Enumeration of Career Path Re-Creation Components in Iraq's Social Work-Based Organizations Using the Systematic Review Method

Emad Sabih Laiez[1] , Mohammad Mahdi Farahi[2] , Ghasem Eslami[3]* , Ruhollah Bagheric[3]

[1] PhD Student in Public Administration, Human Resource Management, Faculty of Administrative and Economic Sciences, Ferdowsi University of Mashhad, Mashhad, Iran
[2] Assistant Professor, Department of Management, Faculty of Administrative and Economic Sciences, Ferdowsi University of Mashhad, Mashhad, Iran
[3] Associate Professor, Department of Management, Faculty of Administrative and Economic Sciences, Ferdowsi University of Mashhad, Mashhad, Iran

* Corresponding author email address: gh.eslami@um.ac.ir

Abstract

The present study was conducted with the aim of enumerating the components of career path re-creation in Iraq's social work-based organizations using a systematic review method. The philosophical foundation of the research is based on pragmatism, and a mixed-method approach combining library and field studies was employed. The research strategy included a systematic literature review in the qualitative section and a survey in the quantitative section. The study population consisted of texts related to career path re-creation in reputable domestic and international scientific databases from 2000 to 2024. For qualitative data analysis, the method of qualitative content analysis was applied, and the systematic review process was carried out based on the seven-step framework of Petticrew and Roberts (2007). In this regard, after the initial search and determination of keywords, the inclusion and exclusion criteria of sources were specified using the PICOS framework. In total, 54 related studies were identified and reviewed, from which 98 components were extracted. These components, after three stages of coding and categorization, were organized into 11 categories and ultimately four main dimensions of career path re-creation, including "cognitive re-creation," "skills and roles re-creation," "relationships and opportunities re-creation," and "personal life re-creation." For quantitative analysis, structural equation modeling was employed. Regarding the assessment of the validity and consistency of the components with the study population, considering that the measurement model coefficients of career path re-creation in the structural equation modeling software fell within the acceptable range in both significance and standardized states, this indicates the accuracy and reliability of the measurement tool used in the research. The high standardized coefficients demonstrate that, in the Iraqi statistical population, the selected indicators are strongly and effectively related to the concept of career path re-creation, and the degree of each indicator's contribution to explaining this concept is noteworthy. On the other hand, appropriate significance coefficients (with T-values above 1.96) indicate that the statistical relationships between the indicators and the latent construct are statistically reliable, and the probability of these relationships being random is very low. In the context of Iraq's social work organizations, this matter carries particular importance. The validity and significance of the coefficients show that the indicators used in this model accurately and meaningfully reflect the experiences and challenges of employees in these institutions. The concept of career path re-creation in this context is justifiable and analyzable not only theoretically but also practically through the selected indicators. The results indicate that applying these four dimensions in Iraq's social work organizations can lead to improved career advancement, increased satisfaction, and enhanced efficiency of social workers. This study, by providing a comprehensive framework, not only contributes to the empowerment of human resources in these organizations but also paves the way for future research on career path re-creation in similar cultural and social contexts.

Keywords: career path re-creation components, Iraq's social work-based organizations, systematic review method

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1. Introduction

The contemporary labor market is undergoing unprecedented transformations driven by globalization, digitalization, demographic shifts, and organizational restructuring. These transformations have altered traditional notions of career stability and predictability, giving rise to new paradigms in career development such as job crafting, career crafting, and sustainable careers [1-3]. Within these paradigms, individuals are increasingly expected to assume an active role in shaping their own professional trajectories by aligning personal values, competencies, and aspirations with organizational opportunities. Such approaches emphasize adaptability, resilience, and continuous learning, all of which are essential in navigating the volatility and complexity of modern workplaces [4-6].

The concept of job crafting, initially introduced as a way for employees to proactively adjust their tasks and relationships at work, has gained substantial scholarly and practical attention. It describes the self-initiated changes individuals make to align their jobs with their skills, needs, and preferences [7-9]. As empirical evidence has demonstrated, job crafting not only enhances engagement, satisfaction, and performance but also supports broader career sustainability [10, 11]. Building on this foundation, career crafting extends the notion to long-term professional trajectories, emphasizing deliberate efforts to align personal goals with career opportunities and contextual realities [12, 13]. This broader perspective acknowledges that employees are not merely passive recipients of organizational structures but active agents capable of shaping their own career narratives [14, 15].

A growing body of research has sought to conceptualize and measure these constructs in diverse contexts. Lee and colleagues [3] developed and validated the Career Crafting Assessment (CCA), offering a reliable tool for evaluating the extent to which individuals engage in proactive career management behaviors. Their findings highlight that career crafting behaviors are positively associated with satisfaction and adaptability, thereby reinforcing the importance of self-directed career management. Similarly, studies have illustrated that job crafting has the potential to reduce burnout and foster well-being across a variety of professions [16, 17]. For example, research among occupational therapy professionals has shown that the ability to craft jobs mitigates the negative effects of emotional exhaustion and enhances resilience [16].

Another dimension of career crafting research emphasizes the role of contextual and individual determinants. Kilic and Kitapci [18] proposed a serial indirect effect model demonstrating how contextual and personal factors influence sustainable careers through the mediating roles of career crafting and person-career fit. Their findings underscore the intricate interplay between organizational environment and individual agency, suggesting that sustainable careers are facilitated not only by personal competencies but also by institutional structures. These insights resonate with De Vos and colleagues [1], who conceptualized sustainable careers as careers that maintain viability across time by integrating individual, organizational, and societal perspectives.

The notion of adaptability has also emerged as central to the discourse on career re-creation. According to Nalis and colleagues [4], adaptability functions as a key resource in responding to evolving career demands, with career construction theory offering a framework for understanding how individuals mobilize personal and contextual resources to meet challenges. Adaptability, when combined with proactive behaviors such as job crafting, strengthens employees' capacity to align work with personal aspirations and external demands [5, 13].

Empirical research has consistently highlighted the positive outcomes associated with career and job crafting. For instance, Dubbelt and colleagues [9] demonstrated through longitudinal and quasi-experimental evidence that job crafting enhances engagement, performance, and career satisfaction. Likewise, Fu and Huang [11] identified meaningful work as a mediating mechanism linking job crafting to organizational citizenship behaviors among teachers in Chinese colleges. Their study provides evidence that employees who engage in job crafting are more likely to experience their work as meaningful, which subsequently drives positive discretionary behaviors. Similar findings have been observed in hospitality settings, where job crafting has been linked to enhanced job embeddedness and overall retention [19, 20].

Beyond individual outcomes, job and career crafting also hold significant implications for organizational performance. By empowering employees to proactively shape their work and career paths, organizations can foster greater alignment between individual competencies and organizational goals. This alignment is essential for addressing contemporary organizational challenges such as innovation, resilience, and employee retention [21, 22]. For instance, Soliman [21] found that job crafting in the hotel

industry enhances employees' innovative behaviors, particularly when psychological states and workplace gossip are considered. This suggests that job crafting not only benefits individual employees but also contributes to organizational adaptability and innovation capacity.

The dynamic nature of career crafting also highlights the role of external influences such as technological advancements and labor market trends. Zhao and colleagues [20] examined how dependence on artificial intelligence affects job crafting behaviors among hotel employees, revealing that higher reliance on AI can both facilitate and inhibit proactive work behaviors depending on the degree of employee autonomy. This finding aligns with broader observations that technological disruption is reshaping the ways employees approach their careers [12, 23]. Similarly, Patterson [24] emphasized the transformative role of contextual changes, illustrating how iconic architectural developments—the so-called "Bilbao effect"—reshape organizational and local career dynamics.

The relational and social dimensions of career crafting also deserve attention. Networking, social support, and professional identity are increasingly recognized as integral to successful career management [22, 23]. Johnson and colleagues [23] applied social network analysis to examine the career paths of university presidents, revealing the importance of relational capital in navigating hierarchical and competitive career landscapes. In parallel, Mukhtar and Ibrahim [17] demonstrated that workplace inequality negatively influences job crafting, but this effect can be mitigated through social support and workplace resilience. Such findings highlight the role of social embeddedness in enabling individuals to effectively re-create their career paths.

While much research has focused on organizational settings, career crafting is also relevant in broader socio-economic and demographic contexts. Wentz and Gyllensten [15] explored career crafting among individuals aged 69–75, illustrating how older workers actively adapt and re-craft their careers to maintain meaningful engagement in later life. Similarly, Vidwans [5] explored the paradigm of career crafting in the context of career success, underscoring its applicability across different stages of professional development. These findings resonate with the boundaryless and protean career orientations emphasized by Övgü Çakmak-Otluoğlu [14], who identified how such orientations are associated with enhanced career competencies and self-directed behaviors.

Moreover, the potential risks of neglecting job and career crafting should not be overlooked. Burnout, disengagement, and career stagnation remain pressing challenges in contemporary organizations. Research has shown that proactive crafting behaviors can buffer the negative impacts of these risks by enhancing personal resources and aligning work with personal values [16, 25]. For instance, Gallagher and colleagues [25] examined oral health-related behaviors among elite athletes, highlighting how lifestyle practices intersect with professional performance, thus indirectly reinforcing the importance of self-management in sustaining careers.

Taken together, the literature demonstrates that job crafting and career crafting are not isolated phenomena but deeply embedded in the broader discourse on sustainable careers. They encompass individual-level initiatives, organizational practices, and societal trends that collectively shape how individuals perceive and pursue their career development [1, 18, 26]. As organizations face increasing pressures from technological disruption, globalization, and social change, the ability of employees to re-create and sustain their careers has become a critical determinant of both individual success and organizational resilience.

The current study builds on this growing body of literature by examining the components and dimensions of career path re-creation within the context of social work-based organizations in Iraq.

2. Methodology

The research philosophy is pragmatism, the method of this study is mixed-method, and the data collection techniques include both library studies and field collection. To enumerate the components of career path re-creation, the research population consisted of texts related to the subject available in reputable foreign scientific databases. Among these databases are Springer, Scopus, Elsevier, Emerald, Science Direct, and Google Scholar. For selecting the relevant studies, the following criteria were considered.

1. The time frame of the studies ranges from 2000 to 2024. The reason for this time frame is that the concept of career path re-creation was first introduced in articles published in 2016 and 2017, but for precautionary reasons and to review related concepts, the search began from 2000.
2. The language of publication was limited to Persian and English.

3. The studies had to be in the form of articles indexed in reputable scientific databases.

It should be noted that the focus of article review and analysis was primarily on organizations that provide social work-based activities to support the needy, the elderly, patients, and persons with disabilities. However, due to the scarcity of such studies in the search results, other related populations were also considered. Overall, the priority for article review was on charities, committees for special diseases, social work organizations, and similar institutions. The scope of these organizations was Iraq's social work-based institutions. Furthermore, these components were reviewed and validated through questionnaires within Iraq's social work community.

The researcher restricted the searches to English and Persian-language journals between 2000 and 2024, covering publications of the past 24 years. The year 2000 was selected as the starting point because the first scientific article explicitly addressing the concept of career path re-creation was published in 2016 and 2017. At the first stage, and before conducting the operational search of articles, several preliminary searches were performed in some databases, including Science Direct and Google Scholar, to identify the main keywords. These initial searches provided articles that helped determine suitable keywords and search terms. After examining these initial articles, the most frequently used keywords were selected as the research keywords.

Next, the inclusion and exclusion criteria for the systematic review were determined based on the research question. In this study, the PICOS framework was used to guide the definition of inclusion and exclusion criteria, encompassing Population, Interventions, Comparisons, Outcomes, and Study designs. The qualitative sample consisted of documents relevant to the phenomenon under study, namely career re-creation. The quantitative population included employees of Iraq's social work institutions, primarily in Baghdad. The number of these employees was approximately 950, and based on Cochran's formula, the sample size needed to be around 370. With the distribution of questionnaires, 380 completed questionnaires were collected.

Systematic Review Process

A successful systematic review generally involves three main stages: planning the review, conducting or executing the review, and reporting the review. In the planning stage, researchers identify the necessity of the review, specify the research questions, and prepare a review protocol. In the conducting stage, researchers identify and select primary studies and then extract, analyze, and synthesize the data. In the reporting stage, researchers prepare a report of their review findings for publication. Although various authors have described similar processes for conducting systematic reviews, they usually differ only in the number or naming of the stages, and some stages may be merged.

For conducting the systematic review, this study followed the seven-step framework proposed by Petticrew and Roberts (2007). The seven-step approach includes the following stages and was implemented accordingly:

1. Formulating the research question: clearly defining the question that the method aims to address.
2. Developing the research strategy or protocol: determining what types of studies are required to answer the research question and how to collect them.
3. Identifying data sources: describing the information sources used to comprehensively search the literature.
4. Screening identified studies: reviewing to identify data that meet the inclusion criteria to answer the research question.
5. Assessing quality: carefully evaluating the methodological quality of selected studies.
6. Analyzing and synthesizing data: integrating studies, synthesizing data, and assessing heterogeneity among findings.

For quality assessment of each study, which includes methodological quality, a qualitative rating tool was used during data extraction, and articles were evaluated individually. To assess correlation studies, a quality assessment tool derived from previous systematic reviews was applied (Coden et al., 2011). Four domains of each study were evaluated: research design, sampling, measurement, and statistical analysis. Thirteen criteria with a total score of fourteen were assigned according to Table 1. Based on the scores obtained, studies were classified as low quality (0–4), medium quality (5–9), or high quality (10–14). For qualitative studies, the CASP checklist (2014) was applied. This checklist consists of ten questions related to rigor, validity, and significance, allowing a maximum of nine points based on yes/no responses. A score of nine indicates the highest quality.

After assessing the quality of the reviewed studies, it was necessary to perform final data extraction, analysis, and synthesis. Therefore, each article was carefully read and re-read to examine how arguments, concepts, and claims were

presented and how its hypotheses could be linked to the research question.

To ensure the validity and reliability of the research, and because of the need to increase confidence in the accuracy of qualitative findings, researchers in this field emphasized concepts such as credibility and dependability. In qualitative research, to confirm the robustness of the data, attention must be given to credibility, dependability, confirmability, and transferability. Considering that the qualitative part of the study involved identifying the components of career path re-creation, the data analysis method in the systematic review section was the same seven-step process explained earlier.

Accordingly, studies were systematically collected, categorized, and separated in line with the research objectives, as presented in Table 4. Based on the inclusion criteria that required articles in English, an initial total of 113 studies was identified, and after the final screening, 54 relevant studies on career path re-creation were included in the systematic review. Following the component analysis, career path re-creation components in each study were identified, separated, and entered into an Excel file. Then, the extracted codes, or components, were grouped using selective coding into broader categories, which were subsequently clustered under overarching components.
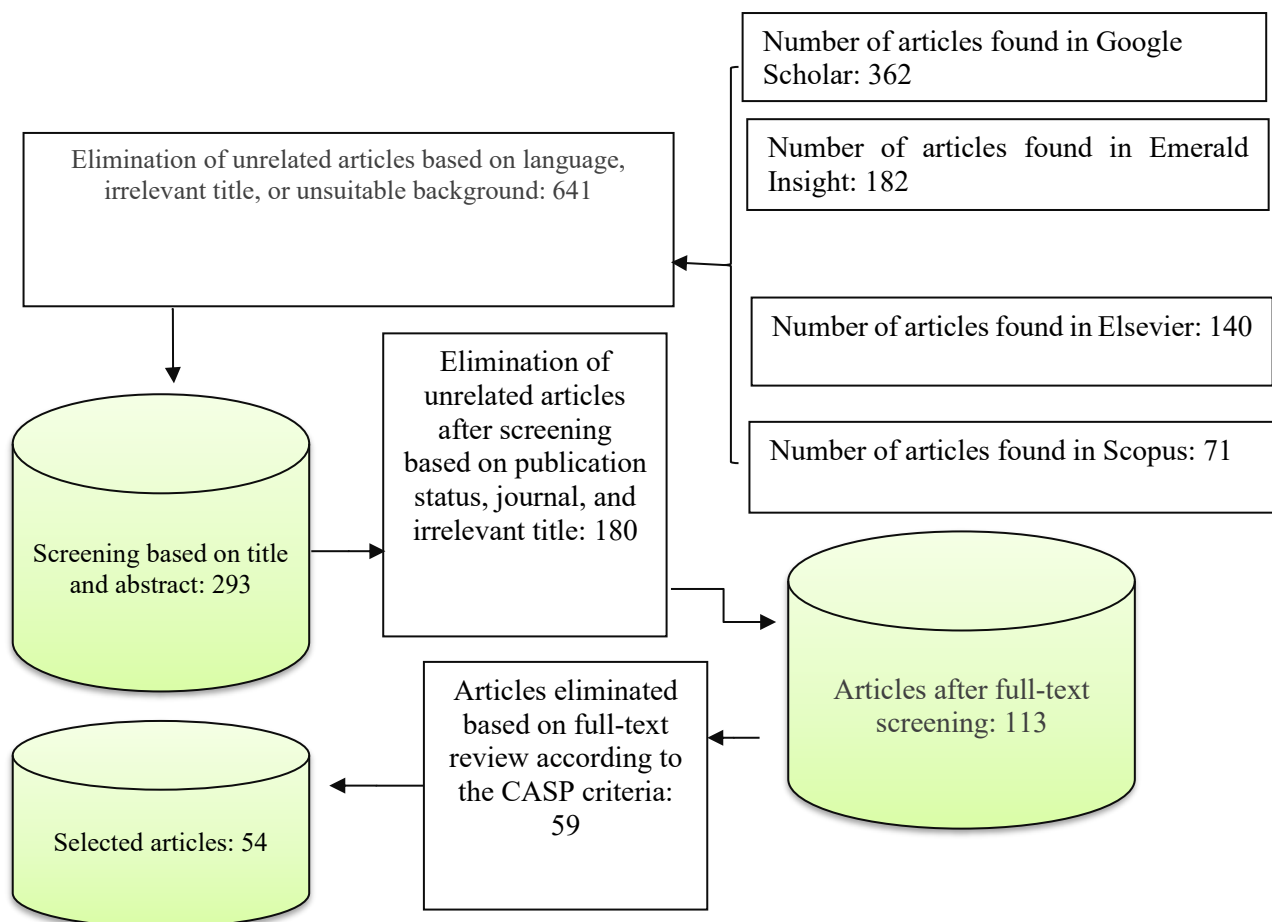
Figure 1. Screening and Refinement of Articles

3. Findings and Results

The research findings, which resulted from the review of various articles in the field of career path re-creation, were presented here after examination, refinement, and analysis. Table 1 presents the different components identified in previous studies.

Table 1. Initial Coding and Concept Identification

Author(s)	Component in Previous Studies	Author(s)	Component in Previous Studies
Porter et al. (2016)	Boundaryless mindset	Tims & Akkermans (2020); Suárez-Bilbao et al. (2023)	Proactive career construction
Li et al. (2021); Briscoe et al. (2006)	Variable career attitudes	Van Leeuwen et al. (2020)	Career self-management
Kim (2021)	Positive career beliefs	Seibert et al. (2001)	Awareness of career goals
Wiedanz (2016)	Cognitive skills	Briscoe et al. (2006)	Career autonomy
Valcour (2015)	Long-term career development	Briscoe et al. (2006)	Responsibility for managing one's own career path
Grant & Parker (2009)	Changes in individual attitudes	Grant & Parker (2009)	Proactive behaviors in career path
Arthur & Rousseau (1996)	Independent career path	Briscoe (2007)	Self-direction
Bridgstock (2009)	Acceptance of career opportunities	Akkermans et al. (2013)	Career exploration
Lent (2013)	Subjective career success	Suárez-Bilbao et al. (2023)	Working across geographical boundaries and macro contexts
Lawrence (2010)	Enjoyment	Greenhaus et al. (1990)	Career salience
Lawrence (2010)	Motivation	Cakmankoglu (2018)	Proactive job search behavior
Lawrence (2010)	Adaptability	Porter et al. (2016)	Variable and boundaryless
Chin & Rasdi (2014)	Proactive behaviors	Valcour (2015)	Proactive choices
Enache, Selen, Simo & Fernandez (2011)	Intrinsic motivation	Tims & Akkermans (2020)	Proactive career reflection
Bridgstock (2007)	Strong intrinsic motivation	Li et al. (2021)	Reflection on positive meaning of career
Akkermans, Brenninkmeijer, Huibers & Blonk (2013)	Self-profiling	Spence (2008)	Gathering information on career opportunities
Akkermans & Tims (2017)	Reflection on motivation	Seibert et al. (2001)	Finding job opportunities through professional networks
Akkermans & Tims (2017)	Reflection on characteristics	Li et al. (2021)	Expanding task boundaries
Suárez-Bilbao et al. (2023)	Self-recreation – reflection on motivations, values and goals, characteristics, strengths, weaknesses, and skills	Panda & Kaur (2023)	Utilizing growth opportunities
Van Leeuwen et al. (2020)	Self-monitoring and reflection	Van Leeuwen et al. (2020)	Self-construction
Seijgers et al. (2008)	Self-leadership	Lopresti et al. (2023)	Increasing challenging job demands
Akkermans, Brenninkmeijer, Huibers & Blonk (2013)	Networking	Li et al. (2021)	Expanding task boundaries
Li et al. (2021)	Changing communication boundaries	Valcour (2015)	Short-term career design
Li et al. (2021)	Use of communication resources	Suárez-Bilbao et al. (2023)	Identity struggles
Suárez-Bilbao et al. (2023)	Maintaining professional and personal networks in home and host countries	Cakmankoglu (2018)	Identity awareness
Panda & Kaur (2023)	Enhancing social influence	Suárez-Bilbao et al. (2023)	Reflection on values
Chen et al. (2022)	Seeking social support	Porter et al. (2016)	Value orientation
Cakmankoglu (2018)	External networking behavior	Van Leeuwen et al. (2020)	Values and interests
Lopresti et al. (2023)	Increasing social job resources	Li et al. (2021)	Reflection on positive meaning of work
Li et al. (2021)	Changing communication boundaries	Wiedanz (2016)	Redefinition of goals
Wiedanz (2016)	Communication and interpersonal skills	Ashforth (1988)	Professional self-concept
Li et al. (2021)	Use of communication resources	Briscoe & Hall (2006)	Value-based perspectives
Wiedanz (2016)	Selection and development of relationships with key individuals	Ashforth (1988)	Career identity
Seibert et al. (2001)	Social networking	Wentz & Galanston (2016)	Proactiveness during challenges and milestones
Seibert et al. (2001)	Building relationships with professionals in fields of interest	Panda & Kaur (2023)	Continuous learning and development
Arthur & Rousseau (1996)	Independence from a single employer for career success	Chen et al. (2022)	Seeking challenges
Akkermans et al. (2013); Akkermans & Tims (2017); Savickas & Porfeli (2011)	Career control	Van Leeuwen et al. (2020)	Motivation for action
Park (2011)	Self-leadership	Watts et al. (2013)	Skill development

Inkson & Arthur (2001)	Preferences for psychological and physical mobility	Panda & Kaur (2023)	Continuous learning
Valcour (2015)	Behavioral adaptation	Lent (2013)	Opportunities for skill enhancement
Briscoe & Hall (2006)	Transformational career action	London & Briscoe (2010)	Career planning, goal setting, and program development
Arthur & Rousseau (1996)	Preferences for psychological and physical mobility	Wentz & Galanston (2016)	Work-life balance in ideal career state
Bridgstock (2007)	Proactiveness, resilience, and adaptability	Wentz & Galanston (2016)	Life beyond work and resource organization
Chen et al. (2022)	Seeking resources	Kilic & Kitapsi (2024)	Impact on my life
Wiedanz (2016)	Task selection for desirable outcomes	Panda & Kaur (2023)	Nurturing personal health
Van Leeuwen et al. (2020)	Self-efficacy	Chen et al. (2022)	Reducing demands
Locke & Latham (1990)	Job adjustment to achieve desires	Wiedanz (2016)	Balance between personal and professional aspects
Locke & Latham (1990)	Job adjustment to achieve goals	Panda & Kaur (2023)	Enhancing adaptability and resilience
Locke & Latham (1990)	Striving for goals	Cakmankoglu (2018)	Adaptability

In the following section, the codes and concepts identified, which represent the components of previous studies, are categorized, and the categories (components of career path re-creation) are identified.

Table 2. Second-Stage Coding and Identification of Categories (Career Path Re-Creation Components)

Codes (Identified Concepts)	Career Path Re-Creation Components and Categories
Boundaryless mindset, flexible career attitudes, positive beliefs about career path, cognitive skills, long-term career development, changes in individual attitudes, preference for pursuing an independent career path, openness to career opportunities, subjective career success	Cognitive development (career path openness mindset)
Enjoyment, motivation and perseverance, adaptability, proactive behaviors, intrinsic motivation, strong intrinsic motivation	Strong intrinsic motivations
Self-awareness and self-knowledge, reflection on motivations, reflection on characteristics, self-recreation, self-monitoring and reflection	Self-awareness and self-knowledge
Identity challenges, identity awareness, reflection on values, value orientation, values and interests, reflection on the positive meaning of work, redefinition of goals, professional self-concept, value-based perspectives, career identity	Identity and value orientation (recognition and management of professional identity and values)
Proactivity in facing challenges and milestones, continuous learning and development, seeking challenges, motivation for action, skill development, continuous learning, opportunities for skill enhancement	Continuous learning and growth
Increasing adaptability and resilience, adaptability, preferences, psychological and physical mobility, behavioral adaptation, transformational career action, psychological and physical mobility preferences, proactivity, resilience and adaptability, self-construction	Resilience and adaptability spirit
Self-leadership, career path control, self-direction, structuring, proactive career path, career self-management, awareness of career goals, career planning, goal setting, program development for career goals, career autonomy, proactive career behaviors, self-guidance, responsibility for managing one's own career direction	Self-leadership and purposeful career path planning
Expanding task boundaries, exploiting growth opportunities, increasing challenging job demands, short-term career design, task selection for desired outcomes	Challenge-seeking and career expansion
Self-efficacy, job adjustment to achieve desires, job adjustment to achieve goals, striving for goals, networking	Self-efficacy and effective task management
Changing communication boundaries, use of communication resources, maintaining professional and personal networks, creating social influence, seeking social support, external networking behaviors, increasing social job resources, communication and interpersonal skills, use of communication resources, selection and development of relationships with key individuals, social networking, building relationships with professionals in areas of interest, independence from a single employer for career success, seeking career opportunities, working across geographical boundaries and macro contexts	Purposeful and broad networking
Career path salience, proactive job search behaviors, flexible and boundaryless attitudes, proactive choices, proactive career reflection, reflection on positive meaning of career, gathering information about career opportunities, finding career opportunities through professional networks, work–life balance in an ideal career state, detachment from work-free life and use of resources	Opportunity seeking
Impact on my life, nurturing personal well-being, reducing demands, balancing personal and professional aspects, resource seeking, work–life balance	Life–work balance management

Finally, the components were categorized into the dimensions of career path re-creation, as presented in the table below.

Table 3. Third-Stage Coding and Identification of Career Path Re-Creation Dimensions

Categories (Career Path Re-Creation Components)	Career Path Re-Creation Dimensions
Cognitive development (career path openness mindset)	Cognitive re-creation
Strong intrinsic motivations	
Self-awareness and self-knowledge	
Identity and value orientation	
Continuous learning and growth	Skills and roles re-creation
Resilience and adaptability spirit	
Self-leadership and purposeful career path planning	
Self-efficacy and effective task management	
Challenge-seeking and career expansion	Relationships and opportunities re-creation
Purposeful networking	
Opportunity seeking	
Life–work balance management	Personal life re-creation

In the following section, each of these dimensions and components is briefly examined.

Cognitive Re-Creation Component

Cognitive re-creation refers to the alteration and development of an individual's attitudes and mindset toward their career path. This component helps the individual maintain an open and adaptive mindset when facing career challenges and transitions. Cognitive re-creation emphasizes the development of cognitive, psychological, and professional dimensions so that individuals can continuously grow throughout their career path and take advantage of available opportunities. It enables individuals to hold an open mindset toward their career path and to use changes as opportunities for growth and development. People with an open mindset are continuously seeking learning and new experiences, while remaining resilient and adaptable in the face of workplace changes and challenges.

Example: An individual with an open career mindset may view new career opportunities as tools for further learning and professional advancement, using changes as opportunities for growth.

This component also refers to an individual's ability to possess strong intrinsic motivations that constantly drive them toward achieving their career goals. Those with intrinsic motivations are driven from within to perform tasks and achieve professional objectives without relying on external motivators. These motivations include passion for work, sense of responsibility, and commitment to personal development.

Example: An individual with strong intrinsic motivation may independently pursue learning a new skill even in the absence of external pressure.

This category also refers to the process of self-awareness—understanding one's attributes, values, and career goals. Self-awareness in a profession helps individuals manage their career paths more effectively and recognize their strengths and weaknesses. This can involve assessing strengths, weaknesses, interests, values, and professional objectives.

Example: A self-aware individual may recognize specific abilities and take them into account when choosing a job or making professional decisions.

Cognitive re-creation enables individuals to maintain an open mindset toward career changes, utilize intrinsic motivations, develop self-knowledge, and manage their professional identity and values. This process not only aids individuals in achieving career goals but also allows them to gain greater satisfaction from their career path and continuously progress and learn. Cognitive re-creation includes categories elaborated as follows.

Cognitive development or career path openness mindset refers to the individual's ability to perceive multiple career trajectories and remain flexible in responding to career and professional changes. Individuals with an open career mindset actively seek new opportunities and can readily adapt to new circumstances and workplace demands. This mindset includes acceptance of new ideas, flexibility in career choice, and the ability to shift attitudes and behaviors toward professional growth.

Positive career beliefs are held by individuals who believe they can succeed in their career paths and overcome obstacles. Such individuals trust in opportunities and potentials across different jobs and continuously strive to improve and advance themselves.

Strong intrinsic motivations refer to the internal drives that propel individuals toward their goals. Unlike external motivations such as financial rewards or social approval,

these originate internally, based on passion, personal growth, satisfaction, and self-acceptance.

Proactive behavior refers to actions initiated without external prompting or pressure. Proactive individuals actively identify problems and devise solutions, engaging preventively in workplace situations rather than waiting for instructions.

Self-awareness refers to an individual's awareness of personal attributes, behaviors, values, motivations, and emotions. This component reflects the ability to recognize and understand personal strengths and weaknesses, as well as evaluate and analyze attitudes and reactions.

Identity and value orientation refers to the process of identifying, understanding, and managing personal values and professional identity. This component includes an individual's capacity to define professional identity, evaluate internal values and beliefs, and align them with career goals and professional activities.

Skills and Roles Re-Creation Component

Skills and roles re-creation refers to the process of revising, updating, and expanding an individual's skills and roles throughout their career path. This component emphasizes continuous learning, adaptation to career changes, and personal growth. Individuals who re-create their skills and roles can operate more effectively in complex and dynamic workplace environments and play a more adaptive and effective role in organizations.

This component highlights the importance of self-awareness in career management and an individual's ability to plan and direct their own career path. Self-leading individuals can independently make decisions, set career goals, and plan to achieve them. They can also adjust their career paths according to new conditions and seize opportunities.

Example: A self-leading manager may identify long-term career goals and take actions such as developing specific skills or networking in relevant industries to achieve them.

It also refers to the individual's ability to effectively manage work experiences and utilize them for career advancement. A highly self-efficacious individual can successfully perform various tasks and use each work experience—whether positive or negative—for learning and growth. This leads to greater confidence in facing career challenges and making better decisions.

Example: A project manager with high self-efficacy may apply lessons learned from past projects to better manage new projects.

Skills and roles re-creation is a dynamic and continuous process that allows individuals to continuously advance in their career paths by developing skills and effectively managing work experiences. Through continuous learning and growth, resilience and adaptability, self-leadership and purposeful career planning, and self-efficacy, individuals can successfully face workplace challenges and achieve their goals. This process not only contributes to personal development but also improves organizational performance and job satisfaction. The following categories elaborate this component.

Continuous learning and growth refers to the process of continuously updating knowledge, skills, and competencies, enabling individuals to advance in both professional and personal domains. It includes capacity for challenge acceptance, skill development, and commitment to lifelong learning.

Resilience and adaptability spirit refers to the ability to adjust and respond positively to changes, challenges, and unexpected circumstances. It involves coping with changing environments and managing psychological and workplace pressures. Individuals with strong resilience and adaptability learn from crises, overcome challenges, and succeed even in novel or unexpected situations.

Behavioral adaptability refers to changes in individual behavior in response to new conditions or environmental challenges. This may include altering communication styles, work methods, or decision-making approaches. Those with behavioral adaptability quickly adjust to new conditions and improve their performance.

Self-leadership and purposeful career planning refer to the individual's ability to independently and proactively guide and control their career path. This includes goal setting, designing a roadmap to achieve goals, and undertaking necessary actions for career advancement. Strong self-leaders can strategically plan their career path, assume responsibility for it, and implement strategies for long-term goals.

Challenge-seeking and career expansion refers to individuals' efforts to face demanding tasks and broaden their career boundaries. It includes seeking new job opportunities, taking on challenging demands, and strategically designing work tasks for skill enhancement and professional growth. Challenge-seekers aim to move beyond their current duties and continuously improve their competencies.

Self-efficacy and effective task management refers to the ability to evaluate and perform tasks in ways that achieve

desired outcomes. It emphasizes selecting, organizing, and executing tasks effectively to achieve goals. High self-efficacy enables individuals to optimally manage tasks, utilize their capacities to face challenges, and ultimately achieve objectives.

Relationships and Opportunities Re-Creation Component

Relationships and opportunities re-creation refers to an individual's ability to rebuild and expand professional relationships and seek new career opportunities. This component emphasizes the importance of human relations and networking in career development and helps individuals continuously leverage relationships for professional advancement.

This category refers to seeking and embracing new workplace challenges. Individuals striving for career expansion continuously position themselves in challenging contexts to enhance skills and experiences, enabling them to overcome obstacles and move toward larger opportunities.

Example: An employee interested in career expansion may accept new responsibilities, manage complex projects, or join diverse teams to gain new experiences.

This category also refers to creating and maintaining professional relationships with individuals who can provide new career and development opportunities. Purposeful networking allows individuals to connect with key people in their industry and leverage these relationships to achieve professional goals.

Example: An individual may attend conferences and industry events to connect with senior managers and experts, thereby building a network of influential contacts.

Purposeful and broad networking refers to creating, expanding, and managing professional and social relationships strategically to achieve career success, lifelong learning, and use of social resources for personal and professional growth. In this component, individuals consciously expand networks and utilize communication resources to achieve professional objectives. Networking helps individuals access resources and opportunities for advancement. These relationships may include colleagues, managers, clients, or other stakeholders in related industries.

Opportunity seeking refers to the proactive and deliberate process by which individuals identify and access new career opportunities or promotions along their career path. This includes exploring different fields, gathering information, and making strategic decisions for career development.

Effective opportunity seekers align identified opportunities with personal goals and values.

Example: An individual may pursue new job opportunities involving challenges that allow them to test and expand their competencies.

**Personal Life Re-Creation Component**

Personal life re-creation refers to the process of creating balance and harmony between personal and professional life. This component emphasizes the importance of managing the balance between different aspects of personal and career domains. Personal life re-creation enables individuals to continue advancing professionally while also devoting time and energy to maintaining relationships, health, and personal well-being.

The work–life balance category refers to creating equilibrium between career responsibilities and personal life. An individual capable of managing work–life balance can effectively allocate time and energy between professional duties and personal needs. This balance helps prevent workplace stress and enhances overall quality of life.

Example: An individual may carefully schedule work and personal time to ensure strong performance at work while dedicating sufficient time to family, recreation, and health.

Work–life balance management reduces stress and prevents burnout. Achieving balance improves quality of life and allows individuals to benefit from both personal and professional domains. Moreover, it enhances job satisfaction, maintains motivation and productivity, and ultimately improves mental and physical health.

Although many individuals strive to achieve such balance, they may face challenges such as long working hours, job pressures, or high expectations, leading to imbalance. Thus, effective management of this balance requires planning skills, flexibility, and self-awareness. Personal life re-creation and work–life balance management are crucial for maintaining mental, physical, and professional health. An individual with strong balance management skills not only succeeds in the workplace but also enjoys a higher quality of life. This process allows individuals to distance themselves from work-related stress while continuously benefiting from professional opportunities. It ensures success at work while safeguarding psychological and physical well-being, preventing personal life from being undermined by job pressures. Competent individuals in this domain can effectively and coherently manage professional and personal needs, thereby improving both quality of life and job performance.
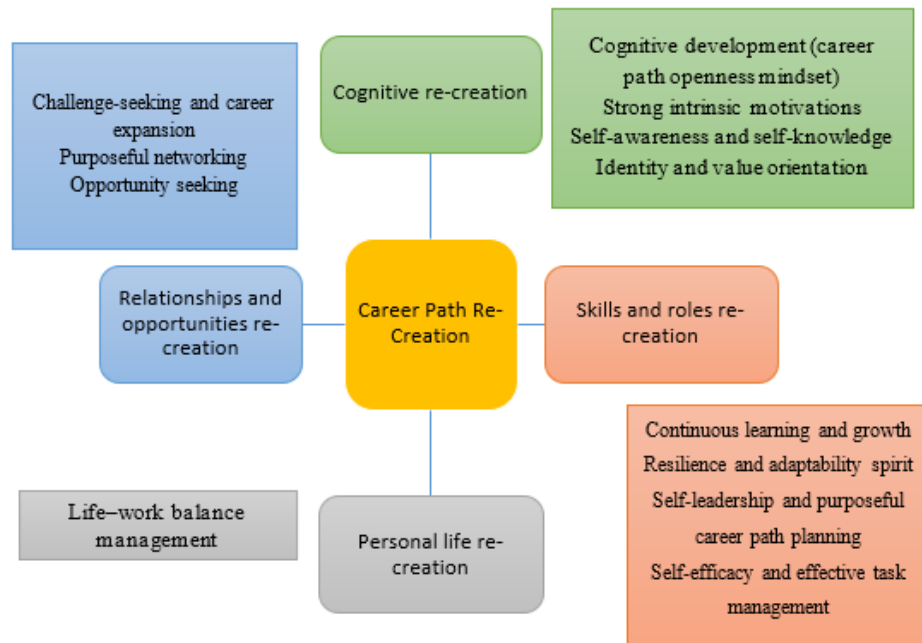
Figure 2. Final Model of Career Path Re-Creation (Dimensions and Components)

Before testing the standardized model of the components, it is necessary to examine the normality of the variables. One of the methods used to test the assumption of normal distribution of variables is the Kolmogorov–Smirnov test. The results of this test are presented in Table 5.

Table 4. Test of Normality of Career Path Distribution

| Variable	Index	Value
Number		380
Normal Parameters	Mean	3.0286
	Standard Deviation	0.92540
Kolmogorov–Smirnov Z		
Sig. (2-tailed)	Significance	0.071

The results of the test show that the significance level of all research variables is greater than 0.05; therefore, the null hypothesis, i.e., the normality of the variables, is confirmed.

The career path re-creation variable consists of four dimensions (cognitive re-creation, skills and roles re-creation, relationships and opportunities re-creation, and personal life re-creation) and twelve indicators. Figures below illustrate the career path re-creation model in standardized and significance states.
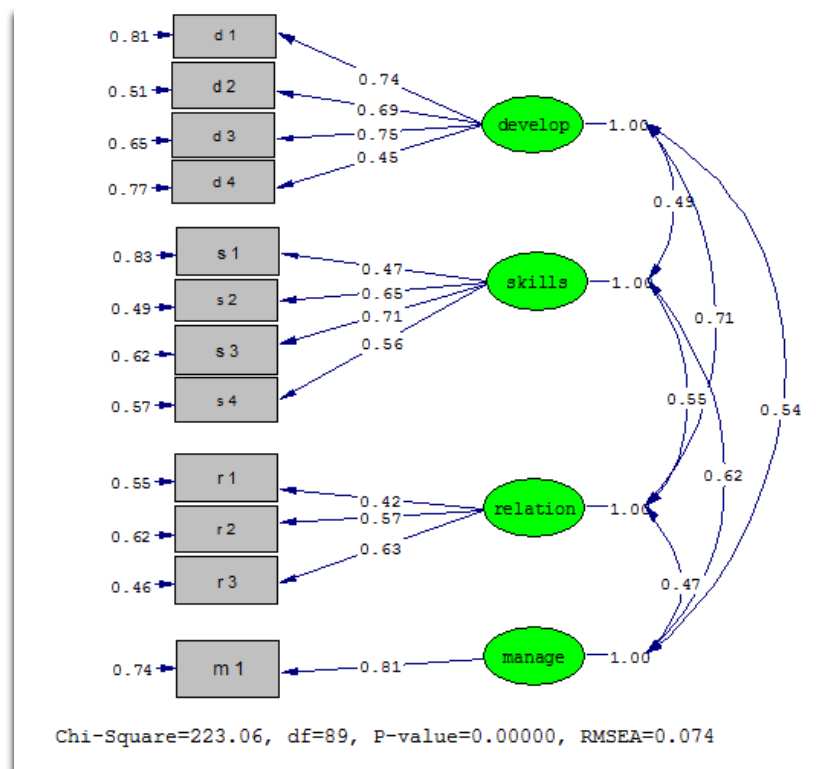
Figure 3. Coefficients of the Career Path Re-Creation Measurement Model in Standardized State
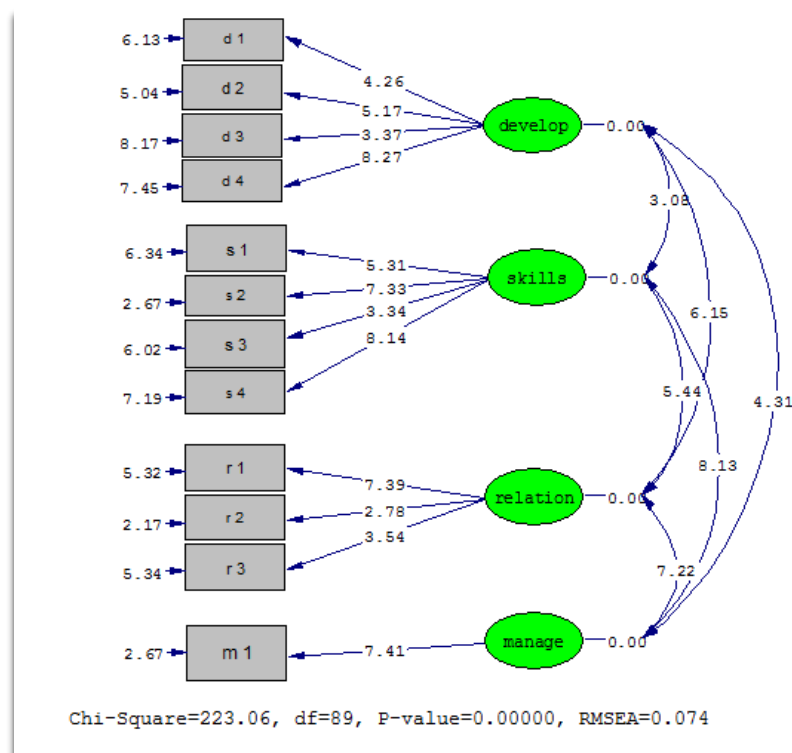
Figure 4. Coefficients of the Career Path Re-Creation Measurement Model in Significance State

When the coefficients of the career path re-creation measurement model in LISREL software fall within the acceptable range both in the significance and standardized states, this indicates the accuracy and reliability of the measurement tool used in the study. High standardized coefficients demonstrate that, in the Iraqi statistical population, the selected indicators are strongly and effectively related to the concept of career path re-creation, and the contribution of each indicator to explaining this concept is substantial. On the other hand, appropriate significance coefficients (with T-values greater than 1.96) show that the statistical relationships between the indicators and the latent construct are statistically reliable and that the probability of these relationships being random is very low.

In the context of Iraq's social work organizations, this issue is of even greater importance. The validity and significance of the coefficients indicate that the indicators used in this model are accurate and relevant reflections of the experiences and challenges of employees in these institutions. The concept of career path re-creation in this context is justifiable and analyzable not only theoretically but also practically through the selected indicators. This statistical validity, along with conceptual coherence, enables the researcher to derive meaningful and evidence-based inferences from the data and to propose practical, actionable measures for improving employees' career paths in these organizations. Thus, the findings obtained can play an effective role both in the theoretical development of research and in enhancing the quality of human resources in Iraq's social work institutions.

4. Discussion and Conclusion

The findings of this study provide a comprehensive understanding of the components and dimensions of career path re-creation within the context of Iraqi social work-based organizations. Results indicate that career path re-creation can be conceptualized across four core dimensions: cognitive re-creation, skills and roles re-creation, relationships and opportunities re-creation, and personal life re-creation. These dimensions encompass twelve specific components, including cognitive openness, intrinsic motivation, self-awareness, value and identity orientation, continuous learning, resilience, self-leadership, self-efficacy, challenge-seeking, networking, opportunity-seeking, and work–life balance. The results confirm that these dimensions and components represent critical mechanisms through which employees adapt, sustain, and advance their careers in dynamic and often challenging professional contexts.

One of the most salient findings is the strong role of cognitive re-creation, which emphasizes the development of flexible, positive, and open mindsets toward career paths. Employees who adopt boundaryless mindsets and positive career beliefs demonstrate greater resilience in facing structural and contextual challenges. This aligns with the work of Vidwans [5], who described career crafting as a paradigm that enables professionals to reframe challenges as opportunities for development. Similarly, Lee and colleagues [3] showed that individuals with proactive cognitive orientations achieve higher adaptability and satisfaction, reinforcing the present findings that open and growth-oriented mindsets are essential for sustainable career development.

The dimension of skills and roles re-creation was also found to be a critical predictor of career sustainability, highlighting the role of continuous learning, self-leadership, resilience, and self-efficacy. The importance of continuous learning resonates with the research of Dubbelt and colleagues [9], who demonstrated that job crafting enhances task performance and career satisfaction by enabling employees to expand their roles and capabilities. Similarly, Fu and Huang [11] revealed that job crafting fosters meaningful work, which in turn mediates positive behaviors such as organizational citizenship. This supports the conclusion that skills and roles re-creation is not merely about competence development but also about cultivating meaning and purpose in work. The emphasis on resilience and adaptability also echoes findings by Nalis and colleagues [4], who argued that adaptability represents a central career resource for navigating modern demands.

The study further highlights the role of relationships and opportunities re-creation, reflecting the importance of networking, social support, and active opportunity seeking. Networking emerged as a key mechanism for broadening career horizons and leveraging social capital. This aligns with Johnson and colleagues [23], who emphasized the role of social networks in the career progression of university presidents, illustrating how relational ties can shape career pathways. Similarly, Mukhtar and Ibrahim [17] demonstrated that social support mitigates the negative effects of inequality on job crafting, underscoring the protective function of supportive professional networks. Opportunity seeking, another subcomponent of this dimension, reflects proactive efforts to identify and exploit new possibilities, consistent with research by Suarez-Visbal

and colleagues [22], who examined how circular strategies in global value chains create new social opportunities.

The final dimension, personal life re-creation, highlights the importance of work–life balance and integrating personal and professional domains. The results show that employees who successfully balance career demands with personal well-being are more satisfied and resilient. This finding resonates with Wentz and Gyllensten [15], who demonstrated that career crafting among older professionals involved not only sustaining work engagement but also maintaining personal well-being. Similarly, Lynner and colleagues [16] showed that job crafting among occupational therapists reduced burnout, suggesting that integrating personal balance is crucial in preventing exhaustion and sustaining long-term career engagement.

Beyond identifying these dimensions, the structural model analysis confirmed that all twelve indicators significantly contributed to explaining career path re-creation. The standardized coefficients were strong, and T-values exceeded acceptable thresholds, supporting the statistical validity of the measurement model. These results underscore the relevance of the identified indicators within the Iraqi context and confirm their alignment with international research findings on career and job crafting. The convergence of theoretical and empirical evidence strengthens the case for considering career path re-creation as a multidimensional construct that bridges individual agency and contextual demands.

The emphasis on cognitive openness and self-awareness mirrors findings in the broader career construction literature. For instance, Ge and colleagues [12] introduced career crafting as a construct that integrates self-directed exploration and contextual alignment, consistent with the present study's finding that cognitive re-creation serves as a foundation for other dimensions. The interplay between motivation and adaptability also aligns with research by Kim and colleagues [7], who showed that job crafting is influenced by intrinsic motivation and results in higher engagement and performance. These consistencies highlight that while the Iraqi context presents unique challenges, the underlying mechanisms of career crafting are robust across cultural settings.

Moreover, the findings regarding opportunity seeking and networking extend the discussion on sustainable careers. Kilic and Kitapci [18] demonstrated that contextual and personal determinants affect career sustainability through mediating mechanisms such as career crafting. Their findings support the conclusion that career path re-creation

cannot be reduced to individual initiative alone but is shaped by institutional opportunities and constraints. Similarly, De Vos and colleagues [1] proposed a model of sustainable careers that integrates individual aspirations with organizational practices and societal needs, a perspective consistent with the present study's finding that networking and opportunity seeking are essential to long-term sustainability.

The finding that work–life balance is integral to personal life re-creation also aligns with studies linking career crafting to well-being. Lynner et al. [16] showed that job crafting reduces burnout, while Teng and Chen [19] demonstrated that job crafting enhances job embeddedness, supporting the view that personal balance contributes directly to both employee well-being and organizational retention. Similarly, Zhao and colleagues [20] highlighted the tension between AI dependence and employee autonomy, illustrating that personal agency and balance are critical for maintaining meaningful work in technologically dynamic environments.

Innovation outcomes also emerged as a significant theme connected to career path re-creation. Soliman [21] demonstrated that job crafting fosters innovative behavior in the hospitality industry, while Khalil [10] emphasized the role of servant leadership in enhancing crafting behaviors. These findings reinforce the argument that fostering career path re-creation not only benefits employees individually but also contributes to organizational innovation, adaptability, and resilience. The present study's results suggest that supporting cognitive, relational, and balance-oriented strategies among employees can generate wider organizational benefits, echoing the propositions of Pinto and colleagues [27] that systemic resilience depends on collective adaptive capacities.

Another important implication of the results lies in their relevance for employees in socially oriented organizations, such as those in Iraq. Social work-based institutions face complex demands from vulnerable populations, requiring workers to possess resilience, adaptability, and continuous learning capacities. The identified dimensions and components of career path re-creation provide a roadmap for strengthening human capital in such contexts. Findings suggest that fostering cognitive openness, professional networking, and balance management can empower social workers to respond more effectively to evolving needs. These insights align with Patterson [24], who emphasized how contextual transformations can reshape professional opportunities, and with Walk and Handy [6], who argued

that job crafting is an essential response to organizational change.

Overall, the findings demonstrate that career path re-creation is a dynamic, multidimensional construct that enables individuals to integrate personal, professional, and contextual factors into a coherent and sustainable career trajectory. The alignment with previous studies across diverse settings underscores the robustness of the construct and highlights its relevance for both individual and organizational outcomes. By situating the results within broader theoretical and empirical frameworks, this study contributes to advancing the understanding of career crafting and its implications for sustainable human resource management.

While this study provides valuable insights, several limitations must be acknowledged. First, the research relied on systematic review and survey data within a specific national context, which may limit the generalizability of the findings to other cultural or organizational settings. Although the Iraqi social work context presents unique challenges, the applicability of the identified components in different industries or countries may vary. Second, the cross-sectional nature of the quantitative analysis restricts the ability to draw causal inferences regarding the relationships between the identified indicators and broader career outcomes. Longitudinal designs would be necessary to establish stronger evidence of causality. Finally, while the study employed rigorous methodological frameworks, including the PICOS system and structural equation modeling, potential biases in article selection and respondent self-reporting cannot be entirely ruled out.

Future research should extend the investigation of career path re-creation across diverse cultural and industrial contexts to examine its universality and contextual variability. Comparative studies between sectors such as healthcare, education, and private enterprise could provide richer insights into the adaptability of the construct. Longitudinal studies would also be beneficial to explore how career path re-creation evolves over time and its long-term effects on outcomes such as resilience, innovation, and retention. Additionally, future work should investigate the interplay between technological disruption, such as artificial intelligence, and career crafting behaviors, building on emerging evidence that digitalization profoundly shapes career dynamics. Finally, qualitative approaches could complement quantitative findings by providing deeper insights into the lived experiences of employees engaging in career path re-creation.

In practice, organizations can leverage the insights of this study to strengthen their human resource strategies. Developing training programs focused on cognitive flexibility, self-awareness, and resilience could equip employees with the skills required for continuous career re-creation. Encouraging networking and professional relationship building, both within and beyond organizational boundaries, may enhance opportunity recognition and foster collaboration. Importantly, organizations should prioritize policies that support work–life balance, recognizing its central role in sustaining long-term employee engagement and well-being. Finally, managers and leaders should be trained to act as facilitators of career re-creation by providing feedback, resources, and autonomy, thereby fostering a culture that values adaptability, innovation, and sustainable career development.

Authors' Contributions

Authors equally contributed to this article.

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Declaration of Interest

The authors report no conflict of interest.

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Ethical Considerations

All procedures performed in this study were under the ethical standards.

References

[1] A. De Vos, B. I. J. M. Van der Heijden, and J. Akkermans, "Sustainable careers: Towards a conceptual model," *Journal of Vocational Behavior,* vol. 117, p. Article 103196, 2020, doi: 10.1016/j.jvb.2018.06.011.

[2] J. Akkermans and M. Tims, "Crafting your career: How career competencies relate to career success via job crafting," *Applied Psychology,* vol. 66, no. 1, p. 168, 2017, doi: 10.1111/apps.12082.

[3] J. Y. Lee, C. L. Chen, E. Kolokowsky, S. Hong, J. T. Siegel, and S. I. Donaldson, "Development and validation of the career crafting assessment (CCA)," *Journal of Career Assessment,* vol. 29, no. 4, p. 717, 2021, doi: 10.1177/10690727211002565.

[4] I. Nalis, B. Kubicek, and C. Korunka, "Resources to respond: A career construction theory perspective on demands, adaptability, and career crafting," *The Career Development Quarterly,* vol. 70, no. 2, p. 138, 2022, doi: 10.1002/cdq.12293.

[5] M. P. Vidwans, "Exploring career success with the new paradigm of career crafting," Doctoral dissertation, Lincoln University, 2016.

[6] M. Walk and F. Handy, "Job crafting as reaction to organizational change," *The Journal of Applied Behavioral Science,* vol. 54, no. 3, p. 349, 2018, doi: 10.1177/0021886318777227.

[7] H. Kim, J. Im, and H. Qu, "Exploring antecedents and consequences of job crafting," *International Journal of Hospitality Management,* vol. 75, p. 18, 2018, doi: 10.1016/j.ijhm.2018.02.014.

[8] B. Hu, A. McCune Stein, and Y. Mao, "How control and commitment HR practices influence employee job crafting," *Journal of Managerial Psychology,* vol. 35, no. 5, p. 361, 2020, doi: 10.1108/JMP-06-2019-0360.

[9] L. Dubbelt, E. Demerouti, and S. Rispens, "The value of job crafting for work engagement, task performance, and career satisfaction: longitudinal and quasi-experimental evidence," *European Journal of Work and Organizational Psychology,* vol. 28, p. 300, 2019, doi: 10.1080/1359432X.2019.1576632.

[10] S. H. A. U. S. S. M. A. Khalil and S. M. Khalil, "Servant Leadership, Job Crafting Behaviours, and Work Outcomes: Does Employee Conscientiousness Matters?," *J Knowl Econ,* vol. 15, pp. 2607-2627, 2024, doi: 10.1007/s13132-023-01290-0.

[11] M. Fu and J.-H. Huang, "Job Crafting and Teachers' Organizational Citizenship Behavior in Chinese Colleges: The Mediating Role of Meaningful Work," *Journal of Ecohumanism,* vol. 3, no. 7, pp. 2231-2239, 2024, doi: 10.62754/joe.v3i7.4375.

[12] X. Ge, L. Gao, and H. Yu, "A New Construct in Career Research: Career Crafting," *Behavioral Sciences,* 2023, doi: 10.3390/bs13010049.

[13] M. Tims and J. Akkermans, *Job and career crafting to fulfill individual career pathways*. 2020, pp. 165-190.

[14] K. Övgü Çakmak-Otluoğlu, "A cluster analysis of protean and boundaryless career orientations: Relationships with career competencies," *Australian Journal of Career Development,* vol. 27, no. 3, p. 127, 2018, doi: 10.1177/1038416217743024.

[15] K. Wentz and K. Gyllensten, "Career crafting: working during the ages of 69-75 years," *Journal of Business and Economics,* vol. 7, pp. 1334-1345, 2016.

[16] B. N. Lynner, R. Stoa, G. G. Fisher, E. D. Pozo, and R. Lizerbram, "Feel the Burn, Heal the Burn: Job Crafting and Burnout Among Occupational Therapy Professionals," *American Journal of Occupational Therapy,* vol. 79, no. 1, 2024, doi: 10.5014/ajot.2025.050731.

[17] S. Mukhtar and M. b. Ibrahim, "The Impact of Workplace Inequality on Job Crafting: Moderating Role of Work Social Support and Workplace Resilience in Mitigating the Effect of Psychological Stress: An Analysis of Academia," *Administrative and Management Sciences Journal,* vol. 3, no. 1, pp. 144-156, 2024, doi: 10.59365/amsj.3(1).2024.136.

[18] E. Kilic and H. Kitapci, "Contextual and Individual Determinants of Sustainable Careers: A Serial Indirect Effect Model through Career Crafting and Person-Career Fit," *Sustainability,* vol. 16, no. 7, p. 2865, 2024, doi: 10.3390/su16072865.

[19] H. Y. Teng and C. Y. Chen, "Do job crafting and leisure crafting enhance job embeddedness: A moderated mediation model," *Journal of Hospitality and Tourism Insights,* vol. 8, no. 3, pp. 1030-1048, 2025, doi: 10.1108/JHTI-04-2024-0314.

[20] H. Zhao, Y. Ma, and Y. Chen, "Facing or Avoiding? How Dependence on Artificial Intelligence Influences Hotel Employees' Job Crafting," *International Journal of Contemporary Hospitality Management,* vol. 37, no. 6, pp. 1884-1902, 2025, doi: 10.1108/ijchm-06-2024-0939.

[21] M. Soliman, "Job Crafting and Employees' Innovative Behaviour in Hotels: Exploring the Role of Employees' Psychological State and Workplace Gossip," *Tourism and Hospitality Research,* 2024, doi: 10.1177/14673584241307308.

[22] L. J. Suarez-Visbal, J. R. Carreón, B. Corona, and E. Worrell, "The social impacts of circular strategies in the apparel value chain; a comparative study between three countries," *Circular Economy and Sustainability,* vol. 3, no. 2, p. 757, 2023, doi: 10.1007/s43615-022-00214-5.

[23] J. A. Johnson, S. S. Hunnicutt, and T. M. Cottom, "The ties that corporatize: A social network analysis of the career paths of university presidents," *The Social Science Journal,* pp. 1-13, 2021, doi: 10.1080/03623319.2021.1956279.

[24] M. Patterson, "Revitalization, transformation and the 'Bilbao effect': Testing the local area impact of iconic architectural developments in North America, 2000-2009," *European Planning Studies,* vol. 30, no. 1, p. 32, 2022, doi: 10.1080/09654313.2020.1863341.

[25] J. Gallagher, P. Ashley, A. Petrie, and I. Needleman, "Oral health-related behaviours reported by elite and professional athletes," *British Dental Journal,* vol. 227, no. 4, p. 276, 2019, doi: 10.1038/s41415-019-0617-8.

[26] S. Panda and N. Kaur, "Crafting Sustainable Careers in a dynamic Professional Terrain," *Panda, S., & Kaur, 2023,* pp. 77-87, 2023.

[27] D. Pinto *et al.*, "Cross-neutralization of SARS-CoV-2 by a human monoclonal SARS-CoV antibody," *Nature,* vol. 583, no. 7815, p. 290, 2020, doi: 10.1038/s41586-020-2349-y.