

The Systems Theory Framework of Career Development: Theoretical Construction, Narrative Assessment and Career Education Insights

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Abstract

Traditional career development theories are largely rooted in Western cultural contexts and tend to prioritize individual psychological factors while neglecting the dynamic interplay between individuals and multi-layered environmental systems, resulting in limited explanatory power for diversified career development demands in the contemporary postmodern era. The Systems Theory Framework (STF), constructed by Patton and McMahon, integrates general systems theory and constructivism as its dual theoretical foundations. This framework systematically categorizes career-influencing elements into individual, interpersonal-social, and macro environmental-social content systems, and defines three core process mechanisms: recursiveness, temporal changes, and chance events. It provides a holistic, panoramic analytical lens for interpreting lifelong career construction. This paper narratively synthesizes the core connotation, structural composition and internal logical relations of STF, and further introduces its representative qualitative assessment tool—the My System of Career Influences (MSCI) manual, which shifts career counseling from psychometric measurement to narrative meaning construction. On this basis, this study summarizes three major practical inspirations for career education and intervention: centering the construction of personal career meaning, attaching importance to multi-dimensional environmental influences, and promoting integrated home-school-society collaborative career guidance. The paper also discusses the application prospects of STF in localized career counseling research and practice, aiming to offer integrated theoretical and practical references for career educators and counselors.

Keywords

Systems Theory Framework, Career Development, Constructivism, Narrative Career Counseling, MSCI

1. Introduction

Since Frank Parsons came up with the career counseling, there have been many theories in the field of career research, such as John Holland's vocational interest theory, Super's lifespan life-space career development theory (Briddick, 2009; Gottfredson et al., 1993; Sterner, 2012). As the world has experienced unprecedented changes in recent years, people's traditional views on careers are also quietly changing. The ability of existing career theories to play a positive role in career development and to meet it has been questioned. Although many new career theories and models have emerged since then, and to a certain extent they have explored the future direction of career development and embodied certain new concepts. However, scholars argue that those limitations include: firstly, traditional career theories mainly focus on Western middle-class people (especially men), and lack explanatory power for people in non-Western cultures and non-middle-class groups (Tomer & Mishra, 2023). Secondly, traditional career theories are influenced by the research perspectives of occupational psychology, focusing mainly on individual factors and paying insufficient attention to environmental factors (Adler, 2019; Jin et al., 2022). Thirdly, there is a lack of content relevance and interdisciplinary perspectives among theories (Dany et al., 2014). Fourthly, theory and practice are disconnected, and existing theories are difficult to apply to career counseling practice (Guichard, 2003).

The use of multiple theories to explain career development has gained widespread acceptance as researchers have gained a deeper understanding of the complexity of career development and the need to use multiple constructs and approaches in the practice of career counseling and guidance. At the end of the 20th century and the beginning of the 21st century, career psychologists, represented by Savickas, proposed that the laws of individual career development should be explored in a more unified and inclusive framework, so that theories could better serve the practice of career counseling and career education (Ryan, 1996). In this context, Patton and McMahon have proposed a metatheoretical framework (the Systems Theory Framework, STF) for career development and counseling (McMahon & Patton, 1995). The STF puts various factors that may affect individual career development under one framework, emphasizes the wholeness and dynamic interactions among individual systems, interpersonal social systems, and socio-environmental systems, and is capable of better explaining the connotation and extension of the core concepts of career development, such as work and professional identity in the post-modern society (McMahon, 2011).

The main purpose of this paper is twofold: First, to systematically sort out ca-

reer development and systems theory, so as to refine its core content and pave the way for subsequent practice; second, based on the core content of career development and systems theory, to try to put forward a kind of practical advice on career intervention, in order to be able to draw on and inspire in the field of career counseling and consulting.

Therefore, this review addresses two focused review questions:

RQ1. What are the core components and internal logic of the Systems Theory Framework (STF)?

RQ2. What practical value do STF and its MSCI assessment tool bring for career education and counseling?

2. Framework and Core Elements of Career Development and Systems Theory

STF is essentially rooted in general systems theory (McMahon & Patton, 1995). The “system” refers to a group of interacting factors that, in addition to interactions within a system, interact with its environment, as in the case of living systems. Thus, the systems perspective views things as wholes rather than parts and emphasizes the interactions between parts. Although general systems theory originated in biology, it has had a wide impact on many disciplines outside of biology, such as Ford’s motivational systems theory (Pintrich, 1995) and Bronfenbrenner’s ecological system theory (Flynn & Mathias, 2023) in the human sciences. The systems perspective is both the theoretical foundation of STF and the basic idea that guides the career counseling and assessment process based on STF.

Another theoretical foundation of STF is constructivism (McMahon & Patton, 1995). The core of career theory should be changed from adapting to the needs of the environment to realizing the value of the individual, and the focus should be shifted from the objective career to the subjective career (Collin & Young, 2016). Constructivism and social constructivism have increasingly influenced the field of career (McCash, 2012). Brown and Brooks (1990) proposed four basic assumptions for viewing career development from a constructivist perspective: (1) all aspects of heaven and earth are interconnected; figure and context, subject and object, and person and environment are inseparable; (2) there are no absolutes, and therefore human functioning cannot be reduced to laws or principles that infer causality; (3) human behavior can be understood only in the context in which it occurs; and (4) human subjective awareness is the only rational source of knowledge (Brown & Brooks, 1990). Events occur in context and as individuals understand their environment and participate in events, they define themselves and the environment in which they live. Constructivism represents an epistemological stance that emphasizes self-organization and active knowing which provides an appropriate lens for understanding the changing concept of career in postmodern society.

Influenced by systems theory and constructivism, STF places the various internal and external factors affecting an individual’s career development under the

same theoretical framework, emphasizing the wholeness among the components, which is expressed in the dynamic interactions within and between the systems (McMahon & Patton, 1995). In practical career-counseling work, systems theory provides the multi-layered factor framework, while constructivism governs how these factors are used. System-level influences are not treated as direct causal determinants of career outcomes. Instead, practitioners use narrative approaches to encourage clients to reflect on these factors and construct their own subjective career meaning.

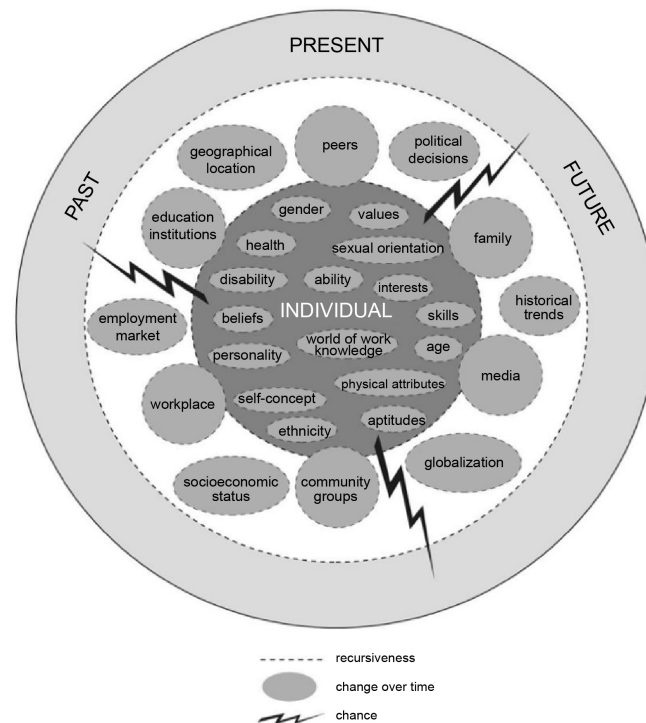


Figure 1. Conceptual diagram of the systems theory framework.

As shown in **Figure 1**, at the center of this theoretical framework is the individual, nested in a complex context of constructing the meaning of his or her career. The factors that influence individual career development are categorized into content and process factors. Content factors include the individual system (i.e., gender, age, personality, abilities, etc.), the social system (i.e., family, peers, school, community, workplace, etc.), and the environmental-societal system (i.e., geography, economic environment, job market, policy factors, etc.). All three content systems are nested in the context of time and are subject to dynamic change over time. Rather than being isolated from one another, these systems interact with one another on an ongoing basis. The process factors of interaction include three kinds: Recursiveness, refers to the interactions and interpenetrations that occur among the systems. Change Over Time, refers to the fact that the impact of each system is different at different times, e.g., the family environment affects people differently in childhood, adolescence, and college. Chance, refers to events in ca-

reer development that are unpredictable but have a significant impact on career development.

These content and process elements are not isolated, and individuals connect these elements in a narrative way to find the relationship between them and construct meaning during their career development (Taylor & Savickas, 2016). STF provides a panoramic map of the influences on an individual's career development, which highlights the interrelationships between factors and their interactions by discussing them under the same framework, triggering the individuals to think about life themes and the meaning of life.

3. Practical Attempts at Career Development and Systems Theory

STF is not only a theoretical framework, but also focused on bridging the gap between theory and practice from the very beginning of its proposal (Patton & McMahon, 2015). Traditional career counseling is influenced by positivism and is dominated by quantitative assessment tools, which assume that an individual's career development is observable and predictable. Entering the postmodern era, individuals' careers are influenced by more and more uncontrollable factors, showing a trend of nonlinear development and unpredictability. Therefore, Savickas proposed that postmodern career counseling tools should shift from a psychometric orientation to a narrative orientation, and from scores to stories, emphasizing the importance of qualitative career assessment tools that have been neglected (Savickas, 1993). These qualitative tools can provide meaningful and valuable experiences that help visitors construct their unique selves within their unique cultural context. With this in mind, the researcher developed a qualitative assessment manual, My System of Career Influences-MSCI, which was to explore how various factors in the STF have an impact on the individual's career development (McMahon et al., 2016). In the process of using the manual, counselors learn about their own characteristics and upbringing by encouraging visitors to tell their career stories, which in turn provides users with space to think about and comprehend their own unique life themes, and ultimately helps users make career decisions that are more meaningful to them.

The MSCI manual consists of 11 chapters, each representing a phase of the assessment and reflection process. The titles, content, and corresponding STF subsystems of the 11 chapters are shown in **Table 1**. Chapters 1-2 are basic introduction. Chapters 3-6 are based on the STF theory to help the user reflect on his/her own career impact system step-by-step, which is a process of deconstruction of the career story. The section of this part adopts the STF subsystems as the core structure, and its logical sequence is consistent with that of the STF, i.e., starting from the internal system of the individual, linking the internal system with the interpersonal-social system and the environmental-social system, and then moving on to the past-present-future temporal factors that influence career development. Chapters 7-10 are designed to facilitate the user's career reconstruction and

action. Chapter 10, “My Action Plan”, supports users to record concrete action steps. Based on the assumption that career development is ever-changing and life-long, Chapter 11 allows the user to revisit his/her current thinking at some point in the future, to refine it once again and to reflect on the changes in his/her career impact system over time.

Table 1. The 11 chapters of my career impact system (teen edition) and their contents.

No.	Title	Contents	STF
1	Introduction	Introduction to the manual	
2	Rethinking My Career Decisions	Introduces career decisions faced by adolescents and the factors that influence them, and the utility of the handbook.	
3	Where I am now in my career	To help users reflect on their current career situation, including career aspirations, work experience, life roles, support systems, etc., with the aim of presenting problems.	
4	Thinking about who I am	Encourage users to reflect on their own personality, interests, gender, values and other internal influences.	Intra-individual systems
5	Thinking about the people around me	Encourage users to reflect on interpersonal influences such as family, friends, media, etc.	Interpersonal social systems
6	Thinking about society and the environment	Encourage users to reflect on environmental-social influences such as geographic location, public transportation, financial support, etc.	Environmental-social system
7	Thinking about my past, present and future	Encourage users to reflect on past career influences, current career status, and envision future lifestyles.	Time dimension
8	Representing my Career Influence System Map	Help users complete the mapping of their career influences using the information in the previous 6 chapters.	
9	Reflect on my Career Influence System	To guide users to reflect on their own career impact maps and to construct meaning and learning as they talk about their own career issues.	
10	My Action Plan	For users to record further action plans.	
11	My Career Influence System II	For users to draw their CIS map again at a future date and reflect on how their CIS has changed over time.	

The MSCI manual allows the user to grasp a holistic view of the factors affecting his or her career situation and, in doing so, to reflect on what is most important to him or her, what changes he or she would like to see happen, and ultimately to develop an action plan to support those changes. The MSCI is available in both adolescent and adult versions, with corresponding user and counselor manuals, which can be used by the visitor alone or with the assistance of a counselor. The MSCI can be used alone or with the assistance of a counselor. As an adjunct to career counseling, the MSCI can be used in one-on-one individual counseling as well as in group counseling, career development learning activities in the classroom or other settings. To date, the MSCI has been translated into several languages, and research has shown that the MSCI is applicable to different populations in different social contexts.

4. Future Research Perspectives and Insights

Firstly, it is important to emphasize the construction of meaning in the counseling process. In the 21st century, due to the transformation of socio-economic structure, coupled with the great changes after the epidemic, stable jobs and linear career development paths were gradually broken, and people began to face the problem of how to gain adaptability and realize their own values in a rapidly changing society (Chen et al., 2022). While STF accepts the instrumental utility of assessment techniques originating from positivist traditions, its core philosophical foundation shifts away from logical positivism toward constructivism (McMahon, 2011). Constructivism emphasizes the value of the whole, human autonomy and meaning construction, and STF helps individuals to tell stories based on complex backgrounds, adopt a holistic view to understand the relationship between various parts of complex systems from a broader perspective, and construct their own unique life themes and meanings through reflection and comprehension, so as to lay down the main lines of individual career and even the whole life development.

Secondly, it emphasizes the influence of environment on career development. According to the internationally recognized Competency Standards for Career Management, the content of career education should cover the three major areas of self-development, career exploration and career management (Jackson & Wilton, 2016). “Self-development” includes recognizing oneself, constructing a positive self-concept, developing positive interpersonal skills and adapting to self-change and growth. “Career exploration” includes acquiring knowledge and skills for lifelong learning, learning to acquire career information, acquiring social practice skills, and understanding the development of society and its impact on personal development. “Career management” includes formulating career goals that meet one’s own characteristics, mastering career decision-making skills, adjusting career planning according to changes in the social environment, and balancing the various roles of individuals, learners, workers, social citizens, family members, and recreationists (Chen et al., 2021).

Thirdly, it emphasizes the interaction between systems. Existing career education relies heavily on internal school forces and makes grossly insufficient use of family and social forces. STF emphasizes the roles of each part of the system and the impact it has on the other parts, and stresses that learning experiences may arise in a variety of formal or informal settings and places. Relying only on the school’s career curriculum, club activities, theme class meetings, career counseling and other channels, and lacking the cultivation of the family environment and the accumulation of social experience, it is easy for students to stay at the level of knowledge and skills in career development, and it is difficult to realize the transformation of emotions, attitudes, and values, and it is even more difficult to implement them into spontaneous actions. Only by fully mobilizing family resources and social forces, realizing the “home-school-society integration” of career education, and increasing the opportunities for students to engage in experiential learning, can career education produce a subtle, silent and positive orientation

effect on students (Chen et al., 2021).

Author Contributions

Conceptualization, L.L. and H.L.; methodology, L.L.; software, L.L.; validation, L.L. and H.L.; formal analysis, L.L.; investigation, L.L.; resources, L.L.; data curation, L.L. and H.L.; writing—original draft preparation, L.L. and H.L.; writing—review and editing, L.L. and H.L.; visualization, L.L.; supervision, H.L.; project administration, H.L.; funding acquisition, H.L. All authors have read and agreed to the published version of the manuscript.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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