Psychometric Properties of Career Flexibility and Its Mediating Role in the Relationship Between Strategies for Coping with Career Indecision and Career Distress in University Students

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Article

Psychometric Properties of Career Flexibility and Its Mediating Role in the Relationship Between Strategies for Coping with Career Indecision and Career Distress in University Students

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Abstract

Objective: To investigate the mediating role of career flexibility in the relationship between strategies for coping with career indecision and career distress among university students, and to conduct a psychometric validation of the Persian version of the Career Flexibility Inventory (CFI). **Method:** A two-phase, cross-sectional study was conducted with a sample of 517 Iranian university students. Phase one involved a Confirmatory Factor Analysis (CFA) to validate the CFI. Phase two tested the proposed mediation model using Structural Equation Modeling (SEM) with a bootstrapping procedure. **Findings:** The CFA confirmed th)e psychometric soundness and three-factor structure (Wavering, Adaptation, Flexible Thinking) of the Persian CFI, with excellent model fit (CFI = .975, RMSEA = .036). SEM results revealed that career flexibility partially mediated the relationship between coping strategies and career distress. Productive coping was associated with lower distress indirectly through its positive effect on Adaptation (Standardized Indirect Effect = –.124), while nonproductive coping was linked to higher distress indirectly through its positive effect on Wavering (Standardized Indirect Effect = .106). **Conclusion:** Career flexibility is a crucial mechanism explaining *how* coping strategies influence career distress; productive coping enhances active flexibility (Adaptation) to reduce distress, whereas nonproductive coping fosters passive flexibility (Wavering) that exacerbates it. The study provides a validated instrument for the Iranian context and highlights the importance of designing career interventions that build adaptive flexibility, rather than merely targeting distress.

Keywords: career flexibility; career distress; career indecision; coping strategies; structural equation modeling; psychometric validation

Introduction:

One of the main concerns of university students, particularly as they approach graduation and entry into the job market, is facing career decision-making anxiety (Nguyen et al., 2024); even among talented and motivated students, there is a deep concern that their current career choices will bring them a future full of dissatisfaction, missed opportunities, and regret. career decision-making anxiety can cause career distress in students (Nguyen et al., 2024). Career distress is an unpleasant and multidimensional psychological state that arises as a result of facing challenges, ambiguities, and pressures related to career choices and futures in individuals, especially university students (Laditka

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et al., 2023). This state is not limited to simple worry, but can manifest in various forms, including a feeling of helplessness in the face of career decisions, constant worry about choosing the right career path, and fear of the consequences of wrong career choices (Qazi et al., 2023, Akmal et al., 2023). It is a complex issue that can influence numerous facets of an individual's career and overall well-being (Schilbach et al., 2023). Career distress represents a substantial emotional and psychological challenge for individuals when confronted with career-related difficulties, uncertainties, or obstacles (Akmal et al., 2023). It can also impede performance, reducing productivity and job satisfaction (Hengen & Alpers, 2021). Prolonged exposure to career distress can also adversely affect an individual's physical and mental health (Browning & Heinesen, 2012).

It is a byproduct of many career-related activities, including career indecision (Lipset-Brasilier, et al., 2016) and distress in turn suppresses other career development processes, such as career exploration and decision-making (Şensoy & Siyez, 2019). Therefore, examining the role of strategies for coping with career indecision can be important. Most Most university students who face difficulties in making career decisions try to cope with these difficulties in some way. Some individuals may feel helpless and anxious and use ineffective coping strategies such as escape-avoidance behaviors (Larson & Majors, 1998), while others are more likely to use problem-focused coping activities such as planning, direct action, or help-seeking. However, researchers have argued that the use and effectiveness of coping strategies may vary depending on the type of stressor (DeLongis & Holzman, 2005). When career indecision is considered a stressor, how university students deal with this problem becomes of critical importance for university career counselors to help their clients cope more effectively with the challenges of career decision-making. Although numerous studies have focused on discovering and assessing various difficulties associated with career decision-making (Lee,2022), fewer empirical studies have examined the ways in which individuals cope with these difficulties.

Lipschitz-Brasilera et al.(2016) proposed a model of strategies for coping with career indecision. (SCCI). The proposed SCCI model is based on a combination and adaptation of the stress coping models of Skinner et al. (2003) and Frydenberg and Lewis (1993) to cope with career indecisiveness. The proposed model is divided into three main clusters of strategies: productive coping, support seeking, and unproductive coping.

productive coping includes six categories of strategies that help deal with career indecision. They include: 1. Instrumental information seeking: Actively seeking additional information relevant to career decision-making 2. Emotional information seeking: Actively seeking information to reduce anxiety and prepare oneself emotionally for decision-making 3. Problem solving: The extent to which an individual invests in planning, systematically analyzing information, and comparing possible outcomes of different options 4. Compromise: The extent to which an individual is willing to consider compromise in some aspect 5. Accommodation: The degree to which an individual finds a positive way to think about the challenge of career decision-making 6. Self-regulation: The extent to which an individual monitors and controls emotions and thoughts that interfere with decision-making. *Support seeking* includes three categories of strategies that involve others in coping with one's career indecision. They include: 1. Instrumental help seeking: The degree to which an individual seeks guidance, assistance, and advice from others 2. Emotional help seeking: The degree to which an individual seeks emotional support and understanding from others 3. Delegation: The degree to which individuals ask others to make decisions or seek answers on their behalf. *Unproductive coping* includes five categories of strategies that are detrimental to coping with career indecision. They include: 1. Escape: cognitive or behavioral avoidance, denial, or fantasy 2. Helplessness: the individual's feelings of inability to do anything to move the decision forward, including passivity, confusion 3. Isolation: the individual's attempt to hide their problems from others and keep feelings and concerns related to the decision to themselves 4. Submission: the degree to which the individual repeatedly focuses on negative or unpleasant features of the career decision. 5. Opposition: the extent to which the individual blames others for making the decision more difficult(Lipschitz-Brasilera et al., 2015).

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Career Distress and Career Indecision

Career decisions are among the most important decisions that people make in their lifetimes (Wang et al. 2024). However, making such decisions is not only complex but also a stressful and confusing experience. These difficulties can delay the process, stop it midway, or lead to a less than desirable decision (Syafril et al.,2024). Several studies have focused on different aspects of career decision-making difficulties, such as cognitive, emotional, and personality-related aspects (Brown & Rector, 2008; Sacca, Gatti, & Kelly, 2008). Career indecision also has many consequences for personal and professional life. In a study, Doğanülkü & Korkmaz(2024) showed that life satisfaction is negatively related to career decision regret and career distress. The important finding of others was that career distress plays a fully mediating role in the relationship between career decision regret and life satisfaction (Atitsogbe et al., 2024). A comprehensive understanding of the intricacies of career indecision is vital, as it can profoundly affect one's professional trajectory and personal satisfaction (Bagchi & Reddy, 2023). Within higher education, career indecision assumes a unique significance. It presents challenges to decision-making processes, potentially resulting in delays or suboptimal choices with enduring consequences (Sarsıkoğlu, 2023). Boo & Kim (2022) showed that productive coping strategies were the most effective, followed by support-seeking coping strategies and then unproductive coping strategies, on perceived decision-making difficulties and decision-making distress

Strategies for Coping with Career Indecision and Career Flexibility

Strategies for coping with career indecision are the specific behaviors individuals employ to manage the stress of this process. These can be broadly categorized as productive coping (e.g., problem-solving, planning, information-seeking) and unproductive coping (e.g., avoidance, denial, helplessness) (Lipshits-Braziler et al., 2016). Career flexibility acts as the underlying psychological resource that facilitates the use and effectiveness of these strategies. Productive coping strategies, such as career exploration, inherently require and build career flexibility. Exploration helps individuals increase their knowledge of themselves and the world of work (Cheung & Jin, 2016; Lent et al., 2017), thereby fostering the adaptability needed to make informed decisions. Research has confirmed that higher levels of career flexibility lead to reduced decision-making difficulties (Karacan-Ozdemir, 2019) and that psycho-educational programs focused on flexibility can improve one's ability to cope with career indecision (Turan & Çelik, 2023). In essence, career flexibility provides the necessary resources for individuals to cope with career development tasks, engage in career planning and exploration, and build career self-efficacy (Hamzah et al., 2021; Parmentier et al., 2021), which in turn reduces career indecision and improves career outcomes.

Career Flexibility and Career Distress

As a key characteristic in career development, career flexibility refers to the ability of individuals to adapt and adjust their attitudes, beliefs, and career paths in the face of unpredictable events(). This concept includes both active and passive aspects(Kim ,2019). Kim (2019) identified three main dimensions of career flexibility: wavering, which represents the passive aspect, adaptation, which relates to proactive behaviors in the face of opportunities, and flexible thinking, which represents the ability to accept unpredictable changes.

The passive nature of flexibility involves states of stagnation and indecision, which in turn can play an ineffective role in career growth and psychological distress (Kim et al., 2020). Passive flexible people do not commit to taking action towards a goal (Frainer & Janeiro, 2023; Kim, 2019). Therefore, people who are passively flexible do not behave purposefully. Research shows that there are complex relationships between time perspective and job flexibility. People who are focused on the future tend to be more proactive and flexible in their thinking and seek out new opportunities. In contrast, people who are hesitant in their decision-making tend to be less focused on the future and have negative views of the future (Frayner & Janeiro, 2023). On the other hand, job flexibility, especially the passive

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type, is strongly associated with immature job identity, which can lead to career distress (Porfili et al., 2012). Overall, passive flexibility can lead to indecision and career distress, as indecisive individuals find themselves in a state of confusion rather than planning and taking proactive action(kim, 2019). This can hinder career advancement and the achievement of long-term goals.

The Present Study

During their time in university, students are confronted with critical career decisions that will shape their professional futures. This period is often marked by severe career distress—a debilitating state that impairs decision-making, reduces well-being, and can have long-term consequences on their life satisfaction and professional trajectory. While we know that how students cope with indecision (through productive, support-seeking, or unproductive strategies) influences their distress levels, the mechanism through which this occurs remains a "black box." This study is imperative because it posits that career flexibility is this crucial mediating mechanism. It is not enough to know that certain coping strategies are better than others; we must understand how they work.

This requires a two-fold approach. First and foremost, we must ensure that career flexibility can be measured accurately and meaningfully in our target population. To our knowledge, the psychometric properties of the Career Flexibility Inventory (CFI; Kim, 2019) have not been examined within an Iranian context. Originally validated on a sample of Korean university students, its cross-cultural validity for other populations, particularly in a Middle Eastern context like Iran, remains largely unexplored. Career-related attitudes and behaviors can be significantly shaped by cultural context, making it essential to confirm that the CFI's three-factor structure is valid and conceptually equivalent for Iranian students. Therefore, a primary objective of this study is to translate the CFI into Persian and conduct a rigorous evaluation of its psychometric properties, providing a validated tool for the Iranian population and creating the necessary foundation for testing our mediation model.

By first establishing the psychometric soundness of the Persian CFI and then testing its mediating role, this research can illuminate whether effective coping strategies ultimately foster the cognitive and behavioral adaptability needed to navigate an uncertain professional future, thereby reducing distress. Conversely, it can reveal if unproductive strategies exacerbate the passive, wavering aspect of flexibility that leads directly to heightened anxiety and stagnation. The implications of these findings extend directly to the support systems within higher education. For professionals in university career services, academic advising, and student counseling centers, these findings are not merely academic; they are essential for moving beyond standard career guidance to develop targeted interventions. These interventions can specifically build active career flexibility, equipping students with the foundational skill needed to transform career-related stress into manageable and purposeful growth as they prepare to enter the workforce.

Therefore, this study seeks to provide a theoretical conceptual model for career distress by examining the relationship between strategies for coping with career indecision (SCCI) and career distress, and by testing the mediating role of career flexibility in this relationship among university students.

Method

Research Design

The present study employed a quantitative, descriptive-correlational design. The research was conducted in two distinct phases. The first phase focused on the psychometric validation of the Persian version of the Career Flexibility Inventory (CFI), primarily using Confirmatory Factor Analysis (CFA) to establish its structural validity within the Iranian context. The second phase involved testing the proposed theoretical model using Structural Equation Modeling (SEM). This approach allowed for an examination of the mediating role of career flexibility in the relationship between strategies for coping with career indecision and career distress.

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Participants and Procedure

The target population for this study comprised all university students enrolled in various public and private universities in the city of Karaj, Alborz province, Iran. To determine the necessary sample size, we followed established guidelines for SEM, which recommend a minimum ratio of 5 to 10 participants per questionnaire item to ensure sufficient statistical power (e.g., Kline, 2015). With a total of 73 items across all instruments, the minimum required sample was estimated to be 365.

The final sample consisted of 517 university students who voluntarily participated in the study. Participants were recruited using a convenience sampling method. Data were collected through an online survey link distributed via university-affiliated social media channels and academic email lists. Participation was anonymous, and informed consent was obtained from all individuals before they began the survey. The sample included students from various academic disciplines, with ages ranging from 18 to 26 years, which aligns with the typical age demographic for undergraduate and early graduate studies.

Measures

The Career Distress Scale (CDS). The CDS (Creed et al., 2016) is a 12-item scale designed to measure career-related distress. Items (e.g., "I spend time thinking about choosing a job and what I may do about it") are rated on a 6-point Likert-type scale from 1 (Strongly Disagree) to 6 (Strongly Agree). Higher total scores indicate greater levels of career distress. The original study reported excellent psychometric properties, including strong internal consistency (α = .90). In the present study, the scale demonstrated excellent internal consistency (Cronbach's α =. 927).

Career Flexibility Inventory (CFI). To measure career flexibility, we administered the Career Flexibility Inventory (CFI; Kim, 2019), a 15-item scale with a confirmed three-factor structure. The instrument comprises three 5-item subscales: Wavering (items 1-5), reflecting a passive response to career situations (e.g., "I tend to change my career path based on my surrounding situation"); Active Adaptation (items 6-10), measuring proactive engagement with career changes (e.g., "I actively deal with surrounding changes to my career"); and Flexible Thinking (items 11-15), assessing an open cognitive stance (e.g., "I tend to have a flexible attitude towards choosing my career"). All items are rated on a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree), with items 14 and 15 being reverse-scored. The original study reported Cronbach's alphas of .77 (Wavering), .75 (Active Adaptation), and .74 (Flexible Thinking) (Kim, 2019).

Strategies for Coping with Career Indecision (SCCI). Participants' coping strategies were assessed using the SCCI (Lipshits-Braziler et al., 2015a). The instrument includes 42 items that form three major scales: Productive Coping (18 items), Nonproductive Coping (15 items), and Support-Seeking (9 items). Responses were provided on a 9-point Likert-type scale from 1 (does not describe me at all) to 9 (describes me very well). The original study reported high internal consistency (αs from .86 to .92) and confirmed the three-factor structure. In the present study, the SCCI scales demonstrated strong reliability (a=0.81). The Cronbach's alphas were .839for Productive Coping, .848 for Support-Seeking, and .859for Nonproductive Coping.

Data Analysis

Data analysis was conducted in two sequential phases, corresponding to the study's primary objectives. Preliminary data screening and descriptive statistics were performed using SPSS (Version 22). The core analyses, including Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM), were conducted using AMOS-24 and R (Version 4.3.3) with the lavaan, psych, and semPlot packages.

Phase 1: Confirmatory Factor Analysis (CFA). To evaluate the construct validity of the Persian translation of the Career Flexibility Inventory (Kim, 2019), a Confirmatory Factor Analysis was performed. We tested the original three-factor structure (Wavering, Adaptation, and Flexible Thinking) using the Maximum Likelihood (ML) estimation method. The goodness-of-fit of the model was assessed using a combination of established indices: the Comparative Fit Index (CFI), the Tucker-Lewis Index (TLI), the Root Mean Square Error of Approximation (RMSEA), and the Standardized Root Mean Square Residual (SRMR). Following conventional guidelines (e.g., Hu & Bentler, 1999),

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CFI/TLI values > .90, an RMSEA value < .08, and an SRMR value < .08 were considered indicative of an acceptable model fit.

Phase 2: Structural Equation Modeling and Mediation Analysis. To test the hypothesized mediating role of career flexibility, we employed Structural Equation Modeling (SEM). The model specified career distress as the outcome variable, the three strategies for coping with career indecision (Productive, Support-Seeking, and Unproductive) as predictor variables, and the three factors of career flexibility as parallel mediators. The significance of the indirect effects was tested using a bootstrapping procedure with 5,000 resamples to generate 95% bias-corrected confidence intervals (CIs). This modern approach directly assesses the mediating pathway without the strict requirements of the traditional Baron and Kenny (1986) method and provides greater statistical power (Hayes, 2018). An indirect effect was considered statistically significant if its 95% confidence interval did not contain zero.

Results

Phase 1: Psychometric Properties of the Career Flexibility Inventory

A total of 517 participants provided complete data for the psychometric evaluation of the Persian version of the Career Flexibility Inventory (CFI). Preliminary descriptive statistics, including item means and standard deviations, are presented in Table 1. An examination of skewness and kurtosis values for all items indicated that the data approximated a normal distribution, supporting the use of Maximum Likelihood estimation.

Table 1. Item and Total Score analysis of career flexibility (N = 517).

Item/Factors	Mean	SD	Skewn	Kurtosis	CFA	z-Value
Wavering						
1	3.03	0.893	0.038	-0.132	0.728	0.0001
2	3.01	0.846	-0.115	-0.263	0.645	0.0001
3	3.28	0.953	-0.06	-0.470	0.612	0.0001
4	2.98	0.786	0.037	-0.393	0.651	0.0001
5	2.72	0.876	0.087	-0.24	0.604	0.0001
Adaptation						
6	3.16	0.853	-0.095	-0.123	0.74	0.0001
7	2.88	0.869	-0.024	-0.348	0.673	0.0001
8	2.94	0.970	0.043	-0.459	0.707	0.0001
9	3.12	0.919	-0.138	-0.343	0.653	0.0001
10	3.01	0.864	0.028	-0.353	0.699	0.0001
Thinking						
11	2.78	0.858	0.085	-0.177	0.743	0.0001
12	2.91	0.882	0.154	-0.261	0.636	0.0001
13	2.43	0.852	0.209	-0.210	0.688	0.0001
14	3.26	0.961	-0.122	-0.463	0.543	0.0001
15	3.12	0.916	-0.042	-0.433	0.492	0.0001
Career Flexibility						
Wavering					0.723	0.0001

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Adaptation	-0.664	0.0001
Thinking	0.691	0.0001

SD = standard deviation, CFA = confirmatory factor analysis standardized factor loadings

Internal Consistency Reliability

Internal consistency was assessed using Cronbach's alpha. The three subscales demonstrated good internal consistency: Wavering (α = .78), Adaptation (α = .83), and Flexible Thinking (α = .79).

Construct Validity: Confirmatory Factor Analysis (CFA)

The hypothesized three-factor model of the CFI was tested using Confirmatory Factor Analysis (CFA) to establish its construct validity. The analysis indicated a good model fit to the data: χ^2/df **= 1.65,** p **<** .001; CFI = .975; TLI = .969; RMSEA = .036; SRMR = .033.

All standardized factor loadings were statistically significant (p < .001), ranging from. 0.492 **to.** 0.743**.** This confirms that each item loaded significantly onto its intended latent factor.

Collectively, these findings provide strong evidence for the reliability and structural validity of the Persian version of the Career Flexibility Inventory. The results support its use as a psychometrically sound instrument for assessing career flexibility within the Iranian university student population.

Phase 2: Structural Model Analysis

Descriptive Correlations

Bivariate correlations among all study variables are presented in Table 2. As hypothesized, career distress was significantly and negatively correlated with productive coping, support-seeking, adaptation, and flexible thinking. Conversely, it demonstrated a significant positive correlation with nonproductive coping and wavering. These initial correlations provided preliminary support for the hypothesized structural model.

Table 2. Intercorrelation between Variables this Study

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
career distress	1																	
Wavering	0.45	1																
Adaptation	-.50	-.34	1															
Thinking	-.46	-.34	0.38	1														
Escape	0.30	0.17	-.21	-.16	1													
Helplessness	0.22	0.06	-.17	-.12	0.46	1												
Isolation	0.19	0.09	-.13	-.13	0.37	0.34	1											
Submission	0.23	0.09	-.13	-.04	0.43	0.37	0.28	1										

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Opposition	0.2	0.0	-	-	0.3	0.3	0.2	0.3	1										
	5	4	.18	.10	7	9	9	3											
Instrumental	-	-	0.2	0.2	-	-	-	-	-	1									
Help	.37	.16	2	1	.25	.14	.15	.15	.16										
Emotional	-	-	0.1	0.1	-	-	-	-	-	0.5	1								
Help	.24	.10	2	4	.11	.12	.11	.11	.09	2									
Delegation	-	-	0.1	0.0	-	-	-	-	-	0.4	0.4	1							
	.23	.10	2	7	.10	.04	.02	.11	.08	6	3								
Instrumental	-	-	0.1	0.1	-	-	-	-	-	0.2	0.2	0.2	1						
Information	.27	.16	7	5	.16	.03	.09	.08	.11	6	2	4							
Emotional	-	-	0.1	0.0	-	-	-	-	-	0.2	0.2	0.2	0.3	1					
Information	.21	.11	2	7	.14	.07	.06	.15	.09	6	3	1	8						
Problem-	-	-	0.0	0.0	-	-	-	-	-	0.2	0.1	0.2	0.4	0.3	1				
Solving	.20	.07	7	7	.10	.08	.09	.13	.09	1	8	2	2	2					
compromise	-	-	0.1	0.0	-	0.0	-	-	-	0.2	0.1	0.2	0.3	0.2	0.2	1			
	.14	.07	2	7	.11	2	.05	.07	.06	0	4	0	3	1	4				
Accommodat	-	-	0.0	0.0	-	-	-	-	-	0.1	0.1	0.1	0.3	0.2	0.2	0.1	1		
ion	.12	.08	9	5	.06	.09	.03	.13	.01	4	3	3	0	6	3	6			
Self-	-	-	0.1	0.0	-	-	-	-	0.0	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	1	
Regulation	.22	.11	1	9	.11	.02	.06	.08	1	7	6	2	7	8	2	5	7		

Coefficients above 0.09 are significant at the 0.05 level.

Structural Model and Mediation Analysis

The hypothesized mediation model was tested using Structural Equation Modeling (SEM). The model specified the three coping strategies (Productive, Support-Seeking, and Nonproductive) as exogenous variables, the three career flexibility dimensions (Wavering, Adaptation, and Flexible Thinking) as parallel mediators, and career distress as the final endogenous outcome.

The overall model demonstrated an excellent fit to the data: $\chi^2/df = 1.063$; CFI = .996; TLI = .995; RMSEA = .011. (This reporting is based on your provided CMIN/DF, CFI, TLI, and RMSEA. It is now in a more standard format).

The standardized path coefficients for the model are depicted in Figure 1. To test the core hypotheses, we examined the specific direct and indirect effects.

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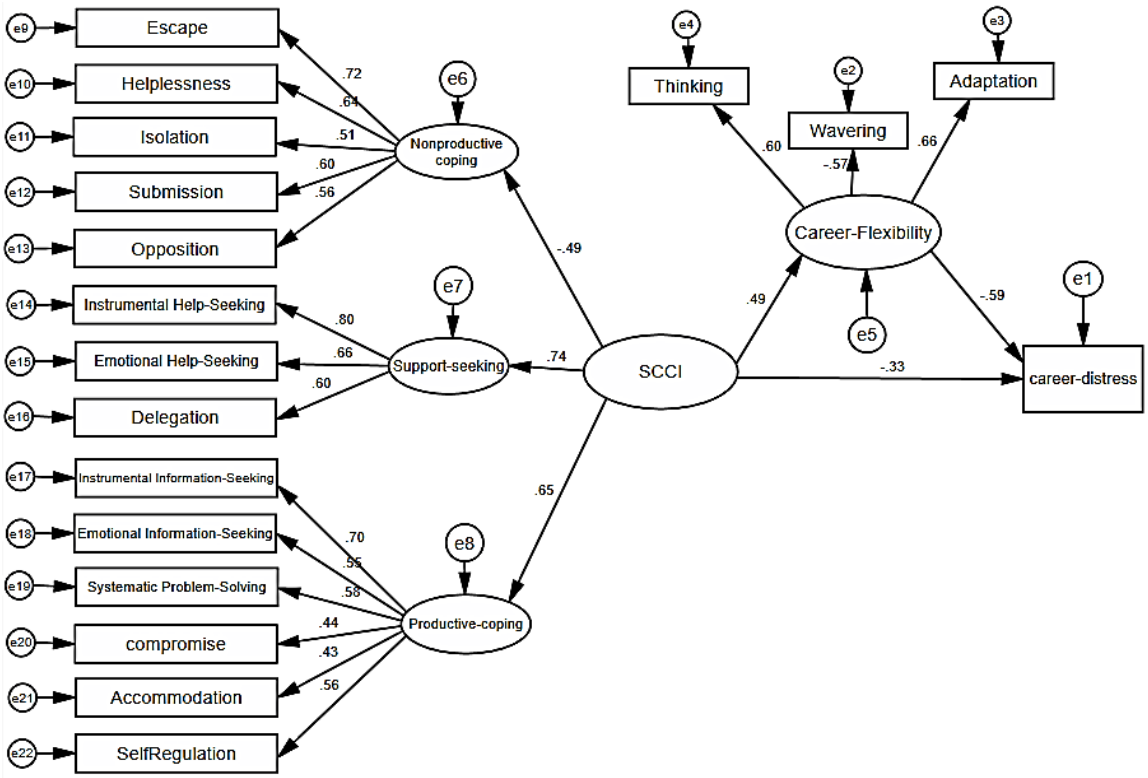

Figure 1. Path analysis of all the study variables

Direct Effects:

Analysis of the direct pathways revealed several significant relationships. For instance, productive coping was found to be a significant positive predictor of adaptation (β = .66, p < .001), while nonproductive coping was a strong positive predictor of wavering (β = .57, p < .001). Furthermore, in the full model, wavering (β = .59, p < .001) and nonproductive coping (β = .49, p < .001) directly predicted higher levels of career distress. In contrast, adaptation (β = –.66, p < .01) and productive coping (β = –.65, p < .01) directly predicted lower levels of career distress. These results indicate that adaptive coping strategies play a crucial role in reducing career-related distress, whereas maladaptive coping and wavering tendencies intensify such distress.

Indirect (Mediation) Effects:

The significance of the indirect effects of coping strategies on career distress through career flexibility was tested using a bootstrapping procedure with 5,000 resamples. The results, presented in Table 3, confirmed several key mediating roles.

Table 3. Indirect coefficients between variables.

IV	Mediator	DV	β	95% CI
Nonproductive Coping	→ Adaptation →	CD	0.094	[0.044, 0.144]
Nonproductive Coping	→ Wavering →	CD	-0.081	[-0.131, -0.031]
Nonproductive Coping	→ Thinking →	CD	0.086	[0.036, 0.136]
Support-seeking	→ Adaptation →	CD	-0.141	[-0.191, -0.091]
Support-seeking	→ Wavering →	CD	0.121	[0.071, 0.171]
Support-seeking	→ Thinking →	CD	-0.128	[-0.178, -0.078]
Productive Coping	→ Adaptation →	CD	-0.124	[-0.174, -0.074]
Productive Coping	→ Wavering →	CD	0.106	[0.056, 0.156]

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Productive Coping	→	Thinking	–	CD	-0.113	[-0.163, -0.063]
SCCI		CF		CD	-0.289	[-0.454, -0.187]

SCCI: Strategies for Coping with Career Indecision CF: Career Flexibility CD: Career Distress

Indirect(i,m)= λi × βSCCI→CFI × λm × βCFI→CDQ

Notably, a significant indirect effect was found for productive coping on career distress, mediated by adaptation (Standardized Indirect Effect = –.124, 95% CI [–.174, –.074]). Similarly, nonproductive coping had a significant indirect effect on career distress through its influence on wavering (Standardized Indirect Effect = .106, 95% CI [.056, .156]). These findings indicate that adaptive coping reduces career distress primarily by promoting active forms of adaptation, whereas maladaptive coping increases distress through wavering tendencies.

Because the direct effects of productive and nonproductive coping on career distress remained significant even after accounting for the mediators, these results support a partial mediation model. This indicates that career flexibility dimensions are significant, but not exhaustive, mechanisms through which coping strategies influence career distress.

Discussion

The primary goals of this study were twofold: (a) to validate the Persian version of the Career Flexibility Inventory, and (b) to explore the mediating role of career flexibility in the relationship between strategies for coping with career indecision and career distress among Iranian university students. Both objectives were successfully achieved, providing robust psychometric evidence and a theoretically grounded model that extends career development frameworks into a cross-cultural context.

The results from the first phase confirmed the structural validity of the Persian CFI, which includes three factors: Wavering, Adaptation, and Flexible Thinking. The fit indices significantly exceeded conventional thresholds, illustrating the stability of the CFI's factor structure in the Iranian context. This finding demonstrates that career flexibility, as measured by the CFI, maintains its conceptual integrity within Iranian university students, reinforcing the model's cross-cultural generalizability. The reliability coefficients are consistent with previous validations conducted in East Asian samples (Kim, 2019; Frainer & Janeiro, 2023), which supports the notion that career flexibility encompasses both proactive and passive dimensions of adaptability.

The preservation of this factor structure suggests that the processes underlying flexible career adjustment such as managing uncertainty, reframing career challenges, and goal reorientation are psychologically universal, although they manifest differently in different cultural settings. In Iran's collectivist society, career flexibility is often seen as a balancing act between familial and societal expectations and personal career goals. The successful adaptation of the CFI thus underscores its ability to capture this dynamic interplay between individual aspirations and cultural influences.

The second phase of the analysis tested the proposed mediation model and demonstrated excellent structural validity. The results confirmed that career flexibility partially mediates the relationship between coping strategies and career distress.

Specifically, productive coping strategies were linked to higher levels of Adaptation and Flexible Thinking, both of which contributed to lower career distress. On the other hand, nonproductive coping strategies led to higher Wavering, which in turn increased career distress. The mediation effect was partial, meaning that coping strategies retained direct effects on distress while also exerting significant indirect effects through flexibility, consistent with Hayes' (2018) bootstrapping criteria for partial mediation.

This complementary pattern offers valuable insights into the mechanisms of career adjustment: individuals who engage in proactive coping, such as planning, information gathering, and emotional

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regulation, are more likely to build psychological readiness and flexibility, enabling them to transform perceived career-related stress into a source of adaptability. Conversely, passive and avoidant coping strategies lead to an inert form of flexibility characterized by hesitation, cognitive confusion, and emotional paralysis—which exacerbates distress. These findings support earlier theoretical frameworks (Savickas, 2013; Lent, 2017), which posit that adaptability is the psychological process through which individuals channel their coping resources to manage emotional outcomes and decision-making challenges.

The present findings align with Career Construction Theory (Savickas, 2013), wherein adaptability resources concern, control, curiosity, and confidence are viewed as self-regulatory tools that shield individuals from career-related stress. The identified mediating role of career flexibility further refines this framework by emphasizing the cognitive aspect of adaptability: flexibility can be understood as an individual's metacognitive ability to tolerate ambiguity and recover from setbacks during the decision-making process. In a similar vein, the Transactional Model of Stress and Coping (Lazarus & Folkman, 1984) views flexibility as an outcome of the appraisal and reappraisal processes that reshape perceptions of threat and challenge during career decision-making.

Within this theoretical convergence, career flexibility serves as the critical link between coping strategies and career distress. Adaptation represents a proactive response that enhances mastery under stress, while wavering reflects a passive response associated with learned helplessness two opposing ends of the same psychological spectrum. The distinction between active and passive flexibility offers conceptual precision, highlighting that future research on career adaptability should explicitly differentiate these two dimensions when examining their impact on emotional and career-related outcomes.

This study contributes to the cross-cultural validation of career flexibility by exploring it within the Middle Eastern educational context for the first time. The Iranian educational system, which is often characterized by limited transparency regarding occupational pathways and a strong influence of family in career decisions, creates a distinctive stress ecology. In this setting, productive coping strategies not only promote task-oriented adaptation but also help students navigate complex sociocultural expectations. The observed positive relationship between Support-Seeking and Flexible Thinking in the Iranian sample provides further evidence of collectivist coping mechanisms, wherein relational engagement functions as a resource rather than a sign of dependence (Cheung & Jin, 2016).

From a practical perspective, these results suggest that the cultural scripts of obedience and familial involvement, rather than restricting career flexibility, can be leveraged to support adaptive career decision-making. Emotional acceptance and effective planning could help frame these cultural expectations in a way that promotes career flexibility. Career counseling in collectivist societies could benefit from this insight by integrating culturally specific coping strategies that enhance metacognitive skills.

Practical Implications

The findings of this study offer valuable insights for career counselors, educators, and psychologists, highlighting several practical applications. First, career counseling programs should prioritize developing Adaptation and Flexible Thinking as key therapeutic outcomes. Activities that encourage cognitive reframing, scenario planning, and emotional self-regulation can significantly enhance career flexibility and alleviate distress. Additionally, the Persian Career Flexibility Inventory can serve as a diagnostic tool for identifying students with high levels of Wavering, who may be more susceptible to indecision and chronic career anxiety. From a psychoeducational perspective, workshops based on Cognitive Career Coaching principles can integrate both productive coping strategies and flexibility-enhancing activities, such as reflection journals, resilience-based planning, and emotional regulation exercises, into career readiness programs. Finally, policy recommendations suggest that university career centers should incorporate career flexibility measurements as part of well-being assessments, complementing traditional evaluations of career interests. These

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applications can significantly improve career guidance and support for students navigating career decisions.

Limitations and Future Directions

While the results of this study are promising, several limitations must be acknowledged. First, the cross-sectional design and reliance on self-report data limit the ability to make causal inferences. Future longitudinal and experimental studies could investigate whether interventions targeting flexibility directly influence career distress over time. Second, the use of convenience sampling limits the generalizability of the findings. Replication across different socio-economic and academic contexts within Iran would strengthen the external validity of the results. Third, the current mediation model only explains partial mediation, suggesting that other variables, such as emotional intelligence, future orientation, or self-compassion, may act as additional mediators. Finally, qualitative research should be conducted to explore the culturally specific metaphors and narratives surrounding flexibility, which may be overlooked by quantitative measures.

Conclusion

This study contributes significantly to the field of career development research by validating the psychometric properties of the Persian Career Flexibility Inventory and empirically establishing the mediating role of career flexibility in the relationship between coping strategies and career distress. The results indicate that career flexibility serves as a crucial psychological mechanism that links coping strategies to distress outcomes. Specifically, productive coping strategies mitigate career distress through the enhancement of active flexibility, while nonproductive coping strategies exacerbate distress through passive flexibility.

This research underscores the need for career interventions that prioritize the cultivation of adaptability over mere anxiety management. By fostering cognitive flexibility, emotional regulation, and reflective decision-making, career counseling programs can empower students to navigate career transitions with resilience rather than avoidance. The cross-cultural validation of the flexibility construct in the Iranian context broadens the global understanding of career adaptability, demonstrating that while contextual factors influence coping strategies, the psychological processes underlying resilience are universal. In a rapidly changing labor market, the ability to adapt cognitively, emotionally, and behaviorally will be a key determinant of career success.

Ultimately, this study shifts the focus of career development from merely *reducing distress* to *building adaptability*, framing career flexibility not as a stress buffer but as a dynamic force that drives personal and professional growth.

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