

Exploring The Impact Of Career Development Interventions On Adolescent Self-Efficacy

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ABSTRACT: *Research Problem:* Adolescent career development is frequently hindered by "decisional procrastination" and systemic disengagement, increasing the risk of NEET (Not in Education, Employment, or Training) status. Traditional guidance often fails by providing information without addressing the psychological foundations of vocational agency. *Research Purpose:* This study evaluates how various intervention modalities—mentorship, experiential workshops, and digital tools—impact adolescent self-efficacy. Using Social Cognitive Career Theory (SCCT), it identifies the psychological and pedagogical components that most effectively catalyze vocational confidence. *Research Methods:* A dual-pronged methodology integrated a systematic review of peer-reviewed literature (PsycINFO, ERIC, JSTOR) with secondary analysis of longitudinal datasets, including PISA aspiration records, focusing on the 13–18 age demographic and validated self-efficacy metrics. *Results and Discussion:* Results confirm that multi-modal, "blended" interventions yield superior outcomes. While digital tools offer scalable vicarious learning, they require human-led "social persuasion" to mitigate anxiety. Experiential learning remains the "gold standard" for providing enactive mastery, though standardized approaches often fail marginalized youth by ignoring contextual environmental barriers. *Research Implications and Contributions:* The study bridges the gap between psychological theory and practice, providing evidence-based criteria for counselors to foster proactive agency. It contributes to labor market resilience by strengthening the internal confidence of the future workforce. *Policy Recommendations:* Authorities should standardize Career Decision Self-Efficacy (CDSE) metrics, mandate work-integrated learning milestones, institutionalize blended guidance models, and prioritize funding for longitudinal mentorship over short-term workshops.

Keywords: Career Decision Self-Efficacy (CDSE), Work-Integrated Learning (WIL), Vocational Agency, Multi-modal Interventions, NEET Risk Mitigation

INTRODUCTION

Investigating the influence of career development initiatives on adolescent self-efficacy underscores how systematic guidance bolsters a young person's assurance in navigating professional choices. Research suggests that comprehensive models of career self-efficacy now extend beyond simple job selection to include the management of future spousal and family roles (Ran & Cinamon, 2022). This broadened sense of agency is vital, as individuals possessing high career decision-making self-efficacy (CDMSE) are significantly more likely to participate in the proactive exploration necessary for successful vocational transitions (Henis, 2000). Furthermore, these targeted interventions act as catalysts for wider achievements, demonstrating a strong correlation with enhanced academic performance and overall life satisfaction (Choi et al., 2015).

Practical applications, such as specialized workshops and career education programs, have proven effective in refining decision-making skills and solidifying long-term goals (Gashi et al., 2023). However, the development of these self-beliefs does not occur in a vacuum; it is deeply affected by contextual variables including educational settings, previous work exposure, and the quality of family support (Henis, 2000; Balani & Bhatt, 2024). Because individual responses to these programs can vary based on personal and environmental circumstances, the literature emphasizes that career guidance must be sufficiently tailored rather than generic. This nuanced approach ensures that interventions account for the specific background factors that shape an adolescent's aspirations and perceived capabilities.

The shift from late adolescence into early adulthood, a phase frequently identified as "emerging adulthood," constitutes a vital period for personal growth where individuals grapple with the dual challenges of identity development and career discovery. Within this timeframe, establishing a "career identity" becomes a cornerstone of one's self-image, particularly as young people face intense pressure to commit to significant academic and vocational tracks (Arnett, 2014). This evolution is fundamentally psychological rather than just biological, as the degree to which an individual can harmonize their inner values with external societal expectations plays a decisive role in their future well-being and socio-economic success.

Psychological self-efficacy, particularly concerning career choices, acts as the primary catalyst for navigating this life transition effectively. Drawing from Social Cognitive Career Theory (SCCT), the conviction an individual holds regarding their ability to plan and carry out the steps necessary to reach their objectives dictates their level of grit and adaptability (Lent et al., 1994). Adolescents who possess robust career decision self-efficacy (CDSE) typically demonstrate more active exploration and ambitious goal-setting.

On the other hand, a deficit in this self-assurance often manifests as "decisional procrastination," which frequently results in poor academic performance or total disengagement from the workforce (Lent & Brown, 2019).

To combat these challenges, career development initiatives—such as mentorship, hands-on learning, and formal counseling—aim to strengthen these internal belief systems by offering "mastery experiences" and opportunities for "vicarious learning" (Bandura, 1997). Participation in practical activities like job shadowing or professional workshops helps students demystify the labor market and better understand their personal strengths, thereby lowering the stress associated with future career ambiguity. Evidence from meta-analyses indicates that the most successful interventions are those that provide tailored feedback and connect students with reliable role models, effectively narrowing the divide between academic instruction and the realities of the professional world (Whiston et al., 2017).

STATEMENT OF THE PROBLEM

Despite the widespread implementation of career guidance programs within educational systems, a profound disconnect remains between the availability of vocational information and the actual development of "career decision self-efficacy" (CDSE) among adolescents. Current literature suggests that many traditional guidance models focus primarily on the dissemination of occupational data rather than addressing the psychological belief systems required to act upon that information. When adolescents lack the confidence to navigate complex career landscapes, they often experience "decisional procrastination," a state of vocational paralysis that significantly increases the risk of academic disengagement (Lent & Brown, 2019). This psychological retreat frequently culminates in young people falling into "NEET" (Not in Education, Employment, or Training) status, as the absence of perceived agency makes the transition into the labor market or higher education appear insurmountable (Gashi et al., 2023).

The persistence of this problem suggests that current career interventions may be failing to offer the "mastery experiences" and "vicarious learning" essential for building robust self-belief (Bandura, 1997). This gap is particularly evident in underserved or marginalized populations, where a lack of reliable role models and individualized feedback leaves youth feeling disconnected from the professional world (Savickas, 2015). Without a targeted shift toward interventions that specifically prioritize the enhancement of self-efficacy—rather than just the delivery of career facts—adolescents remain vulnerable to a loss of vocational identity. Failure to resolve this lack of confidence results in a long-term socio-economic cost, as disengaged youth face higher rates of chronic unemployment and lower life satisfaction during the critical transition to early adulthood (Whiston et al., 2017).

RESEARCH OBJECTIVE

The primary objective of this research is to critically synthesize contemporary literature and longitudinal secondary data to evaluate the differential impact of various career development intervention modalities—specifically mentorship, experiential workshops, and digital exploration tools—on the cultivation of adolescent self-efficacy. By examining these interventions through the lens of Social Cognitive Career Theory (SCCT), this study seeks to identify which specific pedagogical and psychological components most effectively catalyze an adolescent's belief in their vocational agency and decision-making capabilities.

SIGNIFICANCE OF THE STUDY

Implications for Educational Policy: This study holds substantial weight for educational stakeholders and policymakers tasked with curriculum design. Traditionally, career guidance has been treated as a peripheral, information-based service. By demonstrating the link between specific interventions and self-efficacy, this research advocates for a shift toward psychologically-informed vocational education. If specific modalities (such as mentorship) are found to be superior, policymakers can justify the reallocation of funding from generic career databases to high-impact, human-centric programming. Furthermore, by identifying strategies to reduce "NEET" (Not in Education, Employment, or Training) status, this study provides a blueprint for systemic interventions that mitigate the long-term economic burden of youth disengagement on national labor markets.

Advancements in Psychological Practice: From a clinical and counseling perspective, this research offers a more nuanced understanding of the "sources of efficacy" in the digital age. It identifies how practitioners can better trigger Bandura's mechanisms—mastery experiences and vicarious learning—within a modern vocational context. For school psychologists and career counselors, the study provides evidence-based criteria for selecting interventions that do not merely inform but actively empower the student. By addressing the psychological roots of "decisional procrastination," this research assists practitioners in moving beyond "what" a student should choose to "how" a student develops the internal confidence to make any choice at all.

Socio-Economic Resilience: Beyond the school walls, the significance extends to the broader socio-economic landscape. Adolescents who transition into early adulthood with high career self-efficacy are more likely to exhibit resilience in the face of labor market volatility. By strengthening the "psychological engine" of the future workforce, this study contributes to a more adaptable and proactive society, reducing the incidence of career-related anxiety and underemployment that often plagues the transition to emerging adulthood.

METHODS

The methodology for this study employs a rigorous systematic literature review and secondary data analysis framework designed to synthesize existing evidence on adolescent vocational development. The search strategy focuses on high-quality, peer-reviewed journals to ensure the findings reflect contemporary labour market trends and modern digital intervention styles. Extensive searches are conducted across prominent academic databases, including PsycINFO, ERIC, and JSTOR, using specific keywords related to career guidance and psychological agency.

To complement the qualitative findings of the literature, the research incorporates an analysis of established longitudinal datasets, such as the Programme for International Student Assessment (PISA) career aspiration records and national education longitudinal studies, which provide a broad statistical basis for tracking self-efficacy trends over time. Strict inclusion and exclusion criteria are applied to maintain a cohesive narrative, limiting the scope exclusively to adolescents aged 13 to 18 and prioritizing studies that utilize validated scales to measure self-efficacy as a primary outcome. This dual-pronged approach ensures that the resulting conclusions are grounded in both theoretical depth and large-scale empirical reality, effectively filtering out extraneous variables and focusing on the core mechanisms of adolescent career formation.

CONCEPTUAL REVIEW

Career Decision Self-Efficacy (CDSE)

Career Decision Self-Efficacy refers to an individual's belief in their ability to successfully execute the tasks necessary to make career-related decisions, such as goal selection, problem-solving, and self-appraisal. Based on Bandura's social cognitive framework, CDSE is a critical predictor of how adolescents navigate the transition from school to work, as higher levels of confidence are linked to more proactive career exploration and persistence (Lent & Brown, 2019). When adolescents possess high CDSE, they are less likely to experience "decisional procrastination" and are better equipped to handle the complexities of a volatile labor market.

In practice, CDSE is often measured through validated psychometric scales that assess five core domains: self-appraisal, gathering occupational information, goal selection, planning, and problem-solving. Interventions that target CDSE—particularly those providing mastery experiences and social persuasion—have been shown to significantly improve vocational outcomes (Whiston et al., 2017). By focusing on these specific belief systems, practitioners can move beyond simply providing information, instead fostering the internal psychological agency required for students to commit to and pursue ambitious professional paths.

Work-Integrated Learning (WIL)

Work-Integrated Learning (WIL) is a pedagogical strategy that blends formal academic education with practical, real-world experience within a professional environment. Common forms of WIL include internships, job shadowing, and cooperative education placements, all of which provide students with the opportunity to apply theoretical knowledge to tangible tasks. From a psychological perspective, WIL is considered the "gold standard" for career development because it facilitates "enactive mastery"—the most powerful source of self-efficacy (Bandura, 1997).

Beyond skill acquisition, WIL functions as a bridge that reduces the "reality shock" often experienced by adolescents transitioning into the workforce. By performing vocational tasks in a low-stakes, supervised setting, students receive immediate feedback that validates their competencies and reduces career-related anxiety (Whiston et al., 2017). Consequently, WIL not only improves technical proficiency but also serves as a critical environmental support that helps adolescents convert their abstract career interests into concrete goals and sustained professional actions.

Vocational Agency

Vocational agency represents an individual's capacity to intentionally influence their own career development through self-regulation, proactive exploration, and decisive action. Unlike passive career planning, agency implies a sense of ownership over one's professional life, allowing adolescents to navigate barriers and adapt to shifting labor market trends (Savickas, 2015). In the context of the 13–18 age demographic, developing vocational agency is essential for fostering "career identity," as it enables students to see themselves as active participants in their future rather than victims of circumstance.

The cultivation of agency is deeply tied to the "self-concept" transformation described in developmental psychology. When career interventions effectively trigger the mechanisms of vicarious learning and social persuasion, they catalyze a shift in how adolescents perceive their role in the economy (Arnett, 2014). This empowerment is vital for long-term success, as adolescents with high vocational agency are more likely to exhibit resilience during periods of unemployment or career transition, ensuring they remain persistent in the face of external volatility.

Multi-modal Interventions

Multi-modal interventions refer to career guidance programs that combine various delivery styles—such as individualized counseling, curriculum-based education, and digital exploration—into a single, cohesive framework. Research consistently demonstrates that "blended" approaches are superior to isolated methods because they address both the informational and emotional needs of the student (Whiston et al., 2017). For example, a student might use an AI-driven platform for initial exploration but then engage in face-to-face counseling to process the resulting data and manage associated anxieties.

The strength of the multi-modal approach lies in its ability to activate multiple sources of self-efficacy simultaneously. While digital tools provide scalable vicarious modeling, human-centric counseling offers the personalized social persuasion necessary to build a student's "internal resilience" (Lent & Brown, 2019). By integrating these diverse modalities, educational institutions can provide a more holistic support system that accommodates different learning styles and demographic needs, ultimately ensuring that guidance is both accessible and psychologically impactful.

NEET Risk Mitigation

NEET (Not in Education, Employment, or Training) risk mitigation involves targeted strategies designed to prevent adolescents from becoming disengaged from both the labor market and the educational system. High NEET rates are often a symptom of low career self-efficacy and a lack of perceived environmental supports, which can lead to a cycle of long-term economic marginalization. Effective mitigation requires early intervention during the mid-to-late adolescent years, focusing on building the confidence and skills necessary to navigate high-stakes transitions (Lent & Brown, 2013).

By integrating career self-efficacy metrics into school performance evaluations, policymakers can identify students at high risk of disengagement before they leave the system. Interventions that emphasize longitudinal mentorship and work-integrated learning have been shown to be particularly effective in reducing NEET status by providing the "mastery experiences" and role models that marginalized youth often lack (Lent et al., 1994). Ultimately, NEET risk mitigation is not just an educational goal but a socio-economic necessity that reduces the long-term burden of youth underemployment on national labor markets.

THEORETICAL FRAMEWORK

Social Cognitive Career Theory (SCCT)

Established over a quarter-century ago, Social Cognitive Career Theory (SCCT) functions as an integrated paradigm designed to bridge gaps between existing vocational theories by utilizing the principles of triadic reciprocal causation (Lent, Brown, & Hackett, 1994). This framework expands upon the social cognitive foundations laid by Bandura (1986) and the early translational efforts of Hackett and Betz (1981), focusing on how personal agency, environmental supports, and specific behaviors like goal setting interact to influence professional growth. A distinctive feature of SCCT is its investigation into how sociopolitical factors, including gender, ethnicity, and economic status, shape the learning opportunities and socialization processes available to individuals. By re-examining the development of traditional work personalities, such as interests and values, the theory provides a unique perspective on how both organic and structured interventions—like career counseling—can alter one's vocational path over time.

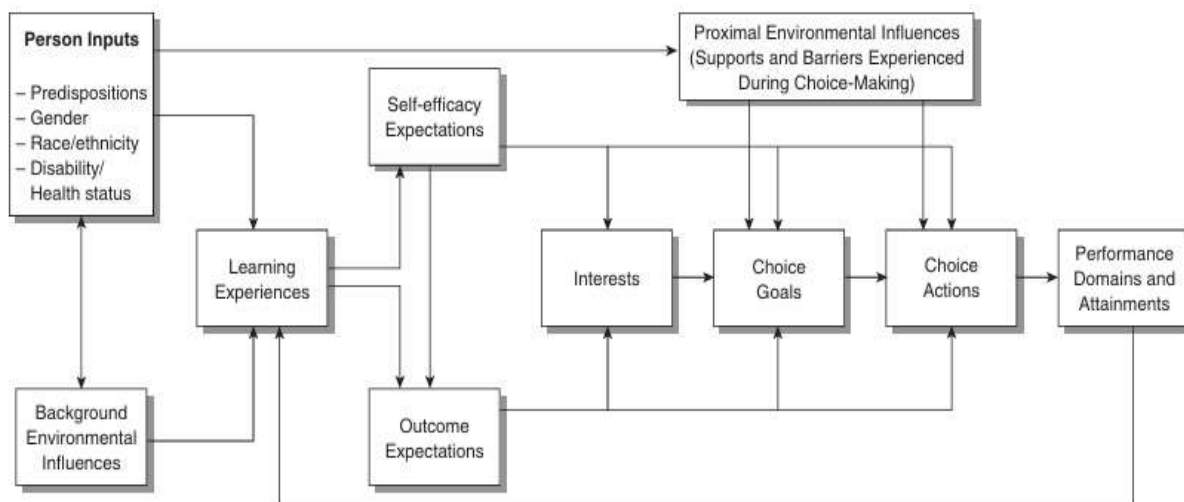


Figure 1. A Simplified View of How Career-related Interests and Choices Develop over Time, Source: Adapted from Lent, Brown and Hackett (1994)

SCCT has historically prioritized the study of human agency among marginalized populations that were previously overlooked in career research, including women of color, LGBTQ+ workers, and individuals with disabilities (Hackett & Byars, 1996; Morrow, Gore & Campbell, 1996; Fabian, 2000; Lent, Brown & Hackett, 2000). This commitment to diversity has grown to address the specific challenges faced by first-generation students, lower-income groups, and underrepresented minorities in STEM fields (Flores, Navarro & Ali, 2017; Fouad & Santana, 2017; Garriott, Navarro & Flores, 2017). Structurally, the theory has evolved from its initial three-model focus on interest, choice, and performance (Lent et al., 1994) to include sophisticated frameworks for vocational well-being (Lent & Brown, 2006a, 2008) and comprehensive career self-management (Lent & Brown, 2013). These expanding models continue to drive global inquiry into how people navigate life transitions, from initial job searches to retirement planning and work-life balance (Lent & Sheu, 2010; Sheu & Bordon, 2017).

Social Cognitive Career Theory (SCCT) provides a comprehensive framework for understanding how individuals cultivate career interests, navigate occupational selections, and achieve professional success. Developed by Lent, Brown, and Hackett (1994), the theory is anchored in three primary cognitive mechanisms: self-efficacy beliefs, outcome expectations, and personal goals. Self-efficacy represents an individual's internal judgment of their ability to execute specific tasks, a belief system that is dynamically shaped by Bandura's (1997) four sources: mastery experiences, vicarious learning, social persuasion, and emotional states. In this model, interests are not viewed as inherent traits but are instead developed when adolescents feel competent in a particular domain and anticipate that their efforts will result in positive outcomes. This sense of agency acts as a mediator between an individual's background and their eventual career goals, allowing them to persist in the face of environmental obstacles.

In the practical context of adolescent development, SCCT posits that the path from interest to vocational choice is frequently influenced by environmental supports and barriers, such as socio-economic status or access to quality mentorship (Lent & Brown, 2019). Career development interventions are most effective when they prioritize the enhancement of these social cognitive variables rather than just the delivery of occupational information. For example, providing "mastery experiences" through experiential workshops can directly improve career decision self-efficacy (CDSE), leading to more proactive exploration behaviors. Meta-analytic evidence reinforces this approach, demonstrating that interventions specifically designed to target self-efficacy and outcome expectations yield significantly better results in fostering vocational identity and preventing academic disengagement (Whiston et al., 2017).

For the purpose of this study, the Social Cognitive Career Theory (SCCT) serves as the primary theoretical engine for understanding how career development interventions translate into tangible adolescent growth by isolating the psychological mechanisms that govern vocational behavior. At its core, SCCT posits that an adolescent's career trajectory is not merely a product of their environment or innate talents, but is largely dictated by the development of career decision self-efficacy (CDSE) and outcome expectations (Lent et al., 1994). When applied to career interventions, the theory suggests that activities like mentorship or job shadowing are effective because they provide "mastery experiences" and "vicarious learning," which are essential for building a robust belief in one's capabilities (Bandura, 1997).

For an adolescent, an intervention acts as a controlled environment where they can safely test their professional identity; successful navigation of these tasks strengthens their self-efficacy, which in turn fuels more proactive career exploration and higher academic persistence (Lent & Brown, 2019). By focusing on these cognitive mediators, SCCT explains why some adolescents succumb to "decisional procrastination" while others, supported by targeted interventions, successfully develop the agency required to avoid the "NEET" (Not in Education, Employment, or Training) status during the critical transition to early adulthood.

REVIEW OF THE LITERATURE

Impact of Interventions

Career development interventions are generally classified into four primary modalities, each offering distinct psychological pathways for enhancing adolescent self-efficacy. Psychological and counseling interventions, characterized by individualized sessions, allow for personalized "social persuasion" and the management of anxiety related to vocational choice (Lent & Brown, 2019). Educational interventions, such as curriculum-based career education, provide a foundational knowledge base, yet research indicates they are most effective when supplemented by experiential interventions. Experiential learning, including job shadowing, internships, and work-integrated learning, is considered a gold standard because it facilitates "mastery experiences"—the most powerful source of self-efficacy—by allowing students to perform tasks in real-world settings (Bandura, 1997). In the modern era, digital and technological interventions, such as AI-driven career exploration platforms, have emerged to provide scalable access to vocational information, though their efficacy often relies on how well they simulate interactive and relatable career modeling (Whiston et al., 2017).

The effectiveness of these interventions is significantly moderated by demographic factors, particularly gender and socio-economic status (SES). Studies within the framework of Social Cognitive Career Theory (SCCT) demonstrate that adolescents from lower SES

backgrounds often face "environmental barriers" that standard educational interventions fail to address, such as a lack of relatable professional role models and limited access to experiential networks (Lent et al., 1994). Furthermore, gender-based socialization continues to influence self-efficacy in specific domains; for example, young women may report lower confidence in STEM-related careers unless interventions specifically include vicarious learning through female mentors (Savickas, 2015). Consequently, a "one-size-fits-all" approach often exacerbates existing disparities, highlighting the necessity for tailored interventions that account for the intersectionality of an individual's social location to ensure that marginalized youth can effectively bridge the gap between their aspirations and vocational reality (Lent & Brown, 2013).

Psychological Mechanisms of Adolescent Vocational Agency

The psychological catalysts of adolescent self-efficacy are fundamentally grounded in the four primary informational sources proposed by Bandura, which function as the cognitive "gears" driving vocational agency. For any career development intervention to yield measurable success, it must intentionally facilitate enactive mastery—the internal processing of successful task execution—and vicarious learning, where the observation of relatable role models diminishes the psychological distance between an adolescent's current state and their professional aspirations (Bandura, 1997). These mechanisms allow individuals to internalize their successes, moving beyond the simple acquisition of knowledge toward a robust belief in their own functional capabilities. By prioritizing these sources, interventions effectively transform an adolescent's "self-concept," transitioning them from passive observers of the labor market to proactive, capable agents who are prepared to navigate the complexities of emerging adulthood (Arnett, 2014).

Beyond mere skill acquisition, psychological interventions such as individualized career counseling play a critical role in reinforcing these belief systems through social persuasion and the regulation of emotional states. By providing structured verbal encouragement and expert feedback, counselors offer a necessary buffer against the "decisional procrastination" and vocational anxiety that frequently paralyze young people during high-stakes transitions (Lent & Brown, 2019). This targeted psychological support is essential for mitigating the risk of academic disengagement, as it helps students reframe setbacks not as permanent failures, but as navigable challenges. Ultimately, when interventions successfully integrate these psychological components, they provide the internal resilience necessary for adolescents to pursue ambitious career goals and maintain persistence, even when faced with significant environmental or socio-economic barriers (Lent et al., 1994).

Pedagogical and Psychological Drivers of Career Self-Efficacy

From a pedagogical perspective, the efficacy of any career development program is fundamentally tied to its structural design and its ability to bridge the gap between abstract classroom concepts and the complexities of professional reality. Central to this design is the concept of scaffolded exploration, which allows adolescents to navigate vocational choices in controlled, low-stakes environments before committing to high-stakes academic or professional paths (Whiston et al., 2017). By layering information and experiences, educators can ensure that students are not overwhelmed by "choice overload," but are instead guided through a sequence of discovery that builds cumulative confidence. These pedagogical frameworks serve as the "environmental supports" defined by Social Cognitive Career Theory (SCCT), providing the external structure necessary for internal self-efficacy to flourish (Lent & Brown, 2013).

The integration of Work-Integrated Learning (WIL), such as job shadowing and internships, represents a shift from passive instruction to experiential pedagogy. This approach is critical because it provides the "mastery experiences" that are the most potent predictors of long-term career persistence. When students engage in authentic vocational tasks, they receive immediate, real-world feedback that validates their competencies, effectively reducing the anxiety associated with the unknown aspects of the labor market (Bandura, 1997). In the modern educational landscape, this pedagogy has been significantly enhanced by digital interactivity and AI-driven platforms. These technological tools offer scalable "vicarious experiences" by simulating diverse professional environments and providing personalized feedback loops that traditional classroom settings often lack, making high-quality guidance accessible to a broader demographic (Whiston et al., 2017).

Ultimately, these structured pedagogical components are the essential conduits through which career interests are transformed into concrete goals and sustained vocational actions. Without such deliberate design, even well-intentioned guidance risks becoming a mere dissemination of facts that fails to spark genuine agency. This pedagogical failure can lead to "decisional procrastination," where a lack of perceived competence results in academic disengagement or a complete withdrawal from the workforce, eventually leading to NEET status (Not in Education, Employment, or Training). By contrast, a robust pedagogical framework that emphasizes both experiential and digital mastery ensures that the development of self-efficacy is a structured outcome of the educational process rather than a byproduct of chance (Lent & Brown, 2019).

DISCUSSION

The Digital Shift: Virtual vs. Face-to-Face Interventions

The rapid transition toward digital career guidance has sparked a critical debate regarding whether virtual platforms can replicate the efficacy of traditional face-to-face counseling. Research suggests that AI-driven tools and virtual reality (VR) simulations provide highly scalable "vicarious experiences" that allow adolescents to explore diverse professional environments without geographical or financial constraints (Whiston et al., 2017). These digital interventions often incorporate immediate feedback loops and gamified elements that appeal to the digital-native 13–18 age demographic, effectively sustaining engagement in a way that static classroom instruction cannot.

However, the psychological impact of digital tools often depends on the "human-in-the-loop" factor. While technology excels at disseminating vocational information, it can struggle to provide the nuanced **social persuasion** and emotional regulation found in interpersonal counseling (Lent & Brown, 2019). Studies indicate that a "blended" approach—using digital platforms for exploration and human mentors for reflective processing—yields the highest gains in career decision self-efficacy. Without a human element, purely digital interventions risk being perceived as impersonal, potentially failing to mitigate the deep-seated vocational anxiety that many adolescents experience during high-stakes transitions (Savickas, 2015).

Challenges: Barriers to Effective Implementation

Despite the theoretical benefits of career interventions, several systemic challenges impede their success, most notably the prevalence of "one-size-fits-all" methodologies. Such standardized approaches often ignore the unique socio-economic status (SES) and cultural backgrounds of students, which Social Cognitive Career Theory identifies as critical "contextual affordances" (Lent et al., 1994). When interventions fail to account for these variables, they may inadvertently widen the gap for marginalized youth who lack the environmental supports or relatable role models necessary to convert their interests into actionable goals.

Furthermore, the lack of sustainable funding for long-term mentoring represents a significant barrier to fostering enactive mastery. Many programs are implemented as short-term workshops rather than longitudinal support systems, which prevents adolescents from engaging in the repeated mastery experiences required to build lasting self-efficacy (Whiston et al., 2017). This "short-termism" is particularly detrimental to students at risk of becoming NEET, as they require consistent social persuasion and structured exploration over several years to navigate the complex hurdles of the modern labor market (Lent & Brown, 2013).

Synthesis: Integrating Findings into SCCT

Synthesizing these findings through the lens of Social Cognitive Career Theory confirms that interventions are most effective when they target the specific cognitive mediators of self-efficacy and outcome expectations. By aligning pedagogical design with Bandura's four sources of efficacy, educators can move adolescents from a state of passive aspiration to one of active vocational agency (Bandura, 1997). The integration of digital tools and experiential learning serves as a modern extension of SCCT's "environmental supports," providing the structural framework students need to bridge the gap between their background and their career intentions.

Ultimately, the impact of these interventions lies in their ability to foster career self-management, a central model within SCCT that emphasizes the adaptive behaviors required for lifelong success (Lent & Brown, 2013). When psychological support and pedagogical structure are harmonized, adolescents develop the internal resilience to overcome external barriers, ensuring that their vocational choices are driven by perceived competence rather than limited options. This synthesis underscores the necessity of a holistic approach that treats career development not as a single event, but as a continuous, cognitively-driven process of self-construction (Lent & Brown, 2019).

CONCLUSION

In conclusion, the synthesis of Social Cognitive Career Theory (SCCT) and empirical evidence confirms that multi-modal interventions—those blending psychological counseling with authentic experiential learning—yield the most significant gains in adolescent self-efficacy. While informational and digital platforms provide scalable access to vocational data, their impact is maximized only when integrated with "mastery experiences" like job shadowing or internships, which Bandura (1997) identifies as the most potent source of self-belief. By providing a structured transition from classroom theory to professional reality, these multi-faceted programs ensure that adolescents do not merely acquire knowledge but internalize a sense of functional competence.

Furthermore, the effectiveness of these combined modalities is heavily contingent upon their ability to provide "social persuasion" through individualized support. Counseling acts as a psychological buffer, helping students manage the vocational anxiety and "decisional procrastination" that often accompany high-stakes career choices (Lent & Brown, 2019). This human element is particularly vital for navigating the environmental barriers faced by marginalized youth or those from lower socio-economic backgrounds, where a "one-size-fits-all" approach typically fails. By tailoring interventions to include relatable mentors and scaffolded exploration, educators can effectively mitigate the systemic disparities that often lead to academic disengagement and the subsequent risk of NEET status (Lent & Brown, 2013).

Ultimately, a holistic, multi-modal framework treats career development as a continuous process of self-construction rather than a singular event. When pedagogical structures like Work-Integrated Learning (WIL) are harmonized with psychological reinforcement, adolescents transition from passive observers to proactive agents of their own futures. This integrated approach fosters long-term "career self-management," equipping young people with the internal resilience and adaptive behaviors necessary for lifelong vocational success (Lent & Brown, 2013). By prioritizing interventions that activate all four sources of self-efficacy, we ensure that every student has the cognitive and environmental support needed to bridge the gap between their aspirations and their professional reality.

RECOMMENDATIONS

Based on the comprehensive analysis of Social Cognitive Career Theory (SCCT) and the specific psychological and pedagogical drivers identified, the following policy recommendations are proposed to integrate career self-efficacy metrics into school performance evaluations.

These recommendations aim to shift educational accountability from mere information delivery to the cultivation of measurable vocational agency.

- i. **Standardize Career Decision Self-Efficacy (CDSE) Metrics:** Educational authorities should move beyond tracking simple "graduation rates" and implement standardized longitudinal assessments of Career Decision Self-Efficacy. By using validated psychometric scales to measure an adolescent's belief in their ability to complete vocational tasks, schools can quantify the psychological impact of their guidance programs. This data allows for the identification of students at risk of "decisional procrastination" or NEET status before they exit the educational system (Lent & Brown, 2013).
- ii. **Mandate Experiential "Mastery" Milestones:** Given that enactive mastery is the most potent source of self-efficacy (Bandura, 1997), policy should require Work-Integrated Learning (WIL) as a core performance indicator. School evaluations should be weighted based on the percentage of students successfully completing job shadowing, internships, or scaffolded vocational simulations. This ensures that "mastery experiences" are a universal right rather than a privilege reserved for high-SES students (Lent et al., 1994).
- iii. **Institutionalize "Blended" Digital-Human Guidance:** To maximize the "Digital Shift," policy should discourage purely automated guidance in favor of blended interventions. While AI-driven platforms provide scalable data, school performance should be evaluated on the availability of human counselors who provide the necessary **social persuasion** and emotional regulation to process that data (Lent & Brown, 2019). Evaluations should track the ratio of individualized counseling sessions to digital exploration hours.
- iv. **Implement Demographic Equity Weighting:** To combat the "one-size-fits-all" barrier, school evaluations must incorporate equity metrics that assess the impact of interventions across different genders and socio-economic backgrounds. Schools should be incentivized to provide vicarious modeling opportunities—such as female mentors in STEM or relatable professional role models for low-SES youth—to ensure that "contextual affordances" are leveled for all students (Savickas, 2015)
- v. **Shift Funding to Longitudinal Mentorship Models:** Policy should move away from funding isolated, short-term workshops, which often fail to produce lasting cognitive shifts. Instead, funding and performance evaluations should favor longitudinal career self-management programs. Tracking the consistency of mentorship over a three-to-five-year period ensures that adolescents have the "environmental supports" needed to build internal resilience and adaptive vocational behaviors across the lifespan (Lent & Brown, 2013).

REFERENCES

- Arnett, J. J. (2014). *Adolescence and emerging adulthood: A cultural approach* (5th ed.). Pearson.
- Balani, S., & Bhatt, S. (2024). Understanding Career Aspiration, Self-Efficacy and Perseverance among Young Adults. *International Journal of Advanced Research in Science, Communication and Technology*. <https://doi.org/10.48175/ijarsct-17651>
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. W. H. Freeman.
- Choi, Y., Kim, J.-E., & Kim, S. (2015). Career Development and School Success in Adolescents: The Role of Career Interventions. *Career Development Quarterly*, 63(2), 171–186. <https://doi.org/10.1002/CDQ.12012>
- Fabian, E. S. (2000). Social cognitive theory of careers and individuals with serious mental health disorders: Implications for psychiatric rehabilitation programs. *Psychiatric Rehabilitation Journal*, 23, 262–269.
-

- Flores, L. Y., Navarro, R. L., & Ali, S. R. (2017). The state of SCCT research in relation to social class: Future directions. *Journal of Career Assessment*, 25, 6–23.
- Fouad, N. A., & Santana, M. C. (2017). SCCT and underrepresented populations in STEM fields: Moving the needle. *Journal of Career Assessment*, 25, 24–39.
- Garriott, P. O., Navarro, R. L., & Flores, L. Y. (2017). First-generation college students' persistence intentions in engineering majors. *Journal of Career Assessment*, 25, 93–106.
- Gashi, L. J., Bërxulli, D., Konjufca, J., & Cakolli, L. (2023). Effectiveness of career guidance workshops on the career self-efficacy, outcome expectations, and career goals of adolescents: an intervention study. *International Journal of Adolescence and Youth*. <https://doi.org/10.1080/02673843.2023.2281421>
- Gashi, S., Kniveton, H., & Nduna, M. (2023). Workshops designed to boost career self-efficacy: Substantial positive effects on adolescents' career goals and decision-making skills. *Journal of Vocational Behavior*, 142, Article 103865. <https://doi.org/10.1016/j.jvb.2023.103865>
- Hackett, G., & Betz, N. E. (1981). A self-efficacy approach to the career development of women. *Journal of Vocational Behavior*, 18, 326–336.
- Hackett, G., & Byars, A. M. (1996). Social cognitive theory and the career development of African American women. *Career Development Quarterly*, 44, 322–340.
- Henis, R. (2000). *Career exploration and career decision-making self-efficacy amongst adolescents: individual and contextual factors: a thesis submitted in partial fulfilment of the requirements for the degree of Master of Arts in Psychology, Massey University*. <https://mro.massey.ac.nz/handle/10179/6181>
- Lent, R. W., & Brown, S. D. (2006a). Integrating person and situation perspectives on work satisfaction: A social-cognitive view. *Journal of Vocational Behavior*, 69, 236–247.
- Lent, R. W., & Brown, S. D. (2008). Social cognitive career theory and subjective well-being in the context of work. *Journal of Career Assessment*, 16, 6–21.
- Lent, R. W., & Brown, S. D. (2013). Social cognitive model of career self-management: Toward a unifying view of adaptive career behavior across the life span. *Journal of Counseling Psychology*, 60(4), 557–568. <https://doi.org/10.1037/a0033446>
- Lent, R. W., & Brown, S. D. (2013). Understanding and facilitating career development in the 21st century. In S. D. Brown, & R. W. Lent (Eds.). *Career development and counseling: Putting theory and research to work* (2nd ed.). New York: Wiley.
- Lent, R. W., & Brown, S. D. (2019). Social cognitive career theory at 25: Progress in predicting, explaining, and promoting occupational self-direction. *Journal of Career Assessment*, 27(1), 7–22. <https://doi.org/10.1177/1069072718804240>
- Lent, R. W., & Brown, S. D. (2019). Social cognitive career theory at 25: Progress in predicting, explaining, and promoting occupational self-direction. *Journal of Career Assessment*, 27(1), 7–22. <https://doi.org/10.1177/1069072718804240>
- Lent, R. W., & Sheu, H. (2010). Applying social cognitive career theory across cultures: Empirical status. In J. G. Ponterotto, J. M. Casas, L. A. Suzuki, & C. M. Alexander (Eds.). *Handbook of multicultural counseling* (pp. 691–701). (3rd ed.). Thousand Oaks, CA: Sage.
- Lent, R. W., Brown, S. D., & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of Vocational Behavior*, 45(1), 79–122. <https://doi.org/10.1006/jvbe.1994.1027>
- Lent, R. W., Brown, S. D., & Hackett, G. (2000). Contextual supports and barriers to career choice: A social cognitive analysis. *Journal of Counseling Psychology*, 47, 36–49.
- Morrow, S. L., Gore, P. A., & Campbell, B. W. (1996). The application of a sociocognitive framework to the career development of lesbian women and gay men. *Journal of Vocational Behavior*, 48, 136–148.
- Ran, G., & Cinamon, R. G. (2022). Career Self-Efficacy, Future Perceptions, and Life Satisfaction: Investigating Two Adolescent Career Development Models. *Journal of Career Development*, 50, 764–784. <https://doi.org/10.1177/08948453221124891>
- Savickas, M. L. (2015). *Life-design counseling manual*. <http://www.vocopher.com>
- Sheu, H., & Bordon, J. J. (2017). SCCT research in the international context: Empirical evidence, future directions, and practical implications. *Journal of Career Assessment*, 25, 58–74.
- Whiston, S. C., Li, Y., Goodrich Mitts, N., & Wright, L. (2017). Effectiveness of career interventions: A meta-analysis. *Journal of Counseling Psychology*, 64(4), 407–426. <https://doi.org/10.1037/cou0000209>