

The Interplay of Psychological Factors and Social Expectations in Career Decision-Making: A Moderated Model of Support Seeking in Chinese Higher Education

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ABSTRACT

Grounded in Social Cognitive Theory, Expectancy Value Theory, and the Theory of Planned Behavior, this study examines how psychological factors influence support-seeking behavior and career choice decisions among Chinese college students. The research investigates the predictive roles of self-efficacy, perceived personal ability, and personal utility, and further explores the moderating effect of subjective norms on the relationship between support seeking and career choice. A cross-sectional survey was conducted among 368 undergraduates from universities in Liaoning Province, China. Structural Equation Modeling (SEM) using AMOS was employed to test hypothesized relationships. Findings revealed that self-efficacy, perceived personal ability, and personal utility significantly and positively influenced support seeking. Support seeking, in turn, had a strong direct impact on career choice decisions. Moreover, subjective norms significantly moderate this relationship, amplifying the influence of support seeking under high perceived social expectations. The results underscore the integrated influence of psychological and social-contextual factors in shaping students' career decision-making processes. This study contributes to the literature by extending theoretical understanding of career development in collectivist cultures and offers practical implications for university career counseling, policy design, and educational practices that strengthen self-efficacy and supportive environments for students navigating career transitions.

ARTICLE HISTORY

Received 04 January 2026
Revised 21 February 2026
Accepted 14 April 2026
Online First 27 April 2026
Published 01 June 2026

KEYWORDS

Self-efficacy, perceived personal ability, personal utility, support seeking, subjective norms, career choice

1.0 Introduction

Career choice is a pivotal life decision that profoundly shapes an individual's future trajectory, economic independence, and psychological well-being. It influences not only personal satisfaction and occupational identity but also broader social and economic development through the alignment of human capital with labor market needs (Eun et al., 2013; Jackson and Tomlinson, 2020). In the context of higher education, understanding how college students make career decisions has become increasingly urgent as they face dynamic labor markets, evolving

industrial structures, and intensified competition for professional opportunities. In China, these challenges are particularly pronounced due to rapid economic transformation and a growing mismatch between educational qualifications and employment demands (Liang et al., 2021). Thus, examining the psychological and social factors that influence career decision-making among Chinese undergraduates provides critical insights into both individual development and national talent strategies.

Recent decades have witnessed a theoretical shift in career development research from trait–factor approaches toward psychosocial and contextual perspectives. Classical models such as Holland’s theory of vocational interests (Holland, 1997) and Super’s life-span theory (Super, 1990) emphasized personality–environment congruence but provided limited explanation of dynamic psychological mechanisms and social influences. In contrast, contemporary frameworks such as Social Cognitive Theory (Bandura, 1997), Expectancy Value Theory (Eccles and Wigfield, 2002), and the Theory of Planned Behavior (Ajzen, 1991) highlight how individuals’ beliefs, perceived abilities, and subjective values interact with contextual factors to shape goal-directed behaviors. These perspectives underscore that career decisions emerge from an interplay between self-belief (self-efficacy), cognitive appraisals (perceived ability and utility), and social expectations (subjective norms). However, empirical integration of these theories remains limited, especially within collectivist cultural contexts where social norms and family expectations exert strong influence over career pathways (Guan et al., 2015; Lent and Brown, 2019).

Fundamentally, self-efficacy is a one’s belief in the capacity to perform tasks successfully that has long been recognized as a key determinant of career choice behavior (Bandura, 1997; Lent et al., 1994). Students with higher self-efficacy tend to exhibit stronger persistence, confidence, and adaptability in navigating career-related challenges (Savugathali et al., 2025). Perceived personal ability, while conceptually related to self-efficacy, refers more specifically to individuals’ self-assessment of their skills and competencies in relation to career requirements (Siddiky and Akter, 2021). Empirical studies suggest that perceived ability influences both the breadth of career options considered and the willingness to seek guidance or explore alternative choices (Gati and Kulcsar, 2021). Personal utility, derived from Expectancy Value Theory, pertains to the perceived value or benefit of career outcomes such as job stability, income, or personal fulfillment—and functions as a motivational driver of decision-making (Eccles and Wigfield, 2002; Xin et al., 2020). Collectively, these cognitive constructs are crucial in determining how students evaluate opportunities, engage in exploration, and commit to specific career paths.

Beyond individual cognition, support seeking represents an important behavioral mechanism in career decision-making. Support seeking involves actively obtaining advice, information, or emotional reassurance from others such as family, peers, teachers, and career counselors to mitigate uncertainty and enhance decision quality (Barbee et al., 1990; Savickas, 2013). Students who engage more frequently in support seeking are often better informed, more confident, and less prone to indecision (Nota et al., 2020). However, in collectivist contexts like China, the nature of support seeking is embedded within social relationships and is often regulated by subjective norms that the perceived expectations and pressures from significant others (Ajzen, 1991; Hofstede, 2001). Subjective norms influence whether individuals feel comfortable seeking guidance and whose opinions they prioritize when making career choices. This interplay between support seeking and social norms remains underexplored despite its importance in cultures where family endorsement strongly shapes vocational behavior (Li et al., 2020; Wong et al., 2023).

Indeed, China’s career decision environment presents unique structural and cultural pressures that intensify students’ career uncertainty. Rapid industrial restructuring, particularly in traditional manufacturing regions such as Liaoning, has disrupted established employment pathways and increased competition for emerging knowledge-based occupations (Zhang et al., 2020; Su et al., 2022; Li et al., 2023). At the same time, the expansion of higher education has produced a growing mismatch between graduate qualifications and labour market demands, resulting in heightened employment anxiety among university students (Liang et al., 2021; Lu, 2024). These structural shifts interact with collectivist cultural norms emphasizing family expectations, social prestige, and occupational stability, which strongly shape students’ career preferences and decision processes (Hofstede, 2001; Wong et al., 2023). Consequently, Chinese undergraduates must negotiate not only personal aspirations but also familial and societal expectations when making career decisions. This convergence of economic transition and collectivist social regulation makes China a critical context for examining how psychological beliefs and social expectations jointly influence career decision-making processes.

Not to mention, existing studies have typically analyzed self-efficacy, perceived ability, and personal utility as isolated predictors of career outcomes, with limited attention to the mechanisms that connect these constructs to behavioral outcomes such as support seeking and career decisions (Okolie et al., 2020; Lent and Brown, 2019). Moreover, few models have incorporated subjective norms as a moderating factor, despite evidence that social pressures can either strengthen or weaken the influence of psychological factors on decision behavior (Ahmad, 2020; Wiswall and Zafar, 2021). Thus, a comprehensive model integrating cognitive predictors, behavioral mediators, and social moderators is essential to capture the complex dynamics underlying students' career decision-making processes in collectivist educational environments.

Despite substantial research on self-efficacy, perceived ability, and personal utility in career development, most studies have examined these constructs as independent predictors of career outcomes, offering limited insight into the mechanisms through which cognitive beliefs translate into behavioral processes and final decisions (Okolie et al., 2020; Lent and Brown, 2019). Without understanding these mediating pathways, theoretical models remain fragmented and provide inconsistent predictions of career behavior across cultural contexts. In collectivist societies such as China, where social expectations strongly regulate behavior, neglecting mechanism-based relationships restricts the ability to design effective career interventions that address how students move from psychological readiness to actionable decision-making. Specifically, insufficient attention has been paid to support-seeking behavior as a behavioral conduit linking internal beliefs with career outcomes and to subjective norms as a contextual force shaping this translation. Addressing this gap is essential for developing culturally responsive career guidance strategies in rapidly changing labor markets such as China's.

This study makes three key contributions. Theoretically, it extends career development frameworks by integrating cognitive, behavioral, and sociocultural dimensions into a unified model. Empirically, it contributes region-specific evidence from a transitional Chinese province, enriching the global understanding of career decision-making within collectivist contexts. Practically, the findings offer implications for educational policymakers, career counselors, and university administrators seeking to design interventions that enhance self-efficacy, promote proactive support-seeking behaviors, and align career counseling services with students' social environments. Collectively, this study advances the discourse on how psychological and social factors converge to shape adaptive career choices in the rapidly transforming educational and labor landscapes of East Asia.

2.0 Literature Review

2.1 Theoretical Foundations

Career decision-making is a multifaceted process influenced by both internal psychological factors and external social environments. Three major theoretical perspectives underpin this study: Social Cognitive Theory (Bandura, 1997), Expectancy Value Theory (Eccles and Wigfield, 2002), and the Theory of Planned Behavior (Ajzen, 1991). Together, these frameworks provide a robust foundation for understanding how cognitive evaluations, motivational appraisals, and social influences shape individual decision-making.

According to Social Cognitive Theory (SCT), human behavior is a product of the reciprocal interaction between personal factors, environmental conditions, and behavioral patterns (Bandura, 1986). A central construct within SCT is self-efficacy, which refers to individuals' belief in their capability to perform a given task successfully (Woreta et al., 2025). In the career context, self-efficacy determines whether students view themselves as competent to pursue and succeed in specific occupations (Lent et al., 1994). Those with high self-efficacy tend to display greater initiative, perseverance, and resilience in overcoming career-related obstacles (Sun et al., 2025). This theoretical lens supports the proposition that internal beliefs can motivate support-seeking behaviors as a proactive coping mechanism during career planning.

The Expectancy Value Theory (EVT) posits that individuals' decisions are guided by their expectations of success and the subjective value they attach to outcomes (Eccles and Wigfield, 2002). Within career development, perceived

personal ability represents the expectancy component such students' perceptions of their competencies relative to career demands (Valdez et al., 2025), while personal utility reflects the value component such students' perceptions of the anticipated rewards and benefits of a career path (Herjanto et al., 2025). EVT suggests that individuals are more likely to engage in behaviors that align with high perceived ability and high perceived value (Wagner et al., 2025). Accordingly, when students perceive high personal competence and utility in their chosen careers, they are more motivated to seek informational and emotional support to actualize their goals.

The Theory of Planned Behavior (TPB) (Ajzen, 1991) extends this discussion by emphasizing the role of subjective norms as the perceived social pressures from family, peers, and society to perform or avoid specific behaviors. Within collectivist contexts such as China, subjective norms often function as powerful determinants of behavioral intention (Hofstede, 2001; Wong et al., 2023). In the career decision process, social expectations may moderate how psychological factors translate into actual behaviors such as support seeking or career decision-making (Nadaan, 2022). Integrating TPB with SCT and EVT thus provides a comprehensive framework linking cognitive, behavioral, and sociocultural influences on career choice.

2.2 Self-Efficacy and Support Seeking

Self-efficacy has been extensively studied as a predictor of both academic and career behaviors. It influences how individuals interpret challenges, manage uncertainty, and pursue goal-directed actions (Bandura, 1997; Lent and Brown, 2019). In the career decision context, students with higher self-efficacy are more confident in exploring diverse career options and more likely to seek assistance from mentors, peers, and institutional resources (Boo and Kim, 2020; Firmansyah and Sukma, 2025). Empirical findings across educational settings suggest that self-efficacy positively correlates with help-seeking and career exploration behaviors (Savickas, 2013; Okolie et al., 2020).

In the Chinese context, where students often face intense academic competition and parental expectations, support seeking can act as an adaptive strategy to navigate uncertainty and align career goals with social norms. Liaoning Province, characterized by economic transition and evolving labor demands, presents an environment where students with higher self-efficacy are particularly likely to engage in resourceful support-seeking behaviors to enhance decision-making accuracy.

Hypothesis 1 (H1): *Self-efficacy has a significant positive relationship with support seeking among Chinese college students.*

2.3 Perceived Personal Ability and Support Seeking

Perceived personal ability refers to an individual's self-assessment of their own competencies and skills (Siddiky and Akter, 2021). It reflects not only technical and academic proficiency but also the confidence to apply those abilities in career contexts. According to Lent et al. (1994), students who evaluate their personal abilities positively are more proactive in gathering information and consulting with knowledgeable individuals to confirm and extend their perceived strengths.

Existing research suggests that perceived personal ability is linked to students' willingness to seek feedback and support from peers and educators (Gati and Kulcsar, 2021). In a collectivist setting like China, individuals who perceive themselves as capable are more likely to engage in instrumental support seeking which actively soliciting career information (Song et al., 2024), internship opportunities (Wu, 2024), and mentorship to validate their competencies (Wu et al., 2025). Conversely, those with lower perceived abilities may avoid seeking support due to fear of judgment or loss of face (Behle, 2020).

Hypothesis 2 (H2): *Perceived personal ability has a significant positive relationship with support seeking among Chinese college students.*

2.4 Personal Utility and Support Seeking

Personal utility, derived from the value component of Expectancy Theory, captures individuals' perceptions of the expected benefits, rewards, and satisfaction associated with career outcomes (Eccles and Wigfield, 2002). Students who attach greater utility value to their career aspirations such as job stability, social prestige, or personal fulfillment tend to be more motivated to engage in activities that increase the likelihood of achieving those goals (Xin et al., 2020). Support seeking serves as one such behavior, enabling students to access information, guidance, and emotional reinforcement aligned with their valued outcomes (Wang et al., 2025).

Prior studies in East Asian contexts have shown that perceived utility influences students' engagement in career counseling and participation in internship programs (Vautero et al., 2021; Ahmad, 2020). In transitional economies like Liaoning's, where emerging industries compete with traditional sectors, students with a strong sense of personal utility are more inclined to seek expert advice and familial input to evaluate which paths yield optimal rewards.

Hypothesis 3 (H3): *Personal utility has a significant positive relationship with support seeking among Chinese college students.*

2.5 Support Seeking and Career Choice Decisions

Support seeking is a critical behavioral mechanism in the career decision process. It involves drawing on interpersonal and institutional resources to gather information (Vogel et al., 2006; Ma et al., 2023), gain reassurance, and reduce decision uncertainty (Barbee et al., 1990; Savickas, 2013). According to the Social Cognitive Career Theory (Lent et al., 1994), help-seeking behaviors facilitate self-regulation and adaptive decision-making by allowing individuals to access environmental supports (Damodar et al., 2024). Empirical studies demonstrate that students who engage in support seeking exhibit greater clarity in career goals, higher decision self-efficacy, and reduced indecision (Nota et al., 2020; Okolie et al., 2020).

In collectivist societies, support seeking is often embedded in relational networks where advice from family, peers, and educators plays a decisive role (Wuruchie Ndinyi, 2022). For Chinese students, family expectations are especially influential; hence, support seeking frequently involves balancing personal aspirations with social obligations (Li et al., 2020). Within Liaoning's transforming economy, where uncertainty about future employment prospects is high, active support seeking can strengthen informed career choices and enhance adaptability.

Hypothesis 4 (H4): *Support seeking has a significant positive relationship with career choice decisions among Chinese college students.*

2.6 Moderating Role of Subjective Norms

Subjective norms refer to the perceived expectations of significant others such as family, peers, and society that shape an individual's behavioral intentions (Ajzen, 1991). In China's collectivist culture, family opinions and societal prestige strongly influence students' educational and career pathways (Hofstede, 2001; Wiswall and Zafar, 2021). When making career decisions, students often face tension between personal interests and family expectations for social status and job security (Fouad et al., 2015; Epstein, 2022). Consequently, subjective norms possibly will moderate the impact of psychological and behavioral factors on decision outcomes.

Empirical research has shown that subjective norms can amplify the influence of support seeking on behavioral outcomes by legitimizing or reinforcing the value of external consultation (Ahmad, 2020; Wong et al., 2023). In high-norm environments, students may feel more compelled to align their support-seeking actions with familial expectations (Nweke and Uzun, 2025), resulting in greater responsiveness to advice and more socially congruent career decisions (Diao and Yao, 2025). Conversely, when perceived social pressure is low, the influence of support seeking on decision-making may weaken as individuals rely more on personal judgment (Acikdeniz et al., 2024).

In Liaoning Province, where traditional collectivist values coexist with modern economic aspirations, subjective norms are expected to exert a substantial moderating effect. Students embedded in strong normative networks are likely to translate their support-seeking behaviors into concrete career choices that meet social approval while still addressing personal utility goals.

Hypothesis 5 (H5): *Subjective norms moderate the relationship between support seeking and career choice decisions such that the relationship is stronger under higher levels of perceived social expectations.*

2.7 Conceptual Framework

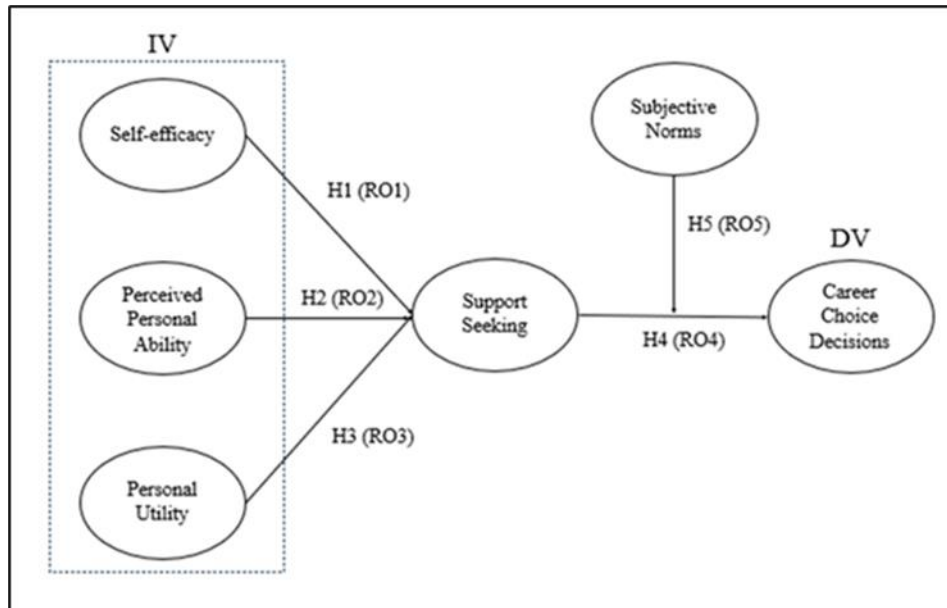


Figure 1: Conceptual Framework

Based on the above theoretical and empirical foundations, the conceptual framework (Figure 1) integrates both cognitive and social dimensions of career decision-making. Self-efficacy, perceived personal ability, and personal utility are posited as independent variables that predict support seeking as a behavioral mediator. Support seeking, in turn, directly influences career choice decisions. Finally, subjective norms function as a moderating variable, strengthening the linkage between support seeking and career choice. This model reflects a moderated mediation structure grounded in the interplay between individual belief systems and sociocultural expectations.

Ultimately, this literature review highlights the need to move beyond fragmented analyses of career choice determinants toward an integrated framework that combines cognitive, behavioral, and sociocultural factors. Drawing upon the complementary insights of SCT, EVT, and TPB, this study posits that students' self-efficacy, perceived ability, and personal utility foster proactive support-seeking behavior, which subsequently enhances career choice decisions. Moreover, subjective norms are expected to amplify this process by aligning individual behavior with social expectations. Through empirical validation of this model among Chinese college students in Liaoning Province, this study contributes to a nuanced understanding of how personal belief systems and social contexts jointly shape adaptive career behavior in East Asian educational settings.

Indeed, prior research in collectivist cultures consistently demonstrates stronger family and social influences on career decisions compared with individualist contexts (Guan et al., 2015; Wong et al., 2023). However, these studies typically emphasize direct normative effects rather than examining how social expectations interact with psychological factors and behavioral processes. By contrast, the present study integrates collectivist social norms

within a moderated mediation framework, enabling a more comprehensive understanding of how cognitive beliefs, support-seeking behavior, and social expectations jointly shape career decision-making in Chinese higher education.

3.0 Methodology

3.1 Research Design

This study employed a predictive correlational cross-sectional survey design to examine directional relationships among psychological predictors (self-efficacy, perceived personal ability, personal utility), support-seeking behavior, and career choice decisions. A predictive correlational design is appropriate when the objective is to test theoretically specified relationships among variables and determine the extent to which predictor constructs statistically explain variation in outcome variables (Hair et al., 2019). Consistent with the proposed theoretical model grounded in Social Cognitive Theory (Bandura, 1997), Expectancy Value Theory (Eccles and Wigfield, 2002), and the Theory of Planned Behavior (Ajzen, 1991), the design enables simultaneous examination of direct, mediating, and moderating relationships using Structural Equation Modeling SEM (using AMOS 28). This approach ensures methodological alignment between the conceptual framework and empirical testing of hypothesized pathways.

3.2 Respondents

The target population comprised undergraduate students enrolled in public universities across Liaoning Province, China. Liaoning was selected due to its ongoing economic transformation, offering a relevant context for studying how students navigate career uncertainty. A total of 368 valid responses were obtained using stratified random sampling, ensuring representation across academic disciplines, gender, and year of study. Respondents' ages ranged from 18 to 24 years ($M = 20.8$, $SD = 1.7$). Approximately 57% were female and 43% male. Most participants were enrolled in social sciences (38%), engineering (27%), business (22%), and arts and humanities (13%). The proposed structural model estimated 32 parameters, including factor loadings, structural paths, covariances, and error terms. Accordingly, the minimum recommended sample size ranged between 320 and 640 cases (Hair et al., 2019). The final sample of 368 respondents exceeded the lower bound requirement, confirming sufficient statistical power and model stability for SEM estimation. Stratified random sampling enhanced representativeness by ensuring proportional inclusion of students across disciplines, gender, and academic year, reflecting the demographic composition of universities in Liaoning Province. This approach minimized sampling bias and improved generalizability within the regional higher-education context, which is appropriate for SEM-based behavioral modeling studies.

3.3 Instruments

A structured questionnaire was developed based on validated scales from prior literature. All items were rated on a five-point Likert scale ranging from 1 ("strongly disagree") to 5 ("strongly agree"). The instrument consisted of six sections, as described below:

Self-efficacy was measured using a modified version of the Career Decision-Making Self-Efficacy Scale – Short Form (CDMSE-SF) (Betz et al., 1996). The 8-item version used in this study demonstrated good internal consistency. Example item: *"I am confident in my ability to choose a career that suits my skills and interests."* Cronbach's Alpha = .87.

Perceived personal ability was assessed through a 6-item scale adapted from Siddiky and Akter (2021) and Gati and Kulcsar (2021). Items evaluated students' perceptions of their cognitive and technical competencies related to potential careers. Example item: *"I have the abilities required to perform well in my desired occupation."* Cronbach's Alpha = .85.

Personal utility was measured using 5 items derived from Expectancy Value Theory scales (Eccles and Wigfield, 2002). The construct captured perceived value and usefulness of future career outcomes (stability, financial security, social respect). Example item: *“My chosen career will bring valuable benefits to my life.”* Cronbach’s Alpha = .83.

Support-seeking behavior was measured using 7 items adapted from Barbee et al. (1990) and Nota et al. (2020). The items assessed the extent to which students sought information, guidance, or emotional reassurance from others during career planning. Example item: *“I often ask teachers or counselors for advice about my career choices.”* Cronbach’s Alpha = .88.

Career choice decision-making was measured using a 6-item scale modified from Lent et al. (1994) and Okolie et al. (2020). Items evaluated confidence, commitment and clarity in making career decisions. Example item: *“I have made a clear decision about my future career.”* Cronbach’s Alpha = .89.

Subjective norms were assessed using 5 items based on Ajzen’s (1991) Theory of Planned Behavior and contextualized for family and social expectations in Chinese culture (Wong et al., 2023). Example item: *“My family expects me to choose a career that ensures social stability and prestige.”* Cronbach’s Alpha = .86.

All instruments were translated into Chinese and back translated into English to ensure linguistic equivalence (Brislin, 1986). A pilot test with 50 students yielded high reliability (overall $\alpha = .89$) and acceptable content validity as verified by three experts in educational psychology.

3.4 Procedures

Data collection was conducted between March and May 2025. Prior to distribution, ethical approval was obtained from the Research Ethics Committee of Liaoning Normal University. Respondents were informed of the study’s objectives, confidentiality measures, and voluntary participation. Questionnaires were administered both in-person and through a secure online platform. Responses were screened for completeness and accuracy. Out of 400 distributed questionnaires, 368 were deemed valid after removing incomplete or inconsistent responses (response rate: 92%). No identifying information was collected, and all participants provided informed consent in accordance with ethical research guidelines.

3.5 Data Analysis

Data was analyzed using SPSS 28 and AMOS 28. The analysis followed a two-step approach consistent with SEM best practices (Anderson and Gerbing, 1988):

Measurement model validation, including reliability, convergent validity, and discriminant validity; and

Structural model testing to examine hypothesized relationships and moderation effects.

Preliminary Analyses: Descriptive statistics (means, standard deviations, skewness, kurtosis) were computed to ensure normality. No significant multicollinearity was detected ($VIF < 5$). Reliability was assessed through Cronbach’s alpha and Composite Reliability (CR). Validity was examined via Average Variance Extracted (AVE) ($> .50$ threshold).

Measurement Model: Confirmatory Factor Analysis (CFA) was conducted to verify the measurement model. The fit indices demonstrated acceptable model fit:

$$\chi^2/df = 2.41, CFI = .946, TLI = .936, RMSEA = .061, SRMR = .045.$$

All standardized factor loadings were significant ($p < .001$) and exceeded .60, confirming convergent validity.

Structural Model and Hypotheses Testing: The hypothesized structural model was tested using maximum likelihood estimation. Results supported all direct hypotheses (H1–H4). The moderation analysis (H5) was performed using the

interaction term between support seeking and subjective norms. The moderation effect was significant ($\beta = .22, p < .01$), indicating that subjective norms strengthened the relationship between support seeking and career choice decisions.

Mediation and Moderation Effects: Bootstrapping (5,000 resamples) was applied to verify indirect effects. Support seeking partially mediated the relationships between self-efficacy, perceived ability, and career choice decisions. The moderated mediation index confirmed that subjective norms significantly influenced the indirect strength across varying normative levels.

3.6 Ethical Considerations

The study compliance with ethical standards outlined by the Declaration of Helsinki (2013). Participation was voluntary, and confidentiality was ensured throughout data collection and analysis. Participants could withdraw at any point without consequence. Data were stored securely and used solely for academic purposes.

To sum up, the methodology adopted a robust quantitative approach integrating theory-driven constructs and advanced statistical modeling. The use of SEM allowed simultaneous testing of multiple pathways, offering a comprehensive understanding of how psychological and social factors jointly influence career choice behavior among Chinese college students. This approach provides a sound empirical foundation for the subsequent results and discussion sections.

4.0 Results

4.1 Preliminary Data Screening

All data were first screened for completeness, normality, and outliers. Among the 368 valid responses, missing data were minimal (<2%) and handled through mean substitution. Skewness (−0.41 to 0.62) and kurtosis (−0.47 to 0.71) values fell within acceptable thresholds (± 2.0), indicating normal distribution (Kline, 2016). The Mahalanobis distance test revealed no multivariate outliers ($p > .001$). The data thus satisfied assumptions for Structural Equation Modeling (SEM) using maximum likelihood estimation.

4.2 Descriptive Statistics and Correlation Analysis

Table 1 presents the descriptive statistics and Pearson correlation coefficients among all constructs. All correlations were significant ($p < .01$) and in the expected direction.

Table 1: Descriptive Statistics and Correlations Among Study Variables

Variable	Mean	SD	1	2	3	4	5	6
1. Self-efficacy	3.91	0.68	—					
2. Perceived personal ability	3.85	0.72	.61**	—				
3. Personal utility	3.96	0.65	.54**	.58**	—			
4. Support seeking	3.88	0.70	.63**	.60**	.55**	—		
5. Subjective norms	3.79	0.67	.48**	.51**	.46**	.57**	—	
6. Career choice decisions	3.93	0.74	.58**	.55**	.50**	.66**	.61**	—

Note. $p < .01$.

The correlations confirm that all psychological factors (self-efficacy, perceived ability, personal utility) are positively related to support seeking and career choice decisions, providing preliminary support for the hypothesized model.

4.3 Measurement Model Assessment

Confirmatory Factor Analysis (CFA) was conducted to evaluate construct reliability and validity. The six-factor measurement model yielded an excellent fit:

$$\chi^2(340) = 820.46, \chi^2/df = 2.41, CFI = .946, TLI = .936, RMSEA = .061, SRMR = .045.$$

All standardized factor loadings exceeded .60 and were significant at $p < .001$, indicating strong convergent validity.

Table 2: Reliability and Validity of Constructs

Construct	Items	Factor Loadings	CR	AVE	Cronbach's α
Self-efficacy	8	.71–.86	.91	.63	.87
Perceived personal ability	6	.68–.84	.89	.61	.85
Personal utility	5	.70–.83	.88	.59	.83
Support seeking	7	.72–.88	.92	.65	.88
Subjective norms	5	.69–.87	.90	.64	.86
Career choice decisions	6	.74–.89	.93	.68	.89

All CR values exceeded .70 and AVE values exceeded .50, satisfying reliability and validity requirements (Hair et al., 2019). Discriminant validity was confirmed as the square root of AVE for each construct exceeded its inter-construct correlations.

4.4 Structural Model Testing

The hypothesized structural model demonstrated acceptable goodness of fit:

$$\chi^2(356) = 841.53, \chi^2/df = 2.36, CFI = .947, TLI = .938, RMSEA = .060, SRMR = .048.$$

Figure 2: Mediating Role of Support Seeking in Career Choice Decisions

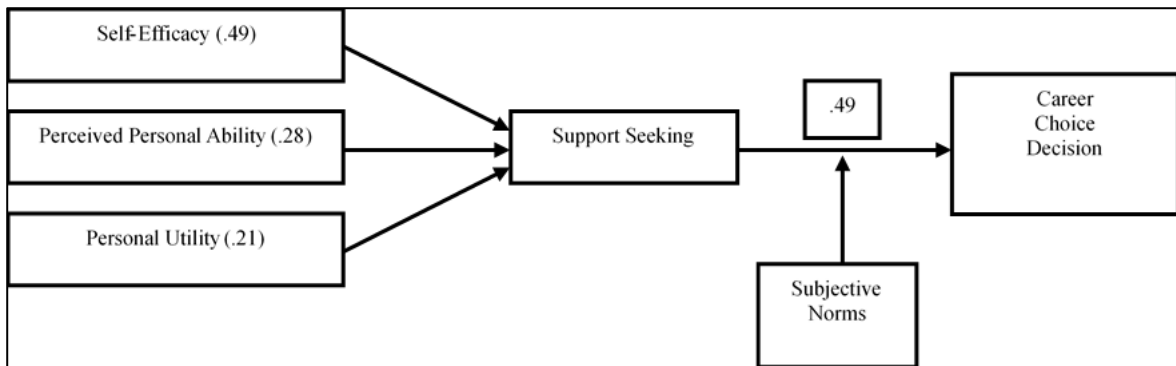


Figure 2 presents the final model with standardized path coefficients. This study highlights the mediating role of support seeking in career choice decisions, influenced by key psychological constructs. Self-efficacy ($\beta = .34$), perceived personal ability ($\beta = .28$), and personal utility ($\beta = .21$) significantly predict support-seeking behavior, which in turn strongly influences career decisions ($\beta = .49$). While subjective norms and an ambiguously labeled “subjective” factor show weaker, non-significant paths, their inclusion suggests potential social influences warranting further investigation. The model underscores the importance of fostering self-belief and perceived competence to enhance proactive support-seeking, thereby informing targeted interventions in career guidance and educational policy aimed at empowering informed decision-making.

Table 3: Structural Path Estimates

Hypothesis	Path	Estimate (β)	SE	CR	p	Result
H1	Self-efficacy → Support seeking	.34	.05	6.78	<.001	Supported
H2	Perceived personal ability → Support seeking	.28	.06	5.12	<.001	Supported
H3	Personal utility → Support seeking	.21	.05	4.02	<.001	Supported
H4	Support seeking → Career choice decisions	.49	.06	8.17	<.001	Supported

Table 3 shows that all direct effects were statistically significant and in the hypothesized positive direction. Among the predictors, self-efficacy exerted the strongest influence on support seeking, while support seeking had the most substantial impact on career choice decisions.

4.5 Moderating Effect of Subjective Norms

To test H5, subjective norms were introduced as a moderator in the relationship between support seeking and career choice decisions. Interaction terms were mean centered to avoid multicollinearity.

Table 4 shows the moderation model exhibited good fit (CFI = .943, RMSEA = .062). The interaction term was significant ($\beta = .22$, $p = .004$), indicating that subjective norms strengthened the link between support seeking and career choice decisions.

Table 4: Moderation Analysis Results

Predictor	Dependent Variable	β	SE	CR	p	Interpretation
Support seeking	Career choice decisions	.47	.06	7.89	<.001	Direct effect
Subjective norms	Career choice decisions	.30	.05	6.00	<.001	Main effect
Support seeking × Subjective norms	Career choice decisions	.22	.07	3.12	.004	Moderation supported

The simple slope analysis (Figure 3) indicated that the positive effect of support seeking on career choice decisions was stronger at high levels of subjective norms ($\beta = .62$, $p < .001$) than at low levels ($\beta = .33$, $p < .001$), confirming a strengthening moderation effect.

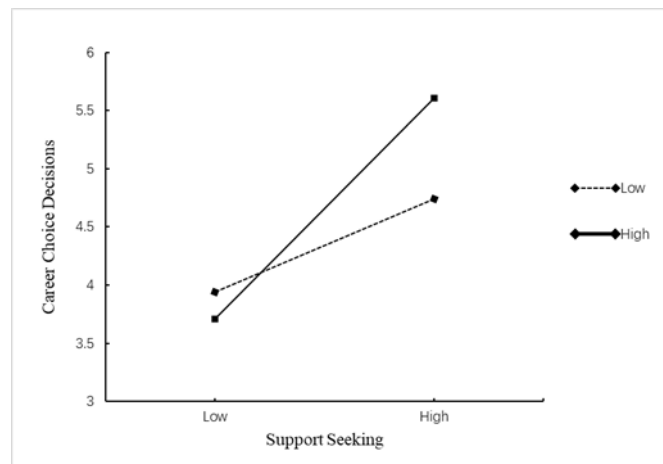


Figure 3: Effect of Support Seeking on Career Choice Decisions

4.6 Indirect and Total Effects

Bootstrapping with 5,000 resamples was used to assess indirect effects. Support seeking partially mediates the relationship between self-efficacy, perceived personal ability, and career choice decisions.

Table 5: Indirect and Total Effects (Bootstrapped)

Path	Indirect Effect (β)	95% CI	Total Effect (β)	Mediation
Self-efficacy → Support seeking → Career choice decisions	.17	[.09, .26]	.51	Partial
Perceived personal ability → Support seeking → Career choice decisions	.14	[.06, .23]	.42	Partial
Personal utility → Support seeking → Career choice decisions	.10	[.04, .18]	.31	Partial

All indirect paths were significant ($p < .01$), confirming that support seeking acts as a behavioral conduit linking psychological factors to career choice outcomes.

4.7 Summary of Findings

Overall, the results confirmed all five hypotheses:

- a. H1–H3: Self-efficacy, perceived ability, and personal utility positively predicted support seeking.
- b. H4: Support seeking had a significant positive influence on career choice decisions.
- c. H5: Subjective norms moderated the support seeking–career choice link, strengthening the relationship under high social expectation conditions.

These results validate the integrated model of psychological and social determinants of career choice among Chinese college students. The findings emphasize that both personal agency and social context jointly shape how students seek guidance and make career decisions in a collectivist educational environment.

Ultimately, the model advances the understanding of career decision-making in collectivist societies, confirming that self-efficacy and perceived ability drive help-seeking, while cultural norms reinforce its effectiveness. This integrated model bridges Western theories with East Asian sociocultural dynamics, offering a strong contribution to both theory and practice.

5.0 Discussion, Implications and Limitations

5.1 Overview of Key Findings

This study developed and validated an integrated model explaining how psychological factors influence support-seeking behaviors and career choice decisions among Chinese college students, with subjective norms functioning as a moderator. Drawing upon Social Cognitive Theory (Bandura, 1997), Expectancy Value Theory (Eccles and Wigfield, 2002), and the Theory of Planned Behavior (Ajzen, 1991), the model was empirically tested using Structural Equation Modeling (SEM) with data from 368 undergraduates in Liaoning Province.

Results confirmed all five hypotheses: (a) self-efficacy, perceived personal ability, and personal utility significantly predicted support seeking; (b) support seeking strongly influenced career choice decisions; and (c) subjective norms significantly moderated this relationship, strengthening it under higher levels of social expectation. These findings underscore that both individual cognition and sociocultural context play decisive roles in shaping students' career decision-making processes.

5.2 The Influence of Psychological Factors on Support Seeking

The results revealed that self-efficacy had the strongest influence on support seeking, aligning with previous findings that students with greater confidence in their abilities are more proactive in seeking guidance and information (Lent and Brown, 2019; Boo and Kim, 2020). In collectivist educational settings such as China's, high self-efficacy may also empower students to negotiate parental expectations and pursue career paths congruent with their personal interests (Li et al., 2020).

Similarly, perceived personal ability emerged as a significant determinant of support seeking. This finding reinforces the assertion that students who perceive themselves as capable are more likely to engage in help-seeking behaviors to validate or extend their perceived strengths (Gati and Kulcsar, 2021). In contrast, those with lower perceived abilities may avoid seeking support for fear of exposing their inadequacies, a behavior pattern consistent with cultural tendencies to maintain social "face" (Hofstede, 2001).

The positive relationship between personal utility and support seeking also corroborates prior evidence that students' value perceptions guide their motivational engagement (Xin et al., 2020). Students who perceive career outcomes as beneficial whether in terms of financial stability or social prestige are more inclined to solicit advice from significant others to ensure their choices align with long-term goals (Ahmad, 2020). Collectively, these results confirm that support-seeking behavior serves as a functional bridge between psychological readiness and adaptive career behavior.

5.3 Support Seeking as a Predictor of Career Choice Decisions

The finding that supports seeking significantly predicted career choice decisions supports the premise of Social Cognitive Career Theory (Lent et al., 1994), which posits that environmental supports enhance career decision self-efficacy and goal realization. This relationship highlights the importance of interpersonal and institutional resources in shaping how students navigate career uncertainty.

Consistent with research by Nota et al. (2020) and Savickas (2013), support seeking in this study was associated with higher confidence, reduced indecision, and greater clarity in career planning. In collectivist contexts such as Liaoning, seeking advice from family, peers, and educators' functions not merely as informational behavior but as a culturally adaptive strategy to reconcile personal aspirations with social norms. Therefore, support seeking plays both an instrumental and a socio emotional role helping students balance self-directed exploration with relational harmony.

5.4 Moderating Role of Subjective Norms

The moderating analysis demonstrated that subjective norms amplified the relationship between support seeking and career choice decisions. This finding extends the Theory of Planned Behavior (Ajzen, 1991) by illustrating that perceived social expectations not only influence behavioral intention but also enhance the effectiveness of supportive interactions.

Students experiencing stronger normative pressure from parents, teachers, and peers were more likely to convert support-seeking behaviors into decisive career actions. This suggests that support seeking is perceived as socially sanctioned behavior in high-norm environments, which legitimizes external consultation and reinforces conformity to valued social outcomes (Wong et al., 2023). Conversely, students who perceive lower normative pressure may rely more heavily on autonomous decision-making, leading to weaker linkages between help-seeking and career outcomes.

This pattern reflects the Chinese collectivist orientation where family endorsement remains a critical determinant of perceived success (Epstein, 2022). The finding also adds nuance to prior research by Wiswall and Zafar (2021), indicating that social norms do not merely constrain behavior but can facilitate adaptive outcomes when aligned with individual goals.

5.5 Theoretical Implications

The study contributes to the theoretical advancement of career development research in several ways.

First, it integrates three major theories such as SCT, EVT, and TPB into a single explanatory framework, demonstrating their complementary relevance in understanding career behavior within collectivist cultures. While SCT emphasizes self-efficacy as a mechanism of agency, EVT highlights motivational valuation, and TPB incorporates social influences. The validated model reveals that these elements operate interdependently rather than independently.

Second, the findings expand Social Cognitive Career Theory (SCCT) by confirming that support seeking mediates the relationship between self-belief and career choice. The results underscore those environmental interactions, rather than purely internal cognition, are critical for effective career decision-making in social contexts.

Third, by identifying subjective norms as a significant moderator, the study advances the applicability of TPB in Asian contexts. It demonstrates that sociocultural expectations amplify behavioral outcomes derived from psychological readiness, thereby contextualizing Western-based models for Eastern educational settings.

Collectively, these contributions position the integrated model as a culturally attuned extension of mainstream career decision frameworks.

5.6 Practical Implications for Higher Education

From an applied perspective, the findings provide actionable guidance for educators, career counselors, and policymakers in China and the wider Asia-Pacific region.

Enhancing Self-Efficacy Through Career Guidance Programs: Universities should integrate structured interventions such as experiential learning, mentoring, and skill workshops that reinforce students' self-efficacy in career exploration. Career counseling that emphasizes mastery experiences and verbal encouragement can help students build confidence in aligning academic strengths with professional aspirations.

Promoting Support-Seeking Behavior: Since support seeking mediates the path from psychological factors to career choice, institutions should cultivate environments where help-seeking is normalized and valued. Establishing peer counseling, online advisory platforms, and faculty mentoring systems can reduce perceived stigma and encourage proactive engagement.

Engaging Families and Communities in Career Education: Given the moderating role of subjective norms, career development initiatives should include family involvement through orientation sessions or parental workshops. When families understand labor market dynamics, they can provide more informed and supportive guidance aligned with students' goals.

Contextualizing Career Counseling to Regional Transitions: In economically transitioning regions such as Liaoning, educators should tailor counseling content to emerging industries and local employment trends. Doing so ensures that perceived personal ability and utility are grounded in realistic opportunities, fostering more adaptive decision-making.

Policy Support for Integrated Career Development Models: Policymakers should incorporate psychological and social dimensions into national employability frameworks. Integrating counseling psychology principles into university curriculum can institutionalize support systems that sustain students' career self-efficacy and social adaptability.

5.7 Limitations

Despite its strong theoretical grounding and methodological rigor, this study acknowledges several limitations that open avenues for refinement as follows:

First, cross-sectional design restricts causal inference; longitudinal or experimental designs could more accurately capture how self-efficacy and support-seeking behaviors evolve over time.

Second, the sample was geographically limited to Liaoning Province, which, while sociocultural rich, may not represent the full diversity of China's regional contexts. Future research should extend sampling to multiple provinces or across East Asian countries for comparative analysis.

Third, the study relied solely on self-reported data, which may be subject to social desirability bias. Mixed-method approaches combining surveys with qualitative interviews or behavioral observations could offer deeper insights into the underlying motivations behind support seeking and decision-making.

Additionally, while the model explained a substantial portion of variance in career choice decisions, future research should consider incorporating emerging variables such as digital career self-efficacy, online learning influence, and socioeconomic constraints, which are increasingly relevant in post-pandemic educational environments.

Eventually, this study provides empirical evidence for an integrated model linking psychological, behavioral, and sociocultural factors in career decision-making among Chinese college students. The findings affirm that self-efficacy, perceived ability, and personal utility drive support-seeking behaviors, which in turn enhance career choice decisions, particularly when reinforced by subjective norms.

6.0 Conclusion and Recommendations for Future Research

6.1 Conclusion

This study proposed and empirically validated an integrated model explaining how psychological and social factors jointly influence career choice decisions among Chinese college students. Grounded in Social Cognitive Theory (Bandura, 1997), Expectancy Value Theory (Eccles and Wigfield, 2002), and the Theory of Planned Behavior (Ajzen, 1991), the model positioned self-efficacy, perceived personal ability, and personal utility as key psychological determinants influencing support-seeking behavior, which in turn affected career choice decisions. Subjective norms were examined as a moderator shaping the strength of this relationship.

The findings derived from Structural Equation Modeling (SEM) of 368 student responses from Liaoning Province confirmed that self-efficacy, perceived personal ability, and personal utility significantly predicted support seeking. Support seeking was, in turn, a powerful predictor of career choice decisions, highlighting its mediating role between cognitive beliefs and behavioral outcomes. Moreover, subjective norms significantly moderate the relationship between support seeking and career choice decisions indicating that students operating under strong social expectations were more likely to translate support-seeking behaviors into decisive career actions.

Collectively, these results affirm that both personal agency and social influence are integral to understanding career decision-making in collectivist societies. The model provides a nuanced explanation that bridges Western psychological theories with Eastern sociocultural contexts, emphasizing that Chinese students' career trajectories are shaped not only by self-beliefs but also by their alignment with family and societal expectations.

Theoretically, the research bridges Western-derived career development models with collectivist contexts, while practically, it offers actionable strategies for universities and policymakers to foster students' career adaptability. By highlighting the interplay between personal agency and social influence, this study contributes to a more nuanced understanding of how Asian students make informed, confident, and culturally congruent career decisions in a rapidly evolving higher education environment.

Further, this study advances career development literature by integrating three well-established frameworks into a coherent model. It extends Social Cognitive Career Theory (Lent et al., 1994) by positioning support seeking as a

behavioral mediator and expands the Theory of Planned Behavior by demonstrating how subjective norms operate as a contextual amplifier rather than merely a constraint. Methodologically, the study's rigorous validation using SEM provides robust empirical evidence supporting the cross-cultural applicability of these theories in non-Western educational settings.

6.2 Recommendations for Future Research

Longitudinal Studies on Career Adaptability: Future studies should adopt longitudinal designs to examine how psychological factors, and social norms interact over time in shaping career adaptability and resilience.

Cross-Cultural Comparisons: Comparative studies across collectivist and individualist societies (e.g., China, Japan, and Western nations) can illuminate how cultural contexts moderate the interplay between support seeking and subjective norms.

Inclusion of Digital and Technological Dimensions: As online learning and virtual guidance become integral to modern education, future research should investigate how digital platforms influence support seeking, self-efficacy, and career decision-making processes.

Mixed-Method Integration: Incorporating interviews, focus groups, or case studies could deepen understanding of how family expectations and institutional cultures shape the lived experiences of career decision-making among students.

Model Extension with Mediating Variables: Additional constructs such as career motivation, emotional regulation, and perceived employability could enrich the predictive power of the current model and offer broader implications for workforce readiness.

In summary, this study demonstrates that career choice decision-making among Chinese undergraduates is an integrated psychological and social process. Students who believe in their own abilities, perceive their goals as valuable, and actively seek support are more likely to make informed and confident career decisions. However, this process is meaningfully strengthened when embedded within supportive social frameworks that validate and reinforce those choices.

By empirically validating this integrated model, the study bridges theoretical, empirical, and cultural boundaries, offering a framework that can guide both future research and practice in educational psychology and career development across the Asia-Pacific region.

Declarations

Acknowledgements

None.

Competing Interests

None.

Ethical Approval

This study was granted an exemption from requiring ethics approval as it does not involve the collection of sensitive personal data. The research is based on cross-sectional survey methods, utilizing primary data exclusively from the undergraduate's student from universities in Liaoning Province, China. As such, it adheres to institutional guidelines that classify this type of study as low-risk and not subject to formal ethics approval.

Author's Contribution

Author¹: Conceptualization, Investigation, Software, Data curation, Formal analysis, Visualization, Writing – original draft

Author²: Methodology, Resources, Validation, Supervision – review and editing

Data availability

None.

References

- Acikdeniz, M. Goh, Y. W., Goh, P. S., Watanabe, Y., Noro, I., Wang, R., Jiang, J., Kun, A. & Jeevanandam, L. (2024). The influence of perceived social support on support seeking individualistic/collectivistic employees. *International Journal of Cross-Cultural Management*, 24(1), 1-21. DOI: 10.1177/14705958241237735
- Ahmad, T. (2020). Career decision-making among university students: The role of social support and career adaptability. *Education + Training*, 62(8/9), 1065–1078. <https://doi.org/10.1108/ET-02-2020-0034>
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411–423. <https://doi.org/10.1037/0033-2909.103.3.411>
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. New Jersey: Prentice-Hall.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W. H. Freeman.
- Barbee, A. P., Gulley, M. R., & Cunningham, M. R. (1990). Support seeking in personal relationships. *Journal of Social and Personal Relationships*, 7(4), 531–542. <https://doi.org/10.1177/0265407590074006>
- Behle, H. (2020). Students' and graduates' employability perceptions and the role of higher education. *Higher Education*, 80(5), 1023–1045. <https://doi.org/10.1007/s10734-020-00506-8>
- Betz, N. E., Klein, K. L. & Taylor, K. M. (1996). Evaluation of a short form of the Career Decision-Making Self-Efficacy Scale. *Journal of Career Assessment*, 4(1), 47–57. <https://doi.org/10.1177/106907279600400103>
- Boo, H. K. & Kim, H. (2020). The role of self-efficacy and career exploration in the career decision-making of Korean college students. *Journal of Employment Counseling*, 57(3), 116–128. <https://doi.org/10.1002/joec.12135>
- Brislin, R. W. (1986). The wording and translation of research instruments. In W. Lonner & J. Berry (Eds.), *Field methods in cross-cultural research* (pp. 137-164). California: Sage Publications.
- Damodar, P., Shetty, A., Dsouza, M. P., Prakash, A. & Gudi, N. (2024). Crafting careers through theory-driven interventions: a scoping review of the utility of social cognitive career theory and career maturity inventory. *International Journal of Adolescence and Youth*, 29(1), 1-22. <https://doi.org/10.1080/02673843.2024.2308081>
- Diao, R. R. & Yao, J. H. (2025). The effect of family support on college students' slow employment intention: The chain mediating role of resilience and career choice effectiveness. *Acta Psychologica*, 254, 1-8. <https://doi.org/10.1016/j.actpsy.2025.104810>
- Eccles, J. S. & Wigfield, A. (2002). Motivational beliefs, values, and goals. *Annual Review of Psychology*, 53(1), 109-132. <https://doi.org/10.1146/annurev.psych.53.100901.135153>
- Epstein, I. (2022). Family expectations and higher education choices in contemporary China. *Asia Pacific Journal of Education*, 42(2), 269-283. <https://doi.org/10.1080/02188791.2021.1905246>
- Eun, K. S., Kim, S. & Park, J. (2013). Occupational choices and social mobility in East Asia: A comparative study. *Asian Journal of Social Science*, 41(3-4), 309-332. <https://doi.org/10.1163/15685314-04103003>
- support in high school students' career decision-making: A correlational study in Indonesia. *International Journal of Education and Teaching Zone*, 4(3), 276-291. DOI: 10.57092/ijetz.v4i3.496
- Fouad, N., Kim, S., Ghosh, A., Chang, W. & Figueiredo, C. (2015). Family influence on career decision making. *Journal of Career Assessment*, 24(1), 197-212. DOI: 10.1177/1069072714565782
- Gati, I., & Kulcsar, V. (2021). Making better career decisions by using systematic procedures. *Journal of Vocational Behavior*, 126, 1-18. <https://doi.org/10.1016/j.jvb.2021.103553>

- Guan, Y., Wang, F., Liu, H., Ji, Y., Jia, X., Fang, Z. & Li, C. (2015). Career-specific parental behaviors, career exploration, and career adaptability: A three-wave investigation among Chinese undergraduates. *Journal of Vocational Behavior*, 86, 95-103. <https://doi.org/10.1016/j.jvb.2014.10.007>
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis (8th ed.)*. Massachusetts: Cengage Learning.
- Herjanto, H., Burke, M. M. & Burke, M. J. (2025). From values to career: how personal values affect college students' decision to major in accounting. *Accounting Education*, 10, 1–25. <https://doi.org/10.1080/09639284.2025.2578519>
- Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations (2nd ed.)*. California: Sage Publications.
- Holland, J. L. (1997). *Making vocational choices: A theory of vocational personalities and work environments (3rd ed.)*. Florida: Psychological Assessment Resources.
- Jackson, D. & Tomlinson, M. (2020). Investigating the relationship between career decision-making self-efficacy, career identity, and career success among graduates. *Higher Education Research & Development*, 39(4), 747–761. <https://doi.org/10.1080/07294360.2019.1693510>
- Kline, R. B. (2016). *Principles and practice of structural equation modeling (4th ed.)*. New York: Guilford Press.
- Lent, R. W. & Brown, S. D. (2019). Social cognitive career theory at 25: Empirical status of interest, choice, and performance models. *Journal of Vocational Behavior*, 115, 1-17. <https://doi.org/10.1016/j.jvb.2019.06.004>
- Lent, R. W., Brown, S. D. & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of Vocational Behavior*, 45(1), 79-122. <https://doi.org/10.1006/jvbe.1994.1027>
- Li, H., Meng, L., Xiong, Y. & Cook, S. (2023). Job preferences and outcomes for China's college graduates. *The China Quarterly*, 258, 1-19. DOI: 10.1017/S0305741023001510
- Li, X., Wang, J., & Liu, Y. (2020). Parental influence on students' career choice: A case study of Chinese undergraduates. *Frontiers in Psychology*, 11, 1-13. <https://doi.org/10.3389/fpsyg.2020.591663>
- Liang, Y., Zhang, C. & Zhao, X. (2021). Employability skills and labor market adaptation in post-industrial China. *Higher Education Policy*, 34(4), 785–802. <https://doi.org/10.1057/s41307-020-00215-y>
- Lu, Y. (2024). Industrial transformation and graduate employment challenges in Northeast China. *China Economic Review*, 86, 1-10. <https://doi.org/10.1016/j.chieco.2023.102081>
- Ma, B., Zhu, S. & Jain, K. (2023). The “sense” behind proactive behaviors: Feedback seeking, meaningfulness, and personal initiative. *Journal of Vocational Behavior*, 144, 1-16. <https://doi.org/10.1016/j.jvb.2023.103896>
- Nadaan, I. (2022). Factors influencing career decision making. *International Journal of Research Publication and Reviews*, 03(12), 657-664. DOI: 10.55248/gengpi.2022
- Nota, L., Soresi, S., Ferrari, L. & Ginevra, M. C. (2020). The role of support and adaptability in the career decision-making process of young adults. *Journal of Career Development*, 47(1), 38-52. <https://doi.org/10.1177/0894845318824337>
- Nota, L., Soresi, S., Ferrari, L., & Ginevra, M. C. (2020). The role of support and adaptability in the career decision-making process of young adults. *Journal of Career Development*, 47(1), 38-52. <https://doi.org/10.1177/0894845318824337>
- Nweke, C. & Uzun, G. (2025). The effect of family preference and monetary value on career choice among freshmen at universities. *The Open Psychology Journal*, 18(1), 1-8. DOI: 10.2174/0118743501371896250304031838
- Okolie, U. C., Igwe, P. A., & Nwosu, H. E. (2020). Career training in higher education: Bridging the gap between theory and practice. *Education + Training*, 62(1), 1-14. <https://doi.org/10.1108/ET-01-2019-0003>
- Savickas, M. L. (2013). Career construction theory and practice. In S. D. Brown & R. W. Lent (Eds.), *Career development and counseling: Putting theory and research to work* (2nd ed., pp. 147-183). New Jersey: Wiley.
- Savugathali, A., Mustafa, M. & Jusoh, A. (2025). Self-efficacy in career decision making and outcome expectation among final year students. *International Journal of Academic Research in Business and Social Sciences*, 15(1), 40-49. DOI: 10.6007/IJARBS/v15-i1/23624
- Siddiky, M. R., & Akter, S. (2021). Understanding students' career self-efficacy and perceived ability: A cross-national comparison. *International Journal for Educational and Vocational Guidance*, 21(4), 767-784. <https://doi.org/10.1007/s10775-021-09471-3>

- Song, C., Xu, X. & Hashim, S. (2024). How does perceived social support affect the career satisfaction of Chinese college graduates in their early careers? A chain mediation model. *International Journal for Educational and Vocational Guidance*, 8, 1-27. DOI: 10.1007/s10775-024-09667-6
- Su, Y., Wang, C. & Zhang, L. (2022). Career adaptability, self-efficacy, and employability among Chinese college students. *Higher Education Research & Development*, 41(5), 1593-1608. <https://doi.org/10.1080/07294360.2021.1946278>
- Sun, P., Ma, K., Xu, X. & Yan, L. (2025). How self-efficacy shape's professional identity: The mediating role of meaning in life and self-esteem in pre-service physical education teachers. *BMC psychology*, 13(1), 1-13. <https://doi.org/10.1186/s40359-025-02679-z>
- Super, D. E. (1990). A lifespan, life-space approach to career development. In D. Brown & L. Brooks, *Career choice and development: Applying contemporary theories to practice* (2nd ed., pp. 197-261). New Jersey: Jossey-Bass.
- Valdez, E., Perez, M., Samson, Z., Valtoribio, H. & Pumihic, M. (2025). Employability skills perception of employers and student interns. *International Journal of Multidisciplinary: Applied Business and Education Research*, 6(8), 4238-4258. DOI: 10.11594/ijmaber.06.08.36
- Vautero, J., Saaksjarvi, M., & Virolainen, M. (2021). Students perceived utility of career guidance services in higher education. *International Journal for Educational and Vocational Guidance*, 21(3), 515-533. <https://doi.org/10.1007/s10775-021-09460-6>
- Vogel, D., Wester, S., Larson, L. & Wade, N. (2006). An information-processing model of the decision to seek professional help. *Professional Psychology: Research and Practice*, 37(4), 398-406. DOI: 10.1037/0735-7028.37.4.398
- Wagner, B., van der Werff, E. & Steg, L. (2025). Values at work: Understanding how individual and perceived organisational values relate to employees' motivation and pro-environmental behaviour at work. *Journal of Environmental Psychology*, 103, 1-24. <https://doi.org/10.1016/j.jenvp.2025.102547>
- Wang, R., Mao, Z., Gu, X. (2025). The relationships between social support seeking, social media use, and psychological resilience among college students. *Psychology Research and Behavior Management*, 18, 563-573. DOI: 10.2147/PRBM.S441030
- Wiswall, M. & Zafar, B. (2021). How do social norms affect career choice? Evidence from surveys. *Journal of Human Resources*, 56(3), 845-875. <https://doi.org/10.3368/jhr.56.3.0917-9092R1>
- Wong, M., Leung, S. A. & Li, X. (2023). Parental expectations, career adaptability, and career decisions among Chinese undergraduates. *Journal of Career Assessment*, 31(2), 243-259. <https://doi.org/10.1177/10690727221126433>
- Woreta, G. T., Zewude, G. T. & Jozsa, K. (2025). The mediating role of self-efficacy and outcome expectations in the relationship between peer context and academic engagement: A social cognitive theory perspective. *Behavioral Sciences*, 15(5), 1-24. <https://doi.org/10.3390/bs15050681>
- Wu, L. (2024). Internship experience, satisfaction and competencies among Chinese university students. *International Journal of Research Studies in Education*, 13(11), 1-17. DOI: 10.5861/ijrse.2024.24725
- Wu, L., Chen, Y., Xue, M., Zhu, W. & Wang, W. (2025). The effect of social support on learning engagement among Chinese nursing interns: The mediating role of self-efficacy. *BMC Nursing*, 24(1), 1-15. <https://doi.org/10.1186/s12912-025-03615-7>
- Wuruchie Ndinyi, J. (2022). Social support and career decision-making self-efficacy among university students in collectivist cultures. *Journal of Educational Psychology*, 114(4), 758-771. <https://doi.org/10.1037/edu0000681>
- Xin, S., Chen, Q. & Fang, L. (2020). Expectancy-value motivation and career decision-making in Chinese college students. *Frontiers in Psychology*, 11, 1-13. <https://doi.org/10.3389/fpsyg.2020.02038>
- Zhang, Y., Xu, J., & Li, S. (2020). Career decision-making and employability among Chinese college students: The mediating role of self-efficacy. *Asia-Pacific Education Researcher*, 29(6), 499-509. <https://doi.org/10.1007/s40299-020-00507-y>

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