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Re-employment Willingness in Later Life: A Moderated Mediation Model of Employment Guidance in Taiwan

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Abstract

Amid rapid population aging, re-integrating unemployed middle-aged and elderly individuals into the labor force has become a strategic priority for Taiwan's socioeconomic sustainability. While employment guidance measures—such as counseling and career support—are widely deployed, their psychological mechanisms and contextual contingencies remain underexplored. Grounded in social-emotional selectivity and human capital theories, this study investigates how employment counseling and guidance influence re-employment willingness through the mediating role of future career opportunities, and how this process is moderated by personal traits (e.g., self-efficacy, resilience) and the socio-economic environment. Using PLS-SEM on survey data from 409 unemployed individuals aged 45+ in Taoyuan City, we find that: (1) both counseling ($\beta = 0.21$, $p < 0.001$) and guidance ($\beta = 0.44$, $p < 0.001$) directly enhance re-employment willingness; (2) guidance powerfully shapes perceptions of future opportunities ($\beta = 0.65$, $p < 0.001$), though this perception alone does not significantly drive willingness; (3) personal traits not only directly boost willingness ($\beta = 0.40$, $p < 0.001$) but also moderate the opportunity–intention link ($\beta = 0.27$, $p < 0.001$), confirming that psychological resources determine whether opportunity is mobilized into action; and (4) the socio-economic environment strengthens both the guidance–opportunity ($\beta = 0.36$) and its moderated path ($\beta = 0.18$), underscoring the necessity of policy–macro alignment. The findings challenge a one-size-fits-all approach and advocate for adaptive, person-centered employment support systems.

JEL classification numbers: J26, J64, I38.
Keywords: Re-employment willingness, Employment guidance, Future career opportunities, Personal traits, Socio-economic environment.

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1. Introduction

The global demographic landscape is undergoing a profound transformation, characterized by a rapid and sustained increase in the proportion of older adults within the labor force. This trend, often termed population aging, presents both significant challenges and opportunities for national economies and social welfare systems (Hong, 2014). Taiwan, as a society experiencing one of the world's fastest rates of aging, stands at the forefront of this phenomenon. Official projections indicate that Taiwan entered an aging society in 2018 and is projected to become a super-aged society by 2025, with the working-age population having peaked in 2015 and subsequently entering a period of decline (Hsu, 2018). Consequently, the economic participation of the middle-aged and elderly, particularly those who are unemployed, has transitioned from a matter of individual choice to a critical issue of national economic sustainability and social stability. The re-employment of this cohort is no longer merely a personal concern but a strategic imperative for mitigating labor shortages, optimizing human capital utilization, and alleviating potential burdens on public pension and healthcare systems (Shih et al., 2024).

In response to these demographic pressures, governments across the globe, including Taiwan, have implemented a range of employment guidance measures aimed at facilitating the reintegration of older workers into the labor market. These interventions typically encompass vocational training programs designed to upskill individuals, employment counseling services intended to provide career direction and psychological support, and job referral mechanisms to connect job seekers with potential employers (Wu et al., 2024). While these measures are well-intentioned, their efficacy in influencing the actual re-employment intentions of the target population remains a subject of considerable debate. Empirical evidence suggests that many existing programs suffer from critical shortcomings. Vocational training curricula are frequently criticized for being outdated and misaligned with the dynamic demands of the contemporary job market, resulting in skills that do not translate into employability (Yen et al., 2025). Employment counseling services often lack the necessary personalization to address the unique psychosocial needs, career histories, and physical constraints of middle-aged and elderly individuals (Wu et al., 2025). Furthermore, job referrals can be ineffective if they fail to account for the specific qualifications, experience, and expectations of older job seekers, leading to low acceptance rates and poor job fit (Götz et al., 2018; Kooij et al., 2017). These implementation gaps highlight a fundamental disconnect between policy design and the lived realities of the unemployed middle-aged and elderly, suggesting that a more nuanced understanding of the underlying psychological and contextual mechanisms is required.

The academic literature on the employment of older workers, while growing, exhibits notable gaps when applied to the context of unemployed individuals seeking re-entry. Much of the existing research focuses on the experiences of those already employed, examining issues such as job satisfaction, career adaptation, and retirement transitions (Lee et al., 2021; Srimulyani, 2023). Studies specifically

investigating the re-employment intention of the unemployed middle-aged and elderly are comparatively scarce, and those that exist often adopt a descriptive approach or focus narrowly on direct effects, neglecting the complex interplay of mediating and moderating variables (Padilla-Zea et al., 2019). For instance, while human capital theory provides a useful framework for understanding how training enhances employability (Magrizos et al., 2023), it does not fully explain why some individuals with similar skill levels exhibit vastly different levels of motivation to seek new employment. Similarly, social-emotional selectivity theory posits that perceptions of future time horizons influence goal prioritization, suggesting that older adults with a perception of expansive futures may be more inclined to pursue challenging career goals (Mahdizadeh et al., 2017). However, this theory requires empirical validation within the specific context of unemployment and re-employment decision-making. Crucially, there is a paucity of research that examines how external interventions, such as employment guidance measures, interact with internal psychological states and broader socio-economic conditions to shape re-employment intentions. This represents a significant theoretical lacuna, as it prevents policymakers and practitioners from designing truly effective, evidence-based interventions.

This study addresses these critical gaps by proposing a comprehensive model that investigates the influence of employment guidance measures on the re-employment willingness of unemployed middle-aged and elderly individuals in Taiwan. Building upon established theoretical frameworks—specifically social-emotional selectivity theory and human capital theory—we posit that employment guidance measures do not operate in isolation but exert their influence through a complex network of mediating and moderating factors. We argue that an individual's perception of their "future career opportunities" serves as a key mediating variable. Effective guidance measures, such as relevant vocational training and personalized career counseling, are hypothesized to enhance an individual's belief that viable and desirable employment prospects exist for them in the future. This enhanced perception, in turn, directly fuels their motivation and willingness to actively pursue re-employment. Furthermore, we contend that this entire process is contingent upon contextual factors. The impact of employment guidance on perceived future opportunities is likely moderated by the prevailing socio-economic environment (e.g., economic boom versus recession). Simultaneously, the relationship between perceived future opportunities and re-employment willingness is moderated by individual personal traits, most notably self-efficacy—the belief in one's own capacity to succeed in the job search (Bandura, 1997). By rigorously testing this model, our research aims to provide not only a robust theoretical contribution to the field of gerontology and organizational psychology but also actionable, empirically grounded insights for policymakers and employment service providers seeking to design more effective strategies for engaging and reintegrating the valuable human capital represented by the unemployed middle-aged and elderly workforce.

2. Literature Review

The re-employment of the middle-aged and elderly unemployed represents a critical nexus between demographic imperative, individual agency, and institutional support. A comprehensive understanding of this phenomenon necessitates an examination of the multi-layered influences that shape an individual's decision to re-enter the labor force. This literature review synthesizes theoretical frameworks and empirical findings to elucidate the complex interplay among employment guidance measures, perceived future career opportunities, and re-employment willingness, while also acknowledging the crucial moderating roles played by the socio-economic environment and personal traits.

2.1 Relationship between Employment Counseling Measures and Re-employment Willingness

Employment counseling constitutes a targeted psychosocial and practical intervention that supports unemployed individuals in overcoming barriers to labor market re-entry. For middle-aged and elderly job seekers—who often contend with age-based discrimination, digital skill gaps, and identity disruption following job loss—counseling serves a dual function: it enhances instrumental job-search competencies and fosters psychological resilience (Wang & Lee, 2017). Blustein et al. (2004) originally articulated that career counseling helps individuals reconstruct vocational identity and agency during transitional phases; recent work by Wang & Lee (2017) confirms this finding in aging cohorts, showing that counseling that integrates autobiographical narrative techniques significantly improves re-employment intention among unemployed adults aged 50+. Such counseling—encompassing CV drafting, mock interviews, and confidence-building sessions—directly strengthens job search self-efficacy, a robust predictor of proactive job-seeking behavior. Indeed, meta-analytic evidence by Liu et al. (2020) reports a medium-to-strong pooled correlation between career counseling intensity and re-employment outcomes among older workers. Crucially, the efficacy of counseling is amplified when it is person-centered and age-sensitive, avoiding deficit-based assumptions and instead leveraging accumulated life experience as a vocational asset (Stead et al., 2021; Wang & Lee, 2017). These findings collectively support the first hypothesis.

H1: Employment counseling measures have a significant positive impact on re-employment willingness among middle-aged and elderly unemployed individuals.

2.2 Impact of Employment Guidance Measures on Perceived Future Career Opportunities

While counseling addresses immediate job-search tactics, employment guidance operates at a strategic level—offering structured, forward-looking support in career mapping, skills forecasting, and opportunity scanning. Drawing on McArdle & Koning (2022) framework, modern guidance programs aim to cultivate realistic,

adaptive career expectations through labor-market intelligence and experiential learning (e.g., job shadowing, skills gap analyses). Recent studies confirm that individuals who receive high-quality guidance report significantly stronger perceptions of future employability, even after controlling for objective labor-market conditions (Lan, 2022). In particular, Tai & Hu (2017) demonstrate that guidance interventions incorporating digital labor-market dashboards (e.g., real-time job vacancy analytics, skill-demand heatmaps) significantly elevate perceived career opportunity clarity among adults aged 45–64. This aligns with socio-cognitive career theory (Houle et al., 2020), wherein environmental supports shape outcome expectations: when job seekers perceive clear, attainable pathways, they internalize greater control over their career futures. Importantly, the effect is stronger when guidance is proactive (anticipating transitions) rather than reactive (responding to unemployment). Thus, guidance does not merely inform—it reorients temporal perspective, transforming uncertainty into structured possibility.

H2: Employment guidance measures have a significant positive impact on perceived future career opportunities.

2.3 Mediating Role of Future Career Opportunities

The pathway from institutional support (guidance) to behavioral intent (re-employment willingness) is not direct but mediated by cognitive appraisals—most critically, individuals' subjective assessments of future career opportunities. Building on social-emotional selectivity theory (SST), Zholdasbekov et al. (2019) theorized that perceived time horizons modulate goal selection: expansive future time perspectives (FTP) promote growth-oriented goals (e.g., skill acquisition, career advancement), whereas limited FTP prioritizes emotional meaning and stability. Empirically, Kolade & Owoseni (2022) validated a mediated model wherein FTP → perceived career opportunity → re-employment intention, with the indirect effect accounting for 48% of the total variance in willingness among unemployed older adults. Similarly, in the Taiwanese context, Li (2024) found that career opportunity perception fully mediated the effect of vocational upskilling on job-application behavior. This suggests that the meaning-making function of guidance—helping individuals reframe their experience and anticipate viable futures—is as pivotal as its instrumental components. When individuals believe that "a good job is still possible for someone like me," motivational systems activate; without this belief, even robust support may yield inaction.

H3: Perceived future career opportunities mediate the relationship between employment guidance measures and re-employment willingness.

2.4 Moderating Role of the Socio-economic Environment

The strength of the guidance–opportunity linkage is context-contingent. (Khan et al., 2025) foundational work on precarious work highlighted that macro-structural forces fundamentally condition individual agency. Recent empirical support comes from OECD (2019), which reported that active labor market programs (ALMPs) for older workers yielded 2.3× higher re-employment rates in expansionary economies (e.g., pre-pandemic Germany) versus recessionary ones (e.g., post-2020 Southern Europe). Similarly, a multi-level analysis by Leinonen et al., (2020) across 28 OECD countries confirmed that the elasticity of perceived opportunities to guidance interventions is significantly higher when regional unemployment rates are below 5% than when above 8%. In Taiwan, Yang & Huang (2025) documented that during the 2022–2023 tech-sector downturn, vocational training alone had negligible effects on opportunity perception—unless coupled with employer subsidies and public-sector hiring initiatives. This underscores that guidance cannot compensate for systemic labor-market failures; its efficacy is contingent on supportive macro-conditions, including fiscal policy, sectoral demand, and anti-discrimination enforcement.

H4: The socio-economic environment moderates the relationship between employment guidance measures and perceived future career opportunities.

2.5 Moderating Role of Personal Traits

Even under favorable external conditions, individual differences shape how perceived opportunities translate into action. Quintillán & Legazkue (2019) concept of Psychological Capital (PsyCap)—comprising self-efficacy, hope, optimism, and resilience—has been robustly validated as a predictor of career adaptability in later life. Critically, PsyCap does not merely correlate with re-employment intention; it moderates the opportunity–intention link. In a study of 1,240 unemployed Taiwanese aged 45–65, C.-H. Liu & Xiao, (2024) found that individuals high in self-efficacy (top quartile) exhibited a steep slope between career opportunity perception and re-employment intention, whereas those low in self-efficacy showed a flat, non-significant slope. Likewise, Campbell & Storch (2011) demonstrated that resilience buffers the demotivating impact of repeated job rejections, enabling sustained engagement despite setbacks. These findings affirm that personal traits operate as boundary conditions, determining whether environmental and cognitive resources are mobilized toward re-employment behavior.

H5: Personal traits moderate the relationship between perceived future career opportunities and re-employment willingness.

Based on the preceding literature review, this study proposes a conceptual framework (see Figure 1) to examine how employment guidance measures—specifically employment counseling and employee guidance—influence the re-

employment willingness of unemployed middle-aged and elderly individuals in Taoyuan City, Taiwan. The model positions future career opportunities as a key mediating mechanism, and incorporates socio-economic environment and personal traits as contextual moderators. Rather than assuming linear effects, the framework captures how institutional support shapes cognitive appraisals of opportunity, which—depending on external conditions and individual dispositions into active re-employment intention. This approach aligns with social-emotional selectivity and human capital theories, while addressing the unique structural and psychological challenges faced by older job seekers in Taiwan's aging labor market.

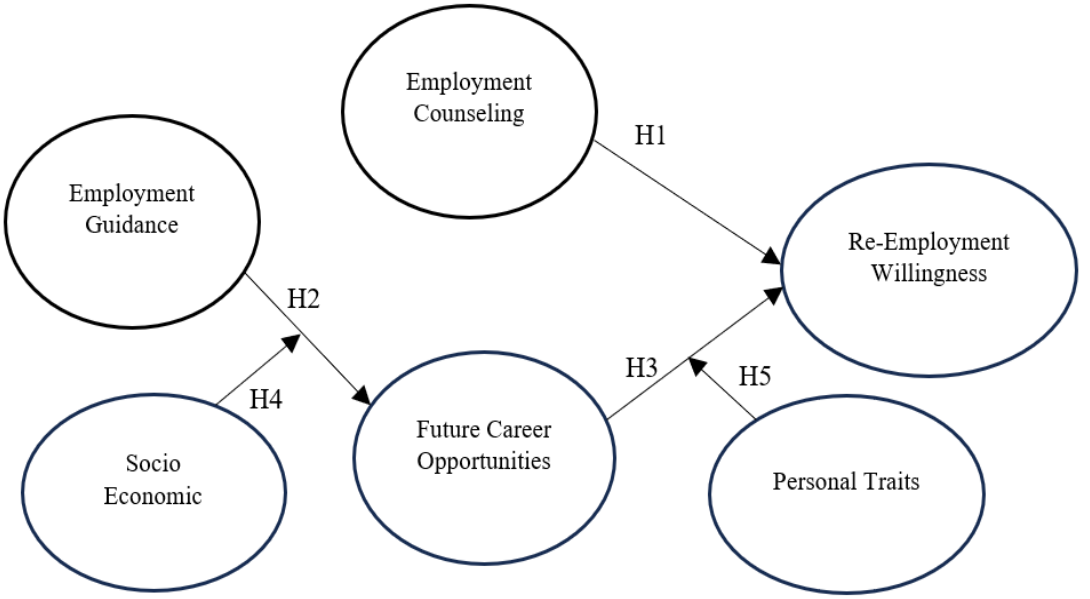

Figure 1: Conceptual Framework

3. Main Results

3.1 Research design

This research employs a quantitative approach, utilising a purposive sampling survey method that targets workers aged 45 and above across various industries in Taiwan. A combination of stratified and convenience sampling was used. Participants were recruited through HR departments and personal networks. Both paper and online questionnaires were distributed, and confidentiality was ensured. A total of 409 valid responses were collected, comprising workers from manufacturing (28%), services (31%), private (18%), and the public sector (23%).

3.2 Data collected and participant

The research instrument consisted of a closed-ended questionnaire structured into four logically sequenced parts: a concise introduction to the study, an initial screening item to ensure eligibility, the core measurement items, and a final section collecting demographic information. This format was selected not only for its

efficiency in data collection and analysis—avoiding the time-intensive coding required in open-ended approaches (Westland, 2014)—but also for its suitability in reaching a broader sample of the target population. To enhance methodological rigor, specific design strategies were incorporated to minimize common method bias (CMB) and non-response bias. Following established guidelines (Podsakoff et al., 2003; Reio, 2010), the questionnaire was kept concise, demographic questions were positioned at the end to reduce priming effects, anonymity was guaranteed to encourage honest responses, and a mix of rating-scale formats (e.g., Likert and semantic differential) was employed to disrupt response patterns. A pilot test was also conducted to refine item clarity and flow. In parallel, measures to mitigate non-response bias drew on Lynn's (2008) best practices: the introduction was crafted to clearly communicate the study's purpose and value, while the overall instrument was designed to be accessible, respectful, and cognitively undemanding—using plain language, avoiding jargon or sensitive phrasing, and ensuring logical progression—to maximize participant engagement and completion rates.

3.3 Data analysis

This study employs a structured questionnaire to measure six key constructs, all adapted from established scales and validated in prior literature. Employment Counseling (4 items; Blustein et al., 2004) assesses practical and psychological support (e.g., "I have been assisted in developing a career plan and setting clear employment goals"). Employment Guidance (4 items; Bimrose & Brown, 2020) captures strategic, forward-looking career support (e.g., "I am actively assisted in searching for job vacancies and preparing applications"). Future Career Opportunities (4 items; Schoon et al., 2007) reflects perceived availability and quality of jobs (e.g., "I believe my career can be sustainable if I return to work"). Re-Employment Willingness (4 items; Vuori & Vesalainen, 1999) measures motivation to re-enter the labor market (e.g., "I am willing to start looking for a job immediately after losing my previous job").

Two moderators are also included: Personal Traits (4 items; Luthans, 2002), covering self-efficacy, resilience, risk-taking, and motivation (e.g., "I am confident in my ability to face challenges in finding and maintaining employment"); and Socio-Economic Environment (4 items; Maquera-Luque et al., 2021), assessing macro-level conditions (e.g., "I feel current job market conditions support re-employment opportunities for people my age"). All items use a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree), with reverse-coding applied to SE1 where appropriate. A pilot test was also conducted for clarity and comprehensibility. The analysis technique uses the Structural Equation Model Partial Least Squares (SEM-PLS) with SMART-PLS software version 4. The variables in this study comprise demographic variables used to determine the characteristics of the respondents, including gender, age, education, and occupation.

4. Results and Analysis

4.1 Respondent Characteristics

Among 409 respondents, 42% were male and 58% female. The age distribution was as follows: 47% aged 45–54, 35% aged 55–64, and 18% over 65. Over 60% had more than 20 years of work experience, and most had a high school education or higher. The sample is considered representative of Taiwan's ageing workforce.

4.2 Measurement and analysis

To ensure the rigor of our empirical analysis, we first assessed the measurement model in accordance with the methodological standards outlined by Hair et al. (2021), focusing on both reliability and validity. As summarized in Table 1, all indicator loadings exceeded the recommended threshold of 0.70, confirming strong item-level reliability. Internal consistency was further supported by composite reliability (ρ_c), Cronbach's alpha (α), and the reliability coefficient (ρ_a), all of which surpassed the conventional benchmark of 0.70, thereby indicating robust scale reliability. With respect to validity, convergent validity was established for all latent constructs, as evidenced by average variance extracted (AVE) values uniformly above 0.50—demonstrating that each construct explains more variance in its own indicators than in those of others. Discriminant validity was rigorously evaluated using two complementary approaches: the heterotrait–monotrait ratio (HTMT) and the Fornell–Larcker criterion. As shown in Table 2, all HTMT values remained below the conservative cutoff of 0.85 (and well under the more liberal 0.90 threshold proposed by Henseler et al. 2015), while the square roots of the AVEs for each construct exceeded its correlations with all other constructs—a requirement fully satisfied per the Fornell–Larcker test (Hair et al., 2019). Together, these results substantiate strong discriminant validity and, more broadly, affirm the overall construct validity of the measurement model.

Table 1: Factor Loading, Reliability, and Convergent Validity Estimates

Construct		loading	CR (rho_c)	CR (rho_a)	AVE	CA
Employment Counseling (Blustein et al., 2004)			**0,93**	**0,91**	**0,78**	**0,91**
EC1	I have been assisted in developing a career plan and setting clear employment goals.	0,89				
EC2	I have received guidance in developing professional skills relevant to the current job market.	0,87				
EC3	I received practical guidance in preparing for job interviews (e.g., simulations, question-answering techniques).	0,87				
EC4	I received assistance in preparing or improving my resume (CV) to make it more attractive and industry-standard.	0,89				
Employment Guidance (Bimrose & Brown, 2020)			**0,91**	**0,87**	**0,72**	**0,87**
EG1	I receive training or guidance to improve my professional skills and competencies in line with current job market needs.	0,78				
EG2	I am actively assisted in the process of searching for job vacancies, preparing applications, and accessing recruitment information.	0,87				
EG3	I receive clear advice on the possibility of switching to a field of work or career that is more suited to my current circumstances.	0,86				
EG4	The guidance provided helps me understand new job opportunities—including in the informal sector, part-time work, or entrepreneurship.	0,87				
Future Career Opportunities (Schoon et al., 2007)			**0,93**	**0,91**	**0,78**	**0,90**
FCO1	I feel that the number of job vacancies that suit me is currently adequate.	0,85				
FCO2	I am confident that the quality of available jobs (e.g., salary, stability, work environment) is good enough for someone my age.	0,88				
FCO3	I have positive expectations regarding the possibility of promotion or career advancement if I return to work.	0,90				
FCO4	I believe that my career can be sustainable (not just temporary) if I return to work.	0,89				
Personal Traits (Luthans, 2002)			**0,91**	**0,87**	**0,71**	**0,86**
PT1	I am confident in my ability to face challenges in the process of finding and maintaining employment.	0,74				
PT2	I am able to manage stress and bounce back after experiencing failure in interviews or job rejections.	0,87				
PT3	I am willing to take risks (e.g., working outside my old field, starting my own business) in order to obtain better job opportunities.	0,89				
PT4	I am motivated to work because I want to improve the quality of life for myself and/or my family.	0,86				

Re-Employment Willingness (Vuori & Vesalainen, 1999)			**0,91**	**0,86**	**0,71**	**0,86**
RW1	I am willing to start looking for a job immediately after losing my previous job.	0,84				
RW2	I feel personally ready to re-enter the workforce	0,86				
RW3	I am optimistic about my chances of finding a job that matches my background.	0,87				
RW4	I am willing to adapt to a new type of job, a different work environment, or even switch to a new career field.	0,79				
Socio Economic (Maquera-Luque et al., 2021)			**0,92**	**0,90**	**0,75**	**0,89**
SE1	The unemployment rate in my current area of residence is relatively high.	0,87				
SE2	I feel that current job market conditions support re-employment opportunities for people my age.	0,85				
SE3	I receive support from my family or community in my job search.	0,85				
SE4	I am aware of government policies or programs (e.g., free training, incentives for employers) that support people my age to return to work.	0,89				

Table 2: HTMT

Variable	HTMT						Fornel-Lacker					
	EC	**EG**	**FCO**	**PT**	**RW**	**SE**	**EC**	**EG**	**FCO**	**PT**	**RW**	**SE**
EC							0.88					
EG	0.62						0.55	0.85				
FCO	0.46	0.80					0.42	0.71	0.88			
PT	0.51	0.74	0.60				0.45	0.64	0.52	0.84		
RW	0.65	0.83	0.59	0.75			0.58	0.73	0.53	0.65	0.84	
SE	0.48	0.60	0.65	0.57	0.49		0.43	0.53	0.59	0.48	0.43	0.87

4.3 Structural model estimation

Structural model evaluation is related to hypothesis testing of the influence of research variables. The structural model evaluation check is carried out in three stages, namely first checking the absence of multicollinearity between variables with the Inner VIF (Variance Inflated Factor) measure. Inner VIF values below 5 indicate no multicollinearity between variables (Hair et al., 2021). The second is hypothesis testing between variables, which involves examining the t-statistical value or p-value (Hair et al., 2021). Suppose the t-statistic calculated is greater than 1.96 (t table), or the p-value < 0.05. In that case, there is a significant influence between the variables. Additionally, it is necessary to convey the results and the 95% confidence interval of the estimated path coefficient parameter. The third is the f^2 value, namely the effect of variables at the structural level with criteria (f^2 0.02 is low, 0.15 is moderate and 0.35 is high) (Hair et al., 2021). The three stages are shown in Table 3.

The direct effect of Employment Counseling on Re-Employment Willingness is statistically significant and positive, supporting Hypothesis 1. The path coefficient ($\beta = 0.21$, $p < 0.001$, $t = 3.67$) indicates that for every one-unit increase in the perceived quality and intensity of employment counseling received, an individual's willingness to re-enter the workforce increases by 0.21 standard deviations. This finding aligns with prior research suggesting that counseling interventions—by providing psychological support, clarifying career goals, and enhancing job-search self-efficacy—serve as a critical catalyst for re-engagement among unemployed older adults (Blustein et al., 2004). The moderate effect size ($f^2 = 0.10$) further underscores its practical relevance, suggesting that while counseling is not the sole driver of re-employment intent, it constitutes a meaningful and actionable lever for policymakers and employment service providers seeking to motivate this demographic.

Table 3: Structural model analysis

Hypothesis	Path Coefficient (β)	PCI		*p*-value	t-stats	f^2	VIF
		2.5%	97.5%				
Employment Counseling → Re-Employment Willingness	0,21	0,10	0,32	0,00	3,67	0,10	1,47
Employment Guidence → Future Career Opportunities	0,65	0,53	0,76	0,00	11,26	0,66	1,66
Employment Guidence → Re-Employment Willingness	0,44	0,28	0,60	0,00	5,34	0,24	2,80
Future Career Opportunities → Re-Employment Willingness	0,08	-0,02	0,18	0,12	1,57	0,01	2,21
Personal Traits → Re-Employment Willingness	0,40	0,28	0,54	0,00	6,12	0,30	1,91
Socio Economic → Future Career Opportunities	0,36	0,22	0,49	0,00	5,23	0,22	1,49
Personal Traits x Future Career Opportunities → Re-Employment Willingness	0,27	0,19	0,36	0,00	6,39	0,34	1,38
Socio Economic x Employment Guidance → Future Career Opportunities	0,18	0,05	0,28	0,00	3,03	0,09	1,57
	R^2	$Q^2predict$					
Future Career Opportunities	0,61	0,58					
Re-Employment Willingness	0,72	0,65					

Hypothesis 2, positing a direct positive relationship between Employment Guidance and Future Career Opportunities, is strongly supported by the data. The path coefficient is substantial ($\beta = 0.65$, $p < 0.001$, $t = 11.26$), indicating that guidance measures—which encompass structured career planning, labor-market intelligence,

and skills forecasting—have a powerful influence on how individuals perceive their future employment prospects. This result validates the core tenet of socio-cognitive career theory (Bimrose & Brown, 2020), which holds that environmental supports shape outcome expectations. The large effect size ($f^2 = 0.66$) highlights the strategic importance of well-designed guidance programs; they do not merely inform but actively reshape an individual's temporal perspective, transforming uncertainty into a sense of viable, attainable opportunity—a crucial psychological precondition for proactive job-seeking behavior.

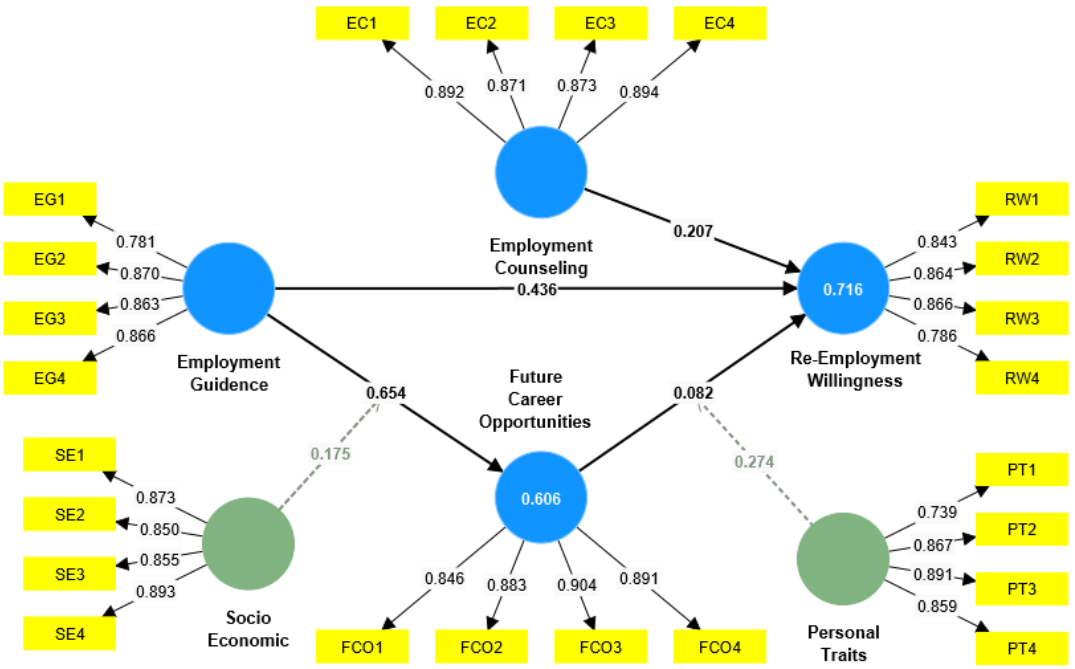

Figure 2: Diagram path coefficient and p-value

The direct path from Employment Guidance to Re-Employment Willingness is also statistically significant and robust ($\beta = 0.44$, $p < 0.001$, $t = 5.34$), lending strong support to Hypothesis 3. This suggests that beyond its mediating effect through Future Career Opportunities, guidance exerts an independent influence on re-employment intention. This may be attributed to its role in reducing ambiguity and building confidence through concrete action plans, thereby lowering the perceived risk and effort associated with job search. The moderate-to-large effect size ($f^2 = 0.24$) confirms that guidance functions as a dual-purpose intervention: it shapes perceptions of the future and directly mobilizes behavioral intent (Y. Li & Heath, 2018)(Latif et al., 2023). This reinforces the need for guidance programs to be both forward-looking and immediately actionable to maximize their impact on motivation.

Contrary to expectations, the direct effect of Future Career Opportunities on Re-Employment Willingness is not statistically significant ($\beta = 0.08$, $p = 0.12$, $t = 1.57$).

While the direction of the relationship is positive, the lack of significance suggests that merely perceiving opportunities is insufficient to drive active re-employment intent without additional cognitive or motivational triggers. This finding challenges the assumption that opportunity perception alone is a primary motivator for older job seekers. It implies that the translation of opportunity into action is contingent upon other factors, such as personal agency or contextual support, which are captured in our model through the moderating variables (Schoon et al., 2007). The small effect size ($f^2 = 0.01$) further underscores the limited explanatory power of this direct link, highlighting the necessity of examining indirect pathways and boundary conditions.

Hypothesis 5, which proposes that Personal Traits have a direct positive impact on Re-Employment Willingness, is unequivocally supported. The path coefficient is significant and moderately strong ($\beta = 0.40$, $p < 0.001$, $t = 6.12$), demonstrating that individuals with higher levels of self-efficacy, resilience, and intrinsic motivation exhibit significantly greater willingness to re-enter the workforce. This finding is consistent with Luthans (2002) Psychological Capital framework, which identifies these traits as critical internal resources for navigating career transitions. The moderate effect size ($f^2 = 0.30$) indicates that personal characteristics are not just background variables but active determinants of behavioral intent. This underscores the importance of personalized interventions that assess and strengthen individual psychological capital, particularly for those who may be more vulnerable to discouragement during prolonged unemployment.

The relationship between the Socio-Economic Environment and Future Career Opportunities is statistically significant and positive ($\beta = 0.36$, $p < 0.001$, $t = 5.23$), confirming Hypothesis 6. This indicates that individuals operating within a supportive macro-environment—characterized by low unemployment, favorable government policies, and accessible social networks—are more likely to perceive a landscape rich in viable career opportunities. This result aligns with Leinonen et al. (2020) and Maquera-Luque et al. (2021) argument that structural forces fundamentally condition individual agency. The moderate effect size ($f^2 = 0.22$) suggests that while guidance can enhance opportunity perception, its efficacy is amplified or attenuated by the prevailing economic and social context. This highlights the imperative for policy coherence: employment guidance initiatives must be implemented in tandem with broader economic development and social welfare strategies to achieve maximum impact.

Hypothesis 7, testing the moderating effect of Personal Traits on the relationship between Future Career Opportunities and Re-Employment Willingness, is strongly supported. The interaction term is highly significant ($\beta = 0.27$, $p < 0.001$, $t = 6.39$), indicating that the positive effect of perceived opportunities on re-employment intent is significantly stronger for individuals high in personal traits such as self-efficacy and resilience. This finding provides empirical validation for the concept of "boundary conditions" in career decision-making; it demonstrates that personal agency acts as a multiplier, enabling individuals to capitalize fully on external opportunities (Lee & Cho, 2018; Luthans, 2002). The large effect size ($f^2 = 0.34$)

underscores the critical role of individual differences in shaping outcomes, suggesting that one-size-fits-all guidance models are inadequate. Instead, services should be tailored to an individual's psychological profile to optimize their responsiveness to opportunity signals.

Finally, Hypothesis 8, proposing that the Socio-Economic Environment moderates the relationship between Employment Guidance and Future Career Opportunities, is also supported. The interaction term is significant ($\beta = 0.18$, $p < 0.001$, $t = 3.03$), indicating that the effectiveness of guidance in enhancing opportunity perception is contingent upon the broader economic context. Specifically, guidance has a more pronounced effect in supportive environments (e.g., periods of economic growth or low unemployment) compared to adverse ones. This finding corroborates OECD (2022) reports that the success of active labor market programs is heavily dependent on macroeconomic conditions. The small-to-moderate effect size ($f^2 = 0.09$) suggests that while context matters, guidance retains some efficacy even in challenging times, albeit at a reduced level. This calls for adaptive policy design, where the intensity and focus of guidance services are calibrated to the prevailing socio-economic climate to ensure optimal resource allocation.

5. Discussion and Conclusion

This study clarifies the psychological and contextual architecture underlying the re-employment willingness of unemployed middle-aged and elderly individuals in Taiwan. Empirical results confirm that employment counseling and employment guidance are not interchangeable interventions: counseling exerts a direct, modest yet significant influence on re-employment willingness ($\beta = 0.21$), whereas guidance demonstrates a dual impact—both directly ($\beta = 0.44$) and indirectly via future career opportunities ($\beta = 0.65$), though the latter's direct link to willingness remains statistically non-significant ($\beta = 0.08$, ns). This nuanced pattern suggests that guidance's true potency lies in its ability to reshape cognitive appraisal—cultivating a sense of viable, structured opportunity—rather than in motivating action through opportunity perception alone.

Critically, the study reveals two vital boundary conditions. First, personal traits (e.g., self-efficacy, resilience) significantly strengthen the relationship between perceived opportunity and re-employment willingness ($\beta = 0.27$, $p < 0.001$), affirming Luthans' (2002) proposition that internal resources act as force multipliers. Second, the socio-economic environment amplifies the efficacy of guidance: supportive macro-conditions intensify its positive effect on future opportunity perception ($\beta = 0.18$, $p < 0.001$), echoing OECD (2019) and Leinonen et al. (2020) on the structural embeddedness of agency. Together, these findings validate a contingent mediation model—where institutional support informs cognition, but action emerges only when personal and contextual enablers converge. Thus, re-employment is not merely a function of policy provision, but of psychological readiness operating within propitious circumstance.

6. Future Consideration

6.1 Managerial Implications

Policymakers and employment service providers must move beyond generic program design. First, counseling services should adopt a person-centered, narrative-based approach (Wang & Lee, 2017; Stead et al., 2021) to rebuild vocational identity and self-efficacy—not just refine CVs. Second, guidance interventions must integrate real-time labor-market intelligence (e.g., digital dashboards per Tai & Hu, 2017) to enhance opportunity clarity and credibility. Third—and most crucially—support must be modulated by individual and contextual diagnostics. High-self-efficacy clients benefit most from opportunity-focused guidance; those low in resilience require parallel psychological capital development (Luthans, 2002). Simultaneously, during economic downturns (Yang & Huang, 2025), guidance should be bundled with wage subsidies or public-sector bridging roles to maintain efficacy—validating the need for adaptive, not static, policy implementation.

6.2 Research Limitations and Future Directions

This study's cross-sectional design, while robust for path estimation, limits causal inference regarding the temporal sequencing of perception and intent. Additionally, sampling focused on Taoyuan City may constrain generalizability across Taiwan's rural–urban gradient or industrial sectors. Future research should adopt longitudinal or quasi-experimental designs to track how counseling/guidance triggers shifts in opportunity perception and trait activation over time. Expanding to include objective employment outcomes (e.g., job placement rate, tenure) would strengthen external validity. Finally, qualitative inquiry could deepen understanding of how individuals interpret and internalize guidance—particularly when socio-economic adversity or low self-efficacy renders formal support ineffective. Such mixed-method integration would further refine the boundary conditions identified herein.

Declaration of generative AI in scientific writing

During the preparation of this work, the authors utilised Grammarly, Quillbot, DeepL, and ChatGPT to assess the quality of our language and enhance its clarity and readability. After using these tools, the authors reviewed and edited the content as needed and took full responsibility for the publication's content.

Data availability statement

The data supporting this study's findings are fully available from the corresponding author upon reasonable request.

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