

Exploring the Connections Between Career Decision-Making Self-Efficacy, Anxiety Levels, and Social Support Systems in High School Students

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Abstract:

Against the backdrop of globalization and technological revolution reshaping the professional landscape, high school students face increasingly complex career decision-making challenges. The quality of their decisions and psychological adaptation are profoundly influenced by the interplay among career decision self-efficacy, anxiety levels, and social support systems. Through systematic theoretical review and integrative research, this study aims to transcend superficial descriptions of variable correlations and delve into the intrinsic mechanisms linking these three factors. The study constructs an “Empowerment-Buffering Dual-Path Model”: social support influences self-efficacy and anxiety through distinct pathways. Informational and instrumental support primarily follow the “empowerment pathway” by enhancing skills and outcome expectations, thereby boosting efficacy and enabling proactive anxiety management. Emotional and evaluative support mainly traverse the “buffering pathway” by regulating stress perception and providing emotional reassurance, directly alleviating anxiety and preventing efficacy erosion. These pathways are interconnected and dynamically shift across different decision-making stages. This framework offers a systematic perspective for understanding adolescents’ career decision-making psychology and provides theoretical foundations and practical guidance for constructing an effective tripartite support system involving schools, families, and society.

Keywords: Self-efficacy; Career decision anxiety; Social support system; Career development of high school students

1. Introduction

In the contemporary context of deepening globalization and accelerating technological revolution, the career development environment for adolescents is undergoing structural transformation. In response to socioeconomic demands, educational systems worldwide are shifting from standardized training toward personalized development, exhibiting two distinct characteristics: First, assessment frameworks increasingly prioritize cultivating core competencies over rote knowledge memorization. For instance, the Organisation for Economic Co-operation and Development (OECD)'s "Education 2030: Future Education and Skills" framework emphasizes creativity, critical thinking, and collaborative abilities; Second, the starting point for career education is being progressively advanced. Many countries have integrated systematic career exploration curricula into secondary education systems. For instance, Finland's "Education and Career Guidance" spans the entire basic education phase, while Australia's "Vocational Education and Training" commences at the junior secondary level. Concurrently, the structural shifts in occupations driven by the Fourth Industrial Revolution are reshaping global labor markets. Advances in automation and artificial intelligence are forcing many traditional occupations to transform or disappear, while emerging professions demand higher levels of interdisciplinary knowledge and digital literacy. This transformation shifts career development from traditional linear paths to more flexible, discontinuous, and combinatorial trajectories, requiring individuals to continuously update skills and reinvent their professional identities throughout their careers. Under this dual tension, high school students face unprecedented complexity in career decisions: they must make foundational choices with far-reaching implications for personal development while their cognitive maturity is incomplete and their access to career information is limited. While existing research has extensively confirmed statistical correlations among these three variables, such studies often remain descriptive, failing to reveal underlying mechanisms. In fact, identifying correlations marks only the beginning—not the end—of theoretical exploration^[1]. We must further inquire: Is the mechanism of social support singular or multifaceted? Does it function merely as a stress buffer, or does it possess more proactive, empowering capabilities? Do different support sources influence the decision-making process through distinct psychological pathways? Is the direction of decision anxiety linear or nonlinear? Is there an optimal anxiety level that "stimulates individuals' motivation to seek information without causing decision rigidity or avoidance"? These questions become particularly critical in increasingly uncertain deci-

sion environments.

Different theoretical traditions offer valuable insights into the same phenomenon, yet these insights lack effective integration. For instance, career construction theory emphasizes individual agency and meaning-making processes, while ecological systems theory prioritizes the shaping influence of the environment. Social cognitive career theory focuses on the core mediating role of self-efficacy but rarely delves into the specific moderating mechanisms of anxiety. This theoretical fragmentation limits our comprehensive and in-depth understanding of the issues. More importantly, existing research exhibits shortcomings in cultural sensitivity. Critical reflection and necessary revisions are required to determine whether most mainstream theoretical assumptions apply to adolescents across diverse cultural contexts. For instance, in societies with strong collectivist cultures, the mechanisms of social support may be more complex, and family influences may operate through distinct pathways. In environments where higher education resources are relatively scarce, decision-making anxiety may manifest unique forms and influence mechanisms.

Therefore, this paper is dedicated to systematic theoretical review and in-depth integration. By examining the theoretical origins and multidimensional implications of core concepts, and scrutinizing the explanatory perspectives offered by different theoretical lenses, we will focus on three levels of integration: First, the integration of micro-psychological processes and macro-social structures, paying attention to both individual cognitive-emotional mechanisms and the influence pathways of the sociocultural environment; Second, the integration of different temporal dimensions, examining how these variables function across various stages of career development; Third, the integration of static structures and dynamic processes, analyzing not only the current state of variables but also their interactive mechanisms. Through in-depth analysis of these mechanisms, we can develop more targeted and effective intervention strategies. This will propel the field from merely "knowing what" to a deeper understanding of 'why' and mastery of "how," helping adolescents better navigate career development challenges and find their developmental direction in an uncertain era.

2. Theoretical Analysis and Dimensional Deconstruction of Core Concepts

2.1 . The Multidimensional Nature of Career Decision Self-Efficacy

The theoretical origins of career decision self-efficacy

trace back to Bandura's self-efficacy theory. Bandura defined self-efficacy as an individual's belief in their ability to organize and execute actions necessary to achieve specific accomplishments^[2]. This universal theory evolved in the 1980s into the domain-specific concept of career decision self-efficacy, marking a significant shift from general psychological mechanisms to specific application contexts.

Career decision-making self-efficacy is a complex construct encompassing multiple cognitive dimensions. It manifests as an individual's evaluative belief in their capacity to accomplish key tasks within the career decision-making process. These include accurate self-assessment abilities, career information gathering and processing skills, goal-setting and planning capabilities, problem-solving competencies, and ultimately, the ability to commit to and execute plans. Thus, it fundamentally represents a deep-seated belief in the controllability of the decision-making process, involving an individual's assessment of their capacity for a series of complex cognitive operations: managing uncertainty, processing ambiguous information, and reconciling internal needs with external realities^[3]. High-efficacy individuals not only believe they can make decisions but also trust in their ability to address challenges within the decision-making process through systematic exploration and rational analysis.

During high school, career decision-making self-efficacy exhibits distinct developmental characteristics. First, it maintains complex intertwined relationships with academic self-efficacy. Academic achievement and performance often serve as primary benchmarks for high school students to evaluate their capabilities. Subject strengths may be directly mapped onto judgments of career aptitude, a mapping that frequently overlooks the multidimensional competency structures required for careers. Second, high school students' self-efficacy is largely built upon "imaginative projections" of the future rather than actual experience. Lacking direct workplace exposure, their efficacy beliefs often rely on vicarious experiences, verbal persuasion, and emotional arousal states. This efficacy grounded in imagination rather than experience is more fluid and susceptible to external evaluations, forming a fragile yet malleable state.

2.2 . Re-examining Career Decision Anxiety

The conceptual evolution of career decision anxiety has undergone a paradigm shift from trait theory to situational theory. Early research often viewed it as a stable personality trait, but contemporary theories emphasize its role as a contextual emotional response during decision-making^[4]. This state anxiety has clear temporal boundaries and

situational specificity, typically activated at critical decision junctures, fluctuating as the decision-making process progresses, and gradually subsiding after a choice is made. Regarding the function of career decision anxiety, modern psychological research reveals its dual-natured characteristics, forming a dialectical unity of destructive and constructive aspects. On the destructive side, excessive anxiety can lead to a series of maladaptive consequences: cognitively, it may trigger narrowed attention and information processing biases, causing individuals to overemphasize negative information while overlooking positive possibilities; emotionally, it may result in decision avoidance or procrastination, leading to choice paralysis; Behaviorally, it may lead to hasty decisions or rigid adherence to existing plans, diminishing motivation to explore new possibilities^[5]. However, on the constructive side, moderate anxiety holds significant adaptive value. Moderately intense anxiety can optimize arousal levels and enhance cognitive performance.

2.3 . Sources and Functional Differentiation of Social Support Systems

Social support systems can be deconstructed from both structural and functional dimensions. At the structural level, high school students' social support primarily originates from three subsystems: The family system provides emotional and instrumental support, forming the cornerstone of the support network. Emotional support manifests as unconditional acceptance and care, while instrumental support includes tangible assistance such as financial resources and information channels. The peer system offers informational and referential support, which is particularly crucial during adolescence^[6]. Peer groups serve not only as platforms for exchanging career information but also as vital reference points for social comparison and self-positioning. The institutional and professional support from the school system carries formal characteristics, including structured career courses, psychological counseling services, and industry-academia collaboration resources, offering more structured and specialized assistance. Functionally, social support exhibits multidimensional mechanisms: Emotional support alleviates decision-making pressure by providing psychological security and a sense of belonging, acting as an emotional buffer; Instrumental support reduces decision barriers by directly providing resources needed to solve problems (e.g., internship opportunities, financial support); informational support helps individuals build a structured understanding of the professional world by transmitting knowledge, skills, and cognitive frameworks, offering a "cognitive map"; evaluative support assists individuals in calibrating self-perception

and decision direction through constructive feedback^[7]. These functions do not exist in isolation but are interconnected and synergistic, collectively constituting the overall efficacy of the support system.

From a systemic dynamics perspective, these three core concepts are not independent variables but form an interactive triangular network. Career decision self-efficacy serves as an internal psychological resource, career decision anxiety functions as an emotional regulation variable, and the social support system acts as an external resource environment. These three elements influence each other through complex feedback loops.

3. Theoretical Analysis: Interpreting Relationships from Multiple Perspectives

3.1 . Core Pathway Analysis of Social Cognitive Career Theory

Social Cognitive Career Theory, grounded in social cognitive theory, constructs a core causal chain regarding career interests, choices, and development. Its central logical pathway manifests as follows: an individual's specific learning experiences shape their beliefs about their own capabilities—that is, their self-efficacy in career decision-making. This belief then influences outcome expectations, thereby shaping career interests, and ultimately guides goal setting and concrete actions.

Within this framework, the social support system can be systematically understood as a key “background input variable” influencing “learning experiences.” Various functions of social support shape the quality and direction of learning experiences through different mechanisms: instrumental support directly creates mastery experiences; role models provide vicarious experiences through social observation; and verbal persuasion directly influences efficacy judgments. More profoundly, social support alters individuals' cognitive evaluations of their environment, thereby influencing their “outcome expectations.” When individuals perceive a robust support network, they are more likely to anticipate positive outcomes from exploratory behaviors, fostering greater willingness to attempt and persist^[8]. Thus, social support serves not merely as a resource provider but as a psychosocial scaffold that constructs positive “learning experiences” and optimistic “outcome expectations.”

Within this framework, career decision anxiety is primarily conceptualized as an “emotional state” that disrupts cognitive processing. Anxiety interferes with the core pathway through two key mechanisms: First, interfer-

ence with information processing. High anxiety triggers attentional narrowing, causing individuals to overfocus on potential threats and negative information related to the decision. This hinders objective and comprehensive processing of self and environmental information, leading to distorted efficacy judgments and pessimistic outcome expectations. Second, it consumes cognitive resources. Rumination triggered by anxiety depletes substantial cognitive energy, reducing mental capacity available for rational decision-making and self-regulation. This interference creates a negative feedback loop: anxiety disrupts information processing → leads to lower self-efficacy and more pessimistic outcome expectations → triggers decision avoidance or rigidity → the persistence of decision dilemmas further intensifies anxiety. Social cognitive career theory suggests that breaking this cycle hinges on enhancing self-efficacy through successful experiences or social support, thereby reducing anxiety's intrusive impact on cognitive processes.

3.2 . The Perspective of Stress Coping Theory: Support as a Moderating Variable

The “cognitive-evaluative” model of stress coping theory constructs the career decision-making process itself as a typical psychological stressor. From this perspective, decision-making stress arises from an individual's assessment of the balance between their available resources and the demands of the decision. Stress responses are not determined by the event itself but emerge through two stages of cognitive evaluation: primary evaluation (Is this event important to me? Is it threatening?) and secondary evaluation (What resources do I have to cope?).

The “buffer model” of social support finds elegant interpretation within this framework. Social support primarily functions during the stress evaluation phase, particularly in the secondary evaluation stage. When individuals face decision-making pressure, a robust social support system provides the cognitive perception of additional “psychological resource reserves.” This alleviates the sense of facing overwhelming pressure alone, thereby reducing the perceived threat of the stressor and significantly altering the individual's assessment of their coping resources^[9]. In short, support systems do not eliminate stressors but effectively alleviate the resulting anxiety by altering individuals' cognitive interpretations of their relationship with stress.

Complementing this is the “main effect model” of social support, which posits that social support possesses universal beneficial functions regardless of whether an individual is in an explicit state of stress. By continuously providing emotional warmth, recognition, and a sense of

belonging, it directly satisfies fundamental psychological needs, thereby enhancing overall mental health and self-esteem in a long-term, stable manner. In the context of career decision-making, a sustained positive psychological environment offers individuals a stable “psychological foundation.” This foundation allows individuals to accumulate a heightened sense of self-worth and control in everyday life. When confronted with decision-making tasks, these internal resources can be directly converted into greater coping confidence while reducing susceptibility to anxiety. Thus, the primary effects model emphasizes the long-term nurturing role of social support in building psychological capital, whereas the buffer model highlights its immediate protective function within specific stressful situations.

3.3 . Macro-level Examination through Ecosystem Theory

Ecosystem theory expands the analytical scope from the individual psychological level to macro-level social structures, requiring us to examine the relationship among career decision self-efficacy, anxiety, and social support within a nested ecosystem. An individual’s psychological experience is profoundly influenced by their immediate environment, extended environment, and broader socio-cultural context.

Social support systems are no longer merely static resources individuals can mobilize, but dynamic mediators deeply shaped by broader socioeconomic and cultural forces. Parents, driven by anxiety, may distort support into heightened demands and stricter monitoring of their children (instrumental support becoming controlling pressure). Schools, under pressure to boost admission rates, may narrow career education into mere training in application techniques (professional support becoming utilitarian). Such “support” distorted by macro-level pressures may instead erode students’ sense of autonomy and diminish their genuine self-efficacy.

Simultaneously, macro-level structural factors directly establish the “social baseline threshold” for individual anxiety and the “boundaries of possibility” for efficacy^[10]. Widespread “occupational biases” are internalized through media, family, and schools into individuals’ cognitive frameworks, limiting their imagination of career options. This creates anxiety at its source and suppresses efficacy. External systemic factors like labor market polarization and unequal distribution of educational resources constitute tangible, non-psychological decision constraints^[11]. These directly influence the actual resources a support system can provide, thereby setting a real-world ceiling on the development of self-efficacy.

4. Drivers and Far-Reaching Impacts of Paradigm Shift

Building upon the theoretical analysis of core concepts and the comprehensive examination from multiple theoretical perspectives presented earlier, we propose an integrated “dual-pathway model of empowerment and buffering.” This model systematically elucidates the dynamic interplay among career decision self-efficacy, anxiety levels, and the social support system. This model transcends traditional single-causal explanations by emphasizing that social support simultaneously influences individuals’ cognitive development and emotional regulation through distinct pathways, with complex interactions between them.

The empowerment pathway reflects the constructive function of social support in building individuals’ cognitive capacities and belief systems. Its core mechanism involves: informational and instrumental support directly enhancing decision-making abilities by providing structured knowledge, skill training, and practical resources. Specifically, high-quality career information helps individuals construct accurate cognitive schemas of the professional world. Skill guidance enhances concrete abilities like information gathering and option evaluation, while instrumental resources such as internships and financial support reduce practical barriers to decision implementation. These supports not only improve objective capabilities but, more importantly, alter subjective evaluations through mastery experiences—enhancing individuals’ sense of control over the decision-making process and fostering more positive outcome expectations. This dual enhancement of capability and expectation substantially boosts self-efficacy in career decision-making. An individual possessing high self-efficacy perceives decision uncertainty not as an uncontrollable threat but as a manageable challenge. This cognitive restructuring enables proactive regulation and reduction of anxiety levels. Thus, the essence of the empowerment pathway lies in building internal psychological capital to counter anxiety through the chain of “capacity building – belief reinforcement.”

The buffering pathway highlights the direct regulatory role of social support on emotional experiences. Emotional support provides a secure psychological base through unconditional acceptance, empathy, and care, offering individuals emotional comfort and breathing room when facing decision-making pressures. Evaluative support, through constructive feedback, recognition, and encouragement, helps individuals develop more positive self-perceptions and stress assessments. Both supports jointly and directly regulate individuals’ primary and secondary evaluations of stressors: At the primary evaluation level, supported individuals reduce their assessment of a decision

task's threat level; at the secondary evaluation level, they perceive themselves as possessing more adequate coping resources. These shifts in cognitive evaluation directly alleviate anxiety experiences. Reduced anxiety levels serve a crucial protective function: They prevent self-efficacy from being depleted by excessive anxiety. The reduced occupation of cognitive resources by anxiety and the diminished interference with information processing enable individuals to utilize existing capabilities more effectively, thereby maintaining stable efficacy beliefs.

These two pathways form a dynamically interacting cyclical system. Within a virtuous cycle, the enhanced self-efficacy from the empowerment pathway increases confidence in seeking and utilizing support, while the alleviated anxiety from the buffering pathway protects cognitive functions, making the empowerment process more efficient. Simultaneously, heightened efficacy also enhances individuals' capacity to perceive and accept emotional support. Conversely, in a vicious cycle, the absence or distortion of support simultaneously weakens both empowerment and buffering functions: it fails to enhance capabilities and beliefs while also failing to alleviate anxiety. This leads to low efficacy and high anxiety reinforcing each other, potentially trapping individuals in decision avoidance or rigidity. This bidirectional interactive model emphasizes that effective social support must be multifaceted, simultaneously fulfilling dual needs for cognitive empowerment and emotional buffering.

5. Conclusion

This study constructed a dynamic, interactive "empowerment-buffering dual-path model" through a multidimensional theoretical analysis of the relationships among career decision self-efficacy, anxiety levels, and social support systems. This theoretical integration transcends descriptive research examining simple correlations between variables, revealing the complex mechanism whereby social support simultaneously influences individuals' cognitive construction and emotional regulation through differentiated pathways. The study not only confirms self-efficacy's core mediating role in reducing anxiety but also highlights the dynamic characteristics of social support from different sources and functions across various decision-making stages. This study offers threefold theoretical advancement: First, it breaks the traditional limitation of viewing social support as having a single function, clearly distinguishing its dual mechanisms of empowerment and buffering. Second, it incorporates the temporal dimension into the theoretical framework, revealing the dynamic evolution of the triadic relationship throughout the decision-making process. Third, it introduces mac-

ro-sociocultural factors as moderating variables, providing a clear theoretical foundation for cross-cultural comparative research. This systematic theoretical construction provides a more comprehensive analytical framework for understanding the psychological mechanisms of adolescent career development in the era of globalization.

In an age of uncertainty, helping adolescents build psychological capacity to navigate career choices is not merely an educational issue but a critical societal concern. The theoretical framework developed in this study indicates that cultivating this capacity requires dual support from cognitive empowerment and emotional buffering, mutual reinforcement between individual effort and environmental improvement, and, crucially, the formation of a collaborative educational force among schools, families, and society. Only when adolescents possess both the skills and confidence to make choices, coupled with the psychological resilience to withstand the risks of those choices, can they truly grow into autonomous navigators of their careers. In this way, they can find their bearings in an era of change and forge meaningful, vibrant life trajectories.

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