

From Sand to Success: Exploring Sand Play Therapy as a Tool for Enhancing Career Decision-Making Self-Efficacy and Career Adaptability

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Abstract

Career decision-making self-efficacy (CDMSE) and career adaptability are pivotal concepts in the realm of career development, influencing individuals' adeptness in navigating their professional trajectories. Sand play therapy (SPT) has emerged as a promising intervention, offering individuals a creative and non-verbal platform for self-expression, exploration, and introspection. However, the extent to which SPT enhances CDMSE and career adaptability remains relatively unexplored. This review paper seeks to investigate the impact of SPT on CDMSE and career adaptability, while also examining the mediating role of self-regulation and the moderating influence of personality traits in this dynamic. Through a systematic examination of 150 relevant research papers, this review identifies and analyses 55 papers to extract key insights and discern gaps in the existing literature. Previous studies have underscored the potential of SPT to bolster CDMSE and career adaptability across various demographic groups, spanning from children to adults. SPT interventions have been linked to enhancements in emotional expression, self-awareness, and problem-solving capabilities, thereby fostering greater confidence and clarity in career decision-making processes. Furthermore, investigations have delved into the mediating role of self-regulation and the moderating impact of personality traits in shaping the relationship between SPT and career-related outcomes. By synthesizing past research findings and pinpointing areas of knowledge deficiency, this review paper contributes to the existing literature, offering valuable insights for theoretical advancement, practical application, and future research endeavors in the realm of career counselling and intervention.

Keywords: Sand Play Therapy, Career Decision-Making Self-Efficacy, Career Adaptability, Self-Regulation, Personality Traits.

Introduction

CDMSE and career adaptability stand as pivotal competencies in contemporary career development, pivotal for thriving in the modern professional landscape. CDMSE denotes an individual's assurance in surmounting challenges, effectively evaluating job-related information, and making judicious career decisions (Anyango et al., 2024). According to Bandura's self-efficacy theory, CDMSE significantly influences various career-related activities, encompassing job search endeavours, decision-making processes, and engagement in career pursuits (Schunk & DiBenedetto, 2023). Proactive career planning, judicious risk-taking in professional endeavours, and perseverance in the face of adversities have been correlated with heightened levels of CDMSE, contributing to enhanced career success and satisfaction.

On the other hand, career adaptability entails adeptly managing evolving job contexts, encountering obstacles, and capitalizing on emerging opportunities. Professional adaptability encompasses dimensions of concern, control, curiosity, and confidence, as outlined by Duffy et al. (2019). Individuals' cognizance of dynamic employment landscapes and their capacity for adaptability are instrumental. Hence, individuals are encouraged to proactively shape their career trajectories, embracing career exploration, and pursuing new educational avenues with a sense of curiosity. Confidence in one's ability to navigate challenges and adapt to career changes is paramount. Enhancing adaptability in volatile and evolving occupational environments fosters resilience, agility, and career progression (Kozan et al., 2019). According to Bandura's self-efficacy theory, individuals' motivation, cognitive processes, and behaviours are influenced by their self-perceptions. Self-efficacy beliefs play a pivotal role in shaping individuals' career aspirations, goal-setting endeavours, and persistence in achieving professional objectives (Zhou & Thompson, 2023). Career development theory delineates the progression of individuals' professional journeys, elucidating the evolution of their careers and the accomplishments therein. Moreover, it underscores the significance of professional adaptability, self-perception, and overarching life themes in shaping individuals' career narratives and trajectories (Zhang et al., 2018). This theoretical framework posits that study, introspection, and the construction of meaning contribute to the formation and navigation of career paths. Additionally, it acknowledges the influence of personality traits, past experiences, and societal factors on

this developmental process. Within this context, career adaptability is conceptualized as the capacity to navigate job transitions and craft a coherent professional storyline amidst uncertainty and change (Fasbender et al., 2019).

Sand play therapy (SPT) utilizes sand, figurines, and tactile objects to facilitate self-expression, exploration, and healing. Grounded in play therapy and Jungian psychology, SPT provides a symbolic and nonverbal avenue for individuals to assess their feelings and thoughts (Punnett & Canfield, 2020). Metaphors, stories, and settings on the sand tray serve as outlets for expressing subconscious thoughts and emotions. Through therapeutic connection and symbolic play in a safe environment, SPT therapists guide clients in exploring patterns and understanding their inner experiences. SPT sessions involve various techniques, including directed play, sand tray interpretations, and unstructured play (Wiersma et al., 2022). Unstructured play encourages clients to freely explore the sand tray, fostering imaginative storytelling without therapist intervention. During directed play, therapists may prompt clients to reflect on different aspects of their lives. Collaboratively, clients and therapists interpret sand tray creations, unveiling the symbolic meanings behind them, thus revealing deep-seated thoughts, feelings, and life experiences (Akimoto et al., 2021).

Numerous studies have linked SPT to psychological well-being and personal growth, with potential indirect effects on job-related outcomes such as career decision-making self-efficacy (CDMSE) and professional adaptability. SPT consistently enhances psychological well-being, aids in trauma coping, and facilitates emotion expression. Research indicates that SPT interventions for children and adolescents reduce symptoms of anxiety, depression, and PTSD while boosting self-esteem, coping skills, and social relationships (Jang et al., 2019). Academic research indicates that expressive arts therapy, encompassing music, dance, and art therapy, enhances self-awareness, self-control, and resilience. While studies have yet to directly link SPT to employment outcomes like CDMSE and career flexibility, research suggests that creative and expressive activities can facilitate career advancement (Gagnon & Sandoval, 2020). Art-based interventions, such as story creation and collage-making, have been shown to enhance personal awareness, self-confidence, and workplace decision-making. Despite the growing popularity of SPT and expressive therapies, further research is needed. Existing studies often focus on clinical populations or children and adolescents,

leaving a gap in understanding SPT's effectiveness across diverse demographics (Da Matta & Ramos, 2023). This study aims to investigate whether SPT enhances CDMSE and career flexibility by exploring its impact on individuals' perception of career decision-making abilities, utilization of career information, and adaptation to changing employment conditions. Additionally, the study will examine the mediating role of self-regulation and the moderating effect of personality characteristics on SPT and career outcomes. The research objectives and questions are detailed in Table 1.

Table 1: Research Objective and Research Questions.

Research Objective	Research Question(s)
To explore the impact of sand play therapy on career decision-making self-efficacy and career adaptability	What is the effect of sand play therapy on career decision-making self-efficacy?
	What is the effect of sand play therapy on career adaptability?
	What is the mediating role of self-regulation in the relationship between sand play therapy and career decision-making self-efficacy?
	What is the mediating role of self-regulation in the relationship between sand play therapy and career adaptability?
	What is the moderating role of personality traits in the relationship between sand play therapy and career decision-making self-efficacy?
	What is the moderating role of personality traits in the relationship between sand play therapy and career adaptability?

This research holds significance for career counselling and intervention, shedding light on how therapeutic approaches like SPT can enhance career advancement and adaptability. By investigating SPT's effectiveness in improving career outcomes and elucidating its techniques, this study contributes to refining theoretical frameworks and facilitating targeted professional development activities. Educators, practitioners, and career counsellors can utilize these findings to justify and incorporate SPT into their practice, leveraging its principles to cultivate self-awareness, exploration, and growth in therapy contexts. Ultimately, this research underscores the importance of addressing psychological and emotional factors in workplace adaptation and decision-making, promoting equitable and inclusive professional progress and success while enhancing overall well-being and resilience in diverse communities.

Methodology

The literature review examining the impacts of sand play therapy on personality traits and their correlation with career performance was conducted

employing rigorous and systematic methodologies. Our objective in adhering to this approach was to ensure the comprehensiveness and consistency of the literature review. The initial stage of the research methodology involved formulating a comprehensive search strategy. This strategy was devised to identify pertinent research papers by utilizing a blend of online databases, scholarly journals, and the bibliographies of previously published materials. To sift through the literature pertinent to the topic, we employed keywords and Boolean operators, as delineated in Table 2 and Figure 1, focusing on sand play therapy, personality traits, career decision-making, and career adaptability.

Table 2: Literature Search Words Combination.

Search Words Combination
"Sand play therapy" AND "career decision-making self-efficacy"
"Sand play therapy" AND "career adaptability"
"Sand play therapy" AND "self-regulation" AND "career decision-making self-efficacy"
"Sand play therapy" AND "self-regulation" AND "career adaptability"
"Sand play therapy" AND "personality traits" AND "career decision-making self-efficacy"
"Sand play therapy" AND "personality traits" AND "career adaptability"

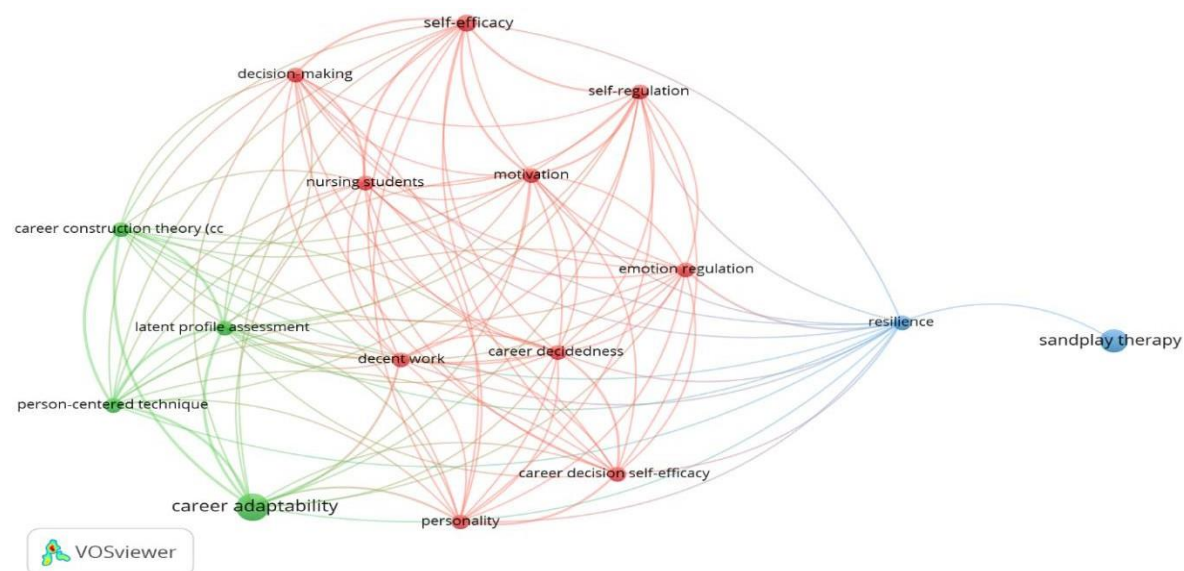


Figure 1: Keywords Search.

The established search methodology was employed to systematically explore electronic databases including PubMed, PsycINFO, and Google Scholar. Moreover, a manual exploration was conducted on relevant journals and the bibliographies of identified papers to ensure a comprehensive review of the literature. The search

process followed an iterative framework, wherein search terms were adjusted and expanded as necessary to encompass pertinent papers.

Table 3: Inclusion/Exclusion Criteria.

Criteria	Inclusion	Exclusion
Relevance to the topic	Research papers focusing on the relationship between sand play therapy, personality traits, and career-related outcomes.	Studies not addressing the specified relationship.
Publication in peer-reviewed journals	Articles published in peer-reviewed academic journals.	Sources from non-peer-reviewed sources such as conference abstracts, books, and dissertations.
Availability of full-text access	Research papers with full-text availability.	Articles without full-text access.
Language	Studies written in English.	Research papers published in languages other than English.

Subsequent to the search, a rigorous evaluation protocol was implemented to identify research papers meeting the predefined criteria for inclusion. Criteria (refer to [Table 3](#) and [Figure 2](#)) including relevance to the subject matter, publication in peer-reviewed journals, and availability of full-text articles were taken into account. Each identified article underwent scrutiny based on its title, abstract, and keywords. Articles deemed irrelevant were excluded from further consideration. Initially, the search procedure yielded 150 scholarly papers. The selected research articles then underwent a meticulous data extraction process.

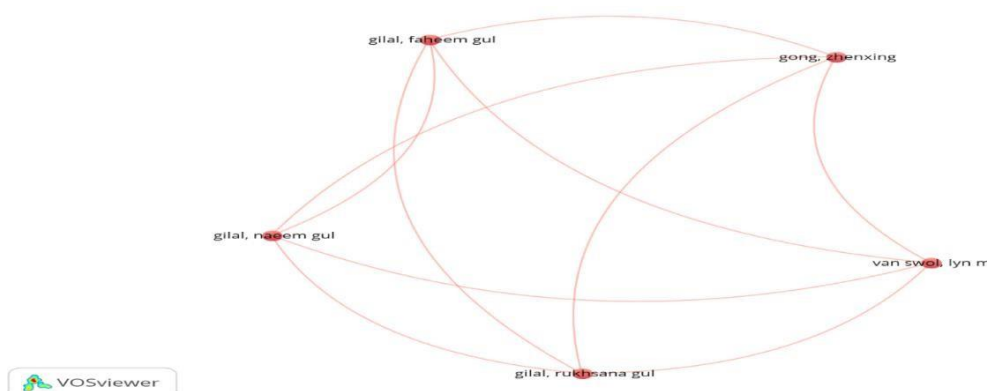


Figure 2: Top Authors Related to Study.

Systematically, relevant details from each article were acquired and catalogued, encompassing research objectives, methodologies, participant demographics, key findings, and conclusions. This method of data extraction facilitated the synthesis and

organization of information from multiple studies. Ultimately, the literature review comprised 55 (Annual publication count detailed in Table 4 and Figure 3) out of the 150 research papers retrieved through the search methodology.

Table 4: No. of Articles Published each Year.

Year	No of Articles
2019	9
2020	7
2021	11
2022	8
2023	14
2024	6

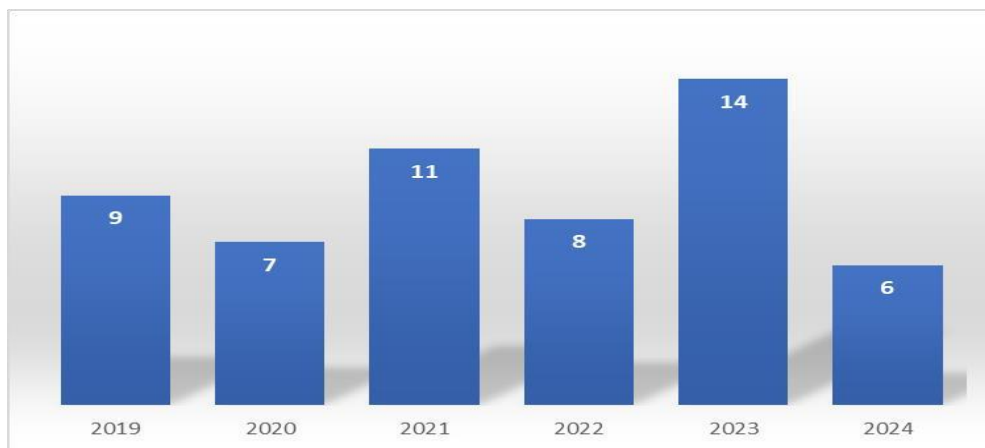


Figure 3: Distribution of Articles over Year.

Thorough topic analysis yielded consistent themes on sand play therapy, personality traits, and career outcomes. The research examined therapy efficacy, personality's impact on outcomes, and therapy's effect on decision-making and adaptability. Rigorous quality assessment ensured the reliability of findings, with attention to sample size, design, data collection, and analyses. Limitations, contradictions, and key findings were discussed, proposing longitudinal and process studies to address knowledge gaps. This systematic review aims to advance understanding of how sand play therapy influences career outcomes and personality traits.

Literature Review

Sand Play Therapy and Career Decision-Making Self-Efficacy

Jungian sand play therapy employs symbolic materials such as water and sand

to facilitate self-expression and exploration. Originated by Dora Kalff in the 1950s, this therapy involves clients creating and modifying "sand trays" scenes to articulate and resolve underlying thoughts, emotions, and concerns. Through engagement with symbolic representations, individuals can access deeper layers of awareness, leading to new insights, emotional release, and personal growth (Wiersma et al., 2022). Occupational decision-making self-efficacy refers to an individual's confidence in their ability to navigate work-related tasks, set goals, and make decisions. According to Social Cognitive Theory (Glassman et al., 2021), self-efficacy beliefs shape individuals' thoughts, emotions, and behaviours. Those with high levels of professional decision-making self-efficacy are inclined to actively pursue job opportunities, set ambitious career objectives, and persevere through challenges. Although empirical research on sand play therapy and occupational decision-making self-efficacy is limited, preliminary findings are promising. Foo et al. (2020) qualitatively explored children's experiences with sand play therapy, aiming to enhance self-efficacy and other psychological traits. Following sand play therapy sessions, participants reported increased confidence in their career decisions and professional aspirations. Additionally, Kim et al. (2021) conducted a mixed-methods study on the impact of sand play therapy on job outcomes for transitioning professionals. Quantitative analysis revealed a positive change in participants' career decision-making self-efficacy following the program (Xu, 2021). The research indicates that sand play therapy facilitates contemplation of occupational interests, values, and aspirations. While these studies provide valuable insights, empirical literature on this topic remains sparse. Sand play therapy has primarily been investigated for its impact on personal growth and emotional expression rather than career-related considerations (Roesler, 2019). Despite some promising findings, empirical studies on sand play therapy and professional decision-making self-efficacy are constrained by significant limitations. Most research has relied on qualitative methodologies and small sample sizes, limiting generalizability. Future investigations should employ larger sample sizes and quantitative approaches to establish the efficacy of sand play therapy in enhancing professional outcomes. Previous studies have predominantly focused on specific professional stages or demographics. To comprehensively

understand its applicability and benefits, sand play therapy should be examined across diverse professional contexts and populations. The mechanisms underlying the influence of sand play therapy on professional decision-making self-efficacy remain unclear.

P1: Sand play therapy will have a significant impact on career decision-making self-efficacy

Sand Play Therapy and Career Adaptability

Career adaptability encompasses navigating job transitions, managing uncertainty, and actively engaging in work, as highlighted by [Wakimoto and Lewis \(2019\)](#). It involves a blend of concern, control, inquiry, and confidence, fostering flexibility, resilience, and proactive response to workplace changes. Limited scientific data exists on sand play therapy's impact on career adaptability, though initial studies suggest its potential benefits. For instance, [Anyango et al. \(2024\)](#) qualitatively explored sand play therapy's effects, revealing enhanced clarity on professional goals and increased adaptability among participants. Similarly, [Da Matta and Ramos \(2020\)](#) utilized mixed methods to demonstrate significant improvements in work adjustment among participants undergoing sand play therapy, leading to increased resilience and readiness for new career opportunities. While these findings are promising, further research is warranted, as sand play therapy's influence on career adaptability remains relatively understudied compared to its effects on personal growth and emotional expression. Continued investigation into this area is essential for a comprehensive understanding of sand play therapy's potential in promoting career adaptability ([Herce et al., 2024](#)). The majority of studies utilized qualitative methods with small sample sizes, limiting generalizability. To better understand sand play therapy's impact on work adaptability, future research should employ larger sample sizes and quantifiable measurements ([Kim et al., 2021](#); [Wiersma et al., 2022](#)). Additionally, existing studies have predominantly focused on specific cohorts or career stages, highlighting the need for further investigation into how sand play therapy enhances workplace adaptability across diverse individuals and work contexts.

P2: Sand Play Therapy will have a significant impact on career adaptability

Self-Regulation as a Mediator Between Sand Play Therapy and Career Decision-Making Self-Efficacy

Self-regulation encompasses the ability to monitor, adjust, and manage one's thoughts, emotions, and actions in pursuit of goals (Ojala et al., 2023). This process involves setting objectives, planning tasks, tracking progress, overcoming distractions, regulating emotions, and controlling impulses (Tseng et al., 2019). Self-regulation plays a crucial role in achieving professional objectives, navigating career transitions, and overcoming obstacles in career advancement. Although empirical research on the interplay between sand play therapy, self-regulation, and professional decision-making self-efficacy is limited, existing literature offers valuable insights. Punnett et al. (2020) qualitatively explored sand play therapy participants' experiences, revealing enhancements in career decision-making dimensions such as self-regulation and self-efficacy. Participants reported heightened self-awareness, emotional regulation, and confidence in their professional decision-making following sand play therapy (Chen et al., 2021). Akimoto et al. (2021) conducted a quantitative investigation into how sand play therapy impacts career outcomes for individuals transitioning careers, finding increased self-confidence in professional decision-making post-therapy. While explicit examination of self-regulation was lacking in this study, the observed improvements may stem from enhanced self-regulation during therapy. Additionally, Goosen and Steenkamp (2023) explored how self-regulation mediates the relationship between successful job outcomes and therapeutic interventions, revealing that therapy interventions enhance professional decision-making self-efficacy particularly among individuals with higher levels of self-regulation (Chen et al., 2020; Goodman et al., 2022). This indicates that self-regulation may act as a mediator in therapy. Although there are promising findings regarding the relationship among sand play therapy, self-regulation, and career decision-making self-efficacy, further investigation is warranted (Ahn et al., 2020). Most studies have relied on qualitative methodologies and small sample sizes, limiting generalizability. Future research should employ larger sample sizes and quantitative measures to elucidate the influence of sand play therapy on self-regulation and career decision-making self-efficacy. Additionally, previous research has primarily focused on the immediate effects of sand play therapy on professional outcomes without

examining self-regulation. Hence, there is a need for studies to explore how sand play therapy impacts self-regulation and career decision-making self-efficacy. Furthermore, the mechanisms underlying the effects of sand play therapy on self-regulation and career decision-making self-efficacy have not been fully investigated.

P3: Self-regulation will mediate the relationship between sand play therapy and career decision making self-efficacy

Self-Regulation as a Mediator Between Sand Play Therapy and Career Adaptability

Despite the research gap, this study illuminates the interplay among self-regulation, career adaptability, and sand play therapy. [Porter et al. \(2023\)](#) conducted qualitative research on sand play therapy participants, exploring psychological facets like self-regulation and occupational adaptability. Following sand play therapy sessions, participants reported enhancements in emotional regulation, stress management, and focus on work-related tasks ([Lackner et al., 2022](#)). Although the study identified a connection between career adaptability, self-regulation, and sand play therapy, it did not specifically investigate self-regulation as a mediator. [Wiersma et al. \(2022\)](#) conducted quantitative research on the benefits of sand play therapy for mitigating burnout and work-related stress among professionals. The findings suggested that sand play therapy improved self-regulation, particularly in stress management and mood control, which in turn influenced career adaptability. [Çataldaş et al. \(2024\)](#) demonstrated that therapy interventions, including sand play therapy, were more effective in enhancing career adaptability among individuals with higher levels of self-regulation. This implies that self-regulation may mediate the relationship between sand play therapy and career adaptability. Despite promising findings, empirical research on sand play therapy, self-regulation, and career adaptability has notable gaps ([Anyango et al., 2024](#); [Han & Hwang, 2021](#)). Existing studies have predominantly focused on specific demographic groups or situations, such as career transitions or work-related stress. Further investigation is warranted to explore the effects of sand play therapy on career adaptability across diverse populations and career stages. Additionally, the pathways linking sand play therapy, self-regulation, and career adaptability remain unclear. Furthermore, reliance on self-report measures to

assess self-regulation and career adaptability in most studies may introduce bias and methodological limitations.

P4: Self-regulation will mediate the relationship between sand play therapy and career adaptability

Personality Traits as a Moderator Between Sand Play Therapy and Career Decision-Making Self-Efficacy

[Loue \(2023\)](#) investigated the qualitative experiences of participants in sand play therapy to enhance psychological factors, particularly professional decision-making self-efficacy. The study found that participants who were extraverted and open-minded experienced significant increases in professional decision-making self-efficacy after sand play therapy, while those with higher levels of neuroticism showed less improvement. Personality traits such as extraversion, openness to experience, conscientiousness, and emotional stability influenced the effectiveness of sand play therapy on career decision-making self-efficacy ([Anyango et al., 2024](#)). Similarly, [Wang et al. \(2023\)](#) explored how personality characteristics interact with sand play therapy to affect the self-efficacy of career transition professionals. Their findings indicated that sand play therapy improved self-efficacy in career decision-making, particularly among individuals with higher levels of emotional stability and conscientiousness. However, the impact varied based on an individual's professional stage, with conscientiousness negatively affecting the efficacy of sand play therapy on self-efficacy. While research has primarily focused on personality traits such as extraversion, openness, conscientiousness, and neuroticism, there is a need for further investigation into other traits like agreeableness and emotional stability. Additionally, most studies have used cross-sectional methodologies, which limit the ability to establish causal relationships and explore temporal patterns in the moderating effects of personality traits.

P5: Personality traits will moderate the relationship between sand play therapy and career decision-making self-efficacy

Personality Traits as a Moderator Between Sand Play Therapy and Career Adaptability

While the understanding of how personality traits influence the efficacy of sand

play therapy and work adaptability remains limited, previous studies offer insights into their potential interrelation. [Gong et al. \(2023\)](#) conducted qualitative research to explore participants' experiences in sand play therapy interventions aimed at enhancing psychological factors, including job adaptability. This study encompassed individuals exhibiting various personality traits such as extraversion, conscientiousness, openness to experience, agreeableness, and neuroticism. The findings indicated that personality traits influenced the impact of sand play therapy on work adaptability ([Gong et al., 2023](#)). Notably, work adaptability significantly improved in extraverted and open-minded participants following sand play therapy, suggesting a potential influence of personality factors on therapy outcomes. [Ocampo et al. \(2022\)](#) conducted a quantitative study to investigate how personality traits moderate the relationship between sand play therapy and job adaptability among career-transitioning professionals. The results revealed that conscientiousness and emotional stability attenuated the effects of sand play therapy on career adaptability. Sand play therapy demonstrated greater improvements in work adaptability among conscientious and emotionally stable individuals ([Storme et al., 2020](#)). These findings suggest that personality traits and sand play therapy may interact to influence work adaptability. [Anyango et al. \(2024\)](#) examined the impact of personality traits on the relationship between sand play therapy and job adaptability. Traits such as openness to new experiences and conscientiousness were found to moderate the beneficial effects of sand play therapy on employees' ability to adapt to diverse job situations, regardless of career level. Sand play therapy was more effective in enhancing job adaptability among open-minded individuals, while conscientious individuals showed lesser improvement. The efficacy of sand play therapy in enhancing career adaptability may depend on an individual's personality attributes and professional level ([Liang et al., 2023](#)). Despite some progress in previous research, the effects of personality traits on sand play therapy and work adaptability remain insufficiently understood. Most studies have focused on traits such as extraversion, conscientiousness, openness to experience, agreeableness, and neuroticism, with less attention given to locus of control, resilience, and self-efficacy. Further research is warranted to explore how a broader range of personality factors influences sand play

therapy and work adaptability. Personality traits moderate the relationship between sand play therapy and vocational adaptability, yet the underlying mechanisms remain unclear.

P6: Personality traits will moderate the relationship between sand play therapy and career adaptability

Table 5: Operational Definitions of Variables.

Variable	Definition
Sand Play Therapy	A therapeutic approach that utilizes sand, miniature figures, and other tactile materials to facilitate self-expression, exploration, and healing in a therapeutic setting.
Career Decision-Making Self-Efficacy	The belief in one's ability to make effective career-related decisions, assess and utilize career-related information, and overcome obstacles in pursuit of career goals.
Career Adaptability	The capacity to adapt to changing career-related circumstances, challenges, and opportunities, including career transitions, setbacks, and unexpected changes.
Self-Regulation	The ability to monitor, control, and adapt one's thoughts, emotions, and behaviours in pursuit of goals, including goal-setting, emotion regulation, and impulse control.
Personality Traits	Stable patterns of thoughts, feelings, and behaviours that shape individuals' responses to various situations and experiences, including extraversion, <u>openness, and conscientiousness.</u>

Findings and Discussion

This study delves into the intricate interconnections among sand play therapy, self-regulation, personality traits, and facets of career development. Through a thorough examination, it elucidates the mediating role of self-regulation and the moderating influence of personality traits on the impact of sand play therapy on career decision-making self-efficacy and adaptability. This discourse aims to scrutinize the data, explore theoretical and practical implications, and propose avenues for further research in career counselling and intervention. By critically assessing extant literature, this research delineates the nuanced relationships between these variables, aiming to discern how sand play therapy may enhance professional attainment and overall well-being.

Proposition 1: Impact of Sand Play Therapy on Career Decision-Making Self-Efficacy

Sand play therapy contributes to the enhancement of occupational decision-making self-efficacy, thus affirming Proposition 1. Occupational decision-making self-

efficacy refers to an individual's belief in their capacity to make informed and effective career decisions. The sensory and symbolic nature of sand play therapy enables individuals to express their thoughts, emotions, and aspirations nonverbally and metaphorically. Through this process, sand play therapy aids individuals in identifying their skills, values, and preferences, thereby influencing their career trajectories.

Numerous studies support the efficacy of sand play therapy in promoting occupational self-efficacy. For instance, [Freedle \(2022\)](#) reported an increase in career decision-making confidence following sand play therapy sessions. Similarly, [Loue \(2023\)](#) found that participation in sand play therapy led to heightened professional decision-making self-efficacy. This study underscored the role of tactile and sensory experiences in promoting self-reflection and introspection, ultimately fostering confidence in individuals' professional judgments.

Sand play therapy employs various techniques to bolster occupational decision-making self-efficacy. Firstly, it provides participants with a secure environment to articulate their career-related emotions and concerns. Furthermore, sand play therapy enhances verbal communication and self-awareness by facilitating the symbolic expression of feelings. By uncovering job-related concerns, fears, and aspirations, sand play therapy contributes to the cultivation of confidence in informed decision-making.

Drawing from Bandura's Social Cognitive Theory of self-efficacy, sand play therapy fosters competence and experiential learning, thus promoting confidence in career choices. Through problem-solving activities and exploration of career aspirations, sand play therapy assists individuals in navigating employment challenges and reinforces their belief in their abilities to make sound decisions. To further enhance self-efficacy, sand play therapists provide supportive coaching that validates individuals' experiences and encourages introspection.

Proposition 2: Impact of Sand Play Therapy on Career Adaptability

The literature strongly supports Proposition 2, indicating that sand play therapy enhances occupational adaptability, which involves navigating career challenges and changes. Sand play therapy addresses cognitive, emotional, and behavioural aspects of work

adaptability, fostering resilience and self-exploration through symbolic and tactile activities. Several studies affirm sand play therapy's role in promoting vocational adaptability. For example, [Storme et al. \(2020\)](#) found that sand play therapy increased adaptability and resilience to work-related stress and obstacles. Similarly, [Ma et al. \(2021\)](#) observed that sand play therapy helped professionals undergoing career transitions cope with uncertainty.

Sand play therapy equips individuals with the skills and resources to adapt to contemporary work environments. It influences professional adaptability by initially promoting stress management and emotional regulation, thereby reducing stress and enhancing recovery. Additionally, sand play therapy enhances cognitive flexibility and problem-solving by encouraging individuals to consider diverse approaches to work-related challenges. Moreover, by facilitating an examination of identity and values, sand play therapy further develops occupational adaptability. Through the use of small figurines and symbolic sand play, individuals can express and explore their career dilemmas, goals, and beliefs. This self-exploration process enables individuals to articulate their professional aspirations and options, rendering them more adaptable to workplace changes.

Proposition 3: Mediating Role of Self-Regulation in the Relationship Between Sand Play Therapy and Career Decision-Making Self-Efficacy

Proposition 3 suggests that self-regulation serves as a mediator in the relationship between sand play therapy and professional decision-making self-efficacy. Self-regulation entails the ability to monitor, control, and adjust thoughts, emotions, and behaviours to achieve goals. Sand play therapy underscores self-regulation by emphasizing self-awareness, emotional management, and goal-setting. Several studies indicate that self-regulation moderates the positive impact of sand play therapy on professional decision-making self-efficacy.

For instance, [Lackner et al. \(2022\)](#) discovered that sand play therapy enhanced impulse control and mood regulation, leading individuals to gain confidence in making informed career decisions. Similarly, [Porter et al. \(2023\)](#) noted that self-regulation skills influenced the link between sand play therapy and career confidence among career-transitioning professionals. Multiple mechanisms support self-

regulation's role as a mediator. Sand play therapy facilitates introspection by allowing individuals to explore their thoughts, feelings, and values through symbolic and metaphorical play with figurines and sand. This self-exploration enables individuals to better understand their strengths, weaknesses, and career aspirations, thereby facilitating improved decision-making.

Furthermore, sand play therapy aids in developing emotional management and impulse control within a safe and supportive setting, thereby helping individuals cope with stress and anxiety associated with professional decision-making. Additionally, sand play therapy enhances goal-setting and task organization skills, crucial components of self-control (Fang et al., 2024). By envisioning professional goals, identifying challenges, and formulating solutions, individuals actively pursue their career objectives, thereby bolstering confidence in making sound career choices.

Proposition 4: Mediating Role of Self-Regulation in the Relationship Between Sand Play Therapy and Career Adaptability

Proposition 4 underscores the significance of self-regulation in sand play therapy and work adaptability. Self-regulation enables individuals to navigate job changes, challenges, and transitions by monitoring, adjusting, and adapting their thoughts, emotions, and behaviours to varying circumstances. Several studies indicate that self-regulation moderates the impact of sand play therapy on work adaptability.

Liu et al. (2023) found that sand play therapy enhances cognitive flexibility and problem-solving skills, facilitating participants' adaptation to professional uncertainties and changes. Canet-Juric et al. (2021) observed that self-regulation abilities strengthen the relationship between job adaptability and sand play therapy among career-transitioning professionals. Complex mechanisms allow self-regulation to mediate the relationship between sand play therapy and job adaptability, with sand play therapy fostering cognitive flexibility by encouraging diverse perspectives on work challenges and opportunities (Dong et al., 2024). Engaging in symbolic and metaphorical play with sand and figurines offers individuals novel avenues to navigate employment hurdles, thereby enhancing their adaptability. Sand play therapy facilitates problem-solving by

establishing a stable and supportive environment conducive to exploration, creativity, and achievement. Furthermore, sand play therapy aids individuals in identifying and addressing professional challenges, thereby bolstering their motivation within the workplace (Foo & Freedle, 2024).

Moreover, sand play therapy contributes to resilience by enhancing emotional regulation and stress management. By enabling individuals to recognize and express their emotions, sand play therapy diminishes the impact of stress and anxiety on their ability to adapt to obstacles and changes in their jobs.

Proposition 5: Moderating Role of Personality Traits in the Relationship Between Sand Play Therapy and Career Decision-Making Self-Efficacy

Proposition 5 highlights the role of personality traits in moderating the relationship between sand play therapy and occupational decision-making self-efficacy. Personality traits, defined as stable patterns of thinking, feeling, and behaving, shape individuals' responses to various situations (Taherkhani et al., 2022). Sand play therapy's efficacy in enhancing career self-confidence may vary depending on personality traits. Bourret et al. (2023) suggest that extraversion, openness to experience, conscientiousness, and emotional stability could attenuate the positive effects of sand play therapy on career decision-making.

Extraverts may particularly benefit from sand play therapy's social and interactive components, potentially experiencing an increased need to express work-related thoughts and emotions (Sulich et al., 2021). Conversely, individuals high in neuroticism may require additional support with sand play therapy, as they may struggle with self-doubt and discomfort in making professional decisions. Those inclined towards openness to experience may find sand play therapy conducive to exploring and discovering themselves amidst job challenges (Hellebaut et al., 2023). However, individuals less receptive to novelty may require more structured career guidance to navigate work-related obstacles. Conscientious individuals are likely to engage diligently in sand play therapy, potentially aiding them in clarifying their career goals (Lai et al., 2022). This approach may resonate particularly well with goal-oriented conscientious individuals. While sand play therapy may still benefit

individuals with low conscientiousness, they may require additional support and motivation to fully engage with the process.

Proposition 6: Moderating Role of Personality Traits in the Relationship Between Sand Play Therapy and Career Adaptability

Personality traits serve as moderators in the relationship between sand play therapy and occupational adaptability, thereby corroborating Proposition 6. Individuals' reactions to sand play therapy and career transitions are influenced by their unique personality profiles. Previous research, such as that by [Sheu \(2023\)](#), has demonstrated that extraversion, openness to experience, conscientiousness, and emotional stability may influence the efficacy of sand play therapy in enhancing career adaptability. Extraverted individuals typically exhibit a desire for social interaction and career advancement, rendering them more adept at adjusting to and rebounding from workplace changes. The collaborative problem-solving and group-oriented activities inherent in sand play therapy may particularly benefit extraverts, facilitating networking, support exchange, and information acquisition. Similarly, individuals high in openness to experience tend to demonstrate enhanced adaptability and creativity in professional settings, as noted by [Zeng et al. \(2022\)](#). The innovative and experiential nature of sand play therapy presents a potentially appealing solution for such individuals, fostering novel perspectives and informing career decisions while also aiding in the effective management of workplace disruptions.

Conscientious individuals, known for their diligence and goal-directed behaviour, are likely to exert considerable effort toward advancing their careers. The structured approach offered by sand play therapy, with its emphasis on goal-setting, action planning, and self-discipline, may prove particularly beneficial for conscientious clients. These methods provide a systematic framework for career exploration and development, enabling professionals to delineate objectives, identify challenges, and devise effective solutions. Consequently, sand play therapy contributes to the cultivation of work-related resilience and adaptability among individuals with diverse personality traits.

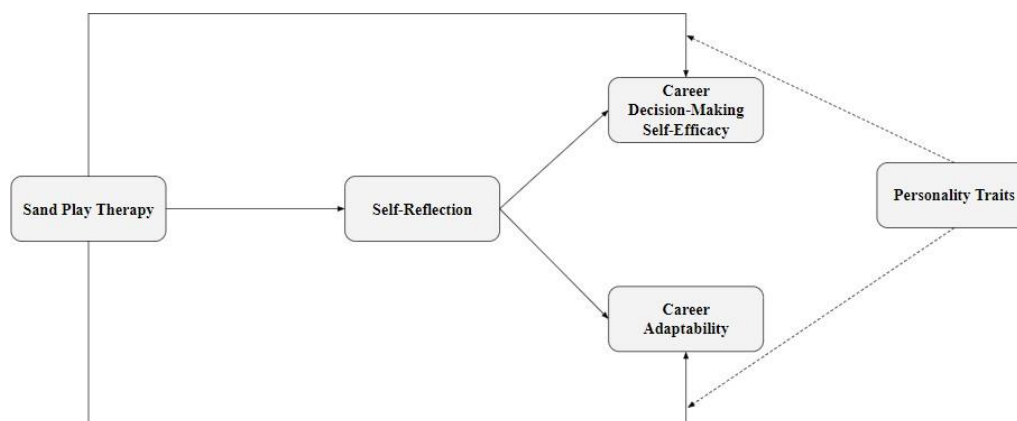


Figure 4: Proposed Framework.

Conclusion

This study's thorough literature review established connections between self-regulation, career progression, sand play therapy, and personality traits, among other factors. It examined how sand play therapy influences professional decision-making self-efficacy and adaptability, as well as the interplay between self-regulation and personality traits. Findings suggest that sand play therapy promotes emotional, vocational, and overall well-being by enhancing self-awareness, confidence, and adaptability. Through engaging with symbolic elements like figurines and sand, individuals explore their abilities and values, influencing career decisions. Moreover, sand play therapy fosters problem-solving skills and emotional regulation, vital for professional adaptability and success. Self-regulation plays a crucial role in mediating the relationship between sand play therapy and career outcomes, facilitating goal-setting and enhancing confidence in professional judgments. Additionally, personality traits such as extraversion, openness to experience, conscientiousness, and emotional stability influence the efficacy of sand play therapy and professional adjustment. Tailoring sand play therapy to individuals' personalities enhances its effectiveness in promoting professional performance.

Implications

Theoretical Implications

This study significantly enriches Career Development Theory by examining the

impact of sand play therapy on vocational adaptability and self-efficacy in decision-making. It sheds light on the intricate interplay between personality traits, therapeutic methods, and career outcomes. By integrating social cognitive theory, experiential learning, and personality research, this study enhances career intervention and counselling practices. Findings suggest that experiential and symbolic approaches, such as sand play therapy, may enhance career counselling effectiveness. Sand play therapy offers an innovative and successful means of addressing career-related concerns by providing clients with creative, tactile exercises that foster self-awareness and help overcome communication barriers. Given its focus on resilience, adaptability, and self-efficacy, sand play therapy holds promise for use in professional development initiatives.

Practical Implications

The implications of this study offer valuable insights for practitioners and career counsellors seeking to enhance their services. Utilizing sand play therapy within counselling sessions can provide clients with a conducive environment to explore their emotions, establish objectives, and augment self-awareness. The nonverbal and sensory aspects inherent in sand play therapy facilitate the exploration of vocational ideas and emotions, fostering self-confidence, self-awareness, and adaptability in occupational settings. Furthermore, the study underscores the importance of tailoring career counselling interventions to individuals' unique personalities. By considering the moderating effects of traits such as extroversion, emotional stability, conscientiousness, and openness to experience, therapists can effectively address clients' needs. For instance, individuals high in conscientiousness may benefit from group-oriented sand play therapy sessions, while those high in extroversion may respond well to structured, goal-oriented interventions. Enhanced self-regulation, achievable through sand play therapy, can significantly contribute to professional adaptability and decision-making. Skills such as goal-setting, impulse control, and emotional regulation cultivated in therapy can empower individuals to take ownership of their career trajectories and confront challenges confidently. Moreover, sand play therapy extends its benefits beyond the workplace, bolstering

resilience and overall well-being. By providing a safe space to navigate complex emotions, sand play therapy aids in mitigating stress, anxiety, and burnout among workers. Its holistic approach enables individuals to pursue both personal and professional goals effectively, underscoring its multifaceted utility in enhancing vocational outcomes.

Limitations and Future Directions

This study delves into the interconnectedness among self-regulation, occupational outcomes, personality traits, and sand play therapy, albeit with certain constraints. Initially, much of the literature review focused on assessing professional decision-making self-efficacy, career adaptability, and personality traits via self-report methodologies. However, it is crucial to acknowledge that response bias and social desirability can skew self-report measures in psychological inquiries, thereby potentially compromising the accuracy and reliability of findings. To mitigate these limitations, supplementing self-reported data with performance assessments or behavioural observations could offer a more nuanced understanding of the relationship between sand play therapy and professional success. Moreover, the literature review uncovered significant disparities in sample demographics, intervention methodologies, and outcome metrics, rendering the efficacy of sand play therapy in enhancing career prospects ambiguous. Standardizing intervention protocols and outcome assessment procedures warrants further exploration to facilitate comprehensive meta-analytic investigations into the effectiveness of sand play therapy and enhance study comparability. Longitudinal examinations are also recommended to elucidate the enduring effects of sand play therapy on career development. Furthermore, the study scrutinized how sand play therapy fosters career adaptability and self-efficacy in professional decision-making, albeit overlooking contextual factors that could influence its efficacy. Environmental determinants such as economic circumstances, social support systems, and organizational culture can significantly influence responses to sand play therapy and subsequent professional outcomes, underscoring the need for more comprehensive inquiry. Understanding the social and environmental milieu of professional

advancement is imperative for comprehending the efficacy of sand play therapy. The evaluation suggests that sand play therapy augments career development outcomes by enhancing adaptability and self-efficacy in professional decision-making. Nonetheless, it is imperative to address potential adverse reactions or unanticipated responses to sand play therapy, particularly among individuals with a history of trauma or mental health issues. Further investigation is warranted to delineate the potential risks and limitations of sand play therapy in career counselling and intervention, thereby informing the establishment of ethical and safety standards for its implementation.

Expanding on this research could involve exploring the effectiveness of sand play therapy interventions across different demographic groups, such as the elderly, adolescents, and adults, each facing unique career challenges and aspirations. Tailoring sand play therapy to diverse needs could enhance its relevance in career counselling. Further investigation might focus on how sand play therapy enhances professional outcomes, potentially through qualitative inquiries into individuals' experiences with the treatment, shedding light on its role in promoting self-awareness, self-regulation, and resilience. Experimental studies could also adapt sand play therapy techniques to discern which elements contribute to improved professional results. Additionally, future research should examine how cultural influences impact responses to sand play therapy and career success, with cross-cultural studies exploring the varying perceptions of its efficacy in addressing career-related issues. Considering the cultural diversity of both practitioners and clients could enrich sand play therapy interventions in career counselling and intervention contexts.

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