

Exploring of a Career Crafting Indicators for Young Adults Using the Delphi Method*

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■ ABSTRACT ■

As the uncertainty and rapid changes in the world increase work-career related vulnerabilities, young adults in the career preparation and early career stages are likely to face long-term and significant career-related difficulties. This study aims to review previous studies and develop career crafting indicators for young adults using the Delphi method. To achieve the research purpose, a Delphi survey was conducted with 26 experts and the validity and priority of career crafting indicators were analyzed. SPSS analysis, Borich needs, and LFF were sequentially applied to analyze the priorities of 33 career crafting indicators that secured validity through Delphi. As a result of this study, 12 of the 33 career crafting indicators developed were identified as priority indicators that are currently necessary and important in the future for career crafting of the youth. Based on the research results, conclusions, discussion points, and implications regarding career crafting were presented.

[Keywords] Career crafting indicators, Young adults, Delphi method, Priority analysis

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I . Introduction

As uncertainty and vulnerability in the workplace increase, individuals must actively shape their current and future careers while adapting to the rapid and unpredictable changes. Individuals can leverage their psychological resources, such as career adaptability and competencies, to manage their careers during such challenges (Akkermans et al., 2020; Lee et al., 2021).

In Korea, the unemployment rate of young adults is higher than for those in mid- or late-career stages, and it is among the highest compared to other OECD countries (OECD, 2021). Although over half of young adults have completed their college education, they have been struggling to obtain jobs. Moreover, many early career-stage young adults experience challenges such as high turnover and job dissatisfaction, even if they successfully entered the labor market (Bae & Park, 2018). Previous studies have shown that these challenges are largely attributed to overeducation, mismatches between education and career, and lack of career preparation (e.g., Choi & Song, 2019; Noh, 2019). While some studies have examined the positive impact of learning agility and mentoring on college students' career development (Jeong, 2023; Park et al., 2021), recent career development studies consistently highlight that young adults in the career preparation or early career stage tend to demonstrate relatively low levels of communication and networking skills (Park et al., 2024), career decision-making proficiency, and career-related competencies directly tied to job performance (Au, 2018; Jeong, 2017; Kim et al., 2014). These findings underscore the need for developing a comprehensive career development model that supports young adults in their career preparation and management, thereby enhancing employability, career success, and long-term sustainability in the labor market.

Career crafting refers to individuals' proactive behaviors to prepare for and develop their careers across their entire working lives (Tims & Akkermans, 2020). While existing research has primarily adapted the concept of job crafting to evaluate career crafting, this approach is limited in explaining one's whole career journey (Balakhtar et al., 2024). Job crafting mainly emphasizes

task- and role-related adjustments within one's current job, and thus does not adequately capture broader, career-level processes such as long-term career management, competency development, and boundary negotiation (Tims & Akkermans, 2020). Consequently, a new conceptual framework and measurement scales are required to account for the distinct and long-term nature of career crafting.

Therefore, this study aims to explore dimensions and indicators of career crafting for young adults who are in career preparation and early career stages in Korea. For this purpose, we apply the Delphi technique to verify the validity of career crafting indicators. We also conduct a priority analysis to assess the urgency and importance of the identified indicators, to help developing practical guidelines for young adults' career development.

II . Theoretical Background and Hypotheses

1. Career Crafting

In response to the increasingly unpredictable and rapidly changing work environment, which requires individuals to proactively plan and manage their career paths, scholarly interest in career crafting has been steadily growing (Ge et al., 2023; Balakhtar et al., 2024). In the early research, scholars directly extended a concept and factors of job crafting to an individual's entire career to conceptualize career crafting (e.g., Sukhapure & Cohen, 2015; Wentz & Gyllensten, 2016). However, such studies limit the concept of career crafting to the current job level, as they primarily borrow concepts and the constructs of job crafting. This does not fully capture the continuous shift in one's career path and the evolving needs for knowledge, skills, and attitudes that accompany such career changes (Ge et al., 2023). Therefore, Tims and Akkermans (2020) conceptualized career crafting and defined it as an individuals' proactive behaviors that "craft fulfilling careers by shaping both their individual jobs and the series of jobs or roles that comprise their career journeys" (p. 166). Individuals' career crafting behaviors are expected to promote employability and future career success as well as job satisfaction and

advancement (Akkermans & Tims, 2017). Shkhapur and Cohen (2015) also identified that individuals' career crafting behaviors helped them to set career goals, and to clarify the competencies and networking necessary to achieve those goals. That is, individuals' career crafting abilities, such as career management and competencies, play a critical role in managing their career more successfully and flexibly (Lee et al., 2021).

The current empirical research on career crafting is still in its early stages, which mostly explains why the concept and career crafting scales are still developing. Early research described characteristics of career crafting behaviors using qualitative methods (e.g., Sukhapure & Cohen, 2015; Vidwans & Whiting, 2021; Wentz & Gyllensten, 2016). In particular, Wentz and Gyllensten (2016) revealed characteristics and influences of career crafting behaviors of older workers. Tims and Akkermans (2020) and de Vos et al. (2019) have further defined career crafting and proposed new constructs. Other research has developed and validated a career crafting scale (e.g., Lee et al., 2021; Tims & Akkermans, 2020).

In contrast, however, career crafting has hardly been studied in Korea despite the emerging research on job crafting (Kim & Park, 2019). Lee et al. (2021) is the only study that developed a career crafting scale in the Korean context. In addition, the current empirical studies do not clarify distinguished characteristics of career crafting behaviors of young adults at the career preparation or early career stages, as most research has primarily focused on individuals in the mid- or late-career stages (e.g., Feldman & Shultz, 2018; Wentz & Gyllensten, 2016). However, the careers of individuals at the early stage are more vulnerable than those at the mid- and late-career stages, especially when the labor market faces unexpected challenges (Akkermans et al., 2020). Moreover, given the critical role of early career success in long-term career sustainability and adaptability (Blokker et al., 2019), it is essential to identify the key dimensions of career crafting for young adults and to promote their long-term career crafting success.

Research on career crafting in the Korean context also remains limited, as most existing studies have been conducted in Western settings. In Korea, exam-oriented education for university entrance has relatively undervalued vocational and career education, resulting in challenges for young adults—such as low levels of career self-management, adaptability, and

competency despite higher education institutions' growing interest in career and vocational education (Lee, 2022). Therefore, it is important to define career crafting and develop career crafting factors for different career stages and sociocultural contexts.

2. Career Crafting Dimensions

Since career crafting research is currently at the early stage, there is no consensus on indicators or dimensions of career crafting among scholars. While some scholars have discussed the significance of career crafting in a person's entire life and career, they have only focused on borrowing the concept and scales of job crafting (e.g., Lee et al., 2021; Sukhapure & Cohen, 2015; Wentz & Gyllensten, 2016). Scholars who have distinguished career crafting as its own concept have reiterated that it is an integration of job crafting, career competencies, and adaptability. For instance, de Vos et al. (2019) explain key elements of career crafting as adaptability and career competencies, while Tims and Akkermans (2020) suggest the key elements include job crafting, career competencies, and career self-management.

Accordingly, this study focuses on a comprehensive perspective of career crafting, using the career crafting indicators introduced by Tims and Akkermans (2020). The Career Crafting Survey (CCS) developed by them integrates and reshapes the initial three-factor model into the two-factor model that embraces proactive career reflection and proactive career construction. However, our study extends beyond this by incorporating all three original indicators to develop more reliable and precise measures of career crafting, especially considering the unique Korean context. Also, we include self-leadership as another factor of career crafting as the existing career-related research underscores the pivotal role of self-leadership in the career success and preparatory behaviors of young adults and college students in Korea (Kim, 2019; Yang & Song, 2015).

Job Crafting

Job crafting is a fundamental concept from which a concept of career crafting is originated.

Wrzesniewski and Dutton (2001) defines job crafting as “the physical and cognitive changes individuals make in the task or relational boundaries of their work” (p. 179). An individual's proactive job crafting behaviors are predictors of his or her career outcomes such as employability, person-job fit, job satisfaction, and job performance by facilitating their problem-solving, a sense of meaning in the work, and task accomplishment (Tims & Akkermans, 2020; Wrzesniewski & Dutton, 2001).

In this study, we adopt the Korean job crafting scale developed by Lee (2017). Lee (2017) not only validated this scale within the Korean context but also incorporated the three subconstructs-cognitive, task, and relational crafting-originally proposed by Wrzesniewski and Dutton (2001). In this study, we excluded task crafting because task crafting primarily measures proactive behaviors that change one's current task and job. However, our study addresses not only current employees but also potential members of the workforce.

Career Self-Management

Career self-management plays a significant role in an individual's career development and transition (Hirschi & Koen, 2021). King (2004) describes career self-management as “a dynamic process” in which three types of behaviors - positioning behaviors, influencing behaviors, and boundary management occur simultaneously (p. 119). The three facets of career self-management encompasses an individual's proactive career behaviors, including skill and cognitive development for career success, active behaviors aimed at influencing employer's decision-making, and the management of work-life balance (King, 2004; Tims & Akkermans, 2020). Hirschi and Koen (2021) also emphasize that career self-management involves a cyclical process for formulating and revising career goals, wherein the goal development process can significantly enhance an individual's career progression.

Career Competencies

It is crucial for young adults to possess adequate career competencies including skills, knowledge, and abilities related to their work and career, given its importance for all potential

and current employees (Akkermans et al., 2012). Career competencies are distinct from specific job or work competencies; rather they constitute a more comprehensive concept indicating an individual's proactive and self-initiated behaviors that aid in developing and managing his career, leading to career success and enhanced employability (Akkermans & Tims, 2017). For this study, we employed the Career Competencies Questionnaire (CCQ) developed by Akkermans et al. (2012), and the CCQ encompasses six indicators: reflection on motivation, reflection on qualities, networking, self-profiling, work exploration, and career control. However, we excluded reflection on motivation and self-profiling, as these two indicators are not relevant to our focus on young adults.

Self-Leadership

In the Korean context, current research on career-related behaviors among young adults underscores the significance of self-leadership. Specifically, self-leadership stands out as a robust predictor of young adults' career efficacy, career preparation behaviors, and career competency (e.g., Kang, 2021; Kim, 2019; Lee & Hong, 2020). Liu et al. (2023) also suggest that self-leadership can result in positive work-related outcomes such as job crafting and autonomous motivation. Self-leadership refers to “a process of behavioral and cognitive self-evaluation and self-influence whereby people achieve the self-direction and self-motivation needed to shape their behaviors in positive ways in order to enhance their overall performance” (Houghton et al., 2012, p. 217). Given the concept and its relationship with other career-related outcomes, self-leadership exhibits shared elements with career crafting, especially job crafting. In addition, regarding the impact of self-leadership on young adults' career preparation and competence, existing studies have emphasized its significance as a factor that facilitates successful career exploration and planning, especially for young adults (Kim, 2019; Yang & Song, 2015). Therefore, this study includes self-leadership as one of the career crafting indicators, considering its importance for young adults in the Korean context.

III. Methods

After a literature review, we developed career crafting indicators to support young people's career preparation and development. We conducted a Delphi survey to validate career crafting indicators. Once collecting the opinions of Delphi experts, we applied the priority analysis to identify indicators that are essential and important for youth career development.

1. Selection of Experts and Structure of Delphi Rounds

To make the Delphi valid, the selection of experts and the decision about the number of rounds is critical (Thangaratinam & Redman, 2005). The selection of experts is highly important because the Delphi method aims to make decision based on their subjective and intuitive judgments. Scholars do not agree on the appropriate number of experts. Some scholars claim that a smaller number of experts in a group is efficient (Song & Yoon, 1992), while others argue that more experts yield more reliable results (Dalkey et al., 1970). However, Noh (2006) suggests that a group of about 15 experts does not make a significant difference in a median value from larger groups of experts. In this study, we selected 32 experts with consideration of both the reliability and efficiency of the Delphi process, and finally 26 experts participated in this study (i.e., the response rate was 81.3%). <Table 1> is a list of the participants.

<Table 1> Characteristics of Delphi Experts

No.	Name	Position	Affiliation	Expertise
1	A	Professor	G Univ. Education Dept.	Director in Center for Teaching & Learning, Career Research
2	B	Professor	K Univ. Education Dept.	Director in Center for Teaching & Learning, Educational Policy
3	C	Professor	HB Univ. Education Dept.	Education for Youth & Multicultural Family
4	D	Professor	M Univ. Education Dept.	Education Policy for Youth
5	E	Professor	I Univ. HRD Dept.	Career for College Students & Adults
6	F	Professor	H Univ. HRD Dept.	HRD, Career Development
7	G	Professor	Y Univ. Graduate School	Adult Education, HRD, Career Development

No.	Name	Position	Affiliation	Expertise
8	H	Professor	K2 Univ. Education Dept.	Director in Faculty Development Center, Education for College Students
9	Q	Professor	M2 Univ. Youth Dept.	Ph.D. in Education, Youth Education
10	R	Professor	Y2 Univ. General Edu Dept.	Ph.D. in Education, Career Education for College Students
11	S	Professor	S Univ. Education Dept.	Ph.D. in Education, Career Education for College Student
12	T	Professor	D Univ. Education Dept.	Ph.D. in Education, Career Education for College Student
13	U	Professor	S Univ. Education Dept.	Ph.D. in Education, Career Education for College Students
14	Y	Professor	E Univ. Education Dept.	Women Leadership & Career
15	M	Professor	G2 Univ. Education Dept.	Women Leadership & Career
16	I	CEO	HRD Consulting	Ph.D. in Adult & Career Technical Education
17	J	Research Fellow	G Institute, HR	Ph.D. in Government Officer (Educational Policy)
18	K	Research Fellow	K National Training Institute	Adult & Career Technical Education
19	L	Research Fellow	B City Youth Education Center	Ph.D. in Education, Youth Career Education Policy
20	N	Research Fellow	K Career Research Institute	HRD & Adult Education Policy
21	O	Research Fellow	K Career Research Institute	HRD & Adult Education Policy
22	P	Research Fellow	K Regional	HRD & Adult Education, Women's Career
23	V	Research Fellow	G3 Univ. Center for Teaching and Learning	Ph.D. in Career Education for College Students
24	W	Research Fellow	KY Research Institute for Youth	Ph.D. in Education, Career Education for Youth
25	X	Research Fellow	KY Research Institute for Youth	Ph.D. in Education, Career Education for Youth
26	Z	CEO	Career Consulting Company	Career Consulting and Training for Adults

Notes: N = 26; Names and affiliations of participants are anonymous

2. Model Evaluation

The 26 experts of the Delphi group included 15 faculty members - their research areas are career development or work in career development for college students in their universities - and 11 research fellows and specialists whose expertise are in career education for adults,

youth, or college students. In this study, our focus is on young adults primarily in the stages of career preparation. Therefore, our aim was to choose those who have expertise and a profound understanding of young adults, particularly at the college level, and their career preparation, rather than professionals currently active in the labor market. Next, we considered the number of survey rounds for application of the Delphi method, and how many rounds were most appropriate for decision-making (Dajani et al., 1979). The consistency among repetitive rounds heightens the stability, but too many rounds may fatigue respondents (Becker & Roberts, 2009). The coefficient of variation (CV) is used to evaluate the stability of the Delphi, and .8 or more CV requires an additional round. However, two or three rounds are generally used for the Delphi research method (Sossa et al., 2019). After a literature review on career crafting, we incorporated both Tims and Akkermans' (2020) original three-factor model (job crafting, career competency, and career self-management) and their two-factor model (proactive career reflection and proactive career construction) into our questionnaire, as the three-factor model is more commonly used in career crafting research. We finally developed 50 questionnaire items for the Delphi after a five-round cross-check. <Table 2> presents the career crafting constructs for Delphi.

<Table 2> Career Crafting Indicators for the Delphi

Type	Dimensions		Items	Source
Open-Ended	A Definition of Career Crafting and Needs for Career Crafting		-	Ghitulescu (2007)
Five-Likert Scale	Proactive Career Reflection		4	Tims & Akkermans (2020)
	Proactive Career Construction		3	
	Job Crafting	Cognitive Crafting	5	Lee (2017)
		Relational Crafting	7	
	Career Self-Management	Networking Behavior	4	Sturges et al. (2005)
		Visibility Behavior	4	
	Career Competencies	Networking	4	Akkermans et al. (2020)
		Self-Profiling	3	
		Work Exploration	3	
		Career Control	4	
Self-Leadership		9	Houghton et al. (2012)	
Total		50		

3. Statistical Analysis and Priority Analysis

From the first and second Delphi survey results, we conducted a paired t-test and priority analysis to identify the difference between the importance and urgency for each career crafting indicator for the young adults. Priority analysis should be based on the results of data analysis and prioritize indicators by a systematic and scientific procedure, not by preference (Shin & Cho, 2014).

Thus, our study used both the Borich's (1980) needs assessment model and the Locus for Focus (LFF) criticality function to prioritize career crafting indicators. Borich's needs assessment is useful for identifying which indicators are prioritized relatively higher, but it has limitations because there are no guidelines on how to weigh the desired future level or to what level priorities should be decided (Cho, 2009). Because the Borich's needs assessment focuses on the difference between the two levels, we also used the Locus for Focus criticality function. LFF is a method of classifying essential research items according to the degree of discrepancy between future and present levels (Mink et al., 1991). The horizontal axis represents the average value of the future level, and the vertical axis represents the discrepancy between the two levels.

IV. Results

This study utilized a Delphi panel survey to identify the career crafting indicators relevant to young adults in Korea. Subsequently, t-tests and priority analysis were employed to determine the indicators that are currently essential and hold future significance for career crafting.

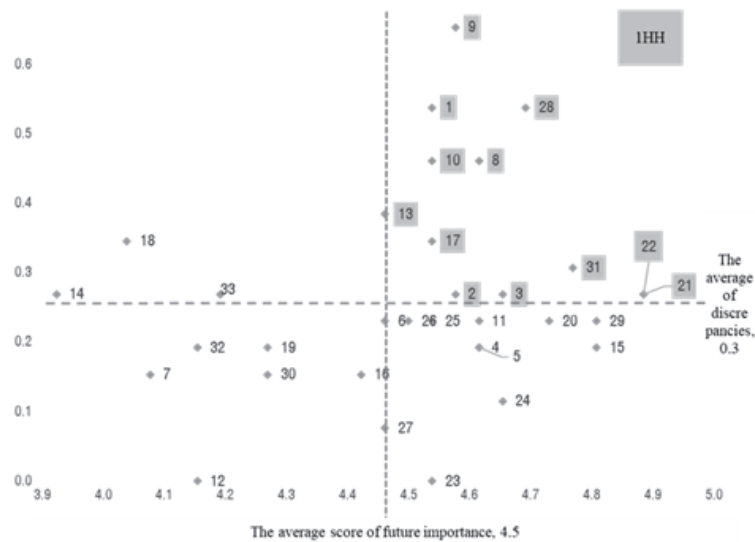
1. Results of Delphi Analysis

In two Delphi surveys, a panel of 26 experts evaluated 33 of the 50 indicators as valid as career crafting indicators. The first-round survey included 5 Likert scale questions asking for the validity of the 50 items as career crafting indicators, and open-ended questions about the definition of

career crafting and the need for career crafting for the young adults in Korea. After the first-round survey, we analyzed the content validity ratio (CVR) proposed by Lawshe (1975) and revised, merged, and removed some questions based on the opinions of a panel of experts. The threshold of content validity ratio (CVR) is considered significant at a level of .05, based on the number of respondents. Since the number of panels in our study was 26, questions with a CVR of .37 or higher were selected as appropriate. Additionally, the expert panel confirmed that most of the items encompassed the theoretical concepts of each construct. However, some items measuring self-leadership exhibited relatively low CVRs, leading to their removal. Based on expert feedback, we revised unclear and confusing items and combined similar items. Also, the initial survey comprises questions concerning the definition and significance of career crafting. Out of 26 Delphi panel respondents, 20 indicated that the definition of career crafting was considered very suitable or suitable, as well as very needed or needed for its importance, based on a 5-point scale, with responses of 4 or higher (CVR = .54, Lawshe, 1975). In response to open-ended questions concerning the importance of career crafting, most experts emphasized its relevance for individual career success, particularly in the face of unexpected career-related crises (e.g., job shortages, layoffs, business closures, etc.). In the second survey, we consulted a panel of experts to assess the importance and urgency of each item, and a paired t-test was performed to compare the differences. As a result of the second round of the Delphi survey, it was confirmed that the CV (Content Validity) value of the 33 survey items was less than .5, indicating that no further rounds were necessary. The CVR values indicate that each item of the career crafting indicators appropriately reflects the components of career crafting.

2. Results of Priority Analysis

We conducted a priority analysis to determine the importance of the 33 career crafting indicators. To investigate the priorities of career crafting indicators of early-career workers, we displaced the average level of future importance and the discrepancies between future importance and current urgency in the LFF. 12 of the 33 items were priority indicators at both levels. [Figure 1] shows the priorities of career crafting indicators using LFF.



[Figure 1] Priority Analysis Result of Career Crafting Indicators Using the LFF

Finally, we identified 12 out of the 33 career crafting indicators as priority indicators for Korean early-career workers. These indicators were deemed essential in the present and held importance for the future. Detailed information regarding these career crafting indicators is summarized in <Table 3>.

<Table 3> Results of Priority Analysis of Career Crafting Indicators

No.	Dimensions	Items	Borich		LFF
			Value	Rank	
1	Proactive Career Reflection	I show my passion for my job and career,	2,44	3	1HH
2		I deliberately think about what I want to achieve in my job and career,	1,23	13	1HH
3		I reflect on myself what I really value in my career,	1,25	12	1HH
4		I explore the possibilities available to me to continue developing myself,	0,89	24	4HH
5	Proactive Career Construction	I try to build a relationship with significant people in my career to talk about my career goal and performance,	0,89	23	4HH
6		I specify and maintain my career goals,	1,03	21	3HH
7		If I need to make a strong impression on others to attain my own goals, I make sure I clearly show them what I am capable of,	0,63	29	3HH

No.	Dimensions	Items	Borich		LFF
			Value	Rank	
8	Cognitive Job Crafting	I think about how my job gives my life purpose.	2,13	4	1HH
9		I think about the ways in which my work positively impacts my life.	2,99	1	1HH
10		I reflect on the role my job has for my overall well-being.	2,09	5	1HH
11	Relational Job Crafting	I engage in networking activities to establish relationships.	1,07	17	4HH
12		I make an effort to get to know people well at work.	0,00	32	3HH
13		I attend events related to my career.	1,72	6	1HH
14		I introduce myself to others I have not met.	1,06	18	2HH
15		I actively look for a mentor who can help my career.	0,92	22	4HH
16		I make friends with people at work who have similar skills or interests.	0,68	27	3HH
17	Career Self-Management: Networking behavior	I have got myself introduced to people who can influence my career.	1,57	7	1HH
18		I talk with the older in career-related meetings.	1,40	9	2HH
19		I have strived to be involved in high profile projects.	0,82	25	3HH
20		I try to have contacts with people in areas where I would like to work.	1,09	16	4HH
21	Career Competencies: Reflection on qualities	I know my strengths (talents, skills) in my work.	1,32	10	1HH
22		I am familiar with my shortcomings in my work.	1,32	11	1HH
23	Career Competencies: Work exploration	I know how I develop my current job.	0,00	33	4HH
24		I explore the possibilities available to me to continue developing my career.	0,54	30	4HH
25		I am able to explore my employability on the labor market.	1,05	19	4HH
26	Career Competencies: Career control	I can make clear career plans.	1,04	20	4HH
27		I know what I want to have achieved in my career a year from now.	0,34	31	3HH
28		I am able to set long-term goals for myself that I want to achieve in my career.	2,53	2	1HH
29	Self-Leadership	I establish specific goals for my own performance.	1,11	15	4HH
30		I make a point to keep track of how well I'm doing at work.	0,66	28	3HH
31		I work toward specific goals I have set for myself.	1,47	8	1HH
32		I visualize myself successfully performing a task before I do it.	0,80	26	3HH
33		Sometimes I picture in my mind a successful performance before I actually do a task.	1,13	14	2HH

Notes: N = 26; 95% Confidence Interval

V. Discussion

1. Conclusion

Due to the unpredictable and rapid changes in our world, the labor market has become increasingly volatile, threatening employees' or potential employees' career prospect and success. In particular, those who are seeking to enter the labor market or those who are in the early career stage have been encountering more challenging circumstances, which has forced them to prepare themselves to develop their own career competencies throughout their entire lives. In light of these challenges, our study focused on investigating career crafting indicators for young adults in career preparation and early career stages in Korea. By drawing on expert opinions and our analysis, we have identified career crafting indicators that can significantly enhance the employability and potential career success of young adults. Also, we prioritized these indicators based on their urgency and importance by conducting a priority analysis.

This study adds a new insight to career development research and practice. The prevailing approach to career development remains employer- or manager-oriented, despite its limitations in effectively adapting to the fast-changing and vulnerable labor market (Shuck et al., 2018). However, as our study suggested, career crafting underscores that an individual's proactive career behaviors empower sustainable career development throughout their entire career path. The career crafting indicators imply a shift in the approach to career development into a more employee-oriented and comprehensive perspective. Furthermore, while existing studies on job crafting focus on the current job and work environment from a short-term perspective, career crafting encompasses individuals' proactive behaviors in shaping long-term career paths (Leeuwen et al., 2021). Therefore, our study provides valuable insights for both career development practice and research by introducing career crafting indicators to facilitate broader and more long-term career planning and development.

In addition, this study offers a more comprehensive method for evaluating the significance and urgency of career crafting indicators by adopting a priority analysis. Furthermore, previous

studies on young adults' career development in Korea have consistently highlighted the low level of job competency, emphasizing the importance of competency indicators like career planning, self-efficacy, goal-setting, networking, and communication for their career preparation and success (Jeong, 2017; Kim et al., 2014). In line with these findings, our study identified career competencies - specifically, reflection on qualities - networking behavior, and goal-setting as elements of both urgent and important. Also, this study pinpointed proactive career reflection as urgent and important, despite the low level of reflection among Korean young adults (Jung, 2017). Thus, our findings regarding the urgency and significance of career crafting indicators reflect the distinctive challenges and opportunities faced by young adults in Korea.

Lastly, contrary to our initial expectations, the results of this study led to the exclusion of several items from the self-leadership. Consistent with these findings, the existing literature on career crafting does not encompass self-leadership (e.g., de Vos et al., 2019; Lee et al., 2021; Tims & Akkermans, 2020). However, previous studies have been consistently suggesting that self-leadership is a critical indicator positively influencing career preparation, decision-making, development, and success, particularly for young adults in the Korean context (e.g., Ji & Kang, 2015; Kang, 2021; Yang & Song, 2015). However, our expert panel concluded that self-leadership items were less associated with career crafting indicators, aligning with other career crafting literature. Nevertheless, specific goal-setting within self-leadership was still identified as an urgent and important indicator for career crafting.

2. Implications for Research and Practice

This preliminary study aimed to develop a career crafting indicators through expert opinions and statistical analysis to ensure the reliability of the results. Although we employed a systematic and rigorous approach to the Delphi method, which strengthens the validity of the findings, our results are solely based on the consensus of expert opinions. This aspect may invite criticism since the Delphi method is susceptible to such critiques (Landeta, 2006).

Therefore, future research should enhance the theoretical originality and practical applicability of this study by strengthening the conceptual clarity of career crafting, revising the items to include proactive career crafting behaviors, and supplementing the items to capture the reduction or elimination of demands that impede career development. Future research should further verify and validate the findings through quantitative research. Additionally, future research can investigate the impact of career crafting on career success and employability among young adults using the career crafting indicators we identified to further enhance the validity of the scale.

Although previous studies suggest that career crafting enhances the potential for career success and employability, there remains a scarcity of empirical research on the outcomes of career crafting behaviors. For example, van Leeuwen et al. (2021) demonstrate that career crafting training positively influences job crafting and self-management among physicians but did not find a significant relationship between career crafting training and employability. Thus, future research can examine the consequences of career crafting by employing the career crafting indicators developed in this study. The findings of this study also suggest practical implications for career development and education, particularly for early career workers and individuals entering the labor market.

First, educational institutions including colleges, universities, and other career and vocational education organizations, can emphasize the prioritization of career development programs. As identified in our study, certain career crafting indicators, such as cognitive job crafting, reflection on one's strengths and weaknesses at work, and proactive career reflection, hold greater urgency and significance for young adults' career development and success compared to other indicators. Therefore, when allocating budgets and resources for career development programs aimed at young adults, placing greater emphasis on these components would be beneficial. Furthermore, as indicated by our study, job-related competencies are crucial for employability and career success in the post-Covid era. However, previous research has shown that college students preparing to enter the job market often exhibit lower levels of job competencies. Therefore, higher education institutions and career/vocational education

providers should offer competency-based and experiential learning opportunities and programs that enable individuals in the job preparation and early career stages to effectively apply their learning to their work.

In a report on post-Covid workplace changes by the McKinsey Global Institute, Lund et al. (2021) predicted three significant shifts in the job market: a rise in telecommuting and video conferencing, rapid growth in e-commerce, and widespread adoption of automation and AI. More and more, organizations and employers should play a crucial role in promoting career crafting skills and behaviors among employees by providing continuous learning and reflective opportunities. Our findings emphasize the significance of continuously developing job-related competencies to adapt to the rapidly changing nature of work while providing an assessment tool for assessing individual employees' career crafting behaviors. Consequently, employees will need to prioritize the enhancement of work-related competencies, alongside relational career competencies, to thrive in this evolving work environment. Organizations should provide ongoing opportunities for employees to enhance their job-related skills and competencies, thereby promoting sustainable career development. Furthermore, given that our study findings revealed the significance and urgency of career reflection, organizations should support their employees in reflecting on the meanings and values in their jobs and careers.

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국문초록

델파이 방법을 활용한 청년층 커리어 크래프팅 요인 탐색*

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불확실하고 급격한 세상의 변화로 인해 일-경력 관련 취약성이 증가함에 따라 경력 준비 및 초기 경력 단계에 있는 청년들은 장기적이고 중대한 경력 관련 어려움에 직면하기 쉬울 것이다. 본 연구는 선행연구들을 고찰하고 델파이 방법을 활용하여 청년층을 위한 커리어 크래프팅 요인을 개발하는 것을 목적으로 한다. 연구 목적을 달성하기 위해 26명의 전문가를 대상으로 델파이 조사를 실시하고 커리어 크래프팅 요인들의 타당도를 분석하였다. 전문가 타당도를 확보한 33개 커리어 크래프팅 요인의 우선순위를 분석하기 위해 SPSS 분석, Borich 요구도 및 LFF를 순차적으로 적용하였다. 연구 결과 개발된 커리어 크래프팅 요인 33개 중에서 12개 요인이 청년층의 커리어 크래프팅을 위해 현재에도 필요하고 미래에도 중요한 우선순위 요인들로 도출되었다. 연구 결과를 토대로 커리어 크래프팅에 관한 결론과 논의점 및 시사점을 제시하였다.

[주제어] 커리어 크래프팅 요인, 청년층, 델파이 방법, 우선순위 분석

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