subjective well-being; mediation; college students.

1. Introduction

1.1. Research Background

For many students in Chinese universities, well-being is shaped by several pressures that appear at the same time: academic assessment, future employment, family expectations, peer relationships, and personal growth. These demands rarely arrive one at a time; instead, they tend to accumulate during the years when adolescence gives way to adult life. When students repeatedly encounter uncertainty about grades, career choices, and social adaptation, their satisfaction with life and emotional experience may be weakened. Existing studies have noted lower well-being and more negative emotional states in some student groups [1,2], while depression- and anxiety-related symptoms continue to be discussed as important issues in college populations. Such difficulties may reduce learning engagement, interfere with interpersonal adjustment, and lower the quality of campus life. Enhancing subjective well-being should therefore be regarded not simply as a personal mental health concern, but as part of the educational responsibility of universities.

The growth of positive psychology has also changed the way student mental health is discussed. Instead of focusing only on symptoms and deficits, this perspective asks which strengths enable individuals to maintain functioning and experience a worthwhile life [3]. Diener's account of

subjective well-being is useful in this respect because it treats well-being as a subjective evaluation that includes both judgments about life satisfaction and affective experiences of positive and negative emotion [4]. Among the factors related to this construct, psychological resources are especially relevant for intervention. Background variables and personality traits are relatively stable, but efficacy beliefs, coping habits, and resilience can be shaped through repeated experience, feedback, and training [5]. This makes psychological resources a practical entry point for improving well-being in higher education.

Self-efficacy and psychological resilience represent two different layers of such resources. Self-efficacy concerns whether individuals believe they can organize and carry out actions required by a difficult task [6]. For students, this belief affects how goals are set, how much effort is sustained, and whether setbacks are interpreted as reasons to withdraw or as problems to be solved. Bandura further argued that efficacy beliefs can be developed through mastery experiences, observation of successful models, social persuasion, and the regulation of emotional arousal [7]. Resilience, in contrast, refers to adaptive functioning and recovery under stress, frustration, or adversity [8]. Although both constructs have been linked to well-being [9,10], their combined role in ordinary college students remains insufficiently clarified.

1.2. Review of Prior Research

1.2.1. Overview of Research on Subjective Well-Being

Researchers typically operationalize subjective well-being along two complementary lines: the judgments people make about their lives and the emotions they actually feel. For the judgment side, the instrument chosen most often is the Satisfaction with Life Scale (SWLS) from Diener and colleagues, while the emotional side is usually assessed with Watson and colleagues' Positive and Negative Affect Schedule (PANAS) [4,11]. Using both instruments allows well-being to be represented as a multidimensional construct rather than as a single mood or satisfaction score [1]. Previous research has linked well-being with personality, social support, coping style, and psychological resources [2,9,12]. For university practice, the last category is particularly important because it can be strengthened through educational and counseling interventions.

1.2.2. Self-Efficacy and Subjective Well-Being

In samples drawn from quite different groups, stronger efficacy beliefs have generally gone together with better well-being outcomes. Wardoyo et al. reported a positive predictive effect among Indonesian high school students ($\beta = .425, p < .001$) [9]. Strobel et al. observed that efficacy beliefs correlated with life satisfaction ($r = .34$) as well as with overall subjective well-being ($r = .27$) in an adult sample containing many university students [13]. In a clinical setting, Bhattarai et al. found self-efficacy to be among the psychological factors tied to well-being in people who had experienced spinal cord injuries [2]. Evidence from China points the same way: in a sample of 776 undergraduates, Chu et al. found that self-efficacy and well-being were positively related ($\beta = .19, p < .001$) [14], and Yang et al. reported a comparable pattern in high school students [15]. From a theoretical standpoint, students confident in their own ability tend to adopt active coping behaviors and to sustain positive mood when pressure arises [2,16]. Self-efficacy therefore provides an important cognitive basis for understanding student well-being.

1.2.3. Psychological Resilience and Subjective Well-Being

Resilience has also been repeatedly linked with well-being, although the populations and research settings differ. Evidence from collegiate athletes indicates that students with stronger resilience tend to report higher life satisfaction [10]. Among older internal migrants in China, resilience was likewise connected with better subjective well-being [12]. Within a junior high school sample in China, Du documented a strong positive correlation linking resilience with well-being ($r = .78, p < .01$) [17]. These findings suggest that resilience helps individuals

regulate emotion, tolerate pressure, and restore psychological balance after difficult experiences. Through these adaptive processes, resilience may prevent negative affect from becoming overwhelming and may protect well-being [8,10]. Because self-efficacy and resilience both show connections with well-being, their joint operation needs to be examined more directly.

1.2.4. Self-Efficacy, Psychological Resilience, and Subjective Well-Being

The link between efficacy beliefs and resilience provides a possible route for connecting cognition with adaptation. In a sample of Turkish collegiate athletes, efficacy beliefs were associated with resilience ($\beta = .517, p < .001$) [10]. Etherton et al. reported a similar positive association in American college students ($r = .45, p < .01$) [18]. These findings are theoretically reasonable: when students believe that difficulties can be handled, they are more likely to persist, revise strategies, and search for support instead of giving up. Over time, this repeated experience of coping may become part of their resilient response pattern [16].

Viewed as a whole, prior work hints that the three constructs examined here may constitute an ordered resource process rather than a set of three independent associations. Conservation of resources theory offers a useful explanation for this idea. The theory emphasizes that resources are often accumulated and connected; possessing one resource can make it easier for individuals to acquire or protect another [5]. From this perspective, self-efficacy may first operate as a cognitive resource that supports confidence and action, and then contribute to well-being partly by fostering resilience. The proposed process is therefore not merely that self-efficacy and resilience are both beneficial, but that efficacy beliefs may help create the adaptive capacity through which well-being is maintained.

Several empirical studies provide background support for this reasoning without fully resolving the question for the present population. In Karababa et al.'s research, including resilience reduced the direct connection between efficacy beliefs and life satisfaction, and the indirect pathway was statistically reliable ($\beta = .073, 95\% \text{ CI } [.024, .126]$) [10]. In China, Du found that resilience partly explained the association between life values and well-being among junior high school students, accounting for 55.56% of the total effect [17]. Liu et al. also showed that resilience helped link social support with well-being among older internal migrants [12]. These studies imply that resilience may be a pathway through which personal or social resources are converted into subjective well-being, but they do not directly answer whether the same pattern applies to ordinary Chinese university students.

Several limitations in the existing literature make the present test necessary. First, many mediation studies have been conducted with athletes, adolescents, older adults, or other specific populations, so findings may not transfer automatically to ordinary college students. Second, a number of studies have treated the relevant variables in isolation instead of testing efficacy beliefs, resilience, and well-being jointly within one model. Third, subjective well-being has sometimes been represented by a single indicator, which may overlook the distinction between life evaluation and emotional experience. Testing the proposed pathway in a Chinese college student sample can therefore extend prior evidence and provide guidance for campus mental health practice.

1.3. The Present Study and Hypotheses

Guided by the above literature, this study examined whether self-efficacy is associated with subjective well-being among Chinese university students and whether psychological resilience helps explain that association. Rather than treating the three variables as only pairwise correlations, the study placed them in a single mediation model. This design makes it possible to examine whether students' belief in their own competence is connected with well-being partly through their capacity to adapt and recover. The study also used both cognitive and

affective indicators of subjective well-being, which gives a broader view of students' psychological state.

The analysis was guided by two questions: (1) Do students who hold stronger efficacy beliefs tend to report greater subjective well-being? (2) Can psychological resilience explain part of this association? Following the conceptual model in Figure 1, the study advanced three hypotheses:

H1: Higher self-efficacy predicts higher subjective well-being.

H2: Higher self-efficacy predicts stronger psychological resilience.

H3: The association linking self-efficacy with subjective well-being is mediated by psychological resilience.

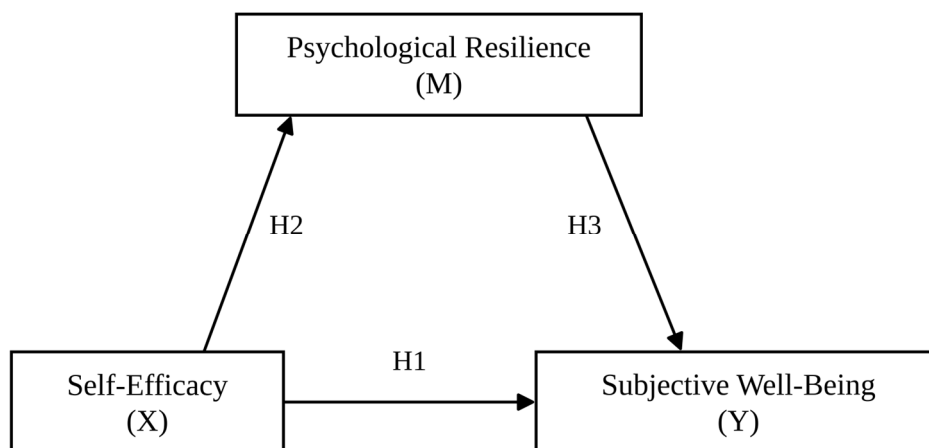


Figure 1. The hypothesized mediation model.

2. Methods

2.1. Theoretical Framework

Three perspectives jointly framed the reasoning of this study: social cognitive theory, subjective well-being theory, and conservation of resources theory. Each theory explains a different part of the model: the cognitive source of action, the outcome to be explained, and the mechanism through which resources may accumulate.

Social cognitive theory provides the foundation for treating self-efficacy as a central predictor. Within this theory, efficacy beliefs influence how individuals interpret demands, regulate effort, and respond emotionally to difficulties. A student who believes that a demanding task is still manageable may be more willing to persist and adjust strategies, whereas a student with weak efficacy beliefs may withdraw earlier. This theoretical view supports the expectation that self-efficacy is related to students' well-being [7].

Diener's framework defines what well-being means here. Rather than being equated with the absence of distress, well-being covers a person's appraisal of life together with the relative balance between pleasant and unpleasant emotional experiences [4]. Accordingly, the well-being index in this study was built from life satisfaction combined with positive and negative affect.

Conservation of resources theory explains the indirect pathway. According to this view, psychological resources may strengthen one another and form a protective system [5]. Self-efficacy may help students mobilize action and confidence, while resilience may help them absorb setbacks and regain balance. When these resources are connected, efficacy beliefs may promote well-being both directly and by increasing resilience.

2.2. Participants

This study used convenience sampling. The questionnaire was created on Wenjuanwang (a Chinese online survey platform) and circulated through Xiaohongshu (a popular Chinese social media platform), WeChat groups, and similar social media channels. After excluding invalid questionnaires, 441 valid responses were retained. All participants were undergraduate or graduate students enrolled at universities in China, and they joined the survey voluntarily.

Table 1 presents the demographic profile of the sample. Among the 441 participants, 183 were male students (41.5%) and 258 were female students (58.5%). The sample included students from different grades and academic fields, such as humanities, sciences, engineering, medicine, arts and physical education, and other majors. Participants also differed in residence background and only-child status, which indicates that the sample covered a relatively broad range of college students.

Table 1. Demographic Characteristics of the Participants ($N = 441$)

Demographic variable	Category	Number	Percentage (%)
Gender	Male	183	41.5
	Female	258	58.5
Age	18–19 years	78	17.7
	20–21 years	155	35.1
	22–23 years	106	24.0
	24 years and above	102	23.1
Year of study	First-year	65	14.7
	Second-year	79	17.9
	Third-year	104	23.6
	Fourth-year	112	25.4
	Graduate and above	81	18.4
Field of study	Humanities	129	29.3
	Sciences	109	24.7
	Engineering	81	18.4
	Medicine	57	12.9
	Arts and physical education	43	9.8
	Other	22	5.0
Place of residence	City	245	55.6
	County town	128	29.0
	Rural	68	15.4
Only child	Yes	249	56.5
	No	192	43.5

2.3. Measures

2.3.1. General Self-Efficacy Scale

Efficacy beliefs were assessed via Schwarzer and Jerusalem's General Self-Efficacy Scale (GSE) [19], which comprises 10 statements answered on a 5-point continuum (1 = strongly disagree; 5 = strongly agree). One reverse-keyed statement was recoded before scoring, and each participant's responses were then averaged so that larger values reflected firmer efficacy beliefs. In the current sample, the scale's Cronbach's alpha reached .827.

2.3.2. Psychological Resilience Scale

Resilience was measured using the brief 10-item form of the Connor-Davidson Resilience Scale (CD-RISC-10). Connor and Davidson [8] built the original instrument, which Campbell-Sills and Stein [21] later condensed into the 10-item version. Participants answered each statement on the same 1–5 continuum (strongly disagree to strongly agree), two reverse-keyed statements were recoded, and item responses were then averaged, larger values reflecting greater resilience. Internal consistency in the current sample was satisfactory (Cronbach's alpha = .865).

2.3.3. Satisfaction with Life Scale

The cognitive facet of well-being—life satisfaction—was captured by Diener et al.'s Satisfaction with Life Scale (SWLS) [20]. Its five statements were answered on a 1–5 continuum running from strongly disagree to strongly agree. After the single reverse-keyed statement was recoded, responses were averaged, and larger values denoted greater satisfaction with life. Cronbach's alpha here was .754.

2.3.4. Positive and Negative Affect Schedule

Affective experience was gauged with a short form of Watson et al.'s Positive and Negative Affect Schedule (PANAS) [11], containing five positive-affect and five negative-affect descriptors. Respondents indicated how strongly they experienced each feeling, from 1 (very slightly or not at all) to 5 (extremely), and the two subscales were averaged separately. Cronbach's alpha reached .855 for the positive subscale and .867 for the negative subscale.

Consistent with Diener's tripartite view of subjective well-being [4], an overall well-being index was computed as life satisfaction plus positive affect minus negative affect, with larger values denoting greater subjective well-being.

2.4. Procedure

The questionnaire was released through Wenjuanwang, and participants accessed it through Xiaohongshu and WeChat groups. The opening page of the survey explained the purpose of the research, guaranteed anonymity, stressed that taking part was entirely voluntary, and noted that the data would serve academic purposes only; respondents then provided informed consent before answering. The median completion time was approximately 6 to 8 minutes. Questionnaires completed in less than 50 seconds or showing obvious response patterns were removed. After this screening process, 441 valid cases remained, and scale scores were calculated after reverse-scored items were recoded.

2.5. Data Analysis

After data screening and coding, analyses were conducted in SPSS 26.0. The first step was to evaluate the possibility of common method bias using Harman's single-factor procedure [23]. Reliability was then examined with Cronbach's alpha for each scale. Next, descriptive statistics and Pearson correlations were calculated to describe the variables and their associations. The last step relied on Model 4 of Hayes's PROCESS macro for SPSS [22], specifying self-efficacy as the independent variable (X), resilience as the mediator (M), and well-being as the criterion (Y). Bootstrapping drew 5,000 resamples to construct bias-corrected percentile confidence

intervals, and an indirect effect was judged reliable whenever the resulting 95% interval excluded zero; a .05 criterion applied to the remaining significance tests.

3. Results

3.1. Common Method Bias

Given that every measure relied on participant self-report, Harman's single-factor procedure was applied ahead of the substantive analyses. Submitting all 35 items to an unrotated principal component analysis produced four components with eigenvalues above 1, and the leading component accounted for 36.69% of the variance—well under the 40% benchmark conventionally adopted for this test—so common method variance did not appear to pose a serious threat [23]. A separate collinearity check, in which well-being was regressed on self-efficacy and resilience, returned VIF = 2.628 and tolerance = 0.381 for both predictors, values that fall within acceptable limits.

3.2. Descriptive Statistics and Correlations

Means, standard deviations, and observed score ranges for self-efficacy, psychological resilience, subjective well-being, and its components appear in Table 2. The averages for self-efficacy ($M = 3.39$, $SD = 0.70$), psychological resilience ($M = 3.43$, $SD = 0.76$), and subjective well-being ($M = 3.75$, $SD = 1.68$) were slightly higher than the midpoints of the corresponding scales.

Table 2. Descriptive Statistics for the Study Variables ($N = 441$)

Variable	<i>N</i>	Minimum	Maximum	<i>M</i>	<i>SD</i>
Self-efficacy	441	1.10	5.00	3.39	0.70
Psychological resilience	441	1.20	4.90	3.43	0.76
Life satisfaction	441	1.20	5.00	3.33	0.81
Positive affect	441	1.00	5.00	3.37	0.87
Negative affect	441	1.00	5.00	2.95	0.95
Subjective well-being	441	-2.00	8.40	3.75	1.68

As Table 3 shows, self-efficacy correlated positively with resilience ($r = .787$, $p < .01$) and with well-being ($r = .685$, $p < .01$), and resilience in turn correlated positively with well-being ($r = .643$, $p < .01$). The three variables were therefore significantly interrelated, which justified moving on to the mediation test.

Table 3. Correlations Among the Study Variables ($N = 441$)

Variable	Self-efficacy	Psychological resilience	Subjective well-being
Self-efficacy	1		
Psychological resilience	.787**	1	
Subjective well-being	.685**	.643**	1

Note. ** $p < .01$.

3.3. Mediation Analysis

PROCESS Model 4 was used to fit the mediation model, with self-efficacy serving as the predictor, resilience as the intervening variable, and well-being as the criterion; Table 4 summarizes the resulting regression coefficients.

Table 4. Regression Analysis of Self-Efficacy, Psychological Resilience, and Subjective Well-Being ($N = 441$)

Model	Predictor	Outcome	<i>B</i>	<i>SE</i>	β	<i>t</i>	R^2	<i>F</i>
Model 1	Self-efficacy	Subjective well-being	1.634	.083	.685	19.684***	.469	387.461***
Model 2	Self-efficacy	Psychological resilience	.854	.032	.787	26.733***	.619	714.630***
Model 3	Self-efficacy	Subjective well-being	1.120	.131	.469	8.548***	.497	216.629***
	Psychological resilience	Subjective well-being	.601	.121	.273	4.979***		

Note. *B* = unstandardized regression coefficient; *SE* = standard error; β = standardized regression coefficient. *** $p < .001$.

Model 1 revealed a positive self-efficacy–well-being association ($B = 1.634$, $\beta = .685$, $t = 19.684$, $p < .001$) that explained 46.9% of the variance, supporting H1. In Model 2, self-efficacy likewise related positively to resilience ($B = .854$, $\beta = .787$, $t = 26.733$, $p < .001$), explaining 61.9% of the variance, so H2 was also supported. With both predictors entered simultaneously in Model 3, resilience kept its positive association with well-being ($B = .601$, $\beta = .273$, $t = 4.979$, $p < .001$). The direct path from self-efficacy to subjective well-being was still significant ($B = 1.120$, $\beta = .469$, $t = 8.548$, $p < .001$), although it was smaller than the total effect ($B = 1.634$). This reduction indicates a partial indirect pathway, supporting H3.

Bootstrap estimates appear in Table 5. Self-efficacy exerted a total effect of 1.634 on well-being (95% CI [1.471, 1.797]), and the direct effect equaled 1.120 (95% CI [.863, 1.378]). The portion transmitted through resilience amounted to .514, with a bootstrap 95% confidence interval of [.250, .777]; since this interval excluded zero, the indirect effect received statistical support. Covering 31.5% of the total effect, the resilience route accounted for a meaningful—though far from complete—share of the link tying self-efficacy to well-being.

Table 5. Test of the Mediating Effect of Psychological Resilience ($N = 441$)

Effect	Estimate	<i>SE</i>	95% CI	Proportion
Total effect	1.634	.083	[1.471, 1.797]	100.0%
Direct effect	1.120	.131	[.863, 1.378]	68.5%
Indirect effect	.514	.136	[.250, .777]	31.5%

Note. For the indirect effect, *SE* denotes the bootstrap standard error, and the interval is a bias-corrected percentile bootstrap 95% CI computed from 5,000 resamples; the mediation is significant because zero lies outside this interval.

4. Discussion

4.1. How Self-Efficacy Relates to Subjective Well-Being

H1 received support: well-being rose together with self-efficacy ($\beta = .685$, $p < .001$), a pattern in line with what Wardoyo et al. [9], Strobel et al. [13], and Chu et al. [14] reported, though one that should be read against the particular backdrop of Chinese higher education. University students often face strong achievement expectations and uncertain career transitions; under these conditions, the belief that one can manage tasks and difficulties may become an important source of psychological security. From the standpoint of social cognitive theory [16], efficacy beliefs shape not only behavior but also emotional interpretation. Students who believe that problems can be handled are more likely to set attainable goals, continue effort after setbacks, and interpret pressure as controllable rather than overwhelming. These processes may increase life satisfaction and support more positive emotional experience.

4.2. How Self-Efficacy Relates to Psychological Resilience

The second hypothesis was also supported, with self-efficacy showing a strong association with psychological resilience ($\beta = .787$, $p < .001$). Although this direction is consistent with Karababa et al. [10] and Etherton et al. [18], the coefficient obtained here exceeded the $\beta = .517$ that Karababa et al. observed among collegiate athletes. This difference is not simply a numerical discrepancy; it may reflect the different ways resilience is formed in different groups. For athletes, resilience may be shaped by systematic physical training, repeated competition, coaching, and team support. These experiences can provide external structures that help athletes recover even when personal efficacy beliefs are not the only source of adaptation. For ordinary college students, however, coping with academic pressure, job-search uncertainty, and interpersonal difficulties may depend more heavily on their own confidence in solving problems. In this sense, self-efficacy may be more closely tied to resilient responses in the present sample.

The cultural and educational context may also amplify this connection. In Chinese universities, students' academic progress and future employment are often closely connected with family expectations and social comparison. When students lack confidence in their ability, these external expectations may be experienced as threat rather than motivation. When efficacy beliefs are stronger, the same demands may be appraised as manageable tasks, allowing students to maintain agency and recover more quickly after failure. This may explain why self-efficacy showed a particularly close association with resilience in the present sample.

4.3. Resilience as a Mediating Pathway

Mediation testing further showed that part of the association linking efficacy beliefs with well-being traveled through resilience: the indirect effect equaled .514, its bootstrap 95% interval of [.250, .777] excluded zero, and this route covered 31.5% of the total effect. Rather than showing a simple one-directional influence, the result suggests a process in which competence beliefs are transformed into adaptive capacity, and this adaptive capacity then contributes to better well-being. This interpretation is broadly consistent with studies in which resilience links psychological or social resources with well-being [10,12,17].

This pattern provides a concrete application of conservation of resources theory [5]. Self-efficacy can be regarded as an upstream cognitive resource: it helps students judge whether they are able to act effectively when facing demands. Resilience can be regarded as a downstream adaptive resource: it helps students recover, adjust, and maintain balance when stress has already appeared. The present findings suggest that these two resources are connected. When students believe that they have the ability to cope, they may be more willing

to mobilize strategies and persist through temporary failure, which gradually strengthens resilient functioning and improves subjective experience.

The mediating proportion in this study (31.5%) was lower than the 55.56% reported by Du among junior high school students. This difference may be explained by both developmental and conceptual factors. Developmentally, college students usually have more independent decision-making experience and more available coping channels than junior high school students, including peer networks, career planning resources, online information, and campus counseling services. As a result, their well-being may be influenced through several routes, and resilience explains only part of the process. Conceptually, Du used life values as the predictor, whereas this study used self-efficacy. Life values involve meaning, orientation, and purpose, while self-efficacy emphasizes perceived competence. Meaning-oriented variables may rely more heavily on resilience when individuals face setbacks, whereas competence beliefs may also influence well-being through goal pursuit, problem solving, and positive appraisal.

The direct effect also remained significant after resilience was entered into the model ($\beta = .469$, $p < .001$), indicating partial rather than complete mediation. This result is theoretically important. It means that resilience is not the only route from self-efficacy to well-being. Students with stronger efficacy beliefs may directly experience more control, confidence, and hope in daily learning and life. They may also benefit from other mechanisms, such as more effective emotion regulation, stronger goal persistence, better problem solving, and broader use of social support. This explanation is consistent with Bandura's view that self-efficacy affects psychological outcomes through multiple behavioral, cognitive, and affective processes [16].

4.4. Implications

The study offers several implications. Theoretically, it examined a pathway running from self-efficacy through resilience to well-being among ordinary Chinese college students—a group that related mediation studies have attended to far less than athletes, adolescents, or special populations. In addition, because well-being was operationalized through three components rather than one global score (life satisfaction together with positive and negative affect), the construct's breadth was preserved. The findings support the resource accumulation logic of conservation of resources theory [5]: a cognitive resource may help build an adaptive resource, and the two together may support better subjective experience. At the practical level, universities should not treat well-being education as simple emotional comfort. Interventions can first build self-efficacy through mastery experiences, constructive feedback, peer modeling, and skills practice, and then strengthen resilience through stress-coping exercises, emotion regulation training, and social support building. Combining these two directions may be more effective than focusing on either confidence or recovery ability alone.

4.5. Limitations and Future Directions

A few limitations deserve mention. First, because the data were collected at a single time point, neither temporal sequence nor causal direction can be determined; longitudinal or experimental work is required to test whether gains in self-efficacy precede later shifts in resilience and well-being. Second, every construct was assessed through participants' own reports. Although the common method check did not show a serious problem, social desirability and response style may still have influenced the results. Future research could combine questionnaires with peer reports, teacher ratings, behavioral indicators, or interview data. Third, participants were recruited through convenience sampling and online platforms, which limits representativeness. Samples from different regions, university types, and academic majors should be compared in later studies. Finally, resilience was the only mediator tested here. Future models could include emotion regulation, perceived social support, coping style, academic engagement, or meaning in life to examine multiple or chained mechanisms.

5. Conclusion

Drawing on responses from 441 university students in China, the present research explored the interrelations among self-efficacy, psychological resilience, and subjective well-being. All three core variables were positively associated, and students holding stronger efficacy beliefs tended to report greater well-being as well as stronger resilience. Bootstrap analysis additionally confirmed a partial indirect route via resilience that covered 31.5% of the total effect. Taken together, the evidence implies that efficacy beliefs support well-being in two ways: directly, by supplying students with a firmer sense of competence and control, and indirectly, by nurturing the adaptive capacity needed to bounce back from stress. For university mental health education, both confidence-building and resilience-building should therefore be included in efforts to improve students' well-being.

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