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Exploring Counselor Perspectives on the Role of Ecotherapy in Mental Health Treatment: A Qualitative Study

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Walden University
2025

Abstract

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MS, Capella University, 2017

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Dissertation Submitted in Partial Fulfillment

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Abstract

This grounded qualitative study explored the common themes of ecotherapy in practice. The research problem was the limited understanding of how counselors implement ecotherapy in clinical practice, hindering the field's ability to fully integrate nature-based approaches into mental health treatment. The purpose of this grounded theory study was to explore counselor perspectives on ecotherapy using the biophilia hypothesis and Swarbrick's wellness model. The research questions focused on how licensed mental health counselors understood, implemented, and evaluated the impact of ecotherapy. Qualitative data were collected through an online survey with open-ended questions from 15 licensed counselors across the United States who use ecotherapy. Inclusion criteria included counseling licensure and at least six months of experience using nature-based interventions. Data were analyzed using axial coding to identify themes and subthemes related to research questions exploring counselor understanding, implementation, and evaluation. Findings suggested counselors' understanding of ecotherapy is rooted in the healing connection between humans and nature, mindfulness, grounding, and somatic awareness. For implementation, practices were used to promote emotional regulation and self-awareness. Evaluation themes varied. Recommendations include developing counselor-specific competencies and expanding research of its practical foundation in alignment with traditional therapeutic functions (e.g., assessment). Implications for positive social change include identifying the foundation for systemic competencies that can span organizational layers, thus promoting equitable care for individuals whose insurance company may not otherwise support.

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Dedication and Acknowledgements

To my children, Claire, Lillian, Kyle, Willow, and Lilly. You were watching me, and your love carried me through countless hours of writing and research. Thank you for calling me "Dr. Mom" with such pride and for reminding me daily why I never gave up.

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Chapter 1: Introduction to the Study

Introduction

This chapter will review the problem statement, the background of the problem, and the purpose of the student. Additionally, it will present the research questions under review, the conceptual frameworks used to ground the study, and the nature of the study. It will review assumptions, scope, and limitations of the study that helped shape the methodology to extract as much significance as possible. Overall, this chapter will provide an overview of existing knowledge we have around ecotherapy; how that knowledge is currently being utilized in counselor education and training; where gaps exist in terms of promoting its use at a large scale, despite its inherent benefits; and how this particular research study will set the stage for continued research into advancing this mode of therapy into the clinical setting. This chapter demonstrates that ecotherapy has a strong foundation in wellness and a justified place within counseling. It will also show that efforts to standardize it for large-scale understanding have not been attempted. In bridging that gap, social justice can be pursued for clients who resonate with ecotherapy and are denied access to this method of counseling due to insurance or funding limitations.

Background

Traditional mental health treatment continues to navigate challenges in promoting wellness, thus highlighting the necessity for holistic and innovative therapeutic approaches. Many conventional methods emphasized cognitive or biomedical perspectives, which often overlooked the interconnectedness of the mind, body, and environment (Richter & Dixon, 2022; Stein et al., 2022). As a result, mental health care has felt fragmented and limited in addressing the full complexity of human experience and overall holistic wellness. Ecotherapy, which integrates nature-based interventions into therapeutic settings, has shown potential in enhancing mental health and emotional well-being (Rueff & Reese, 2023). By incorporating the restorative benefits of the natural environment, ecotherapy encouraged clients to strengthen their mind-body connection and engage with holistic wellness.

Integrating cognitive-behavioral therapy with ecotherapy represented one example of bridging traditional and holistic practices. This approach combined structured cognitive restructuring techniques with nature-based activities to improve mood, reduce stress, and foster a deeper connection to self and environment. Rueff and Reese (2023) conducted a meta-synthesis of outdoor talk therapy, finding that integrating cognitive-behavioral therapy and other modalities in natural settings could be an effective means of addressing depression and emotional distress. However, research also suggested that while ecotherapy can be as effective as cognitive-behavioral therapy in reducing depressive symptoms, it may be less effective for anxiety (Rueff & Reese, 2023). Other scholars have called for refinement or traditional approaches to make them more integrative and empirically grounded. For instance, Longmore and Worrell (2007) questioned the necessity of cognitive interventions in cognitive-behavioral therapy. Hayes et al. (2023) emphasized the need for theoretical advancements in cognitive-behavioral therapy. Additionally, Eagle (2007) and Giacomantonio (2012) critiqued the scientific and conceptual limitations of psychoanalysis and cognitive therapy. Given these critiques, researchers have identified a growing demand for innovative and alternative therapies, such as ecotherapy or nature-based interventions, which embraced the therapeutic benefits of nature to address psychological distress in ways traditional models may overlook and provided holistic care to the complexities of being human, allowing the client to strengthen their mind-body connection.

Problem Statement

Mental health treatment continued to face challenges in promoting holistic wellness, emphasizing the need for innovative therapeutic approaches. Ecotherapy, which integrates nature-based interventions into therapeutic settings, has shown potential to enhance mental health, emotional well-being, and physiological regulation (Rueff & Reese, 2023). However, its application within mental health treatment settings remains underexplored, particularly concerning how licensed mental health counselors conceptualize and implement ecotherapy in practice. Ecotherapy is not a widely used approach, nor is it endorsed as a gold standard amongst the leading professional organizations (e.g., American Counseling Association). Ecotherapy lacks recognition as an evidence-based practice due to the absence of competencies and standardization, which is imperative for facilitating its broader adoption in clinical settings. Recent reviews of nature-based interventions have reported widespread variability in approach, scope, and outcomes, highlighting the lack of standardization across ecotherapy research and training (Diaz-Martinez et al., 2024).

The problem addressed in this study is that little is known about how licensed mental health counselors understood, implemented and evaluated ecotherapy, which limits the development of standardized competencies and evidence-based guidelines for its broader adoption in counseling. Understanding counselor perspectives clarified current practices, revealed ethical and training needs, and identified consistent strategies that informed the creation of professional standards. This understanding is essential for establishing ecotherapy as a credible, evidence-based modality in mental health treatment.

Furthermore, while established competencies exist for animal-assisted therapy and training for other types of ecotherapy, no unified codes or competencies are recognized by the American Counseling Association for ecotherapy. A code of ethics has been developed for ecotherapy (e.g., Relational Ecotherapy Institute), but it is not endorsed by the American Counseling Association (ACA, n.d.). This demonstrates a unified understanding among professionals that ecotherapy is a standalone modality, however, larger organizations that represent counseling as a whole have not also made that distinction. Currently, for a counselor to learn how to become competent in ecotherapy, they are left to the opinions and education provided by unregulated bodies (Relational Ecotherapy Institute, 2024). For the practice to continue beyond that, specific competencies for assessment and direction are needed. Exploring the perceptions and implementation strategies of licensed mental health counselors was a critical step toward understanding the efficacy of ecotherapy and developing standardized protocols, thereby enhancing ecotherapy's credibility and facilitating its broader adoption in promoting holistic wellness.

This problem was significant to the field of counselor education and supervision because the absence of defined ecotherapy competencies restricts educators' and supervisors' ability to prepare counselors for nature-integrated clinical practice. Addressing this gap strengthened the professional credibility of ecotherapy, enhanced the benefits of its integration into counselor training programs, and advanced evidence-informed approaches to client holistic wellness.

Purpose of the Study

The purpose of this grounded qualitative study was to explore the perspectives of licensed mental health counselors who incorporate ecotherapy or nature-based interventions into their counseling settings, specifically using the biophilia hypothesis and Swarbrick's wellness model (2006, 2012) as frameworks. By focusing on the benefits, challenges, and perceived impact of ecotherapy on wellness outcomes, I deepened the understanding of how ecotherapy is implemented in practice and described the perceived effective use of nature-based interventions, identifying areas for continued development of the theory as a standalone approach. Given the increasing need for holistic approaches to promoting wellness, I investigated the insights of licensed mental health counselors through their lens on how ecotherapy or nature-based interventions, such as horticulture, forest bathing, or walk-and-talk, can influence client well-being, emotional healing, and overall holistic wellness. My goal for this study was to explore how counselors understand, implement, and evaluate the use of ecotherapy, ultimately leading to the future development of a standardized set of generalized competencies that encompass the individualized approaches within ecotherapy practices.

Using grounded theory, I provided an in-depth exploration of licensed mental health counselors' professional insight, recognizing the understanding that ecotherapy works differently depending on the person and the situation as a therapeutic tool. Through surveys that included a mix of open- and closed-ended questions, which were aligned with the proposed structure of competencies based on a compilation of those that are endorsed by the American Counseling Association, I examined the perceptions of licensed mental health counselors regarding the therapeutic benefits and challenges of incorporating nature-based interventions into the counseling environment and treatment process. By understanding the steps of practice of licensed mental health counselors, I identified themes that could inform best practices for integrating nature-based interventions into the counseling environment. The findings may contribute to the development of more standardized protocols, ultimately fostering the adoption of ecotherapy as a credible and evidence-based practice in clinical settings.

Research Questions

The research questions for this study were:

Research Question 1 (RQ1): How do licensed mental health counselors understand ecotherapy and receive training to use nature-related interventions in their counseling practice?

Research Question 2 (RQ2): How do licensed mental health counselors implement ecotherapy in their counseling practice?

Research Question 3 (RQ3): How do licensed mental health counselors assess appropriateness for and evaluate the impact of ecotherapy in supporting all dimensions of wellness among clients with mental health disorders?

Conceptual Framework for the Study

I grounded the study in two primary frameworks: the biophilia hypothesis (Wilson, 1984) and the wellness model (Swarbrick, 2006, 2012). These frameworks provided a strong contextual lens for understanding how ecotherapy supported wellness in mental health treatment, particularly from the perspective of licensed mental health counselors who integrated nature-based interventions into their therapeutic practice. The biophilia hypothesis suggested that humans possess an innate connection to nature, which has profound physiological and psychological benefits (Wilson, 1984). Engaging with natural environments can enhance mental well-being, reduce stress, and promote healing by fostering a sense of calm and restoration (Weir, 2020). For instance, Weir (2020) noted that exposure to nature is linked to improved attention, lower stress levels, a better mood, and a reduced risk of psychiatric disorders. Ecotherapy leverages this biophilic bond to facilitate personal growth, emotional healing, and resilience in clients (American Heart Foundation, 2024). According to the American Heart Foundation (2024), spending time in nature can relieve stress and anxiety, improve mood, and boost overall feelings of happiness and well-being.

Wellness Model

This holistic approach aligns with the wellness model, which emphasizes nurturing emotional, mental, and physical health, providing a relevant theoretical basis for exploring how nature-based interventions support individuals in their journey toward wellness. In the context of mental health wellness, this connection to nature offers an opportunity to address the underlying emotional and psychological issues that contribute to mental health needs. While the concept of wellness is a modern term, ancient wellness practices originated around 3,000-1,500 BC and were known as Ayurveda. Ayurveda regimens are tailored to each person's unique constitution, such as their nutritional, exercise, social interaction, and hygiene needs, with the goal of maintaining balance that prevents illness (Global Wellness Institute, 2024). The wellness model was pioneered by Dr. Halbert Dunn in the 1950s, emphasizing high-level wellness as a proactive approach to health beyond just absence of disease and later expanded by Dr. John Travis who introduced the idea that health exists on a spectrum from illness to wellness where wellness is involving a high level of overall well-being (Heba et al., 2025; Stara & Charvat, 2013). The framework for this study included Dr. Peggy Swarbrick's wellness model, which consists of eight dimensions that encapsulated the holistic view of a person (Swarbrick, 2006, 2012, 2023). The different dimensions can be reviewed in Appendix D. The eight dimensions are physical, spiritual, social, intellectual, emotional, occupational, environmental, and financial (Detrano, 2012; Swarbrick, 2006, 2012). This framework continues to influence mental health treatment and complementary therapies, such as ecotherapy, by promoting a multidimensional, holistic approach to well-being, wherein positive changes in the environmental domain may influence positive changes in other domains. The wellness model was used to develop a portion of the survey questions given to participants. For example, one question was, considering the broader definition, what benefits have you noticed when implementing ecotherapy or nature-related interventions with clients? The rest of the survey was structured around the research questions, which aligned with the themes of competencies already endorsed by the American Counseling Association (n.d), for example, in what ways would ecotherapy need to be understood to be considered an evidence-based practice?

Biophilia Hypothesis

The biophilia hypothesis highlights the therapeutic potential of nature. The wellness model illustrates the impact the environment has on the overall quality of life through its connection to the other dimensions of wellness. I explored how ecotherapy may support clients' wellness processes and enhance the overall therapeutic experience for licensed mental health counselors and their clients. Essentially, this framework highlighted the importance of integrating nature into the healing process and laid the groundwork for a deeper understanding of how ecotherapy can be a powerful tool in mental health treatment. It also represents foundational knowledge for the groundwork to create a new standardized theoretical approach as opposed to building upon an existing one. Hence, the reason why an existing counseling theory was not chosen for grounding this study.

Grounded Theory

Grounded theory, co-created by Glaser and Strauss (1967) was used for this research study because it builds upon existing frameworks to create a new theory. It is used for understanding processes within a field of practice that existing theory is inadequate in describing (Glaser, 1992). In grounded theory, researchers come to the date without any preconceived ideas on concepts or hypotheses, but that existing theory and literature is meant to enhance theoretical sensitivity as opposed to providing a lens for interpretation (Glaser & Strauss, 1967). Later versions of grounded theory, supported by Strauss, which provide more structure to data analysis, were not chosen for this research approach. In Straussian grounded theory, a coding paradigm is used to look for causal conditions and consequences (Kelle, 2005). This did not resonate with the intended purpose of this study, nor the trajectory of its utility, in that it complicates unbiased construction of a theory. This study does not aim to fully describe a theory with its results, but to find themes of practical application to be operationalized as competencies or standards, later, beyond the length of the present study, in future research and through a workgroup, much like the development process for other competencies. In that way, the process can be legitimized, and the results can be extended to the counseling profession as a whole. The present study is step one in a larger plan that cannot be accomplished within a reasonable timeframe or within limitations of dissertation study.

Constructivist grounded theory was also not chosen as methodology for this research. In constructivist grounded theory, the assumption is that theory is constructed as a result of the researcher's role and relationship with participants (Mills, Bonner, & Francis, 2006). This has been a primary source of criticism for the use of grounded theory as it can lead to biased construction (Schonfeld & Mazzola, 2013). Although this research used peer checking for trustworthiness, data collection was structured to provide anonymity and eliminate researcher bias. In that way, the methodology for this study remained more closely aligned to traditional grounded theory.

Nature of the Study

Grounded theory is a qualitative research methodology that is used to focus on generating theories through systematic collection and analysis of data (Urquhart, 2022). Using this approach, I emphasized the development of theories grounded in real-world observations. In the context of this study, grounded theory was used to investigate how licensed mental health counselors integrated ecotherapy into their practice, uncovering underlying patterns and constructs that inform this integration through thematic analysis and axial coding of understanding, evaluation, and implementation. By analyzing themes, we then looked for subthemes of each category of counselors' observations and perspectives of these phenomena, I employed grounded theory to develop a conceptual framework that illuminates the role and impact of ecotherapy in mental health treatment.

Definitions

Competencies: For the purpose of this study, competencies will be defined as knowledge and understanding, implementation and skills in practice, assessment and screening, evaluation of implementation and effectiveness, and training, ethics, and professional development (ACA, 2022).

Counseling: A professional service where a trained counselor helps people talk through personal problems, emotional struggles, or life challenges (Corey, 2023).

Ecotherapy: Ecotherapy is a form of therapy that uses nature and outdoor activities to improve mental health and well-being. It helps people reconnect with nature, reducing stress and alleviating emotional struggles (Clinebell, 1996; Jordan & Hinds, 2016).

Nature-related interventions: These are activities that involve nature, such as spending time outdoors, walk-and-talk therapy, horticulture or gardening, animal-assisted therapy, and forest bathing, to support emotional, physical, and psychological health (Buzzell & Chalquist, 2009).

Therapist: A trained professional who helps people with emotional, psychological, or behavioral issues. They use various techniques to assist clients in managing challenges like stress, anxiety, depression, or addiction (Corey, 2023).

Therapy: A treatment process where a person talks with a trained therapist to address emotional, psychological, or spiritual problems. It involves various techniques to improve mental health, such as discussing issues, developing coping strategies, and promoting personal growth (Miller & Rollnick, 2013).

Wellness: A holistic and multidimensional concept that encompasses physical, mental, emotional, social, and spiritual well-being, emphasizing proactive engagement in behaviors that promote overall health and life satisfaction (Swarbrick, 2012).

Wellness Model: A holistic framework that emphasizes overall well-being by integrating various aspects of life, moving beyond the traditional focus of disease treatment to encourage proactive and preventive approaches to promote a balanced and fulfilling life (Swarbrick, 2012).

Assumptions

The ontological assumption of grounded theory was that the reality of using ecotherapy in clinical practice varies and is subjective in line with social constructionism. The methodological assumption in theoretical coding was an iterative process and was that a design emerged through the analysis of themes, with peer checking and discussion. One of the assumptions in grounded theory research was that a new theory will emerge from the data beyond just describing the phenomenon and going above and beyond existing theory. I expected that study participants would be volunteers, participating in their own free will, and would provide accurate and honest descriptions of their perceptions of ecotherapy as an intervention and observations of its efficacy in mental health treatment. Furthermore, I assumed licensed mental health counselors would have an appropriate amount of experience with ecotherapy to provide meaningful insights into the potential it has to impact mental health wellness, despite its current lack of standardization.

Scope and Delimitations

The specific focus of this study was to gain a deeper understanding of the perspectives of licensed mental health counselors regarding ecotherapy in mental health treatment, as well as how counselors understood, implemented, and assessed the use of ecotherapy within the treatment setting. Themes could be used to create competencies for standardization for use within a variety of disciplines (e.g., counseling, social work, psychology). This research focused on the counseling field; however, to enhance the potential transferability and garner a larger impact, the study was grounded in a conceptual framework using the biophilia hypothesis and a wellness model for integration beyond counseling. To achieve this focus, licensed mental health counselors who incorporated ecotherapy or nature-related interventions into their counseling practices were recruited to understand their application of the theory. This was limited to purposive sampling and snowball sampling to help recruit more participants who met the criteria. Some delimitations included excluding licensed mental health counselors without ecotherapy experience, or with experience of less than six months. The study is arranged so that findings can be used to extend research beyond this setting and into further research, which will ultimately have the impact of creating wide-use measures of competency.

Limitations

I considered several limitations, particularly those related to self-reported data. One significant limitation was the potential for recall bias, where participants may have difficulty remembering or may inaccurately report their experiences or behaviors, leading to skewed data. Additionally, social desirability bias may have occurred, as participants may have altered their responses to align with what they believed the researcher expected or what was socially acceptable, thereby affecting the honesty and reliability of the reported data. Furthermore, the honesty of the data reported by participants may have been influenced by their desire to present themselves or their practices in a favorable light. Another limitation that arose from the researcher’s dual role as a counselor and ecotherapist was the potential for bias due to personal perspectives and conflicts of interest in interpreting the data. In terms of methodological constraints, the qualitative design of the study limited its generalizability to broader populations, as the findings may primarily reflect the experiences of a small sample of licensed mental health counselors rather than being broadly represented. Additionally, this study lacked comparative data that may have provided insights into how ecotherapy compares to other therapeutic interventions, as well as long-term data to assess the enduring impacts of ecotherapy on mental health wellness.

Many of these limitations are inherent to the chosen methodology, and there is little that can be done to mitigate their impact (e.g., self-report measures). However, regarding data interpretation and the potential for researcher bias, peer checking was employed as a safeguard during data analysis.

Significance

This study contributed to the growing body of literature on ecotherapy by addressing a critical gap in understanding how licensed mental health counselors understood, implemented, and evaluated nature-based interventions within clinical settings. While previous research has focused primarily on client outcomes (American Heart Association, 2024; Beavers et al., 2022; Clark, 2019; Greenleaf et al., 2024), few studies have explored the counselor's perspective, which was a key component in translating theory into ethical, effective practice (Delaney et al., 2024; Greenleaf et al., 2013). By using the biophilia hypothesis and Swarbrick's wellness model as guiding frameworks, this study provided a multidimensional understanding of how ecotherapy supported the dimensions of wellness within counseling. Findings advanced the knowledge by clarifying how counselors understood, implemented, and evaluated ecotherapy, identifying barriers to standardization, and outlining the professional competencies required to support its evidence base.

This study presented practical significance for counselor education, supervision, and clinical practice. The insights provided by participants will inform the development of competencies recognized by the American Counseling Association and integrated into training programs. Establishing ethical guidelines and training standards may enhance professional credibility while also supporting potential policy discussions around expanding insurance reimbursement or recognition of ecotherapy as an evidence-based treatment within behavioral health systems.

Grounded in the lens of counselor education and supervision, this study promoted positive social change by integrating nature-based interventions into the counseling setting and ultimately into counselor training. This approach encouraged a holistic view of wellness. Increasing access to ecotherapy can help make mental health services more affordable, inclusive, and sustainable.

Summary

The purpose of this study was to understand the practical application of ecotherapy and identify themes related to the research questions, thereby strengthening the foundation that will lead to creating competencies to enhance standardization practices for implementing ecotherapy within the therapeutic context. By doing so, I initiated the steps necessary to enhance counseling tools by broadening therapeutic options for mental health treatment and improving wellness outcomes, thereby promoting positive social change through the advocacy of accessible and inclusive therapeutic approaches, while fostering a connection between humans and nature within a therapeutic setting. The significance of this research has created a potential impact on the counseling field by providing another standard therapeutic approach, while also laying the foundation for creating curriculum which can be used to complement counseling education programs and enhance competency before graduation. In the next chapter, literature was examined that provided an insight into nature-based interventions as related to practicing in the counseling field.

Chapter 2: Literature Review

Introduction

The purpose of this grounded qualitative study was to explore how licensed mental health counselors understood, implemented, and evaluated ecotherapy within clinical practice using the biophilia hypothesis and Swarbrick's wellness model as guiding frameworks. The research problem addressed the limited understanding of how counselors conceptualize and apply ecotherapy, which has restricted the development of standardized competencies and evidence-based guidelines necessary for its broader adoption in the counseling profession. Although recent studies have documented the therapeutic benefits of nature-based interventions, such as reductions in stress, anxiety, and depression (Rueff & Reese, 2023; Hall, 2025; Diaz-Martinez et al., 2024), scholars continued to note wide variability in how ecotherapy was defined, integrated, and assessed. This variability highlighted the importance of examining counselor perspectives to inform professional standards and enhance training within counselor education programs. In this chapter, I reviewed the existing literature that establishes the relevance of the research problem and situates ecotherapy within the broader context of mental health treatment. This chapter expanded on the literature search strategy, frameworks guiding this study, the benefits and types of ecotherapy, and the challenges associated with standardizing ecotherapy for clinical use. Together, these sections provided the framework for understanding the current level of understanding, identified existing gaps, and justified the need for continued research. Due to the study's goal of standardizing ecotherapy as a standalone counseling approach to enhance the eight dimensions of wellness in mental health treatment, a model was chosen as the foundation for this study, rather than another counseling theory.

Literature Search Strategy

As mentioned in chapter 1, the purpose of literature review in grounded theory is to enhance theoretical sensitivity rather than to provide a lens for interpretation of findings. For that reason, foundational frameworks within mental health (wellness model) and the human-nature relationship (biophilia hypothesis) were chosen to explore deeper prior to survey development. The literature provided a base and direction for constructing items on the survey that would be disseminated to participants. These theories did not serve as an integral part of thematic analysis and coding process. The databases searched included PsycINFO, SAGE Journals, SocINDEX, and Taylor and Francis Online using search terms *ecotherapy*, *biophilia hypothesis*, *nature-based therapy interventions*, *ecotherapy in mental health treatment*, *counselors' roles in ecotherapy*, *counselor experiences using ecotherapy*, *counselors' perception of using nature in therapy sessions*, *challenges in standardizing ecotherapy*, *implementation of ecotherapy in therapy*, *human-nature connection*, *ecotherapy AND counselor perspectives*, *qualitative research AND ecotherapy OR nature-based therapy interventions*, *challenges in implementing ecotherapy*, *ethical challenges in ecotherapy*, *wellness model*, *and ecotherapy AND holistic wellness*.

Theoretical Foundation and Conceptual Framework

This study was grounded in the biophilia hypothesis and the wellness model. The biophilia hypothesis, developed by Edward O. Wilson (1984), proposes that humans possess an innate biological need to connect with nature and other living beings. The biophilia effect suggested that human attraction to nature is embedded within our genes, influenced emotional balance, reduced stress, and overall wellness (Simaika & Samways, 2010). Increased exposure to natural environments has been shown to improve mental health, promote emotional healing, and enhance immune function (Kotera et al., 2020; Stoewen, 2017). Within the context of counseling and wellness, this theory provided the foundation for understanding how exposure to natural environments can foster restoration, emotional regulation, and holistic healing. Swarbrick's (2006, 2012) wellness model complemented this perspective by identifying eight interconnected dimensions of wellness (Appendix D) that together promote holistic wellness. The environmental dimension is specifically aligned with ecotherapy's principles by recognizing the natural world as essential to human health and balance. Integrating these two frameworks offered a comprehensive lens for this study, illustrating how nature-based interventions could influence multiple aspects of wellness. Together, the biophilia hypothesis and Swarbrick's wellness model provided the theoretical grounding for examining how licensed mental health counselors understood, implemented, and evaluated ecotherapy as a holistic approach to promoting wellness in mental health treatment. Applying these frameworks may also inform the development of counselor-specific competencies and standardized practices that support the recognition of ecotherapy by the American Counseling Association as an evidence-based therapeutic approach.

Benefits and Types of Ecotherapy

Natural environments have been found to have a significant impact on human psychological and physical health. According to Bai et al. (2025), exposure to such environments enhances emotional recovery, cognitive focus, and physiological relaxation. Bai et al. (2025) specifically commented on the improved EEG readings and self-reported recovery scores. Some of the positive correlations observed indicated that personality traits, such as openness and extraversion, influenced preferences for nature-inspired spaces, with higher levels of awe correlated with improved health outcomes. Hall (2025) highlighted the effect of ecotherapy in helping naturally reduce stress hormones by activating the parasympathetic nervous system, which helped counteract the body's stress response, and Bratman et al. (2015) identified the impact of nature on increasing the release of dopamine and serotonin, further improving mood regulation and reducing anxiety symptoms. Hunter et al. (2019) highlighted studies showing that at least 20-30 minutes in nature significantly reduced cortisol levels and promoted relaxation.

These findings demonstrated consistent physiological and psychological benefits of nature exposure across diverse populations, thereby establishing a strong empirical foundation for ecotherapy. However, most of these studies were quantitative and outcome-focused rather than process-oriented, providing limited insight into how licensed mental health counselors intentionally implemented or evaluated these interventions in practice. The positive impact of nature on health and the environment has influenced interest in ecotherapy and nature-based interventions, which used natural elements to supplement traditional therapeutic approaches. Within counseling research, this gap in implementation knowledge represented an opportunity for qualitative exploration to clarify counselors' decision-making processes, perceptions of efficacy, and barriers to integration.

Several types of nature-based interventions have been shown to strengthen mental and physical health, including forest bathing (shinrin-yoku), horticulture, animal-assisted therapy, walk-and-talk therapy, and adventure therapy. Also included is water, which has a naturally powerful impact on the human body. Furthermore, evidence showed the impact of nature on the well-being of people of all ages, from youth (Buttazzoni & Minaker, 2023) to the elderly (Wang et al., 2024). These modalities varied in structure, intensity, and theoretical orientation, highlighting the need for counselor-specific competencies that presented safe and ethical implementation standards.

Ice Bath

One example of an ecotherapy intervention is an ice bath, which consisted of an individual sitting inside a tub filled with ice water, or plunging into cold water for anywhere from a few seconds to several minutes. Goto (2023) reported that cold-water swimming had been shown to improve symptoms of depression and reduce inflammation, with many individuals reporting better mental health and overall well-being. While Goto (2023) declared that more studies are needed, they state that cold-water swimming is considered an accessible therapy, requiring water to be below 68 degrees Fahrenheit (or 20 degrees Celsius). Popkin et al. (2010) conducted a study describing the essential role of water in human health. They reported that water maintained cellular function and homeostasis, which was critical for survival and overall helped the internal atmosphere of the human body function and aided in preventing nutrition-related diseases. They also identified the mental benefits, including improved alertness, cognition, and physical performance. Danner et al. (2024) conducted a randomized controlled study that described the benefits of water-shiatsu, which improved pain and mood, while also increasing body awareness.

Collectively, these studies suggested that water exposure may have a positive impact on mood, inflammation, and body awareness. The methodological strengths included physiological measurements and randomized designs, while weaknesses involved small sample sizes and a limited focus on therapist-led implementation. Most interventions were self-directed rather than counselor-facilitated, leaving a gap in understanding how licensed counselors ethically incorporated water-based or “blue-mind” practices within treatment planning. This lack of process data highlighted the need for a qualitative understanding of counselor perspectives on feasibility, safety, and client appropriateness.

Forest Bathing and Views

Sop Shin (2007) conducted a study involving 931 office workers, of whom 481 had a view of the forest from their workplaces and 450 did not. The results showed a significantly higher positive influence on job satisfaction and stress for those who had a view of the forest than for those who did not. In previous studies, including one by Kaplan (1993), forest views from a window have been found to contribute to a micro restorative experience, providing a brief respite from a person’s mental stress level and fatigue. Imamura et al. (2022) experimented in an indoor forest bathing environment to assess its effects on reducing mental fatigue. They first had participants complete a working memory test with plants to identify brain activity indicators related to fatigue. According to Imamura et al. (2020), the results showed that when mental fatigue increased, oxygen levels in the prefrontal cortex also increased. Then, a 20-minute exposure to the indoor forest bathing environment was tested, which Imamura et al. (2020) reported resulted in a decrease in feelings of fatigue and an increase in oxygen levels in the prefrontal cortex. In summary, the findings in the study suggested that spending time in a green space, even indoors, can reduce mental fatigue by lowering brain activity associated with fatigue (Imamura et al., 2020). Simpattanawong and McEwan (2024) conducted a controlled trial experiment to compare the impact of guided forest bathing or a mindful urban walk on heart rate, blood pressure, and mood in young Thai adults. Their study supported the benefits of forest bathing for physical health, showing it improved mental well-being and reduced negative mood. Furthermore, although forest bathing and guided mindful urban walking reduced heart rate and blood pressure, forest bathing led to a greater reduction in negative mood, which was closely linked to mental fatigue.

These studies collectively demonstrated that both direct and indirect exposure to natural settings can produce measurable psychophysiological improvements, such as reduced mental fatigue and enhanced emotional stability, as evidenced by the reduction of oxygenated hemoglobin in the prefrontal cortex during indoor forest bathing, as suggested by Imamura et al. (2020). Strengths of this research include the use of neurophysiological measures and controlled comparisons between environments.

Weaknesses included short intervention durations, limited generalizability across cultures, and an absence of counselor-facilitated components. Controversy remains regarding whether indoor simulated environments can replicate the full therapeutic effects of outdoor exposure. Because most forest-bathing studies have emphasized client outcomes rather than counselor implementation, I explored how licensed mental health counselors understood, implemented, and evaluated nature-based interventions such as forest bathing within clinical contexts. Understanding counselor perspectives clarified how ecotherapy aligns with wellness dimensions and will inform the development of standardized competencies to guide the ethical and practical application of ecotherapy.

Horticulture

Horticulture therapy is the use of gardening as a therapeutic intervention, offering a low-cost and widely accessible ecotherapy-related option for people of all ages. Wang et al. (2024) conducted a scoping review to explore existing research on the effects of horticulture therapy for the elderly population, specifically those in nursing homes. Wang et al. (2024) highlighted how horticulture therapy improves emotional well-being, reduces stress, and enhances cognitive function. It also emphasized the role of horticultural therapy in promoting physical activity, thus significantly improving the quality of life and supporting healthy aging in the elderly population. Alaimo et al. (2024) conducted a study examining the impact of gardening in natural settings, specifically through community gardens, on health and well-being. They interviewed 24 new gardeners, revealing that gardening promoted physical activity, food production, and emotional fulfillment from caretaking and being responsible for plants. They also described having feelings of accomplishment and connection to nature, which ultimately enhanced social relationships, self-worth, purpose, and mental health management.

This aligns with other research available, which showed that social support and overcoming challenges in horticulture therapy play a role in achieving positive outcomes and continued engagement, emphasizing the broader emotional and social benefits of gardening beyond just physical activity and food production (Alaimo et al., 2024). This also supported evidence showing that gardening enhanced physical activity, improved mental well-being, fostered social connections, and supported environmental sustainability. Furthermore, gardening provided a holistic approach to the well-being of diverse populations and has been linked to better cognitive health, reduced stress, enhanced diet, better chronic disease management, and notable positive impacts on physical and mental health (Beavers et al., 2020; Coringrato et al., 2024; Haluza et al., 2025; Rashmi Gangamma et al., 2023; Tracy et al., 2023).

Horticulture therapy contributed to multiple wellness dimensions identified in Swarbrick's (2006, 2012) model by combining movement, mindfulness, and social interaction. Methodological strengths across these studies included the use of longitudinal and mixed-methods designs, which captured both physical and psychosocial outcomes. Weaknesses included limited counselor involvement, inconsistent use of standardized instruments, and reliance on self-report measures. Because most horticulture therapy studies have focused on outcomes rather than counselor processes, a grounded qualitative approach was necessary to identify how licensed mental health counselors understand, implement, and evaluate horticultural interventions in alignment with professional ethics and client goals. These findings also illustrated how counselor-led gardening activities could become standardized competencies under ecotherapy, supporting recognition of nature-based counseling practices by the American Counseling Association.

Animal Assisted Therapy

Animal-assisted therapy has gained widespread recognition in the counseling field and is endorsed by both the American Counseling Association and the American Veterinary Medical Association. Animal-assisted therapy was increasingly acknowledged as a valid treatment for depression and other mood disorders, as therapy animals help fostered a sense of well-being, alleviated stress, and enhanced overall physical and emotional functioning (Jones et al., 2019; Parma Animal Shelter, 2022; Parshall, 2003). Kashden et al. (2020) conducted a study highlighting the potential effectiveness of animal-assisted therapy as an adjunct to traditional behavioral treatments for children with psychiatric conditions, showing improvements in mood, symptom reduction, and enhanced resilience, social skills, and emotional well-being in children. Koukourikos et al. (2019) emphasized the importance of the human-animal connection, identifying that trained animals working alongside therapists had also been shown to reduce negative symptoms of mental health disorders, improved patients' personal development, and enhanced their quality of life using common animals like dogs and horses. In a bibliometric study conducted by Sharma and Dhanoa (2022), the growth of research on animal-assisted therapy in mental health from 2001 to 2021 was analyzed, showing a significant increase in publications, particularly after 2017. The researchers highlighted the growing interest in animal-assisted therapy, focusing on its applications in healthcare, psychology, and the social sciences. Sharma and Dhanoa (2022) suggested that, while the field is still emerging, its potential impact on mental health has gained recognition. Arsovski (2024) highlighted the positive impacts of animal-assisted therapy on mental health conditions such as depression, anxiety, post-traumatic stress disorder, and schizophrenia. Interaction with therapy animals has been shown to reduce symptoms of mental health conditions and improve social engagement, especially in vulnerable populations, while also offering nonpharmacological treatment options (Arsovski, 2024).

Collectively, this research demonstrated that interaction with therapy animals enhanced emotional regulation, social engagement, and resilience. This corresponded to the emotional and social wellness dimensions. Strengths in this research included growth in empirical publications and increasingly rigorous outcome measurement. Weaknesses included methodological heterogeneity, small samples, and a limited focus on counselor roles, competencies, and ethical considerations. As animal-assisted therapy has achieved recognition through established competencies within the American Counseling Association, its trajectory provided a parallel for developing similar standards in ecotherapy. Examining the perceptions of counselors regarding nature-based work revealed parallels to the competency development that standardized animal-assisted therapy as an evidence-based approach, guiding how nature-integrated interventions have gained comparable legitimacy.

Walk-and-Talk

Walk-and-talk therapy combines physical movement with psychotherapy in an outdoor setting, offering unique benefits for both clients and therapists. Although there is no standardized framework, research suggests that walking while engaging in therapy fosters self-efficacy, well-being, and a different type of psychological processing. According to a study conducted by Revell and McLeod (2017), therapists found that walking side by side fostered a more collaborative and balanced dynamic, benefited their well-being, and refreshed their professional roles. While an outdoor setting offered unique advantages, it also presented challenges, such as confidentiality issues and weather constraints. The study highlighted the importance of further research, especially on client experiences and the psychological mechanisms underlying the effectiveness of this approach. Greenleaf et al. (2024) conducted a study highlighting both the benefits and challenges of walk-and-talk therapy in an urban environment. Participants largely agreed that walking enhanced creativity, problem-solving, and mind-body awareness while reducing stress and negative thoughts. The study suggested that these benefits may be linked to transient hypofrontality, improved blood flow to the brain, and changes in brain chemistry (Dietrich, 2004; Greene et al., 2018; Lin & Kuo, 2013). However, Greenleaf et al. (2024) noted that the distractions from city noise, the presence of other people, and confidentiality concerns were notable drawbacks. While urban settings may not be ideal for all clients, findings suggested that a more natural environment could enhance therapeutic outcomes by minimizing distractions and fostering a deeper connection with nature (Bratman et al., 2015; Greenleaf et al., 2014). Additionally, walking outdoors with a therapist introduced a dynamic element of the therapeutic relationship, strengthening the mind-body connection and incorporating nature as both a setting and an active influence in the therapeutic process (Clark, 2019; Harris, 2015).

Walk-and-talk therapy demonstrated how physical movement and environmental engagement strengthened the therapeutic alliance, creativity, and insight, which were directly linked to the emotional, physical, and social wellness dimensions. The strengths of this research included its real-world ecological validity and consistent positive outcomes in terms of well-being and stress reduction. Weaknesses involved methodological limitations such as small sample sizes, lack of standardized procedures, and minimal exploration of counselor training or ethical frameworks. Licensed mental health counselors played a pivotal role in determining how to ethically manage privacy, weather, accessibility, and informed consent when conducting therapy outdoors. Because no standardized competencies currently exist for walk-and-talk ecotherapy, exploring the lived experiences of counselors through a grounded qualitative design revealed both common practices and ethical challenges, providing a foundation for future competencies that the American Counseling Association could recognize and adopt.

Sandtray

Sandtray therapy is a form of ecotherapy that can be used within the indoor therapeutic environment as an expressive form of therapy in which individuals create a visual representation of their inner world using a tray filled with sand and miniature figurines or objects. Sandplay therapy began in the 1920s by Margaret Lowenfeld and was later expanded into sandtray therapy in the 1950s by Dora Kalff (Lowenfeld, 1993; Kalff & Turner, 2003; Schoonover, 2024). It is often used in psychotherapy with individuals of all ages to help clients process emotions, trauma, and experiences that may be difficult to express through words (Garrett, 2013; Kern Popejoy et al., 2020).

Although sandtray therapy typically occurs indoors, it is aligned with ecotherapy principles through its use of natural elements and tactile connection to the earth (sand, water, and symbolic materials). This modality supports emotional expression, somatic awareness, and cognitive integration, which corresponded to the emotional, spiritual, and physical wellness dimensions. Strengths of the existing research included its long history of clinical application and use in trauma-informed practice. Weaknesses included a limited empirical focus on its ecological aspects, and few studies addressed counselor decision-making in integrating sandtray for nature-based work. Exploring how counselors conceptualize indoor nature-based tools, such as sandtray, clarified how ecotherapy principles extend beyond the outdoor setting, emphasizing intentional use of natural materials to promote emotion regulation and narrative processing. This exploration contributed to building comprehensive competencies that define ecotherapy as a continuum of indoor and outdoor interventions, which also provides positive social change with respect to inclusivity and accessibility.

Nature-Based Prescriptions

According to Lu (2023), nature-based prescriptions, including activities such as walking in nature and gardening, are associated with reduced blood pressure and improvements in symptoms of anxiety and depression, indicating that spending time in green or blue spaces had a positive impact on both mental and physical health. Louv (2008) highlighted the physical and mental benefits that children gain from interacting with nature, including the experience of putting their hands in dirt. Louv (2008) explained that tactile experiences, like digging or playing in soil, helped children develop sensory skills, fostered creativity, and reduced stress. Additionally, engaging with dirt promoted a sense of connection to the earth, encouraged responsibility, and could improve a child's immune system, ultimately enhancing their overall well-being.

Research on nature-based prescriptions has consistently demonstrated improvements in physical and psychological outcomes, including reduced blood pressure, improved mood, and enhanced cognitive function. Strengths included their accessibility and availability as low-cost interventions, which make them relevant to diverse populations and community-based settings. Weaknesses included inconsistent delivery methods and the lack of integration with professional mental health services. Licensed counselors played a key role in bridging this gap by prescribing or recommending structured, goal-oriented nature exposure as part of clinical treatment. However, without defined competencies or guidance from the American Counseling Association, counselor-led nature prescriptions remain underused and unstandardized. Examining counselor perceptions through qualitative methods will illuminate how professionals conceptualize these practices within the boundaries of ethics and clinical practice.

This is useful to know because studies conducted over time consistently supported the positive impact of nature-related views and involvement on the positive enhancement of mental and physical well-being for individuals of all ages. Also, this suggested that ecotherapy interventions could be effective, low-cost interventions that improved both mental and physical health, particularly in environments with high levels of mental stress and risks of physical disease. This helped decrease the barriers some individuals faced, further emphasizing the importance of implementing ecotherapy as an evidence-based practice.

The integration of ecotherapy into mental health treatment has gained recognition as research continued to highlight the positive health benefits of spending time in nature (Maddock & Razani, 2024). However, despite these benefits, individuals in developed economies spent minimal time in natural environments. Furthermore, disparities in access to natural environments and disparities in access to nature existed among various population groups. Recognizing the connection to nature as a benefit to overall well-being and health, the field must take deliberate steps to establish ecotherapy as an evidence-based intervention within mental health care (Maddock & Razani, 2024).

Clinical Role in Ecotherapy

Licensed mental health counselors play a critical role in this process by providing expertise, structure, and therapeutic guidance that distinguishes ecotherapy from self-directed nature activities. Their perspectives were essential in ensuring that ecotherapy is intentionally integrated into treatment plans, using established psychological frameworks to address deeper emotional and cognitive patterns that are replenished when exposed to natural settings (Kaplan & Kaplan, 1989). Strategies for incorporating ecotherapy into mental health settings included developing standardized nature-based interventions, creating training programs for mental health professionals, and promoting policies that support nature prescriptions as a reimbursable clinical practice (Maddock & Razani, 2024).

Licensed mental health counselors could also play a critical role in integrating ecotherapy into mental health treatment by offering a structured and intentional approach that differed significantly from self-led nature-related activities. For example, a trained therapist could employ an ecotherapeutic intervention, utilizing nature metaphors to help clients articulate complex emotions and experiences, thereby facilitating a deeper understanding and cognitive flexibility (Joschko et al., 2023). This helped facilitate intentional reflection and encouraged mindfulness and self-reflection. Engaging in nature facilitated present-moment awareness, allowing clients to observe their internal experiences without judgment, while also participating in direct interaction with nature, which promoted a mind-body connection as a basis for healing. With the assistance of a helping professional, this awareness and mind-body connection could be enhanced through thought-provoking and insight-oriented dialogue. Like Wu et al. (2021), who claimed ketamine-assisted therapy addressed the mind-body connection through several mechanisms, including neuroplasticity enhancement and integration with mindfulness practices. This structure adopted a holistic approach to mental health, promoting a deeper connection between the mind and body (Wu et al., 2021).

Across these studies, it was evident that the role of the counselor transforms nature engagement into an intentional, clinically grounded process that integrated theory, ethics, and individualized goals. Strengths of existing work included a growing recognition of the need for professional training and structured frameworks. Weaknesses involved the absence of empirically validated competencies and limited data on how counselors assess appropriateness, risk, or client readiness for ecotherapy. Because counselor judgment and ethical discernment guide the safe and effective use of ecotherapy, a grounded qualitative design was appropriate to capture the lived experiences, insights, and implementation strategies of licensed mental health counselors. Understanding counselor perspectives is essential to developing training models and competency standards that could ultimately support the American Counseling Association's recognition of ecotherapy as an evidence-based practice.

Challenges in Standardizing Ecotherapy

Standardizing ecotherapy presents several challenges that hinder its integration into evidence-based practice, encompassing ethical, logistical, and training-related barriers. Ecotherapy encompasses a diverse range of practices, from horticultural therapy to wilderness excursions, resulting in inconsistencies in implementation and outcomes. This variability complicates the establishment of standardized protocols, which are essential for identifying a modality as an evidence-based approach. The absence of universally accepted guidelines and criteria makes it difficult to systematically evaluate the efficacy of ecotherapy, limiting its ability to become an evidence-based practice and be endorsed within mental health organizations (McLachlan et al., 2020).

For example, the American Counseling Association endorses competencies for animal-assisted therapy, disability, first responders, spiritual and religious counseling, and military populations, among others. These competencies were developed with the intention of presenting high-quality skills, knowledge, and behaviors to address issues in their respective areas (ACA, 2022). With the integration of nature into the therapeutic environment, unified competencies for ecotherapy will enhance practice.

A qualitative study conducted by King et al. (2022) highlighted that ecotherapists often encounter issues related to competency, client safety, and respect for nature, underscoring the need for guidelines tailored to nature-based therapies. Khan (2024) identified logistical challenges in implementing ecotherapy, which involve practical considerations, including securing suitable outdoor spaces that provide privacy for confidential reasons, weather-related disruptions, and accessibility for clients with mobility or health-related limitations. Licensed mental health counselors must navigate these logistical hurdles to provide consistent and equitable services. However, that should not preclude the standardization of ecotherapy. Other similar therapeutic models, such as animal-assisted therapy, have developed standardized approaches, given similar implications (e.g., client allergies, animal response, safety risks, and outdoor settings). Although the lack of established protocols for addressing these challenges further complicates the standardization process, it does not make it impossible.

The literature revealed a broad consensus that variability, ethical concerns, and logistical barriers impeded the formal recognition of ecotherapy as an evidence-based practice. Strengths of existing research included increasing scholarly attention to ethical and environmental considerations. Weaknesses included fragmented focus across modalities and a scarcity of empirical research centered on counselor perspectives. By examining how licensed mental health counselors understood, implemented, and evaluated ecotherapy, I identified themes that can inform the creation of unified competencies and ethical guidelines. This counselor-informed foundation is essential for bridging the gap between the demonstrated benefits of ecotherapy and its lack of standardization.

Standardization

Standardizing a therapeutic approach included forming professional societies and conferences dedicated to nature-based therapy, implementing common measures for assessing nature exposure and mental health outcomes, developing national guidelines based on quantitative data, and advocating for support from counseling organizations (Maddock & Razani, 2024). Additionally, gaining support from medical organizations, establishing educational programs, funding opportunities, and continued research will help standardize ecotherapy in mental health treatment as a standalone modality.

There are many different ecotherapy certification programs available through colleges and universities, including Antioch University, California Institute of Integral Studies, Institute of Global Education, Lewis and Clark College, University of Wisconsin, Earthbody Institute, Monmouth University, Mindful Ecotherapy Center, Wilderness Reflections, and TerraSoma Ecopsychology Training Institute. Although these training programs exist with a designed curriculum and professional organizations support them, the counseling field does not yet have a standardized approach.

These examples demonstrated the growing institutional interest in ecotherapy education but also highlight the inconsistency across programs. Strengths included increased availability of formal instruction and practitioner training. Weaknesses included the absence of national accreditation standards, inconsistent curricular content, and a lack of alignment with American Counseling Association ethics and competencies.

Exploring licensed counselors' perceptions of training and implementation revealed which skills and frameworks are most transferable to clinical contexts. These insights are crucial for developing a unified competency model that supports ethical practice and contributes to the recognition of ecotherapy as an evidence-based counseling intervention.

Wellness Model

Conceptual approaches to therapy are grounded in a specific model. For example, in cognitive-behavioral therapy, the foundational principles are that thoughts become distorted because of internalized anxiety. Through intentional and systematic exploration of these thoughts, change can occur. One example of a model is the ABCDE model as seen in Rational-Emotive Behavioral Therapy (Jorn, 2016). In terms of the benefits of ecotherapy, as demonstrated throughout this chapter, the wellness model most accurately identifies the connection between ecotherapy and the mind-body connection in the healing process.

Within this framework, I interpreted ecotherapy as an intervention that encompasses multiple dimensions of wellness, including emotional, physical, social, spiritual, and environmental aspects. The focus of ecotherapy on reconnecting individuals with nature parallels the integrative aim of Swarbrick's (2006, 2012) model to restore balance across interconnected dimensions of wellness. This model served as both an evaluative and conceptual structure, allowing the current study to align counselor-reported experiences with measurable dimensions of wellness.

Dimensions of Wellness

The dimensions of wellness are a set of interconnected areas that contributed to a person's overall well-being. These included physical, emotional, social, intellectual, spiritual, environmental, and occupational wellness (Swarbrick, 2006, 2012, 2023). These dimensions are interdependent, and improvement in one area often had a positive impact on the others. Ecotherapy and the wellness model were interconnected because ecotherapy helped individuals connect with nature, which played a crucial role in healing emotional distress and promoting mental well-being. In the wellness model, the focus on environmental wellness aligned with ecotherapy practices that encouraged outdoor activities and nature immersion as a method for improving overall well-being. The theory posits that being in nature enhanced self-awareness, reduced stress, and fostered a sense of interconnectedness with the world around us, also impacting emotional and social dimensions (Buzzell & Chalquist, 2009; Clinebell, 1996; Jordan & Hinds, 2016).

Ecotherapy's impact extends beyond just the emotional benefits; it can improve the physical and social dimensions of wellness. The physical activity involved in ecotherapy practices, such as hiking, gardening, or nature walks, provides direct benefits to physical health. At the same time, the social aspect is facilitated by group activities in nature, enhancing community connection and social wellness.

The effectiveness of ecotherapy is often evaluated using diverse outcome measures, which can lead to inconsistencies in assessing its impact. A rapid review by Reis et al. (2023) highlighted the breadth of instruments used to measure the effectiveness of nature-based health interventions, indicating a lack of standardized metrics. This variability hampered the ability to compare results across studies and establish a cohesive evidence base. Additionally, Shean (2015) discusses methodological limitations, such as small sample sizes and the absence of control groups, which further restrict the generalizability of the findings.

Therapy-led ecotherapy activities provided a structured, evidence-based approach that enhanced their clinical value beyond the general well-being benefits of self-directed nature activities. Trained professionals integrated psychological frameworks, intentional reflection, and trauma-informed care to individualize interventions to the client's needs, ensuring safety and maximizing therapeutic outcomes. In forest and horticulture therapy activities, professionals facilitated guided mindfulness, emotional processing, and cognitive restructuring, helping clients develop resilience and self-awareness. Water-based ecotherapy, including blue mind therapy and ice baths, became a powerful tool for emotional regulation and trauma recovery when therapists incorporated breathwork, exposure therapy principles, and post-immersion reflections. Unlike self-directed activities, which may provide temporary relief, professional-led ecotherapy ensured long-term psychological integration and growth. However, the lack of standardized guidelines for ecotherapy limited its recognition as an evidence-based practice. Establishing a unified framework that defined ecotherapy and provided structure, therapeutic goals, and measurable outcomes supported its integration into mainstream mental health treatment, allowing it to be applied consistently and effectively across diverse populations.

The wellness model may be the missing framework within the field of counseling for guiding the standardization and integration of ecotherapy, as it can highlight the areas that need to be addressed. The model provides a comprehensive framework for standardizing and enhancing ecotherapy practices. By integrating ecotherapy into the various dimensions of wellness, ecotherapy can be more systematically applied to promote overall well-being. The wellness model ensures that ecotherapy is not only a therapeutic practice but also a holistic approach that addresses multiple aspects of health, making it a powerful tool for comprehensive healing and personal development.

Overall, the dimensions of wellness offered a practical framework for evaluating the broad and multidimensional effects of ecotherapy. The strengths of the current literature included consistent findings across physical, emotional, and social domains. Weaknesses included the absence of a unified measurement system and limited qualitative insight into how counselors facilitated changes across the dimensions. A grounded qualitative approach allowed me to examine how licensed counselors understood and described wellness outcomes across multiple dimensions, providing context that quantitative studies alone cannot capture. This provided a need for a qualitative understanding guided competency development and future research, which focused on establishing ecotherapy as a structured, evidence-based counseling modality.

Summary and Conclusions

The reviewed literature consistently demonstrated that nature-based interventions enhanced mental, emotional, and physical wellness, supporting improvements in emotional regulation, stress reduction, social connection, and physical health. These findings are consistent with the biophilia hypothesis and Swarbrick's wellness model, both of which emphasized the interconnectedness of humans and their environments as central to well-being. The research also demonstrated that diverse ecotherapy modalities, including forest bathing, horticulture, animal-assisted interventions, and walk-and-talk therapy, can effectively complement traditional approaches that promote holistic healing.

However, the literature revealed significant gaps in understanding how licensed mental health counselors understood, integrated, and evaluated ecotherapy in clinical settings. Most existing studies are quantitative, focusing on client outcomes rather than on counselor experiences, ethical considerations, or assessment practices. Additionally, a lack of standardized competencies and the absence of formal recognition by professional organizations, such as the American Counseling Association, limited the acceptance of ecotherapy as an evidence-based practice. These gaps hinder the development of consistent training, implementation, and evaluation standards. This reinforced the need for counselor-informed frameworks to guide ethical and practical integration.

The study addressed these limitations by exploring the lived experiences of licensed mental health counselors who used ecotherapy, thereby contributing new knowledge about counselor implementation and perceived effectiveness. Findings from this grounded qualitative approach provided insight into the creation of counselor-specific competencies and structured frameworks that may guide ethical and evidence-based integration of ecotherapy within mental health practice. Chapter 3 outlines the research design, participant selection, and data analysis used to investigate counselor perspectives, providing a methodological foundation for understanding the current and potential role of ecotherapy in counseling practice, which represents the only method that can used for accomplishing the task at hand.

Chapter 3: Research Method

Introduction

The purpose of this qualitative study was to explore the perspectives of licensed mental health counselors who incorporate ecotherapy or nature-based interventions into their counseling settings, specifically using the biophilia hypothesis and Swarbrick's wellness model (2006, 2012) as frameworks. This chapter outlines the research methodology for studying the implementation of ecotherapy in mental health treatment from the perspectives of licensed mental health counselors. I conducted an in-depth exploration to contribute to a deeper understanding of ecotherapy's role in mental health treatment, offering insights that could inform best practices, policy, training, and funding to standardize the ecotherapy modality as a standalone approach. In this chapter, we discussed research design and rationale, the role of the researcher, methodology, and issues of trustworthiness.

Research Design and Rationale

The research questions for this study were:

Research Question 1 (RQ1): How do licensed mental health counselors understand ecotherapy and receive training to use nature-related interventions in their counseling practice?

Research Question 2 (RQ2): How do licensed mental health counselors implement ecotherapy in their counseling practice?

Research Question 3 (RQ3): How do licensed mental health counselors assess appropriateness for and evaluate the impact of ecotherapy in supporting all dimensions of wellness among clients with mental health disorders?

I employed a qualitative, grounded theory research design to explore the perceptions and insights of licensed mental health counselors regarding the implementation of ecotherapy in mental health treatment. A grounded theory approach was suitable for this study because I aimed to develop a theory grounded in the lived experiences and insights of licensed mental health counselors, rather than relying on pre-existing frameworks (Urquhart, 2022). Given the limited standardization of ecotherapy, this methodology enabled the identification of key themes, patterns, and processes related to how ecotherapy was integrated into practice, the challenges faced by licensed mental health counselors, and the factors that influenced its effectiveness. By focusing on this perspective of implementation, I examined how licensed mental health counselors conceptualized and applied ecotherapy in real-world clinical settings, including its alignment with traditional therapeutic approaches, ethical considerations, and practical barriers. Grounded theory generated an emerging framework that explained the conditions under which ecotherapy was most effective, the adaptations necessary for different populations, and the strategies licensed mental health counselors used to ensure fits therapeutic value (Urquhart, 2022).

This research design contributed to a deeper understanding of ecotherapy's role in mental health treatment, offering insights that informed best practices, policy development, funding opportunities, and training programs for individuals in helping professions. Survey questions were created to align with the proposed structure of competencies based on a compilation of those that are endorsed by the American Counseling Association (e.g., animal-assisted therapy, first responder population, grief counseling, multicultural and social justice counseling), which can be found on the American Counseling Association's Competencies and Exemplary Practices webpage (ACA, 2022). By systematically analyzing the data of this study, I constructed a theoretical model of ecotherapy implementation that supports its recognition as an evidence-based practice and guides future research and clinical applications. Grounded theory was chosen because the goal of the research was to establish a theory.

Grounded Theory as Methodology

This study was designed to identify common themes of understanding, implementation, and evaluation of ecotherapy. Once identified, these themes could be used to generate competencies and provide more legitimacy to ecotherapy. It is only in this way that ecotherapy can be recognized amongst organizational bodies and insurance companies as a legitimate form of therapy, once that centers around nature and relies on therapeutic interventions. The results of this research aim to establish how ecotherapy extends beyond the human-nature bond and also enhances traditional therapeutic approaches, leading to more effective outcomes than current evidence-based approached. Grounded theory is the only method for accomplishing this.

As mentioned in chapter 1, versions of grounded theory were considered, and ultimately rejected. The research approach in this study was to stay as foundational as possible, so as to not complicate the process or create an overly intricate web of themes that could not transfer into competency development for future research. A review of existing competencies illustrated the simplicity in structure (ACA, n.d.). In remaining with a simple approach, open coding and then axial coding were used to analyze data through abstraction. Other formal stages of grounded theory, grouping data into concepts categories, and ultimately the competencies (theory) were alluded to in the research analysis, and used to generate implications. However, the extent of this research study ended with coding themes and subthemes. Although the grounded theory research design ends with a newly generated theory, for the purposes of dissertation, research ended with abstraction of codes into themes.

Despite that, grounded theory is still the most appropriate approach, provided the purpose of this research, mentioned in chapter 1, and the suggested steps in . Glaser (1998) suggested that there be no talk of the researcher's thoughts around the theory that was emerging during the coding process. Theory emerges during the writing process, which is represented by this paper, and then refined through rewriting at a later date, to create a manuscript to submit for publication, the focus of which will be concepts and categories. Sorting through memos, consulting literature, and reviewing panel of experts will lead to the final product of this research endeavor, a new "theory", operationalized as competencies, for submission to the American Counseling Association.

Role of the Researcher

As the researcher, my role was to facilitate the exploration of helping professionals' perceptions and insights with the implementation of ecotherapy in mental health treatment using the grounded theory approach. There were no personal or professional conflicts, as data were collected anonymously. Additionally, no ethical issues arose due to conflicts of interest or power differentials. No incentives were offered to participants. As discussed in the limitations, peer checking was used to address the potential for researcher bias. One role that is often found in qualitative research is the researcher as an instrument. Because data were collected via anonymous surveys, the researcher for this study was not considered an instrument; however, during the peer checking process, the researcher did engage in conversations to follow-up on expert opinion on themes. This was moderated by the chair of this study, Dr. Lane to ensure that interpretation of themes remained unbiased.

In terms of ecotherapy, I practice that modality with my clients and have first-hand account of its utility in substance use treatment. This drove my interest in pursuing the topic in research. Further, in conversations with peers and mentors, it became clear that there was no universal approach to when to use ecotherapy and in what ways. Its use appeared to be subjective. In researching the topic with my chair, we understood that in order for a therapeutic modality to be more widely used and understood, it needed to be standardized. Thus, the goal for this research is to find common elements of practical application. I am motivated to use this research as foundation for continued development of theory, operationalized as competencies, or standards, for the counseling profession as a whole.

Methodology

Population

The population for this study consisted of licensed mental health counselors who incorporated or had at least six months of experience using ecotherapy or nature-related interventions in the counseling environment. These professionals worked in diverse settings, including private practice, community mental health centers, rehabilitation programs, and nature therapy programs, providing insight into how ecotherapy has been applied across different client populations. The justification for this sample is that their perspectives are critical in understanding the practical implementation of ecotherapy, its benefits, and the challenges associated with standardization, practical considerations, and training requirements. Additionally, exploring the perceptions of licensed mental health counselors specializing in different ecotherapy techniques provided a comprehensive understanding of how nature-based interventions and the eight dimensions of the wellness model are adapted to meet client needs.

Sampling and Sampling Procedures

I employed purposive sampling to select participants with specific knowledge and experience using ecotherapy or nature-related interventions within the counseling environment. This ensured that the data collected was relevant to understanding its implementation in clinical practice. To further expand the participant pool, I used snowball sampling, which allowed initial participants to refer colleagues who also used nature as an intervention in counseling, thereby increasing the diversity of perceptions and insights collected. Emails were sent to the Michigan Counseling Association to list the survey information and link on their social media pages (see Appendix A). Additionally, professional and social networking platforms, such as LinkedIn and Facebook groups for mental health professionals, as well as specialized ecotherapy forums, were used to gather more participants. Participants were also recruited through professional organizations, conference announcements, conference presentations, and other online forums dedicated to nature-based healing and therapy interventions.

The inclusion criteria included limited and fully licensed mental health counselors who had at least six months of experience conducting ecotherapy or nature-based interventions in a counseling setting and were willing to participate in an anonymous online survey about their insights and observations on implementing ecotherapy in this setting. Exclusion criteria included licensed mental health counselors without experience in ecotherapy.

Using a combination of purposive and snowball sampling ensured that participants had direct, relevant experience with ecotherapy while broadening the study's reach through professional networks. This recruitment strategy I used captured diverse perspectives on the implementation, benefits, challenges, and potential for standardization of ecotherapy within mental health treatment, in accordance with the American Counseling Association Code of Ethics. To ensure data saturation, I recruited 10-15 participants who completed the survey in its entirety. This allowed for a richer exploration of the nuances in ecotherapy practice, the perceptions of licensed mental health counselors, and potential pathways for standardization, as data saturation was reached.

Procedures for Recruitment, Participation, and Data Collection

When participants started the survey from the link in the recruiting email or post, they were asked to read and agree to a consent form. Those who gave consent were taken through a brief screening to confirm that the potential participants met the inclusion criteria, which were outlined in the demographics section of the survey in Appendix C. This form collected demographic and professional details, including licensure status, years of experience, ecotherapy modalities practiced, and clinical settings in which they are practiced. The survey automatically ended if participants did not meet the inclusion criteria. The participants who met the inclusion criteria continued the survey, which was designed to gather information on their implementation of nature-related interventions in therapy, their assessment and screening for use and relation to Swarbrick's wellness model dimensions, evaluation of effectiveness, and their insights on standardization as an evidence-based practice (Appendix B).

Recruitment efforts focused on achieving participant diversity by reaching out to licensed mental health counselors across the United States, rather than limiting the study to a specific region such as Michigan. By expanding the geographic scope, the study captured a broader range of ecotherapy applications across different environmental and cultural contexts. No incentives were offered to encourage participants to participate. By employing screening measures and a structured survey, this approach ensured a rigorous and comprehensive data collection process, capturing valuable insights into the implementation of ecotherapy and its potential for standardization in mental health treatment.

Data Analysis Plan

For this study, I used thematic analysis to identify patterns and themes within the qualitative data collected from anonymous online surveys. Thematic analysis is a flexible and rigorous method for analyzing qualitative data (Guest et al., 2012; Ravitch & Carl, 2021), enabling the identification of common experiences, challenges, and insights related to the practice of ecotherapy. After collecting the data, I reviewed the survey responses to gain an initial understanding of the data. Once this was completed, I generated initial codes to identify key phrases, concepts, and recurring ideas related to the implementation and effectiveness of ecotherapy. Codes were then grouped into overarching themes that reflected shared patterns in counselor perspectives, such as perceived benefits, barriers, and ethical considerations. The themes were synthesized into a comprehensive narrative, highlighting key insights and implications for the role of ecotherapy in holistic wellness and mental health treatment.

Issues of Trustworthiness

Ensuring trustworthiness in qualitative research required deliberate attention to credibility, transferability, dependability, and confirmability. I approached this process with transparency and reflexivity to ensure that the study's findings accurately reflected the participants' perspectives while minimizing researcher bias. Each component of trustworthiness was addressed through specific strategies that supported the rigor, integrity, and applicability of the study.

Credibility

Credibility was supported through triangulation, peer review, and reflexivity. Triangulation involved using multiple data sources, including survey responses, scholarly literature, and existing theoretical frameworks, to confirm consistency across findings. Peer review was conducted by two licensed clinicians who reviewed the coding structure and thematic analysis for accuracy, consistency, and alignment with the data. Their feedback was incorporated to strengthen the credibility and authenticity of the findings. Reflexivity was maintained throughout the study by documenting thoughts, assumptions, and analytic decisions in a research journal, thereby ensuring transparency in the development of interpretations. Although in-depth exploration was limited due to the anonymity of the participants, the process of coding and recoding supported depth and stability in theme development.

Transferability

Transferability was supported through a detailed description of the study context, participant demographics, data collection procedures, and participants' in-depth explanations of the integration of ecotherapy, as captured in their survey responses. I intentionally recruited licensed mental health counselors with varied levels of experience, geographic locations, and clinical settings to capture diverse perspectives. Despite the challenge of differing familiarity with ecotherapy, this strengthened the external validity and potential for broader application of the study's findings.

Dependability

Dependability was established through maintaining an audit trail, consistent documentation of research decisions, and triangulation. A research journal was used throughout the process to document reflections, procedural changes, and analytic decisions, ensuring that others could trace how data were collected, analyzed, and interpreted. Peer review and committee consultation provided an additional layer of dependability, allowing external feedback to confirm that interpretations aligned with the data. These strategies provided consistency and transparency throughout the study.

Confirmability

Researcher bias and dual-role conflicts presented another concern, as my background and interest in ecotherapy could have influenced data collection, analysis, and interpretation. Confirmability was supported by maintaining reflexive awareness through journaling and periodic debriefing with my committee chair. Another way confirmability was supported was by peer debriefing within the peer checking process, ensuring that findings were grounded in participant data rather than personal assumptions. Together, these strengthened objectivity and ensured that codes and themes were supported by participant data.

Reliability

To support reliability, I conducted repeated rounds of coding to ensure internal consistency. I periodically reviewed codes and themes to ensure accuracy and coherence across the dataset. Reliability was strengthened through peer checking, where codes and themes were discussed and validated, reinforcing the dependability and accuracy of the thematic analysis.

Ethical Procedures

I adhered to ethical standards to ensure participant confidentiality, maintain objectivity, and respect the cultural and ecological aspects of ecotherapy. Participants were informed that their involvement was voluntary, and their perspectives would be analyzed independently of my personal experiences or professional stance on ecotherapy. I obtained Institutional Review Board (IRB) approval prior to data collection, and all procedures complied with ethical guidelines for research involving human participants. Participants were provided with an informed consent outlining their rights, including the ability to withdraw at any time without consequences.

Ethical concerns related to recruitment were addressed by ensuring that participation did not create dual-role conflicts, coercion, or perceived pressure to participate. The recruitment materials clearly stated the study's purpose, its voluntary nature, and the absence of incentives. To protect participant anonymity and data security, all responses were de-identified, and any personally identifiable information was removed. Data were stored on a password-protected, encrypted system, with restricted access. All data will be stored for five years following publication and then permanently deleted.

I was mindful of ethical considerations in data collection, including the sensitivity of mental health treatment and the diverse cultural perspectives surrounding ecotherapy. To promote cultural inclusivity and respect, I acknowledged and honored the land on which ecotherapy takes place, recognizing the Indigenous communities and their historical connections to the land and nature. This was achieved through land acknowledgments, ensuring that findings were presented in a culturally sensitive manner.

I was also mindful of potential power dynamics, given my dual role as both a counselor and a researcher. To minimize bias and maintain participant safety, I did not recruit individuals with whom I had prior personal or professional relationships. This supported the integrity of the research process and reinforced trustworthiness within ethical boundaries.

Summary

In Chapter 3, I outlined the methodological framework that guided this qualitative study, including research design, participant selection, data collection, and data analysis procedures. I also detailed the strategies used to ensure trustworthiness through credibility, transferability, dependability, and confirmability. Ethical safeguards were emphasized to protect the confidentiality of the participants, promote cultural inclusivity, and ensure transparency throughout the research process. These procedures supported the study’s rigor and reinforced the integrity of the findings. The comprehensive design of this study allowed for the exploration of licensed mental health counselors’ experiences with ecotherapy, highlighting how they understood, implemented, and evaluated their role in clinical practice. By integrating reflexivity, triangulation, and member checking, I ensured that the themes generated accurately reflected the participants' perspectives. This foundation provides confidence that the data reflected authentic insights into the professional application or nature-based interventions in counseling. Chapter 4 presents the results of this analysis, organized around major themes that emerged from participant responses, as well as describing how these findings illuminate the current understanding of ecotherapy within counseling, reveal challenges in its standardization, and highlight the implications for training, supervision, and future recognition by the American Counseling Association as an evidence-based practice.

Chapter 4: Results

Introduction

I explored the perspectives of licensed counselors on the use of ecotherapy and nature-based interventions within clinical practice. The purpose of this qualitative study was to investigate counselor perspectives on ecotherapy using the biophilia hypothesis and Swarbrick's wellness model (2006, 2012) as frameworks. The research questions explored are (1) how licensed counselors understand and receive training in ecotherapy, (2) how they implement ecotherapy in counseling practice, and (3) how they assess appropriateness and evaluate its impact across the wellness dimensions. In this chapter, I presented the findings from a qualitative survey that examined the perspectives of licensed mental health counselors on ecotherapy. In this chapter, the setting, participant demographics, data collection and analysis, evidence of trustworthiness, and results are discussed. I organized the results around the three research questions, which identified how counselors understand and receive training in ecotherapy, how they implement ecotherapy into practice, and how they assess the appropriateness and evaluate the impact across various wellness dimensions. The analysis followed a grounded theory approach, coding participant responses into themes, subthemes, and codes to identify common patterns. The findings are grounded in participants' responses and interpreted through the biophilia hypothesis (Wilson, 1984) and Swarbrick's wellness model (2006).

Setting

I conducted this study by using a web-based qualitative survey distributed to counseling professionals. Participants were invited to share their perceptions and experiences using ecotherapy and nature-based interventions in the clinical therapy treatment setting. The survey was completed online anonymously, providing participants with flexibility to respond at their own pace and convenience, as well as the option to return to finish at a later time if needed. This approach enabled the collection of responses from counselors across varied practice settings and geographic regions. At the time of data collection, the counseling field continued adapting to increased telehealth use and post-pandemic workload demands, which may have influenced participants' perceptions of outdoor and nature-based therapy accessibility. No budgetary or organizational disruptions were reported that could have affected participation or data interpretation.

Demographics

I included demographic questions in the survey to gain a better understanding of the respondents' backgrounds. Of all participants who are practicing counselors, 16 held a professional licensure (e.g., LPC, LMHC, LCPC). They represented a variety of work settings, including outpatient clinics, partial hospitalization programs, schools, and private practice. Many respondents reported integrating ecotherapy into trauma-focused, grief, and anxiety-related work. While some counselors had direct training in ecotherapy, others reflected on broader aspects of counseling practice and their personal experiences with nature. This diversity provided a broad perspective on how counselors perceive the role of ecotherapy in mental health treatment. In terms of gender identity, racial identity, and geographic location, there was little variability. Most participants identified as white, female, and living in the United States (see Appendix D). Because there was little variability, demographics were not considered in data analysis. Despite this limited demographic diversity, the inclusion of varied clinical settings and experience levels enhanced the transferability of findings by representing a range of professional backgrounds.

Data Collection

Data were collected using a 30-question, anonymous, qualitative online survey, which included twenty open-ended questions. These questions involved asking demographic questions and open-ended items that invited participants to share their perceptions, experiences, and observations regarding ecotherapy interventions and the role of nature in mental health. Responses were gathered through the online platform Qualtrics and exported into an Excel file for analysis. Of the 34 responses, 17 respondents completed the survey. Of those 17, only one stated they did not use ecotherapy, and another individual stated they were not licensed. Across all open-ended questions, 15 participants who completed the survey offered a variety of in-depth responses. Although some participants provided thorough, narrative-style responses, others answered more briefly, resulting in variability in the richness of data across survey items. All qualitative responses were downloaded verbatim from Qualtrics and stored in password-protected Excel files. No technical failures occurred, and no deviations from Chapter 3 protocol were necessary. Furthermore, no unusual circumstances were encountered in data collection. The collection process concluded once data saturation was achieved, as no new codes or concepts were emerging in the final responses.

Data Analysis

I used grounded theory, a methodology that focuses on generating theories through systematic data collection and analysis (Urquhart, 2022), to guide the analysis. In this study, I used grounded theory to investigate how licensed mental health counselors integrated ecotherapy into their practice, and analyzed counselors observations and perspectives while facilitating the groundwork to develop a conceptual framework that illuminates the role and impact nature has in mental health treatment, ultimately building the foundation to create competencies for different ecotherapy interventions leading to the development of making ecotherapy an evidence-based standalone treatment modality in future research. During the analysis, the key phrases identified include, connection and interconnectedness, nature as healer, holistic wellness, mindfulness and grounding, somatic and spiritual awareness, therapeutic integration, formal and experiential training, access and resources, cultural competence, direct nature interventions, symbolic and creative practices, structured and informal approaches, physical and emotional benefits, relational and social benefits, spiritual and environmental benefits, safety and confidentiality, individualization, strengths and interests, collaboration, informal approaches, limited formal tools, gaps in standardization, consent and safety planning, professional and cultural ethics, and environmental responsibility. Key phrases were identified and grouped into subthemes. These subthemes included nature as healing connection, mindful integration and core principles, training and resource needs, methods and modalities, observed benefits and populations, ethical and practical considerations, client-entered interventions, assessment practices, and risk preparation and professional ethics. Axial coding connected these subthemes into larger categories based on the research questions of the study. These larger categories were understanding ecotherapy and receiving training, implementation of ecotherapy, assessing appropriateness, and evaluating impact. Using the constant-comparative method, I compared each coded unit with existing codes to refine categories and identify theoretical saturation. Discrepant cases, such as one counselor who reported not using ecotherapy, were disregarded and not included in the final sample count.

Evidence of Trustworthiness

Due to data being collected more quickly than expected, peer checking was not available for completion at conferences, including poster presentations and roundtables. Transferability was supported by providing examples of ecotherapy practices, which included direct quotations from participants. Dependability was ensured through an audit trail documenting coding decisions, category revisions, and analytic memos. Confirmability was established through reflexive journaling, which captured my analytic decisions and minimized researcher bias, while also supporting trustworthiness through peer checking. Peer checking was completed by two licensed clinicians who reviewed the coding and themes. Their feedback was incorporated to refine the codes and confirm alignment. There were no conflicts of interest for these peers as they are colleagues. Their feedback supported the credibility of the coding scheme and thematic structure.

Results

The participant responses revealed three overarching themes, which I discussed in greater detail in Chapter 5. These themes included understanding and receiving training, implementing ecotherapy, and assessing appropriateness and evaluating impact. I further organized these themes into subthemes; each grounded in codes derived from the participants' responses collected from the survey. The codes and themes illustrated both the advantages and challenges of integrating ecotherapy into counseling as a potential future stand-alone treatment modality.

Understanding Ecotherapy and Receiving Training

The first research question (RQ1) was, "How do licensed mental health counselors understand ecotherapy and receive training to use nature-related interventions in their counseling practice?"

The theme of understanding ecotherapy and receiving training emerged from the participants' responses. Participants consistently described ecotherapy as rooted in the connection between humans and the natural world. One participant reflected, "fostering a deeper connection with nature, promoting inner peace, discussion of spirituality without reference to a specific God," and another one noted, "the practice of deepening connection to the more-than-human world in an effort to increase wellbeing." Many participants emphasized that the therapeutic process emerges through this relationship, with nature serving as both a setting and a co-facilitator of the healing process. Counselors noted that ecotherapy promotes interconnectedness and reciprocity, highlighting how wellness extends beyond the individual to encompass environmental and community systems. This perspective reflects a holistic approach that positions mental health within broader ecological and relational contexts. A minority of participants, however, expressed uncertainty about how to define ecotherapy formally, suggesting a lack of standardized terminology and training. These discrepancy perspectives highlighted the need for clearer professional definitions.

Implementation of Ecotherapy

The second research question (RQ2) was, “How do licensed mental health counselors implement ecotherapy in their counseling practice?” The theme implementation of ecotherapy emerged. Participants described several methods for incorporating ecotherapy into their counseling practice. Some counselors implemented structured interventions such as forest bathing, horticulture activities, or conservation projects. Others integrated informal approaches, including walk-and-talk sessions, rituals, nature metaphors, or symbolic use of plants and animals.

Reported benefits spanned multiple dimensions of wellness. Counselors highlighted improvements in physical and emotional health, noting reductions in stress and anxiety, enhanced nervous system regulation, and greater overall holistic vitality. One participant noted, “The most frequent intervention I use is cultivating stillness, wonder, and awe. Often that looks like a meditation but what’s bubbling up inside is awe and joy and a much calmer autonomic nervous system.” Relational outcomes included stronger social bonds and an increased sense of belonging, while spiritual outcomes often centered on meaning-making, awe, and transcendence. Environmental awareness also emerged as a benefit, with participants observing that clients developed a heightened sensitivity to their ecological surroundings and responsibilities. Counselors emphasized that ecotherapy was particularly impactful with children, trauma survivors, and neurodivergent individuals, suggesting that these populations may be especially receptive to nature-based interventions.

Despite these benefits, participants identified ethical and practical considerations that complicate implementation. Concerns about physical safety, confidentiality in outdoor settings, client accessibility in resource-limited environments, and systemic barriers such as insurance and billing were recurring themes. Cultural sensitivity was also emphasized, with counselors cautioning against practices that may inadvertently reinforce colonial or exclusionary approaches to nature. Another finding was that its structure limits its consistent application, despite its creative potential. A few participants described institutional barriers, such as administrative resistance or lack of liability coverage, that prevented them from using outdoor settings. These outlier cases highlighted contextual factors that may hinder the integration of ecotherapy within agency-based counseling programs.

Assessing Appropriateness and Evaluating Impact

The last research question (RQ3) was, “How do licensed mental health counselors assess appropriateness for and evaluate the impact of ecotherapy in supporting all dimensions of wellness among clients with mental health disorders?” The theme assessing appropriateness and evaluating impact emerged. Counselors described assessment of ecotherapy as largely client-centered, individualized, and dependent on clinical judgment. Decisions about which interventions to use were often based on the client's preferences, strengths, and interests, with collaborative dialogue serving as the foundation for tailoring interventions. One participant stated, “interventions vary depending on client goals, age, interests, etc.," and "collaboration and planning with the client is super important as well as consultation with those who practice nature-based interventions and/or ecotherapy."

Most counselors reported relying on informal observation, clinical intuition, or client self-report when evaluating client progress. A few participants described using formal assessment tools such as the EcoWellness Inventory, PHQ-9, or GAD-7, but these were exceptions and not the norm. This absence of consistent evaluation practices highlights an ongoing gap in the field, as without reliable assessment measures, ecotherapy struggles to establish itself as an evidence-based modality.

Relative to the wellness model, responses demonstrated that counselors consistently identified benefits of ecotherapy across multiple wellness dimensions, but the depth of responses varied. The physical and intellectual domains were the most consistently addressed. Participants frequently reported improvements, including increased movement, reduced stress, relaxation, improved sleep, clearer thinking, and decreased anxiety. Similarly, emotional wellness was consistently reported by participants, who described increased emotional regulation, improved distress tolerance, and a better mood. Spiritual and social wellness were also frequently mentioned, often in terms of connection, belonging, awe, and meaning-making. However, responses for environmental wellness were less consistent, with limited elaboration outside of some participants' noting increased awareness, reciprocity, or responsibility toward nature. Occupational and financial wellness were the least developed. A few participants referenced career benefits, such as reduced burnout or cost savings compared to pharmaceuticals, but most participants either skipped these areas or provided minimal responses.

Risk preparation and ethical considerations also emerged as central concerns. Participants emphasized the importance of obtaining informed consent, implementing safety plans, and utilizing waivers or contracts when conducting sessions outdoors. Attention to cultural ethics and professional guidelines was crucial in protecting both clients and counselors. Environmental responsibility was also emphasized, with counselors articulating that ecotherapy should not harm the natural environment. Many participants discussed how they safety plan and approach risks, with one participant noting, “physical and psychological risks need to be considered as well.” These findings suggest that while counselors recognize the importance of ethical safeguards, practices remain varied and largely self-determined. Overall, these results indicated that although counselors valued the flexibility and perceived efficacy of ecotherapy, the absence of shared assessment standards and formalized ethics training limited consistency among practitioners.

Figure 1

Understanding Ecotherapy and Receiving Training

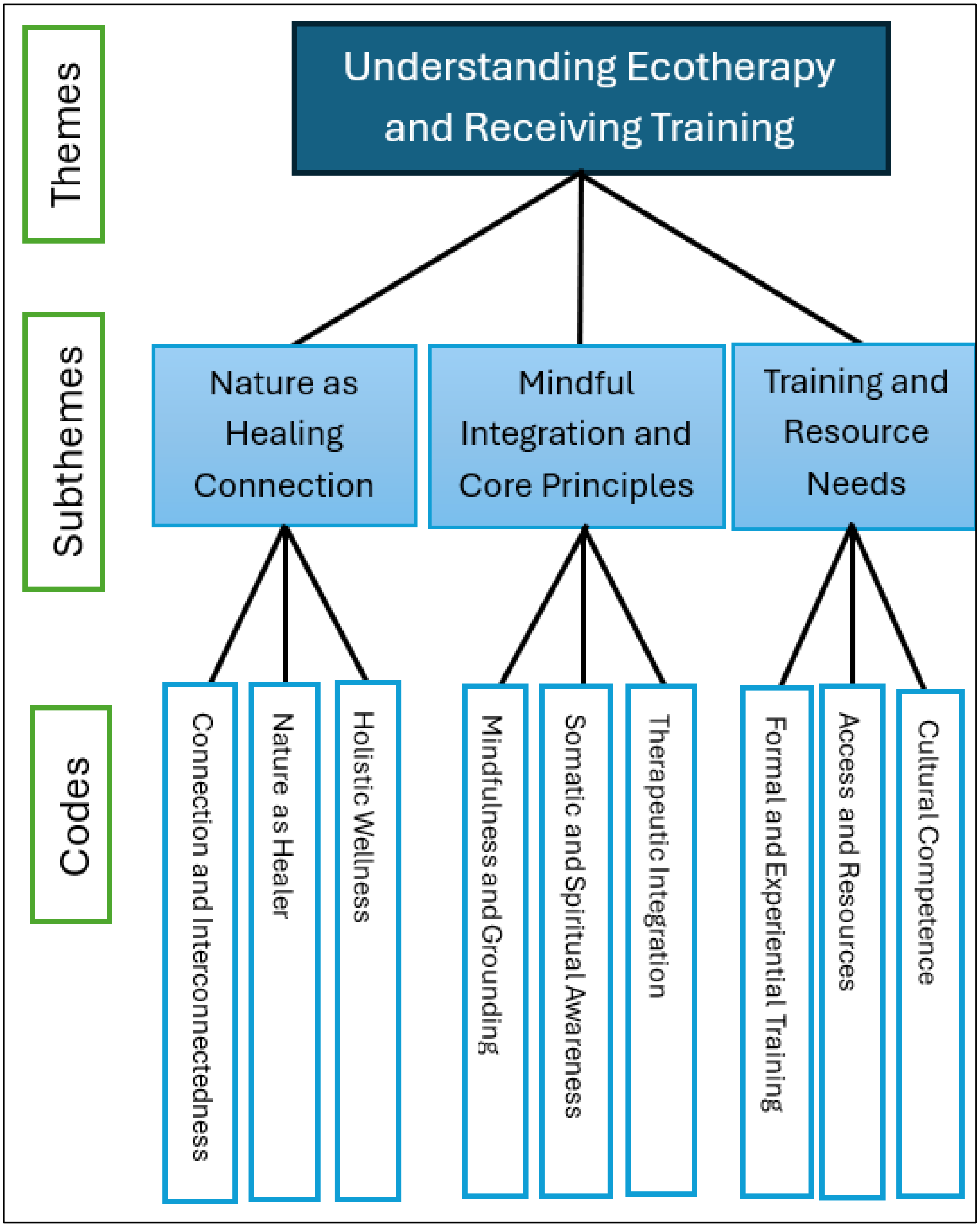


Figure 2

Implementation of Ecotherapy

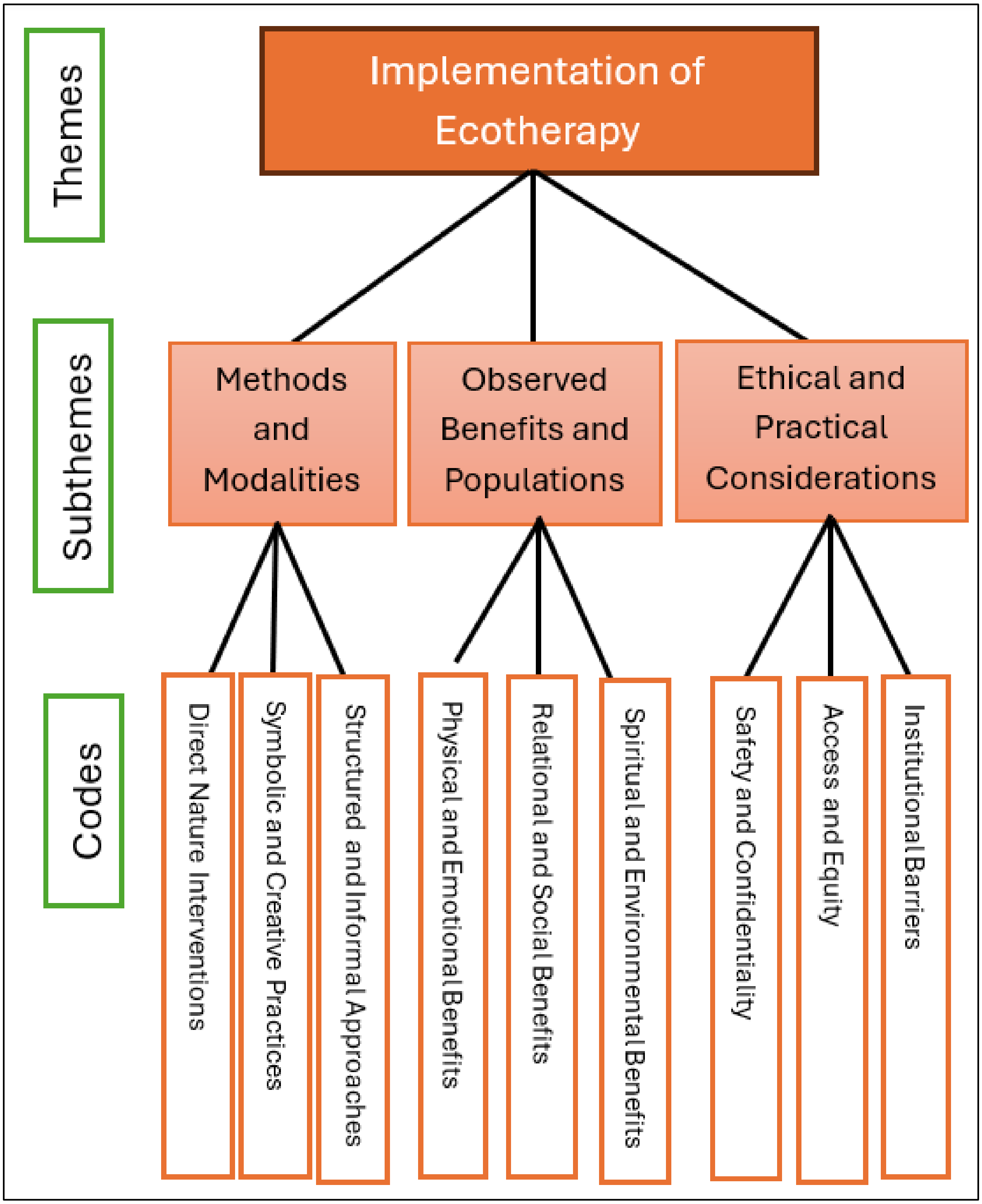
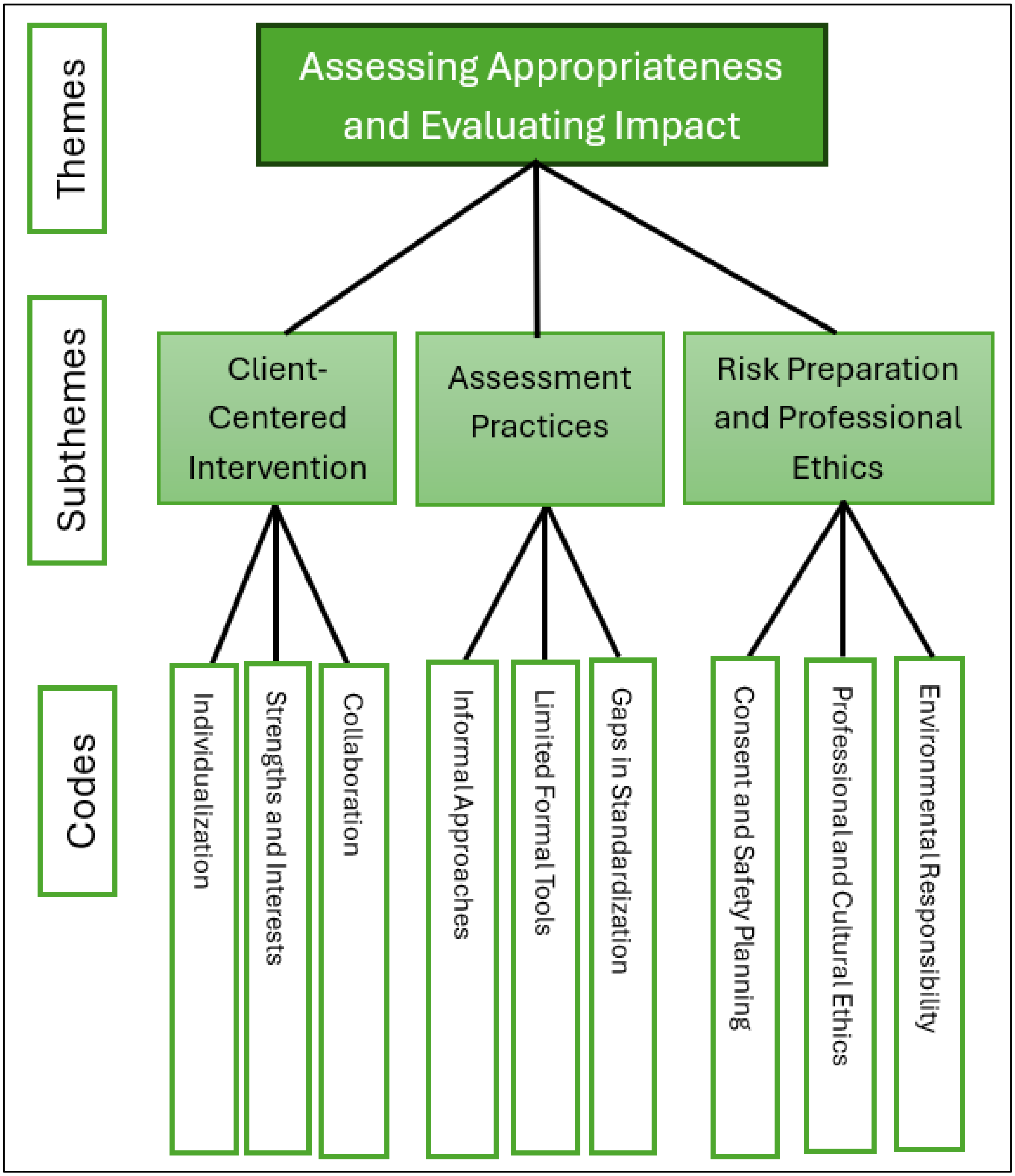


Figure 3

Assessing Appropriateness and Evaluating Impact



Summary

The findings demonstrated that ecotherapy is widely valued among counselors as a flexible, holistic, and meaningful approach to mental health treatment. Counselors view ecotherapy as grounded in the human-nature connection and enhanced by mindfulness, somatic awareness, and spiritual integration. Implementation is diverse, offering benefits across physical, emotional, social, spiritual, and environmental domains, though ethical and systemic challenges persist. Assessment practices are primarily informal, reflecting the field's reliance on clinical judgment rather than standardized tools. Together, these results highlight both the potential of ecotherapy to support wellness across multiple dimensions and the need for greater training, research, and institutional recognition.

These findings directly addressed the three research questions and revealed that while ecotherapy enhances client wellness, it lacked standardized frameworks for training, ethics, and evaluation. This study expanded disciplinary knowledge by identifying counselor-informed pathways for competency development and laying the groundwork for future evidence-based standardization. Chapter 5 interprets these results through the framework of the biophilia hypothesis and Swarbrick's wellness model, discussing implications for counselor education and supervision, and presents recommendations for practice, policy, and research.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this grounded qualitative study was to explore how licensed mental health counselors understood, implemented, and evaluated ecotherapy in clinical practice using the biophilia hypothesis and Swarbrick's wellness model as frameworks. I conducted an anonymous, web-based qualitative survey and analyzed the responses using grounded theory coding to identify themes and subthemes aligned with three research questions related to counselor understanding and training, implementation in practice, and assessment of appropriateness and impact. The key findings indicated that counselors described ecotherapy as a holistic, relational, and wellness-based practice rooted in the connection between humans and nature. Participants implemented ecotherapy through both structured and informal approaches, primarily evaluating client outcomes using individualized, client-centered methods rather than standardized tools. Counselors identified benefits across multiple dimensions of wellness, while also recognizing challenges related to training, ethical considerations, assessment, and institutional recognition. Overall, the study's findings both confirmed and extended the existing literature summarized in Chapter 2, confirming identified benefits such as stress reduction and improved regulation (Bai et al., 2025; Hunter et al., 2019), while also extending knowledge by documenting counselor-level processes, training gaps, and implementation barriers. In this chapter, I interpreted the findings in relation to the literature and model framework, addressed study limitations and trustworthiness, presented recommendations for research, training, and practice, discussed implications for positive social change, and highlighted the overall meaning of the findings and their contribution to the field of counseling.

Interpretation of the Findings

Understanding Ecotherapy and Receiving Training

The findings revealed that counselors perceive ecotherapy as a reciprocal and multidimensional process that benefited the mind, body, spirit, and community. Counselors viewed ecotherapy as rooted in the healing connection between humans and nature, which aligned with Wilson's (1984) biophilia hypothesis, emphasizing the innate human tendency to seek connection with the natural world. This finding confirmed previous research on the benefits of nature exposure (Bai et al., 2025; Hunter et al., 2019) but extended the literature by providing insight into how licensed counselors actively integrate these concepts into therapeutic work.

While counselors reported enthusiasm for ecotherapy and described diverse ways of integrating it into practice, they also identified barriers, including limited resources, lack of training, minimal formal recognition in counseling programs, and an overall lack of competencies and standardization. I found that most counselors gained their knowledge through self-directed learning, workshops, or experiential practice rather than formal coursework. This lack of structured education demonstrates a current gap in counselor education programs, which have historically prioritized evidence-based, office-based approaches over experiential or alternative therapies. These counselor-centered findings described perceptions and reported practices; however, they did not measure client outcomes directly and therefore do not establish causal claims about efficacy beyond what previous outcome studies reported.

Implementation of Ecotherapy

Counselors described implementing ecotherapy through structured interventions, such as horticulture therapy and forest bathing, as well as informal methods, including walk-and-talk sessions, mindfulness in nature, and symbolic use of natural elements. These findings supported the wellness model (Swarbrick, 2006, 2012), as participants identified benefits across multiple dimensions of wellness, including physical, emotional, social, and spiritual. This extended existing research by demonstrating that ecotherapy supported wellness beyond symptom relief and served as a holistic method for enhancing overall quality of life. At the same time, participants identified ethical and logistical challenges, including confidentiality, accessibility, and client safety. Cultural sensitivity was also emphasized, as counselors recognized the importance of respecting land, cultural traditions, and ecological boundaries. These results aligned with findings by King et al. (2022), who identified similar ethical concerns in nature-based therapies, and reinforce the need for clear professional competencies and standardized training. Overall, I found that while ecotherapy was implemented creatively and effectively across different client populations, the lack of structured competencies limited its consistency and recognition as an evidence-based approach.

Assessing Appropriateness and Evaluating Impact

Participants described assessing client appropriateness and evaluating progress using collaborative and individualized approaches, rather than relying on standardized tools. Counselors often relied on observation, clinical judgment, client preferences, and self-report to evaluate outcomes, occasionally incorporating measurements such as the EcoWellness Inventory, PHQ-9, or GAD-7. These findings aligned with Reis et al. (2023), who noted the variability in outcome measurement across nature-based interventions, and demonstrated that the absence of standardized assessment tools continues to be a major barrier to research replication and professional acceptance.

While most counselors emphasized benefits across the emotional, physical, and spiritual dimensions of wellness, some areas, such as financial and occupational wellness, were less frequently addressed. This finding suggested that counselors may benefit from additional training on how to intentionally incorporate all eight dimensions of wellness into ecotherapy practice, ensuring the approach remains comprehensive and balanced.

Ethical considerations were consistently emphasized, including informed consent, safety planning, and environmental responsibility. These results confirmed that counselors are aware of professional ethics yet apply them in varied ways, reinforcing the need for guidelines that reflect both counseling standards and ecological ethics.

Limitations of the Study

I identified several limitations in this study. The sample size was relatively small (*n* = 15), which provided a meaningful but limited snapshot of counselor perspectives and reduced the generalizability of the findings. While sufficient for an exploratory grounded theory design, this small sample may not fully capture the diversity of views across geographic, cultural, or professional contexts. I collected data through anonymous online surveys, which limited opportunities for probing, clarification, or deeper exploration that might have been achieved through interviews or focus groups. The conciseness of some responses, as evidenced by some participants providing only one or two words for open-ended items, constrained the richness of data available for analysis. Due to data being collected faster than expected, I was unable to use peer checking during conferences or round tables. Instead, I sought peer consultation from two licensed clinicians who had no conflicts of interest. While this provided a measure of trustworthiness, it did not allow participants to review interpretations and confirm the accuracy of thematic interpretations.

I identified additional limitations related to the nature and scope of the data. Participant responses reflected self-reported practices and perceptions, which may be influenced by recall bias, professional identity, or social desirability. This is particularly relevant given that some practitioners described ecotherapy in aspirational or philosophical terms rather than concrete practices. Furthermore, the study had contextual limitations, as it did not directly explore client perspectives and lacked longitudinal or outcome-based measures. Therefore, while counselor perspectives offer valuable insights into professional attitudes and experiences, they cannot confirm the actual impact of ecotherapy on client outcomes. These limitations emphasized the exploratory nature of the study and highlighted areas for future research that may address issues of diversity, depth, and outcome-based evaluation.

Recommendations

Based on the findings and limitations, I developed several recommendations for research, practice, and professional development. I recommend that future researchers conduct longitudinal studies to examine the sustained impact of ecotherapy on client outcomes in mental health treatment. I also emphasized the importance of mixed-method designs to combine qualitative perspectives with quantitative measures, such as symptom reduction and quality of life. Client perspectives are important to include, as they capture how ecotherapy is experienced by the recipient of treatment. I further recommend conducting comparative studies to help examine ecotherapy alongside traditional evidence-based practices, such as cognitive-behavioral therapy and dialectical behavior therapy, to assess their complementarities.

For professional practice, I recommend the gradual and thoughtful integration of ecotherapy into counseling through structured informed consent and safety protocols. As demonstrated in the findings in Chapter 4, clinicians using ecotherapy were not fully aware of the holistic nature of the approach. I concluded that increasing education in ecotherapy would strengthen the ability to apply a holistic framework. Developing competencies and best-practice guidelines for ecotherapy within professional counseling bodies such as the American Counseling Association will help bring legitimacy and standardization to ecotherapy as a stand-alone modality. Supporting practitioners in adapting ecotherapy interventions to diverse populations, including trauma survivors, youth, the elderly, and individuals in substance use recovery, will help provide a continuum of care that meets the holistic treatment needs.

For training and professional development, I recommend creating accredited certification and continuing education programs in ecotherapy, as well as expanding access through experiential workshops and supervised practice opportunities. Integrating ecotherapy into graduate-level counseling curricula, either as electives or modules within wellness and holistic counseling frameworks, would provide the necessary education needed to facilitate nature-based interventions. As mentioned in Chapter 2, CACREP does not have requirements that universities offer education in alternative therapies. Pursuing these post-graduation studies can be costly and can lack adequate supervision.

My recommendations for policy and systemic contributions included advocating for insurance recognition of ecotherapy practices when paired with established evidence-based modalities (e.g., mindfulness-based stress reduction, cognitive-behavioral therapy). I also supported advancing equity and access by ensuring that ecotherapy resources are available in underserved communities so that nature-based interventions are not limited to affluent or rural populations. I emphasized the importance of incorporating environmental justice perspectives into counseling practice to align client wellness with ecological sustainability. Taken together, these recommendations highlight the need for ecotherapy to advance beyond individual practitioner enthusiasm and toward structured, evidence-based, and inclusive implementation within the counseling profession.

Implications

I found that the findings of this study suggested that ecotherapy offers important contributions to counseling practice and mental health treatment outcomes. Participants consistently reported emotional stabilization and physiological regulation as key benefits, such as reduced stress, improved sleep, and decreased anxiety. These outcomes closely aligned with core recovery goals, which included improving regulation, sustaining effective coping strategies, and fostering resilience. I concluded that incorporating ecotherapy alongside established evidence-based practices could enhance treatment effectiveness by supporting holistic well-being (Jordan & Hinds, 2016).

Implications for the Individual Level

At the individual client level, ecotherapy provided accessible strategies that can improve daily functioning, emotional regulation, and overall quality of life. One participant noted, “clients can breath easier when outside during and afterward, always feel better, more relaxed, and usually sleep better.” Another added that clients demonstrated “increased ability to emotionally regulate and increased distress tolerance.”

These findings aligned with existing research, which has shown that time spent in nature is associated with decreased cortisol levels, reduced stress, and improved cognitive functioning (Bratman et al., 2015; Hunter et al., 2019). Ecotherapy also fostered empowerment by enabling clients to use natural settings or objects as coping tools, reinforcing autonomy in the healing process. For clients with limited access to traditional therapy, ecotherapy’s adaptability made it a valuable adjunct that strengthens resilience (Buzzell & Chalquist, 2010).

Implications for the Community Level

At the community level, I found that ecotherapy may have reduced inequities in care by offering nature-related interventions that are free or low-cost and widely adaptable. Several participants highlighted the feasibility of simple practices in outpatient programs, schools, or community agencies. For example, one participant stated, “makes them feel more connected to the area in which they live in. Bigger sense of awe and community and we-ness." Another participant stated, "improved connect with others, improved communication skills, increased sense of community within treatment facility."

These findings aligned with existing research that has shown community-based ecotherapy programs can foster social cohesion and collective well-being, particularly in marginalized populations (Summers & Vivian, 2018). By promoting accessibility, I concluded that ecotherapy held promise for reducing inequities in care, ensuring that holistic approaches are not reserved for privileged settings. By incorporating ecotherapy into community mental health frameworks, counselors can help promote collective responsibility for the environment while fostering shared healing spaces.

Implications for the Societal Level

At the societal level, ecotherapy had the potential to influence systemic change by bridging counseling with ecological responsibility. Participants described how ecotherapy connects personal well-being with environmental stewardship, such as "greater tenderness towards the environment we have been working in. A sense of friendship with it," "increased care and curiosity about the natural environment," "increased environmental awareness," and "it makes people more environmentally aware and more likely to engage in sustainable behaviors." Another participant noted, "disconnection from nature harms us all."

These findings reinforced the biophilia hypothesis (Wilson, 1984), which suggested that humans have an innate need to connect with nature, as well as ecopsychology's call to integrate ecological and psychological health (Roszak et al., 1995). I concluded that expanding ecotherapy into existing counseling practices could support societal movements toward sustainability, environmental justice, and holistic public health (Wolsko & Hoyt, 2012). The results of the survey indicate that most insurance companies do not provide reimbursement for complementary approaches as standalone services; instead, they seek established, evidence-based approaches for reimbursement. Policy recognition, such as insurance reimbursement for nature-based care, could have further extended its accessibility and impact.

Training, Ethics, and Technology

I emphasized the importance of training in ecotherapy. Participants noted ethical considerations, including confidentiality, safety, and cultural respect, highlighting the need for clear professional competencies. One participant noted, “I have a consent form and an indemnity form we go through together,” and another participant noted,

> “not everyone likes nature, so you have to know your audience before doing things that could turn someone off or, worse, cause stress or harm. Therapists should also consider the cultural norms and values of different land hosts and participants, such as asking permission to enter a space, a group’s history, and connection to a space (positive AND negative), risks of privacy not being absolute, environmental risks, always have a back-up plan ahead of time to compensate for dangerous or undesirable conditions (this eases the client’s stress and ensures the session can go on).”

I recommended that training in ecotherapy includes both experiential skill development and frameworks for ethical decision-making. Practicality and affordability also emerged as relevant considerations. Because ecotherapy interventions could be resource-light, they offered a practical complement to counseling without significant financial burden for agencies or clients. This supports the call for formalized ecotherapy training, encompassing both experiential and ethical dimensions (Jordan & Hinds, 2016).

I also noted that the implications of technology in expanding ecotherapy are worth considering. While not the focus of this study, I found opportunities for integrating virtual or augmented nature-based environments for clients with limited outdoor access. Technology provided a bridge for individuals in urban, medical, or otherwise restrictive environments, extending the reach of ecotherapy. I noted that this possibility warranted further exploration in both research and practice.

I found that this warranted further exploration opportunities to expand existing counseling frameworks. Ecotherapy aligned naturally with trauma-informed care through its emphasis on safety, regulation, and empowerment. It also complemented intersectionality frameworks, particularly by acknowledging barriers related to cultural access and systemic inequalities in the natural environment. Finally, ecotherapy connected ecopsychology, reinforcing the broader philosophical view that human wellness was inseparable from ecological well-being, encompassing the wellness model dimensions and the biophilia hypothesis, which recognized that humans have an innate connection to nature. Together, these frameworks provided a foundation for counseling that integrated ecotherapy in ways that are both ethical and responsive to diverse client needs within a multicultural context.

Conclusion

The purpose of this study was to explore the perspectives of licensed counselors on the role of ecotherapy in clinical practice, focused on its application in mental health treatment. Using a grounded theory approach, I found that counselors view ecotherapy as a holistic, wellness-based modality that enhances overall wellness while fostering a connection to the natural world. I confirmed existing literature on nature's therapeutic benefits but extended knowledge by highlighting counselors' perspectives on implementation barriers, training gaps, and ethical considerations. Through the findings, I revealed that counselors consistently described ecotherapy as a reciprocal and holistic practice, grounded in principles of interconnectedness, reciprocity, and respect for the natural world. Participants reported a wide range of modalities, including forest bathing, nature walks, animal-assisted interventions, horticulture, and symbolic rituals. I found that integration was shown to be highly adaptable, occurring through structured interventions, informal encounters, and hybrid approaches. Across various wellness dimensions, participants identified emotional stabilization, physiological regulation, and spiritual growth as the most frequently observed benefits, underscoring the potential for ecotherapy to complement traditional evidence-based treatments and lay the groundwork for establishing competencies with the goal of ecotherapy being recognized as a stand-alone, evidence-based practice.

At the same time, results highlighted several persistent challenges. Ethical considerations such as confidentiality, safety, and cultural respect were frequently noted, while assessment practices were eclectic and inconsistent. Although counselors expressed enthusiasm, ecotherapy was described as undervalued, fringe, or lacking adequate institutional support. Opinions on standardization were mixed, with some practitioners advocating for integration into mainstream counseling, while others preferred optional or elective use.

I concluded that ecotherapy occupied a transitional space in the counseling profession, indicating that it was deeply valued by practitioners, broadly beneficial across wellness domains, yet still seeking legitimacy through research, training, and professional recognition. Ecotherapy had implications that extended beyond the individual client, influencing communities and societies. At the individual level, it enhanced coping, resilience, and self-regulation. At the community level, it strengthened social support and ensured more equitable access to holistic care. At the societal level, it bridged the gap between human health and environmental sustainability, aligning mental health practice with ecological stewardship. Together, these findings underscore the potential of ecotherapy to enhance mental health practices, promote systemic equity, and foster positive social change.

By integrating the biophilia hypothesis and wellness model, this study demonstrated that ecotherapy aligned naturally with counseling's values of growth, balance, and self-awareness. The next step is the development of counselor-specific competencies and standardized training that can position ecotherapy as an evidence-based, ethically grounded approach recognized by professional organizations such as the American Counseling Association. Ultimately, the findings support ecotherapy as both a practical and philosophical contribution to counseling as a modality that enhances client wellness, empowers practitioners, and promotes positive social change by reconnecting people to the healing power of nature.

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Appendix A: Survey Invitations

Email Invitation

Subject line:

Ecotherapy and Mental Health Counselors – Survey

Email message:

There is a new study about exploring the experiences of licensed professional counselors using ecotherapy or nature-related interventions in clinical therapy sessions. For this study, you are invited to describe your experiences as a counselor using nature in therapy sessions.

About the study:

- One survey completed through Qualtrics, completed at the participant's pace.
- To protect your privacy, the published study will not share any names or details that identify you.

Volunteers must meet these requirements:

- Must be a limited or fully licensed professional counselor
- Must have at least six months of experience conducting ecotherapy or nature-based interventions in a counseling environment.
- Must be willing to participate in a survey about their insight and observations on implementing ecotherapy in the counseling setting.

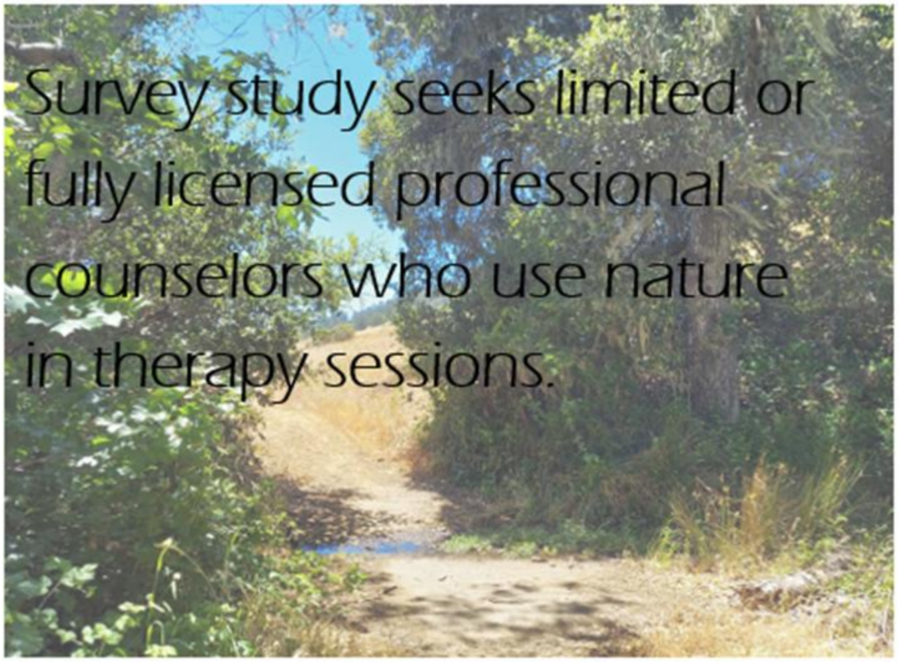
This interview is part of the doctoral study fo[redacted]. student at Walden University.

Please email [redacted] to let the researcher know of your interest. You are welcome to forward it to others who might be interested.

Thank you!

[redacted]

Social Media Invitation



Caption: There is a new study about exploring the experiences of licensed professional counselors using ecotherapy or nature-related interventions in clinical therapy sessions. For this study, you are invited to describe your experiences as a counselor using nature in therapy sessions.

About the study:

- One survey completed through Qualtrics, completed at the participant's pace.
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Volunteers must meet these requirements:

- Must be a limited or fully licensed professional counselor
- Must have at least six months of experience conducting ecotherapy or nature-based interventions in a counseling environment.
- Must be willing to participate in a survey about their insight and observations on implementing ecotherapy in the counseling setting.

This interview is part of the doctoral study for [redacted] student at Walden University.

Please message me privately to let the researcher know of your interest. You are welcome to forward it to others who might be interested.

Thank you!

[redacted]

Appendix B: Survey Questions

Demographic & Professional Background

1. Do you currently hold a license for mental health counseling?
2. How long have you been practicing as a licensed mental health counselor?
3. How long have you been implementing ecotherapy or nature-related interventions into your clinical therapy practice?
    a. I do not use ecotherapy or nature-related interventions in my clinical therapy practice.
    b. Less than 6 months
    c. 6 months to 2 years
    d. 2 years to 5 years
    e. 5 years to 10 years
    f. Over 10 years
4. Have you received any formal training in ecotherapy? Please specify.
5. How often do you incorporate ecotherapy into your therapeutic work?
    a. Daily
    b. Weekly
    c. Monthly
    d. Occasionally
    e. Rarely
6. In what setting do you primarily practice?
    a. Private Practice

   b. Community Mental Health Agency
   c. Hospital
   d. School
   e. Other
7. How do you describe your race or ethnicity?
8. How do you describe your gender identity?
9. Where do you live?
   a. United States of America
      1. Which state?
   b. Outside of the United States of America

Knowledge & Understanding of Ecotherapy

10. How do you define the broad definition of ecotherapy in your own words?
11. What sources have informed your knowledge of ecotherapy?
    1. Academic Research
    2. Professional Training
    3. Workshops
    4. Other
12. What do you believe are the core principles of ecotherapy?
13. What resources do you need to help facilitate the integration of ecotherapy into your practice?

Implementation of Ecotherapy Skills in Practice

14. What ecotherapy modalities do you implement into your practice?

a. Forest Bathing / Shinrin-yoku
b. Water / Blue Therapy
c. Sandtray
d. Animal Assisted
e. Horticulture
f. Wilderness Therapy
g. Nature Walks / Walk-and-Talk Therapy
h. Nature-Based Arts and Crafts
i. Nature Meditation
j. Earthing / Grounding
k. Other

15. How do you integrate it into your sessions (e.g. structured interventions, informal activities)?
16. What specific interventions from ecotherapy do you implement into your practice? Please share specific examples of what you use, leaving out any client protected health information.
17. What considerations should licensed mental health counselors be aware of when implementing ecotherapy or using nature-based interventions in the counseling environment?

Assessment & Screening

18. Please explain in detail how you decide which specific intervention is used for your clients based on client needs and preferences.

19. Do you use a formal assessment to help you screen for appropriateness?
20. When choosing a specific ecotherapy approach, how do you prepare the client for potential risks that may arise from being exposed to the specific nature-related interventions you use?

Evaluation of Implementation and Effectiveness

21. Considering the broader definition, what benefits have you noticed when implementing ecotherapy or nature-related interventions with clients?
    a. Physiological/Physical
    b. Psychological/Intellectual
    c. Environmental
    d. Social
    e. Occupational
    f. Spiritual
    g. Financial
    h. Emotional
22. How do you measure client progress from the frame of reference of ecotherapy?

Training, Ethics, and Professional Development

23. What is your opinion of ecotherapy as a standalone therapeutic modality?
24. Do you think ecotherapy should be a standardized part of therapist training programs? Why or why not?
25. In what ways would ecotherapy need to be understood to be considered an evidence-based practice?

Future Directions & Implementation

26. Are there specific client populations you believe benefit most from ecotherapy? If so, please explain.
27. Do you feel that ecotherapy is adequately supported within your field? Why or why not?
28. What resources do you believe would help therapists better integrate ecotherapy into their practice?
29. What advice would you give to therapists interested in incorporating ecotherapy into their work?
30. Please share any additional thoughts or experiences related to ecotherapy that you feel are important for this study to consider.

Appendix C: Demographics

Q7 - How do you describe your race or ethnicity?

How do you describe your race or ethnicity?
White
Anglo
Caucasian
White
anglo/white
Caucasian
White
white
White American
Caucasian
White
White
Caucasian
White
White
White

Q8 - How do you describe your gender identity?

How do you describe your gender identity?
Non-binary
Female
Female
Non-binary
female
Male
Female
CIS
Female
Female
Female
Cis woman
Female
Female
Cisgender female
Female

Q9 - Where do you live? - Selected Choice

Appendix D: Dimensions of Wellness