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The Motivation Theory of Life-Span Development and Its Implications for Career Education

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Abstract

Based on the Selective Optimization with Compensation (SOC) and control model, the Motivational Theory of Life-Span Development (MTLSD) proposes adaptive development criteria and objectives. It asserts that the pursuit of perpetual development is the primary control and that the life cycle is an action field with an opportunity and constraint structure of time organization. Opportunity is a process characterized by the change processes of escalating and waning and by the adaptation consistency processes of goal participation and goal separation. The MTLSD has endeavored to elucidate how people actively promote their own personal lifelong development throughout its entirety. This provides illumination for China's career education. The importance of individual initiative in career development, the process of opportunity in the continuity of career education, the difference of career education in different career (major) life cycles, and the fairness of career education during the transitional period of social mobility (opportunity) must be emphasized.

Keywords

Motivational Theory of Life-Span Development, career education, primary control, opportunity

1. Introduction

As a comprehensive educational program, career education focuses on a person's entire career, coming from childhood to adulthood, based on career awareness, career exploration, career orientation, career preparation, and career proficiency. By doing so, it enables students to develop essential life skills and establish a distinct personal life style (1971, US Department of Education).

It can be said that continuity, originality, and purpose are essential characteristics. Nonetheless, the majority individuals have the will and motivation to actively participate in shaping their own lives, often following a consistent developmental path, identifying and effectively pursuing long-term goals, and, when necessary, moving away from unattainable goals, expressing individual agency. How to embody individual initiative, how to control and deal with extant problems in career development, and notably how to alter individual motivation in the face of rapid social change, are issues that career educators should investigate. Heckhausen et al. (2010) proposed the MTLSD, which combines the control model of life-span development with the selective optimization and compensation model, and which focuses on the motivational regulation role of individuals in life-span development and their regulation strategies. It is a paradigm of individual motivation control and optimization, as well as a psychological and sociological response to the evolution of vocation education.

2. The Theoretical Foundation and Central Concepts of the Motivational Theory of Life-Span Development

The MTLSD is fundamentally grounded in the Life span development theory. It was developed in the early 1970s by psychologists Baltes and Shaire based on empirical research findings. The theory examines the scientific understanding of the general patterns of development, individual developmental homogeneity, and individual developmental plasticity, focusing on the growth, stability, and change of behavior from conception to mortality. Its fundamental premise is that the development of individual psychology and behavior is a continuous, lifelong process. Individual development in this process is a multi-functional, multi-dimensional dynamic system that exhibits considerable developmental plasticity and compensation. Moreover, it is governed by a multi-stage system that necessitates the collaboration of various human development-related disciplines (e.g., biology, medicine, sociology, anthropology, etc.) in order to examine and comprehend human development as a whole.

The SOC model was proposed by Baltes et al. (1990) to explain the overall pattern of successful individual development. In actuality, the development of a person's existence is an interactive process of selection, optimization, and compensation. The process of SOC optimization serves as the foundation for the development of the MTLSD. In addition to SOC, the control model proposed by Rothbaum et al. (1982) is the basis of the MTLSD. The theory suggests that control is a theme in life development and consists of primary control, in which the individual endeavors to alter the environment to satisfy a desire or need, and secondary control, in which the individual adapts to the

environment or "conforms" to it. Individuals employ diverse adaptive strategies based on the situation, tasks, and life events, allowing primary control and stimulus control to alternate.

Based on the SOC and control models, the theory proposes Adaptive Development criteria and developmental objectives. Firstly, the MTLSD does not support the use of psychological processes such as satisfaction, psychological well-being, and individual understanding of achievement as criteria for adaptive development, as this would lead to issues such as being too subjective and deviating from objective facts (social rules) and not supporting for forming inter-individual comparison or cross-cultural consistency. The most important criterion for adaptive development is the extent to which individuals acquire control over their environment, thus encompassing multiple domains and time spans of life (Heckhausen, 1999; Hechausen & Schulz, 1995, 1999b; Schulz & Hechausen, 1996). Primary Control Capacity is the criterion for adaptive development and, in conjunction with secondary control, it maximizes the individual's overall primary control capacity. In contrast to Rothbaum et al. (1982), the MTLSD clarifies secondary control's function as an auxiliary motivational process that supports short-term or long-term primary control efforts, rather than as an alternative or opposing process.

Furthermore, the MTLSD posits that the life course is a temporally organized action domain of opportunities and constraints (Heckhausen, 1999). Developmental goals are organizational motivational units that play a positive role in shaping individuals' life trajectories and development. Attempts by individuals to regulate their development are organized around the action cycle of pursuing developmental goals (Heckhausen, 1999). Similar to other goals, developmental goals represent anticipated end states that directionally influence individuals' behavior. Individuals are considered active producers of their development (Freund & Baltes, 2002b), and agency plays a crucial role in the developmental process, portraying individuals as active agents in the motivational processes of goal selection, goal pursuit, and goal disengagement.

Of course, not all goals can be pursued throughout one's entire life, and some are considered normative developmental tasks (Havighurst, 1953), such as education and retirement. Simultaneously, the age-related structure of historical life courses is influenced by historical changes, with significant shifts in age boundaries for key life stages, such as education and reproduction, occurring over the past centuries. In many contemporary industrialized nations, formal education extends into late adolescence (beyond the age of 20), as opposed to around 15 years old a century ago, and the onset and conclusion of reproduction have been delayed compared to two centuries ago. While the variability and flexibility of life course trajectories have increased, the fundamental structure of life course events and transitions has not been disrupted (Brueckner & Mayer, 2005). Human life courses still provide an age-graded sequence of opportunities for pursuing and achieving significant developmental goals (Figure 1), offering individuals a timetable to guide goal selection and pursuit. In the future, as society and demographics continue to change, life course trajectories will continue to evolve (Mayer, 2004).

In addition, the MTLSD views the life course as a temporally organized field of action with a structure of opportunities and constraints (Heckhausen, 1999) and developmental goals as organizational units of motivation that allow individuals to actively shape their own life course and development. Individuals' attempts to regulate their own development are structured around a cycle of action aimed at achieving developmental objectives (Heckhausen, 1999). Developmental objectives are akin to other objectives in that they are desired end states that guide the behavior of individuals. Individuals are viewed as active producers of their own development (Freund & Baltes, 2002b), and their agency plays an important role in the developmental process, acting as an active agent and playing a role in goal selection, goal pursuit, goal disengagement, and goal management, which is reflected in the motivational processes of goal selection, goal pursuit, and goal disengagement. Obviously, not all objectives can be pursued at all periods of life, as some are regarded as normative developmental tasks (Havighurst, 1953), such as education, retirement, etc. Simultaneously, the age-related structure of the historical life course has been influenced by historical changes in the pertinent structure of the life course, with the age boundaries of key life phases, such as education and childbearing, shifting dramatically over the past few centuries. In the majority industrialized nations, formal education now extends into late adolescence (after the age of 20) compared to around 15 a century ago, and childbearing begins and ends later than it did two centuries ago. The increased fluidity and flexibility of life course trajectories have not disrupted the basic structure of life course events and transition sequencing (Brueckner & Mayer, 2005), and the human life course still provides an age-level sequence of increasing and decreasing opportunities to pursue and achieve important developmental goals (Figure 1). These trajectories of opportunity provide individuals with a timeline to guide goal selection and pursuit. As societies and populations transform, life course trajectories will continue to evolve in the future (Mayer, 2004).

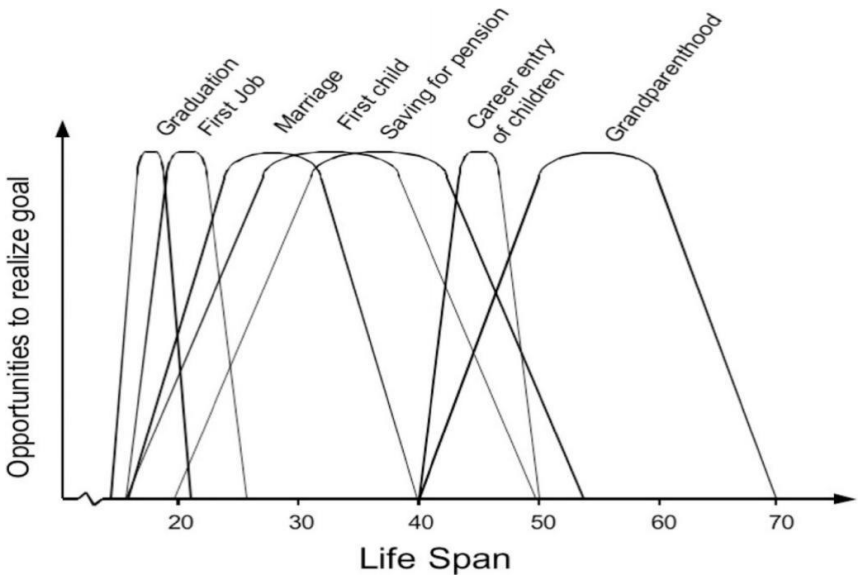

Figure 1. Age-graded Chart of Various Developmental Goal Opportunities (Heckhausen, 2000)

3. Motivational Theory of Life-Span Development Complementarity and Development of the Concept of Career Development

Developmental objectives, career transitions, career choices, and other essential career development concepts have always been present in various career theories, but with the advent of postmodern society, traditional career theories cannot adequately explain these changes. The MTLSD provides new perspectives and explanatory models for understanding these crucial concepts, thereby better explicating the laws of individual career development in postmodern society, and providing theoretical support for career education.

3.1 A Strategy for Primary Control ("Altering" The Environment) Is Secondary Control ("Conforming" to the Environment)

While scholars have made distinctions between primary and secondary control, their functional relationship and their transformations and influences in our life development have not been explicitly elucidated. The MTLSD explicitly proposes that the establishment of the motivational system is to maximize the primary control ability in life domains and across the lifespan. It outlines the development trajectory of the availability of primary control and the use of secondary control strategies (Figure 2). It is observed that although the ability of primary control follows a reversed U-shaped curve (rapid growth in early stages, peaks in midlife, and declines in old age), the efforts in primary control remain stable and idealized throughout the entire lifespan. In contrast, efforts in secondary control increase with the maturation of social-emotional and cognitive abilities, along with the growing need for compensation for failures and control over losses in old age. Regardless of the functionalist perspective or the evolutionary psychology perspective, mastering primary control abilities to the maximum extent is related to overall well-being, such as searching for food, competing for mates,

seeking shelter, and caring for offspring—all representing significant challenges (Heckhausen, 2000b). In the lifespan developmental cycle, while development is adaptive, it ultimately aims to achieve maximum primary control, considering not only the current ability to control external events but also the potential for future exercise of primary control. Life development, in this sense, is achieved by maximizing control over various major functional domains in different stages of life (such as learning, work, family, health, and leisure) to realize the most adaptive development throughout the entire lifespan. In this process, the primary motivation for secondary control strategies (adaptation to the environment) is primarily to reduce losses, maintain, and expand the current level of primary control, rather than serving as alternative methods or opposing processes. The pursuit of primary control is a continuous and universal motivational drive throughout a person's life. While the ability of primary control may decline with age, requiring the activation of secondary control strategies to help cope with challenges, the pursuit of primary control persists. When certain primary control goals become unattainable, individuals need to disengage from these goals to pursue others that are more achievable. In this process, individuals increasingly rely on secondary control strategies, such as adjusting expectations, values, and attributions, to ensure that the loss of primary control does not damage the motivational resources for general primary control efforts.

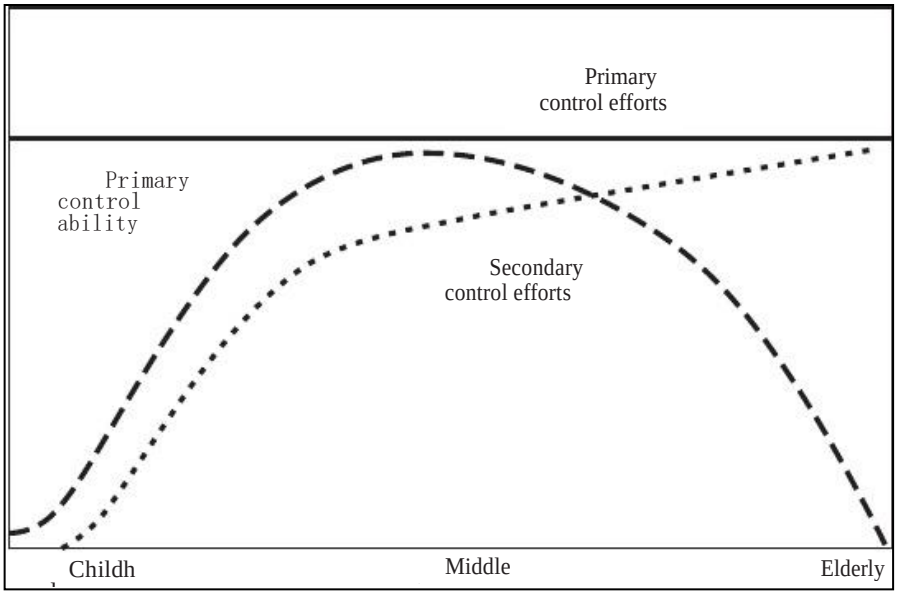

Figure 2. Hypothetical Life Trajectory Diagram of Primary Control Potential and Primary/Secondary Control Effort (Heckhausen, 1999)

3.2 Goal Management Entails Maximizing Goal Participation and Disengagement

According to the MTLSD, goal control strategies operate in a goal engagement mode and a goal disengagement mode (Heckhausen, 2003; Heckhausen & Farruggia, 2003). Both goal engagement and goal disengagement are adaptive processes that are beneficial. In life-cycle development, individuals face two major adjustment challenges: selection and compensation (Heckhausen, 1999), successful development refers to the simultaneous maximization of gains (desired goals and outcomes) and minimization of losses (different desired goals or outcomes), forming a 2*2 matrix with primary and secondary control (Figure 3). The operation of the goal engagement and goal disengagement models is dependent on the matrices' control strategies.

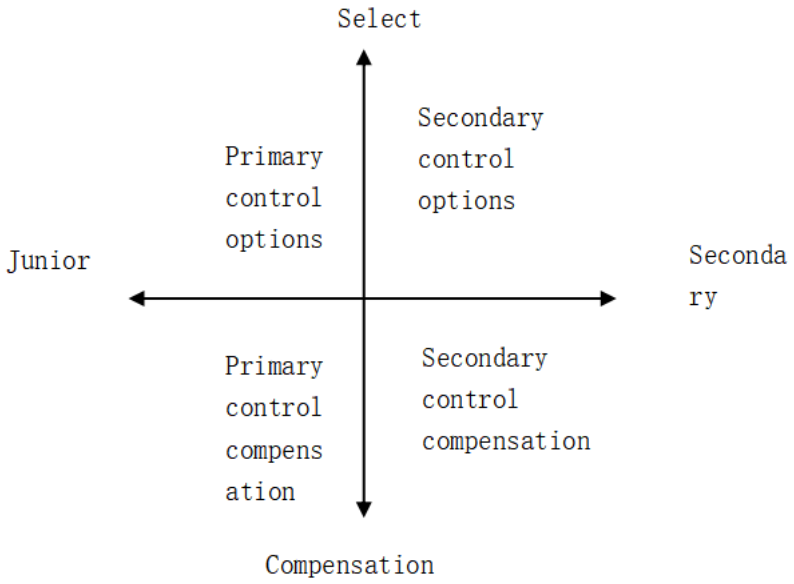

Figure 3. Matrix of Primary/Secondary Control and Selection/Compensation Composition

Typically, goal engagement involves selective primary control and selective secondary control. Selective primary control refers to the pursuit of a goal through the investment of behavioral resources (such as time, skills, energy, etc.). Selective secondary control strategies enhance and maintain motivation and commitment to the selected goal, especially when faced with unexpected obstacles or attractive choices. These strategies include increasing the value of the selected goal, decreasing the value of non-selected alternatives, and fantasizing about the control potential to achieve the selected goal. Additionally, when an individual's available behavioral resources are insufficient to reach the goal, compensatory primary control may be necessary, involving seeking help or advice from others and using technological assistance.

Specifically, compensatory primary control entails obtaining assistance or advice from others, using technological aids, etc. When individuals experience a loss of control or when goals become unattainable or too costly, individuals may need to disengage from the goal (Heckhausen & Schulz, 1993; Wrosch Scheier, Carver & Schulz, 2003). Unlike the motivational mindset of goal engagement, goal disengagement involves more compensatory secondary control strategies. This can be achieved by discontinuing outdated goals, thereby releasing resources to pursue other achievable goals. Furthermore, compensatory secondary control includes specific self-protective strategies, such as causal attributions for self-protection (avoiding self-blame), focusing on success in other domains, and downward social comparisons. All of these strategies are aimed at shifting the potential negative impacts of failure experiences to motivate and protect self-resources, achieve emotional balance, and maintain self-esteem.

Carver et al. (1998, 2000) proposed the concept of convergence in their self-regulation and control theory, suggesting that commitment and confidence are crucial components of goal engagement. Merely abandoning efforts without breaking motivational commitment can lead to maladaptive consequences. Abandoning a goal is an active disengagement where commitment and confidence decrease. Disengagement is a positive process of adjusting goals, not just a passive reflection of failure and loss. (Specific strategies for goal engagement and goal disengagement are outlined in Table 1.)

Table 1. Control Processes for Target Engagement and Target Disengagement

	Control processes	Description
Target participation	Selective primary control	Investment behaviors, efforts, time, skills
	Selective secondary control	Increased self-regulation of willpower, motivational commitment to selected goals, increased perceived control, and positive stimulation of imagined goals
	Compensatory primary control	Seeking help or unusual methods Overcoming inadequate primary control
Target disengagement	Compensatory secondary control (Away from the target)	Devaluing selected targets and reducing their importance Enhancing the value of conflicting objectives
	Compensatory secondary control (Self-protection)	Protecting motivational resources from negative impacts Redefinition of the empirical meaning of failure or loss

3.3 Opportunity Is a Process That, Along With the Objective, Must Establish an Adaptive Consistency Process

The efforts of primary control require individuals to adapt their goals, choices, and control strategies repeatedly to the objectively available opportunities and constraints within a given developmental ecology. The patterns of goal engagement and disengagement, along with their respective control strategies, should reflect these changes. In this context, opportunities are not merely random occurrences at a certain point in time but constitute a process with dynamic fluctuations, showing both increases and declines. This process forms an adaptive consistency with goal engagement and goal disengagement (Figure 4). The Figure 4 illustrates the trajectory of opportunities rising, peaking, and declining for achieving a specific goal (light gray area in Figure 4). It also displays the expected trajectory of goal engagement required for goal attainment (dark gray area in Figure 4). Simultaneously, as opportunities for achieving significant developmental goals increase, individuals are more likely to consider them as personal developmental goals, making the process of optimizing goal selection more feasible (first section on the left in Figure 4). However, if individuals postpone goal selection and pursuit until after opportunities peak and start to decline, which is suboptimal timing, they would require a higher level of goal engagement (dark gray area indicating a peak in Figure 4) to ensure goal attainment when opportunities decrease.

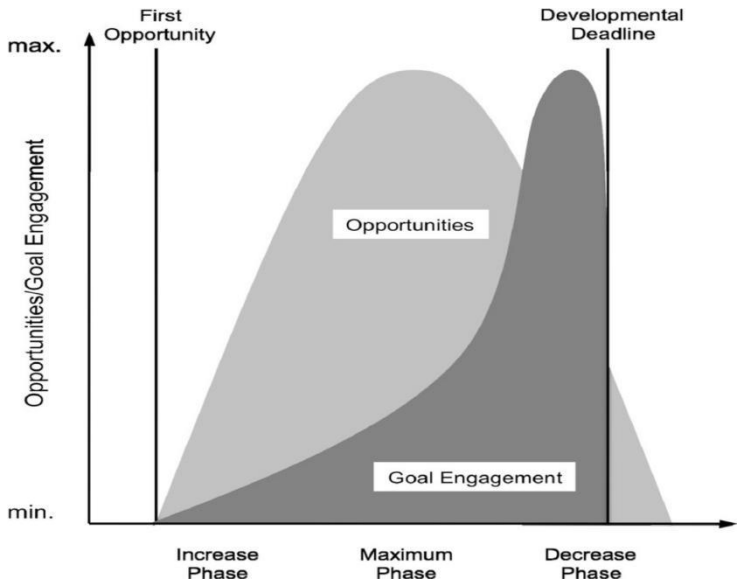

Figure 4. Developmental Chart of the Opportunity Structure of Goals and the Age of Goal Participation (Heckhausen, 2000)

In this process of aligning opportunities with goals to achieve adaptability, a goal cycle is formed, involving goal engagement, disengagement, and control strategies together (Figure 5). Before the decision-making process of goal selection, optimization mechanisms such as optimization, opportunity matching, and diversity considerations are triggered, leading to the phase of goal engagement. In this stage, there will be involvement in selective primary control and selective secondary control. As opportunities approach the strict limitation phase (e.g., the physiological deadline), goal contact intensifies, at which point selective primary control, selective secondary control, and compensatory primary control increase (Figure 5, the transition on the right side of the "Deadline" in the "Urgent Goal Contact" section). As opportunities for goal attainment decrease, achieving the goal becomes nearly impossible or excessively costly, making personal resource allocation challenging. Further efforts towards the goal become highly mismatched, leading to the developmental deadline of the goal. Once the deadline passes without achieving the goal, individuals enter the goal disengagement phase and use compensatory secondary control strategies to protect motivation resources for future goal pursuits (see Figure 5, the section on the right of the "Deadline"). The developmental deadline is a crucial milestone in this process, not only exerting urgency to facilitate goal achievement but also guiding individuals in their goal disengagement decisions. The advantage of anticipating the deadline is significant, as without it, individuals may fall into a state of uncontrollable and futile goal investment, leading to conditions such as depression (Klinger, 1977; Nesse, 2000). This also implies that the developmental deadline poses a significant challenge to individuals' self-regulation, requiring a shift from intense and urgent involvement in goals before the deadline to goal disengagement and self-protection after the deadline. Those who fail to disengage from futile goals after the deadline may face the risks of wasted resource investment, setbacks, opportunity costs of not pursuing other viable goals, and depression. Although the model emphasizes goals associated with deadlines, it is equally applicable to any goal opportunity situation that changes over time.

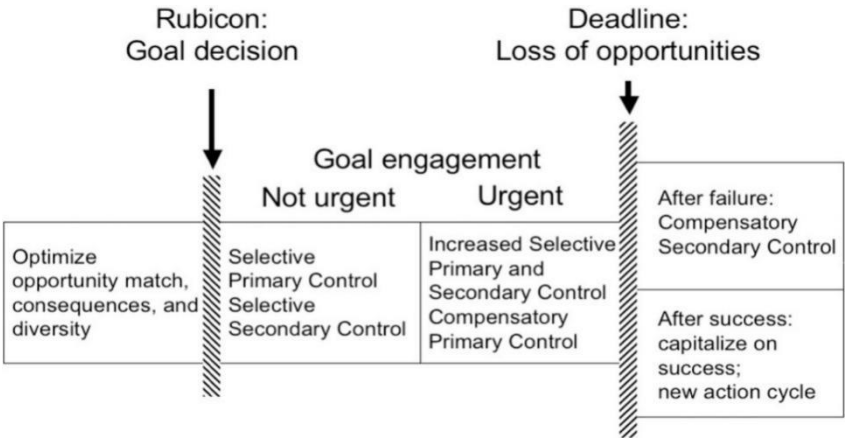

Figure 5. Stages of Action Model of Development Regulation (Heckhausen, 1999)

4. Implications of Motivational Theory of Life-Span Development for China's Career Education

4.1 The Importance of Individual Initiative to Career Advancement

Throughout its existence, the MTLSD has endeavored to clarify the ways in which individuals proactively participate in their own continuous development. It could be argued that the emphasis on the importance of individual initiative in career development is its central argument. On this premise, the theory posits that one's motivational system is designed to optimize his/her primary control, which is the ability to effect social change. Secondary control, which consists of conforming to society, is solely a tactic to achieve primary control. This provides a direction for the development and implementation of vocation education objectives. First and foremost, vocation education should emphasize the development of individual initiative. Career education should focus not only on guiding individuals through their career transitions (e.g., further education, employment, etc.), but also on the evolution and development of their motivation during this process. Second, it provides a theoretical foundation for the guiding concept of "employment before career choice" in career education, which is a manifestation of secondary control and a strategy of primary control with the ultimate-goal of improving "career choice". Employment first is a manifestation of secondary control, a primary control strategy that ultimately aims to improve "career choice" and has attained primary control. Lastly, career education is an effective means of implementing selective secondary control. Individual motivation necessitates career education to provide the appropriate external resources to assist individuals in overcoming adversity.

Additionally, the MTLSD created the Optimization in Primary and Secondary Control-A Multiscale Questionnaire (OPS-Scales) for measuring developmental regulation in maturity. The scale consists of five main dimensions, including optimization, selective primary control, selective secondary control, compensatory primary control, and compensatory secondary control, with 22 sub-dimensions (Table 2) and 44 items in total. It is necessary and instructive for career educators to determine individual goal profiles and control strategies, and the OPS-scale is useful for career goal exploration as a reference tool.

Table 2. OPS Scale Dimensional Components Table (Heckhausen et al., 1998)

Optimization	Selective primary control	Selective secondary control	Compensatory primary control	Compensatory secondary control
●Change of Target Adaptation Development (OPTST) ●Investing in long-term potential targets (OPTSL) ●Positive Trade-offs (OPTTP) ●Negative trade-offs (OPTTN) ●Maintenance of Diversity (OPTDM) ●Uniformity avoidance (OPTDD)	●Putting in the effort ●Time commitment ●Skills development ●Overcoming difficulties	●Help from others ●Advice from others ●Finding new ways ●Detour	●Increase in target value ●Devaluation of other targets ●Enhanced perception of control over selected targets ●Positive consequences of the achievement of the expected objectives	●Target disengagement ●Self-protection attribution ●Social comparison ●Intra-personal comparison

4.2 The Importance of Paying Attention to Opportunities throughout the Continuum of Career Education

Unlike career chaos theory and the "opportunity theory", the MTLSD implies that opportunity is not a random, singular event, but rather a voyage that intervenes in the career development cycle alongside goal participation. In actuality, the achievement of development is contingent upon the individual making the optimal decision and achieving goals at the optimal time, and optimizing goal selection requires consideration of opportunities, time constraints, and other factors. When evaluating the adaptability of control strategies, consideration must be given to the individual's optimization of the parties and the development of long-term competence in primary control, which can be evaluated using at least three criteria: 1) the goal satisfies realistic conditions; 2) the outcome is beneficial (or at least not detrimental) to other domains or long-term development, and 3) the goal's fundamental nature can

be preserved (Heckhausen, 2010).

"When I am fifteen, I will study; when I am thirty, I will be independent; when I am forty, I will have no doubts; when I am fifty, I will know heaven's destiny; when I am sixty, I will follow my heart and do what I desire" (The Analects of Confucius). In this description, the concept of lifelong development and the time series of development objectives of the Chinese people are reflected. This also contains the crucial meaning of opportunity and goal participation: "What to do at what age". "A gentleman has three warnings: in youth, when one's vitality is unsteady, one should avoid lust; in their prime, when one's vitality is robust, one should avoid conflict; and in old, when one's vitality declines, they should avoid excessive acquisition" (The Analects of Confucius), which illustrates the strategy of physical and mental control during the transition from childhood to adulthood. This implies that career education should not be a fragmented education, but rather a coherent comprehensive education that takes into account the limitations of opportunities and time in the education process, including life opportunities, life sequence, and life design, which is typically the most challenging aspect of career education. In any case, the MTLSD seeks to highlight the life process of opportunity and goal engagement as a corrective to current career education, which is sometimes undesirable and dangerous when we place too much emphasis on the immediacy of the goal and ignore the problem of the process nature of time in the creation of opportunity and the adaptability and development of individual initiative in such a journey. At the same time, the journey of opportunity has a deadline, some physical (e.g., the deadline for childbearing) and some temporal (e.g., the deadline for an opportunity), and career education should make students aware of this.

4.3 The Significance of Attention to Various Career (Professional) Life Cycles for Distinctions in Career Education

Although primary control abilities generally follow a bell-shaped trajectory throughout the lifespan, there are significant differences in the peaks and slopes of primary control functions in various occupational fields (Heckhausen et al., 2017). On one hand, some professions or occupations (such as manual labor in fields like construction or clerical work requiring minimal training) can quickly reach the peak level of competence. However, the opportunity for further growth in primary control abilities in such professions also rapidly stagnates or declines. These occupations align with the increasing primary control abilities of adolescents and young individuals, and if the work is not perceived as temporary, involuntary, or undesirable, it can lead to early engagement and satisfaction with the job.

However, opportunities for advancement decrease rapidly after entering the workforce, resulting in a bottleneck period of early and lower primary control abilities. In the later stages of the young adulthood phase, individuals at the early peak of their careers may have already mastered and exhausted the challenges and opportunities in their work environment, while their overall primary control abilities continue to rise, leading to a sense of disconnection and scarcity. This sense of disconnection may prompt a reevaluation of their profession and specialty, either making corresponding adjustments and

changes or adopting secondary control strategies that adapt to the environment.

On the other hand, some professions or specialties significantly delay the opportunities for growth in primary control but provide continuous opportunities for growth throughout the career (such as professions requiring meticulous training like academic or artistic careers). These professional roles necessitate extensive training, substantially delaying and prolonging the entry into the career. The complexity of these professions often makes individuals unable to reach the maximum competence within the primary control domain, making the entry into the career a lengthy and challenging process. This seriously challenges individuals' motivation systems, requiring sustained commitment to an uncertain and distant goal.

Thus, individuals are at risk of violating goal consequence management and goal diversity heuristic maintenance during both the entry phase of a career and the process of establishing and maintaining a position, and the evening peak of a career presents other unique challenges that, if not met, can lead to feelings of inadequacy. To mitigate these potential adverse consequences, the opportunity for lifelong growth and progress in primary control provides individuals with the means to discover enduring significance and intrinsic dedication in their professional pursuits. Therefore, the challenges confronting career education and strategies for advising are distinct for various occupational categories (professions). This differentiated treatment is typically what makes career education so appealing. Moreover, the degree to which an individual's work situation provides primary control that matches his actual primary control has important motivational and socio-emotional implications, indicating the importance of assessing an individual's suitability for the environment, in addition to the significance of motivational stimulation and emotional empowerment in career education.

4.4 The Significance of Transitional Attention to Social Mobility (Opportunities) for Equity and Fairness in Career Education

Almost certainly, the transition from adolescence to maturity is the most significant developmental transition throughout the life course. Most modern societies have a high potential for social mobility, and individuals confront both opportunities for upward social mobility and risks of downward social mobility throughout their lifetimes and across generations. Nevertheless, certain aspects of society may limit an individual's ability to climb the social ladder (Buchholz et al., 2009). For individuals, the initial state is monostable, and the developmental path diverges as the time series intervenes to regulate it. On the one hand, this distinction, in addition to the individual's own disparities, could be the result of the individual's social class. Corak (2013), for instance, argues that the primary motivator of progressively limited social mobility is what economists refer to as "children's human capital". Higher incomes result in better neighborhoods, daycare facilities, and schools, which tips the scales in favor of children from higher income categories when it comes to university quality and employment opportunities. Alternatively, this disparity may be the result of the social system's design. For instance, our education system's stratification is difficult, but it is not impossible to transfer between levels.

These various restrictions in the education system may create barriers between stable paths, making it difficult to move from one to another. Internalized ideologies of social inequality and beliefs regarding the causes of upward and downward social mobility may also contribute to this phenomenon. The impact of these constraints on career development can frequently be a hindrance to career education, and opportunities arise in part from dismantling and modifying these constraints. In other words, career education is frequently accompanied by supply-side education reform, equity in education, and the elimination of barriers to education.

5. Conclusion

The MTLSD expands upon the criteria for adaptive development and developmental objectives by incorporating the SOC and control models. By situating individuals within a more comprehensive temporal framework and incorporating life developmental tasks, the theory believes that individuals actively generate and propel their own development. This offers theoretical support for the practice of career education and a fresh perspective on career exploration. Career education ought to prioritize not only the positive implications of an individual's professional growth but also safeguard and advance their subjective agency. There exists a necessity to augment the procedural, coherent, and opportune knowledge content pertaining to opportunities within the realm of vocation education. This would empower students to comprehensively contemplate the limitations of opportunities and time, and subsequently integrate them into the sequence of life design. With due regard to career education, the impact of various professional life cycles on human development should be taken into account during the construction of the career education system. Aside from valuing individual distinctions, consideration should be given to the variety of professional life cycles.

In conclusion, the MTLSD offers a new perspective on career research, examining human career development and design in a more macroscopic time series and providing new theoretical support for the practice of career education.

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