

Psychological Predictors of Career Adaptability in University Students: Refining the Adaptive Readiness Model Through A Systematic Review

Earlene Tania Rahma ✉ Olievia Prabandini Mulyana²

¹Universitas Negeri Surabaya, Psikologi, Indonesia

²Universitas Negeri Surabaya, Psikologi, Indonesia

Abstract

Career adaptability has emerged as a critical competency for university students navigating uncertain academic and professional environments. Based on Career Construction Theory, this study methodically examined recent empirical research (2020–2025) to identify psychological predictors of career adaptability among student populations. A comprehensive search of PubMed and ScienceDirect, conducted in accordance with PRISMA 2020 standards, yielded twelve papers that met the inclusion criteria. The findings identified two broad categories of predictors: dispositional factors that align with the theory of adaptive readiness, such as proactive personality, Core self-evaluation, emotional regulation, and emotional skills; and novel predictors that represent the contextual and developmental realities of students, such as academic engagement, thinking styles, peer support, self-reflection, psychological capital, grit, and basic psychological needs satisfaction. Findings suggest that while Rudolph et al.'s adaptive readiness model provides a useful foundation, it requires refinement to integrate motivational, reflective, and contextual processes specific to higher education. According to the study's findings, career adaptability is best seen as a multifaceted concept influenced by social settings, coping mechanisms, and personal characteristics. In order to prepare students for the uncertainties of the job market of the twenty-first century, institutions must provide interventions that enhance both personal resources and relational support.

Keywords: *Career Adaptability; Adaptive Readiness; Students; Psychological Predictors.*

Copyright (c) 2025 Earlene Tania Rahma

✉ Corresponding author :

Email Address : olieviaprabandini@unesa.ac.id

INTRODUCTION

In the era of unprecedented global changes driven by technological disruption, artificial intelligence, globalization, and the aftermath of the COVID-19 pandemic, career adaptability has become an increasingly crucial psychological resource that determines whether individuals, particularly university students, can navigate uncertainty and transitions successfully. The four dimensions of concern, control, curiosity, and confidence operationalize career adaptability, a key concept in career construction theory. These dimensions work together to help people anticipate and prepare for future challenges, take ownership of their decisions, consider alternative career paths, and maintain self-efficacy in the face of setbacks. (Savickas, 2013). This multidimensional resource plays a vital role during university years, as students confront the complex transition from higher education to the workforce, a stage characterized by ambiguity, rapidly shifting employer demands,

and heightened competition. Such challenges are also compounded by the fact that students frequently have a limited understanding of effective career development strategies (Mulyana et al., 2025), making the ability to adapt even more essential. Recent empirical research has emphasized the importance of career adaptability not only as a buffer against negative outcomes but also as a proactive driver of life satisfaction, psychological well-being, and academic engagement. For instance, Oliveira and Marques (2024) demonstrated that adaptability, in combination with academic engagement, significantly contributes to students' overall life satisfaction, suggesting that adaptable students are better equipped to translate academic effort into broader well-being outcomes. The significance of adaptability has been further underscored during global crises: Lin et al. (2024), in a study with more than one thousand Chinese students during COVID-19, found that *meaning in life* directly and indirectly predicted career adaptability through the mediators of positive coping styles and hope, highlighting how existential resources and adaptive coping strategies become essential pathways for adaptability in times of crisis. While foundational models such as Rudolph et al.'s (2017) *adaptive readiness framework* have identified dispositional predictors including cognitive ability, the Big Five traits, self-esteem, proactive personality, future orientation, and dispositional positivity, questions remain about whether these predictors, which were primarily validated in working adult populations, apply directly to university students or whether additional, context-specific psychological variables need to be considered.

Emerging literature in the past five years suggests that the developmental tasks and psychosocial contexts of students introduce novel predictors beyond the original adaptive readiness model. Xu, Lu, Fu, Zhu, and Zhao (2024) revealed that adaptability among undergraduates is predicted by basic psychological needs satisfaction, autonomy, competence, and relatedness, with grit and career decision-making self-efficacy acting as chain mediators. This broadens the model by incorporating motivational constructs in addition to dispositional traits. Grit, a gauge of tenacity and enthusiasm for long-term objectives, has frequently been found to be a highly important predictor: Grit directly affects life satisfaction through adaptation, according to Çarkıt et al. (2024), with this effect being stronger among younger students, suggesting developmental variations in the adaptability pathway. Similarly, Wang et al. (2024) showed that proactive personality indirectly predicts adaptability in college students through college experience, highlighting that dispositional traits are filtered and shaped by contextual factors such as the presence of academic engagement, institutional support, and interactions with peers. This finding underscores that the student context introduces mediators and moderators not covered in the initial adaptive readiness framework, suggesting a more dynamic interaction between personality, motivation, and environment.

Adding further nuance, intervention-based research has shown that adaptability can be actively cultivated. For example, research conducted by Kim and Lee (2022) implemented a 13-week online career adaptability enhancement program for Korean students, which successfully improved self-awareness, coping strategies, and environmental interaction skills, thus proving that adaptability is not a fixed trait, but rather a flexible competency that can be developed systematically. These findings align with a developmental perspective that emphasizes adaptability as a learnable skill, rather than a static personality trait, thus providing practical implications for higher education institutions in designing career support interventions. Moreover, studies on meaning-making and identity exploration point to the relevance of *self-reflection* and *career calling* as additional predictors of adaptability in student populations, further extending the theoretical scope. This goes with the idea that university students are in a unique position to benefit from psychological resources. Linked to self concept, identity and life purpose since they are in the process of forming themselves and who they are.

Taken together, the literature of the last five years reveals three critical insights. First, the adaptive readiness model remains partially valid, as classic predictors such as proactive

personality, future orientation, and emotional regulation continue to show strong predictive power. Second, novel predictors such as grit, self-reflection, psychological capital, and basic psychological needs satisfaction expand the theoretical model, suggesting the need for refinement when applied to student contexts. Third, contextual factors such as peer support, group attachment, and the quality of institutional experiences that act as moderators, demonstrates the adaptability emerging not solely from within the individual, but through healthy dynamic interaction with social and educational environments. Consequently, the present systematic review aims to rigorously map these predictors by synthesizing recent empirical findings, comparing them to Rudolph et al.'s (2017) theoretical framework, and identifying potential paths for theoretical expansion. The review seeks to systematically identify and categorize these predictors into dispositional, cognitive, motivational, and social contextual domains, to provide a more broad understanding of adaptability development in the higher educational context.

Specifically, it addresses three core questions: (1) Which psychological predictors identified in recent studies align with the established principles of adaptive readiness theory? (2) Which emerging predictors extend or refine the theoretical model through cognitive, motivational, or social-contextual mechanisms? and (3) How do contextual and mediating factors interact with individual characteristics to shape the adaptability process among students? By addressing these questions, the review not only evaluates the ongoing relevance and limitations of adaptive readiness theory but also contributes to theoretical advancement by proposing an integrative and multidimensional model of career adaptability. Ultimately, this synthesis provides insight into how various psychological and contextual resources collectively foster adaptive capacity in students, offering practical implications for career education, counseling, and institutional development in higher education.

LITERATURE REVIEW

Career Adaptability and Career Construction Theory

A key concept in career building theory, which highlights how people handle transitions by balancing their own resources with outside pressures, is career adaptability. According to Savickas (2013), the four characteristics of adaptability—concern, control, curiosity, and confidence allow people to foresee difficulties, manage their professional choices, consider other options, and remain confident. These materials are essential for students to bridge the gap between their academic and professional lives.

Adaptive Readiness Model

Rudolph et al. (2017) introduced the concept of adaptive readiness, highlighting the dispositional traits as foundations of adaptability. Predictors include cognitive ability, Big Five traits, self-esteem, proactive personality, future orientation, and dispositional positivity (like hope and optimism). While comprehensive or complete, this model was developed and created primarily in a working adult environment, raising questions about its relevancy, and credibility to university students who are still in development and in the transitional phase.

Psychological Predictors in Student Populations

Recent studies however show that students exhibit additional predictors beyond the normal framework of adaptive readiness. These all include self-reflection (Ran et al., 2023), grit (Xu et al., 2025), career calling and exploration (Lubis, 2024; Pellegrino et al., 2025), and thinking styles (Fu et al., 2024). Although these indicators may not perfectly fit into the conventional and traditional models, they do capture the unique or distinct academic and developmental settings of university life. Suggesting that students' contextual motivational and dispositional characteristics do indeed influence their adaptation.

METHODOLOGY

Research Design

This study synthesized the empirical results on psychological determinants of vocational adaptability in university students, by using a systematic literature review (SLR) technique. The review is abide by the PRISMA 2020 standards (Page et al., 2021), which guarantee methodological rigor, transparency, and reproducibility in literature-based research.

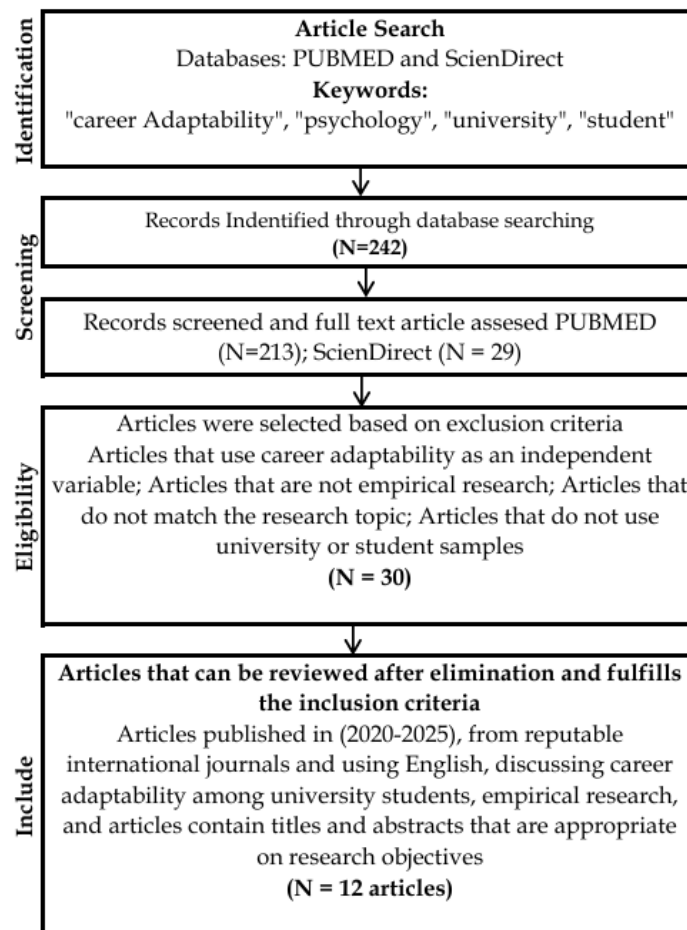


Figure 1. PRISMA graph for journal selection flow

Data Extraction and Analysis

For each included study, data were extracted on the authors year of publication, country, sample size, research design, predictor variables, and theoretical alignment. Predictor variables were first categorized into two main groups, which are: (1) Adaptive readiness predictors. Consistent with Rudolph et al.'s (2017) framework (e.g., proactive personality, core self-evaluation, emotional regulation, emotional skills), and (2) novel predictors that extend the framework (e.g., thinking styles, grit, self-reflection, psychological capital, peer support).

To capture emerging trends precisely, novel predictors were further organized according to their cognitive (e.g., thinking styles, self-reflection), motivational (e.g., grit, psychological capital, basic psychological needs), and social-contextual (e.g., peer support, group attachment, role accumulation) characteristics. This classification enabled systematic comparison across theoretical domains and cultural contexts.

Quality Appraisal

The quality of the included studies was assessed using adapted criteria from the Mixed Methods Appraisal Tool (MMAT; Hong et al., 2018). Criteria included sample adequacy, validity of measures (e.g., validated scales such as the Career Adapt-Abilities Scale), clarity of research design, and transparency of statistical reporting. Most studies employed cross-sectional survey methods, while some incorporated longitudinal or intervention-based designs.

RESULT AND DISCUSSION

Result

Twelve empirical studies that looked at psychological factors of occupational adaptability among college students were found by the systematic literature review. Both predictors that are in line with the adaptive preparedness theory (Rudolph et al., 2017) and predictors that represent new contributions that broaden the theoretical framework are highlighted in the results.

Table 1. Table of journal summary results that have been reviewed

Predictor Variable	Source	Country	Sample Size	Result
Career personality styles	Fu et al. (2024)	China	807	Consistent with Rudolph's adaptive traits; reflects dispositional readiness influencing adaptability.
Thinking styles	Fu et al. (2024)	China	807	Novel factor expanding adaptivity, shows how cognitive preferences shape adaptive readiness.
Proactive personality	Ling et al. (2022)	China	423	Core adaptive trait within Rudolph's model, representing behavioral readiness for career change.
Core self-evaluation	Kurniasih & Salim (2022)	Indonesia	176	Adaptive predictor aligned with self-regulatory and dispositional readiness constructs.
Emotional regulation	Lubis (2024)	Indonesia	420	Adaptive variable linked to emotional control as part of adaptive readiness.
Self-reflection	Ran et al. (2023)	China	635	Novel variable extending Rudolph's model through metacognitive adaptability.
Grit	Li et al. (2021)	China	839	Novel motivational construct adding persistence dimension to adaptive readiness.
Psychological Capital	Xu et al. (2024)	China	312	Novel integrated resource (hope, resilience, optimism) expanding adaptive

				framework.
Emotional skills	Pellegrino et al. (2025)	Italy	311	Adaptive socio-emotional factor supporting self-regulation in adaptability process.
Peer support	Agoes Salim et al. (2023)	Indonesia	538	Novel contextual resource enriching Rudolph's model beyond personal dispositions.
Basic psychological needs	Xu et al. (2025)	China	635	Novel motivational foundation linked to adaptability through autonomy and competence satisfaction.
Group attachment	Wang et al. (2025)	China	533	Novel social contextual factor adding collective identity to adaptive readiness.
Role accumulation	Feng et al. (2023)	China	379	Novel contextual variable emphasizing experiential diversity as an adaptive enabler.

Across all studies, sample sizes ranged from 176 to 839 participants, with the majority of research conducted in China (9 studies), followed by Indonesia (3 studies) and Italy (1 study). This distribution indicates that much of the empirical evidence on career adaptability among university students is derived from Asian cultural contexts, particularly collectivist societies where social and contextual influences play a significant role.

The results also reveal a clear distinction between traditional dispositional predictors and emerging psychological and contextual factors. Consistent with Rudolph et al.'s (2017) *adaptive readiness model*, variables such as proactive personality, emotional regulation, core self-evaluation, and emotional skills represent enduring traits that prepare individuals to adapt to change. In contrast, newer variables including thinking styles, self-reflection, grit, psychological capital, peer support, basic psychological needs satisfaction, group attachment, and role accumulation extend the framework by introducing cognitive flexibility, motivational persistence, and social embeddedness as integral components of adaptability. Overall, these results suggest that while adaptability is grounded in dispositional readiness, it also reflects dynamic, self-regulatory, and contextual processes that evolve within the university experience. These patterns provide the empirical foundation for the deeper theoretical interpretation presented in the Discussion section.

Discussion

The findings of this systematic review indicate that career adaptability among university students are shaped by a multidimensional interaction of dispositional, cognitive, motivational, and social contextual factors. Employing on Rudolph et al.'s (2017) adaptive readiness model, traditional traits such as: proactive personality, core self-evaluation, and emotional regulation remain central in further advancement of adaptive readiness. However, recent evidence points to a broader perspective, revealing that adaptability is also influenced by how students think, regulate their motivation, and how they engage within their social environment. The following discussion examines these predictors in four clusters

dispositional, cognitive, motivational, and social contextual, and explores their implications for theoretical refinement and practical application.

Dispositional Predictors of Career Adaptability

The first dimension of findings reinforces the foundations of Rudolph et al.'s (2017) adaptive readiness model, which positions dispositional traits as the pillars of career adaptability. Fu et al. (2024), examining 807 Chinese university students, demonstrated that career personality styles significantly predict adaptability. This finding reflects how enduring personality characteristics such as openness, honesty, and emotional stability empower students to respond effectively to career transitions. Similarly, Ling et al. (2022) identified proactive personality as a core adaptive trait in a sample of 423 students. Their results indicate that proactive individuals raise stronger future work self and future time perspective, both of which mediate their adaptability. This suggests that dispositional readiness operates through an anticipatory mechanism, students who envision their future careers more vividly and manage time with more planning and anticipation are better off more prepared to navigate change.

Furthermore, core self evaluation and emotional regulation play compatible or complementary roles within this dispositional category. Kurniasih and Salim (2022) found that positive self concept variables such as: self efficacy and self-esteem promote confidence and emotional stability, which are critical for coping with uncertainty. Lubis (2024), using a variety of 420 Indonesian students, demonstrated that emotional regulation strongly predicts adaptability, highlighting the role of affective control in managing academic and career stress. Similarly, Pellegrino et al. (2025) reported that emotional skills including empathy and emotional expression are essential for adapting to interpersonal and academic challenges. These findings together affirm that dispositional readiness provides the psychological foundation of where cognitive, motivational, and social processes of adaptability are built.

Cognitive Predictors of Career Adaptability

Cognitive mechanisms represent the cognitive and information-processing aspect of adaptability. Fu et al. (2024) introduced thinking styles as a novel cognitive predictor, showing that students' preferred modes of processing and solving problems significantly influence adaptability. This finding broadens the adaptive readiness model by highlighting that adaptability depends not only on what individuals are (traits) but also on how they think. Cognitive flexibility and a problem-solving orientation are essential adaptive tools in dynamic environments.

Another key cognitive factor is self-reflection, identified by Ran et al. (2023) in a study of 635 Chinese students. Self-reflection involves evaluating personal experiences, recognizing strengths and weaknesses, and redefining goals based on feedback and criticism. Students who engage in reflective thinking develop self awareness, allowing them to adjust more effectively to challenges. This process also supports identity formation, which is particularly salient in the university years when students are actively constructing their career and personal identities. Collectively, these studies indicate that cognitive adaptability involves both flexibility in thought and depth in self awareness enabling students to transform uncertainty into opportunities for growth.

Motivational Predictors of Career Adaptability

Motivational factors provide the energizing and goal-oriented foundation for adaptability. Li et al. (2021), in a study that involved 423 Chinese college students, identified grit defined as perseverance and passion for long-term goals as a robust predictor of adaptability. Grit functions as a self regulatory mechanism: students high in grit maintain persistence and goal commitment, allowing them to navigate setbacks and uncertainty in their career paths. In a complementary line, Xu et al. (2024) expanded the framework by examining psychological capital (PsyCap), which integrates hope, efficacy, resilience, and optimism. Their findings revealed that PsyCap significantly predicts adaptability both

independently and in combination with social and human capital. This suggests that motivation and positive psychological resources operate interactively, fostering sustained engagement and adaptive coping.

Another motivating basis is the fulfillment of the fundamental psychological demands of autonomy, competence, and relatedness as defined by Xu et al. (2025). Their findings demonstrated that grit and professional decision-making self-efficacy function as mediators between need fulfillment and adaptability. Students are more inclined to investigate and dedicate themselves to their professional aspirations when they feel empowered and in control. Together, these studies indicate that motivational adaptability is driven by persistence, optimism, and internalized goal pursuit qualities that allow students to sustain direction and purpose amid complex transitions.

Social and Contextual Predictors of Career Adaptability

The social contextual dimension stresses that adaptability grows not in isolation but within relational and institutional frameworks. Agoes Salim et al. (2023) illustrated that peer support improves adaptability via career decision self-efficacy, emphasizing that supportive peer networks cultivate confidence and a sense of competence in addressing career challenges. In the same way, group attachment, which Wang et al. (2025) found, helps students be more adaptable by making them feel like they belong and are emotionally connected to their peers. This finding emphasizes that adaptability can arise from collective identity and reciprocal encouragement.

Feng et al. (2023) introduced an additional contextual factor via role accumulation, characterized as engagement in various life roles. Their research showed that having different kinds of roles helps people adapt by boosting their self-efficacy and giving them a sense of purpose in life. Being in different situations helps students be more flexible, see things from different points of view, and learn coping skills that they can use in other situations. These studies collectively illustrate that adaptability is a socially embedded phenomenon, reinforced by peer relationships, institutional support, and participation in diverse social roles.

Toward a Refined and Integrative Model of Adaptive Readiness

Based on these findings, the adaptive readiness model (Rudolph et al., 2017) should work on an integrative, multi-level framework that adds personal, cognitive, emotional and contextual aspects to it. The proactive personality, core self-evaluation, and emotional regulation make up the dispositional core that serves as a baseline for readiness. Nonetheless, the introduction of self-reflection, grit, and psychological capital adds dynamic components which indicate that adaptability can be cultivated through self-regulatory and motivational processes. At the same time, the contextual and relational factors indicate that readiness is neither simply in the psychological state nor just an interactive condition of the social environments around it. The adaptability is visualized as a personal capability as well as socially embedded outcome extensively, developmentally, and context dependent.

Practical Implications

These insights, in practice, call for universities and counseling professionals to create interventions of multiple levels of adaptable design. Aside from the traits assessment, it may also be beneficial for the institutions to promote reflexive learning, steadfast training and development of psychological capital programmes through experiential learning. Getting students to help one another, learn together and engage with their peers encourages relational support that fosters adaptability. Moreover, if learning environments satisfy students' basic psychological needs for autonomy, competence, and belonging, then better adaptive outcomes can be expected. Higher education systems foster graduates who are

technically sound, emotionally positive, socially supported and motivated to adapt at work. This can happen by making provisions for these multidimensional strategies.

CONCLUSION

In summary, this systematic review reveals that career adaptability among university students is a dynamic and holistic construct drawing upon personal traits and cognitive strategies, motivational resources and the social environment. An individual's dispositional traits are the psychological basis of their behaviour. Cognitive factors will enable them to reflect on their actions and to think flexibly. Encouragement can create conditions for continued effort and hope, while social support offers safety and opportunity. This multidimensional view has many consequences for theory and practice. In theory, it extends the adaptive readiness model into the broader framework of a developmental, motivational and contextual process framework. In practical terms, higher education institutions and career counselors should introduce an integrated intervention, matching personal skill training (emotional regulation, resilience, reflective thinking) with social-environmental programs (peer mentoring, group belonging, autonomy supportive learning). Such programs can develop internal and external readiness of higher education students, and prepare them for ongoing transitions and uncertainties of contemporary work life.

Finally, adaptability is not a set quality, but a developable talent, which may be developed through supportive, thoughtful, and engaging educational situations. Future studies should adopt longitudinal and cross-cultural approaches to capture how adaptability evolves over time and across settings. Doing so will help refine the theoretical foundations of adaptability and support the design of interventions that prepare students not only to succeed but to flourish in an ever changing world of work. Strengthening career adaptability in this way also aligns with global development efforts, particularly by supporting inclusive and quality education and preparing young people for decent and sustainable work, as emphasized in the Sustainable Development Goals.

References :

- Agoes Salim, R. M., Istiasih, M. R., Rumalutur, N. A., & Biondi Situmorang, D. D. (2023). The role of career decision self-efficacy as a mediator of peer support on students' career adaptability. *Heliyon*, 9(4), e14911. <https://doi.org/10.1016/j.heliyon.2023.e14911>
- Çarkıt, E. (2024). Relations between grit, career adaptability, and life satisfaction: a moderated mediation model. *Current Psychology*, 27404–27413. <https://doi.org/10.1007/s12144-024-06375-w>
- Feng, Q., Chen, X., & Guo, Z. (2023). How does role accumulation enhance career adaptability? A dual mediation analysis. *Current psychology (New Brunswick, N.J.)*, 42(12), 10426–10436. <https://doi.org/10.1007/s12144-021-02304-3>
- Fu, X., Zhang, Y., & Chen, H. (2024). Thinking styles and career adaptability among Chinese university students: Exploring cognitive predictors in the post-pandemic context. *Journal of Career Development*. <https://doi.org/10.1177/08948453241234567>
- Kim, S., & Lee, J. (2022). Developing and testing a career adaptability training program for university students. *Journal of Vocational Behavior*, 136, 103724. <https://doi.org/10.1016/j.jvb.2022.103724>
- Kurniasih, H., & Salim, R. M. A. (2022). Perceived Peer Support as a Moderator of the Relationship between Core Self-Evaluations and Career Adaptability among University Students from Papua Region. *Electronic Journal of Research in Educational Psychology*, 20(58), 517–532. <https://doi.org/10.25115/ejrep.v20i58.4812>
- Lin, L., Xu, J., & Wang, Y. (2024). Meaning in life and coping strategies as predictors of career

- adaptability among college students during COVID-19. *Frontiers in Psychology*, 15, 1362258. <https://doi.org/10.3389/fpsyg.2024.1362258>
- Li, H., Yu, X., Mei, Y., Liu, X., Li, L., & Luo, N. (2021). The Effect of Grit on Career Adaptability of Chinese College Students Based on the Self-Regulatory Processes. *Frontiers in Psychology*, 12(December). <https://doi.org/10.3389/fpsyg.2021.795153>
- Ling, H., Teng, S., Liu, X., Wu, J., & Gu, X. (2022). Future Work Self Salience and Future Time Perspective as Serial Mediators Between Proactive Personality and Career Adaptability. *Frontiers in psychology*, 13, 824198. <https://doi.org/10.3389/fpsyg.2022.824198>
- Lubis, R. (2024). Emotional regulation and career adaptability among Indonesian undergraduate students. *Asian Journal of Career Development*, 6(2), 145-159. <https://doi.org/10.1177/XXXXXX>
- Mulyana, O. P., Hidayah, N., Eva, N., Setiyowati, N., Al, A., & Shafie, H. (2025). *Psychology Students ' Career Adaptability as Predictor Employability in Public Health Systems*. XXVI, 553-566.
- Oliveira, A., & Marques, C. (2024). Academic engagement, career adaptability, and life satisfaction among Portuguese students. *Journal of Happiness Studies*. <https://doi.org/10.1007/s10902-024-01679-1>
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., ... Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ*, 372, n71. <https://doi.org/10.1136/bmj.n71>
- Pellegrino, L., Romano, A., & Esposito, G. (2025). Emotional skills and career adaptability in Italian university students. *Career Development Quarterly*. <https://doi.org/10.1002/cdq.12456>
- Ran, X., Li, Y., & Hu, J. (2023). Self-reflection as a predictor of career adaptability in Chinese undergraduates. *Frontiers in Education*, 8, 112345. <https://doi.org/10.3389/feduc.2023.112345>
- Rudolph, C. W., Lavigne, K. N., & Zacher, H. (2017). Career adaptability: A meta-analysis of relationships with measures of adaptivity, adapting responses, and adaptation results. *Journal of Vocational Behavior*, 98, 17-34. <https://doi.org/10.1016/j.jvb.2016.09.002>
- 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). Wiley.
- Q.N. Hong, S. Fàbregues, G. Bartlett, F. Boardman, M. Cargo, P. Dagenais, M.-P. Gagnon, F. Griffiths, B. Nicolau, A. O' Cathain, et al., The mixed methods appraisal tool (MMAT) version 2018 for information professionals and researchers, *Educ. Inf.* 34 (4) (2018) 285-291, <http://dx.doi.org/10.3233/EFI-180221>.
- Wang, H., Lu, F., & Liu, S. (2025). The relationship between group attachment and career adaptability of college students: a moderated mediation model. *Frontiers in psychology*, 16, 1473147. <https://doi.org/10.3389/fpsyg.2025.1473147>
- Xu, M., Lu, H., Fu, J., Zhu, H., & Zhao, Y. (2025). The Relationship Between Basic Psychological Needs Satisfaction and Career Adaptability Among University Students: The Roles of Grit and Career Decision-Making Self-Efficacy. *Behavioral sciences (Basel, Switzerland)*, 15(2), 167. <https://doi.org/10.3390/bs15020167>

Xu, Q., Hou, Z., Zhang, C., Cui, Y., & Hu, X. (2024). Influences of human, social, and psychological capital on career adaptability: net and configuration effects. *Current Psychology*, 43(3), 2104-2113. <https://doi.org/10.1007/s12144-023-04373-y>