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Inviting the outside in: nature's contribution to counselor wellness

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INVITING THE OUTSIDE IN:
NATURE'S CONTRIBUTION TO COUNSELOR WELLNESS

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A

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Dedication

To those family camping trips on the beach, mama's first telescope that provided us a small glimpse of what was above, and to all the wonders of the natural world - including the moonflower that gives us white at night.

Acknowledgments

They say it takes a village to raise a child. For me, this adage describes my experience these last few years. I could have never completed this journey without the loving support of my family, especially my husband, Richard, who incessantly reminded me this would be worth it and on my darkest days, assured me I could do it. I am grateful to my parents, Barbara and Ronald Coleman, who instilled in their children love and appreciation for the natural world and its Creator. Anna and Rebekah, my sisters, continued to tell me they believed in me on days I did not believe in myself, and they always reminded me they were proud of me. I acknowledge Dr. Shirley Ogletree, my mentor and friend who introduced me to the research process so many, many years ago. She has remained my cornerstone. I will be forever indebted to Dr. Dan Dydek who trusted me to take my first step into a college classroom as a teacher; little did I know that first step would change my life forever. It was then I fell in love with the profession of teaching.

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These people and so many other dear friends, neighbors, and colleagues have been my village. I will always be indebted.

Abstract

INVITING THE OUTSIDE IN:

NATURE'S CONTRIBUTION TO COUNSELOR WELLNESS

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The positive influence of nature on client wellness and psychological health (Bonham-Corcoran et al., 2022) is well reflected in the emergence of nature-based counseling interventions such as wilderness therapy, walk talk therapy, and horticulture therapy, among other counseling modalities that involve aspects of the natural world (Lewis et al., 2022). This suggests that the inclusion of nature within the counseling session could also contribute to the wellness of the counselor. The purpose of this research was to determine the extent to which presence of nature contributes to counselor wellness and which of the five senses may play a greater role in wellness. The sample consisted of 58 licensed professional counselors and licensed professional counselor associates in the State of Texas. Composite wellness scores from the Five Factor Wellness Inventory (FFWEL) were compared with composite scores from the Nature Survey, an instrument designed to collect data on the extent nature is included and how it is sensed in the counseling session (Myers & Sweeney, 2005, 2014). A correlation coefficient was computed among the FFWEL composite scores and the Nature Survey composite scores and was nonsignificant. A factorial analysis of variance (ANOVA) statistical analysis was conducted to compare the individual main effects of each of the five senses and it was found that touch, when compared to the other four senses was significantly more associated with wellness scores.

Keywords: nature, nature-based, therapy, counselor, walk-talk therapy, wilderness therapy, ecowellness, outdoors, ecotherapy, wellness, senses, sensory information

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Chapter 1

Introduction

The professional counselor's commitment to wellness is non-negotiable. According to the American Counseling Association (ACA) and the Council for Accreditation of Counseling and Related Educational Programs (CACREP), for a licensed professional counselor, wellness is not only an ethical obligation (ACA, 2014; CACREP, 2019), being well influences self-perception, professional relationships, and holds the power to impact relationships with loved ones (Foreman, 2018). Much of the literature addresses counselor wellness from the perspective of investigating self-care strategies the counselor can implement outside of the counseling sessions. Of interest is how the physical context of the counseling session could also foster wellness. For example, when considering the restorative powers of the natural world on psychological health, it is not unreasonable to assume that simply inviting natural aspects, such as plants, windows with a view to the outdoors, non-human animals, or other forms of nature into the session could promote counselor wellness.

Expanding the literature on counselor wellness, specifically in how nature plays a part, will not only uphold the integrity of the counseling profession by contributing to counselor wellness research, but could ultimately impact the counselor's ability to genuinely and effectively assist the client to affect change. The aim of this research was to determine if the ability to sense elements of the natural world through vision, hearing, smell, taste, or touch, whether purposefully or without intention, could influence counselor wellness.

Statement of the Problem

Counselors are less likely to prioritize themselves and self-care is typically neglected at times it is needed the most for a variety of reasons including financial burden and inability to

allot the time required (Brownlee, 2016). Barton (2020) reported that before embarking on the counseling profession, some counselors did not feel they had been prepared for the challenges they would face in caring for themselves to the extent the profession demanded.

Literature is plentiful regarding self-care strategies that facilitate counselor wellness. However, the body of research in the subject of counselor wellness has primarily been dedicated to activities counselors can employ outside of the counseling context. It would be of value to the scientific community in the area of counselor wellness research to determine if the presence of nature within the counseling session contributes to counselor wellness. Further, if it can be established that simply incorporating a natural element into the counseling session has the potential to improve wellness, counselors could be more proactive in creating a physical context within their counseling sessions that fosters wellness. As a residual advantage, counselors could become more effective in their profession and experience a higher quality of life, both professionally and personally.

Research Questions

The contribution of the natural world to human flourishing is now being reflected within a variety of emerging counseling interventions such as walk talk therapy, wilderness therapy, and horticulture therapy. Other protocols that invite nature into the physical context of the counseling setting could include the presence of non-human animals or the placement of plants, rocks, or devices that produce sounds of nature. It is reasonable to surmise that if the presence of aspects of the natural world in the counseling session facilitates positive treatment outcome for the client, the benefits of nature could also contribute to counselor wellness. Worthy of investigation is if elements of nature, when present in the counseling session, contribute to counselor wellness. Further, if nature does indeed contribute to counselor wellness, it is of interest to determine

which sensory area of the five senses, vision, hearing, taste, touch, and smell, may serve as the primary conduit of sensing elements of the natural world. This study addressed the following research questions (and not in hierarchal order):

1. Is there a significant difference in means between the composite scores on the Nature Survey and composite scores on the FFWEL (Myers & Sweeney, 2005, 2014) that would reflect the more natural elements that are sensed in the counseling context the higher the wellness score?

2. Is there a significant difference in means between the individual vision scores and the hearing, smell, touch, and taste individual scores as reflected on the Nature Survey that would suggest counselors who are able to visualize aspects of nature score higher on the FFWEL (Myers & Sweeney, 2005, 2014)?

3. Is there a significant difference in means between the individual hearing scores and the vision, smell, touch, and taste individual scores as reflected on the Nature Survey that would suggest counselors who are able to hear aspects of nature score higher on the FFWEL (Myers & Sweeney, 2005, 2014)?

4. Is there a significant difference in means between the individual smell scores and the vision, hearing, touch, and taste individual scores as reflected on the Nature Survey that would suggest counselors who are able to smell aspects of nature score higher on the FFWEL (Myers & Sweeney, 2005, 2014)?

5. Is there a significant difference in means between the individual touch scores and the vision, hearing, smell, and taste individual scores as reflected on the Nature Survey that would suggest counselors who are able to touch aspects of nature score higher on the FFWEL (Myers & Sweeney, 2005, 2014)?

6. Is there a significant difference in means between the individual taste scores and the vision, hearing, touch, and smell individual scores as reflected on the Nature Survey that would suggest counselors who are able to taste aspects of nature score higher on the FFWEL (Myers & Sweeney, 2005, 2014)?

To answer these research questions, a one-way ANOVA statistical analysis research design was proposed. Rationale to use the one-way ANOVA first involved the ability of the one-way ANOVA to determine any differences that may exist between the composite scores on the FFWEL (Myers & Sweeney, 2005, 2014) and composite scores on the Nature Survey. Another rationale is that it would be determined if those counselors who are able to sense more elements of nature during their counseling sessions would score higher on the FFWEL (Myers & Sweeney, 2005, 2014). Further, by comparing mean scores produced by the one-way ANOVA statistical analysis, between wellness scores from the FFWEL (Myers & Sweeney, 2005, 2014) and scores from the Nature Survey, it would be determined if the presence of elements of nature within the counseling session was associated with counselor wellness. Should results from the one-way ANOVA statistical analysis indicate a significant difference in means, a subsequent post hoc test would provide additional information regarding differences in means between the individual scores on the Nature Survey pertaining to the five senses (sight, smell, taste, hearing, and touch), revealing where the variability lies. Specifically, it would be determined if the presence of nature within the counseling session impacts counselor wellness, and if so, which of the five areas of sensory response appear to be used primarily when compared to the other four senses.

The testing instrument proposed to measure counselor wellness was the Five Factor Wellness Inventory (FFWEL; Myers & Sweeney, 2005b). The FFWEL (Myers & Sweeney,

2005b), a testing instrument designed to assess wellness, contains the tenets of the *Indivisible Self Model of Wellness* (IS-WEL, Myers & Sweeney, 2005a). The IS-WEL (Myers & Sweeney, 2005a) is a wellness model that provides for a first order factor called the *Indivisible Self*. Within the Indivisible Self are five dimensions of wellness, or the five *selves*. These *selves* are considered second order factors and each second order factor contains third order factors. The *selves* are comprised of the *Creative Self* (positive humor, emotions, thinking, work and control), the *Coping Self* (stress management, leisure, self-worth and realistic beliefs), the *Social Self* (friendship and love), the *Essential Self* (gender identity, spirituality, cultural identity, and self-care), and the *Physical Self* (exercise and nutrition).

The FFWEL (Myers & Sweeney, 2005, 2014) testing instrument contains a total of 91 items and is formatted in a four-point Likert scale. The five selves are embedded within these items, and each self is a subscale. When combined, these five second-order factors (the selves) and their respective third order factors as outlined in the Indivisible Self Model of Wellness (IS-WEL, Myers & Sweeney, 2005a), and reflected in the items on the FFWEL (Myers & Sweeney, 2005, 2014) testing instrument, render one composite score for wellness called the Total Wellness score.

As an adjunct questionnaire to the FFWEL (Myers & Sweeney, 2005, 2014), a Likert type survey called the *Nature Survey* was specially crafted for this study. The purpose of the Nature Survey was to gather data from the participants regarding the extent to which they sense nature within the physical context of their counseling session. The Nature Survey contains five items, each addressing a different sense (vision, hearing, touch, taste, and smell). To provide clarity, examples of elements of nature that could be sensed were embedded within each of the five items and participants would be asked to report on a scale of zero (no presence of nature) to

nine (sense of being immersed in nature), the extent to which they sense nature through each of the five senses. Each value is that of a whole number (0, 1, 2, 3, 4, 5, 6, 7, 8, 9). For example, regarding visual awareness of nature, the participant would be invited to indicate on a scale of zero to nine the extent to which they are able to visualize the natural world during their counseling session. Items on the Nature Survey did not differentiate elements that are organic, such as live plants or flowing water, from the inorganic, such as an artificial plant or a device that produces the sound of flowing water.

The extent of nature and scope of this study included the presence of nature within the context of: (a) therapy conducted indoors that might or might not include aspects of nature such as potted plants (natural or artificial), windows, water fountains, nature noise machines, visual images of nature, and non-human animals such fish, cats, dogs, etc.; (b) therapy conducted indoors that might or might not include physical activity related to nature such as gardening or other horticultural activities; or, (c) therapy conducted outdoors that might or might not include sitting or that involves physical activity such as wilderness therapy, walk talk therapy, horticulture therapy, outdoor yoga, etc. By analyzing this data collected from the Nature Survey and data from the FFWEL (Myers & Sweeney, 2005, 2014) it would be revealed how scores from the Nature Survey reflecting the extent nature is sensed in the physical counseling setting compares to Total Wellness scores on the FFWEL (Myers & Sweeney, 2005, 2014). In addition, scores from individual items on the Nature Survey with regard to the five senses would reveal those senses that are primary in how counselors sense nature. Analysis of the data would also accommodate those participants who were physically unable to sense with all of the five senses such as those who are visually or hearing impaired.

It was predicted that data gathered from the Nature Survey and compared with scores from the FFWEL (Myers & Sweeney, 2005b) would determine if aspects of the natural world sensed within the physical context of the counseling session contributed to counselor wellness. Further, data collected from the Nature Survey would reveal the extent to which each of the five senses are involved. Scores 0-3 were to be be interpreted as minimal inclusion of nature was sensed, scores of 4-6 were to be interpreted as moderate inclusion of nature was sensed, and scores of 7-9 were to be interpreted as maximal inclusion of nature was sensed.

An additional residual advantage to the findings of this study would provide a deeper understanding of how the extent of the inclusion of nature in the counseling session may be reflected in specific second order dimensions, or the five *selves*, which comprise the Indivisible Self Model of Wellness (IS-WEL, Myers & Sweeney, 2005a). Specifically, are there any differences in scores reflecting significant inclusion of nature as indicated in the Nature Survey and subscores from the FFWEL (Myers & Sweeney, 2005, 2014) in the *Creative Self* (positive humor, emotions, thinking, work and control), the *Coping Self* (stress management, leisure, self-worth and realistic beliefs), the *Social Self* (friendship and love), the *Essential Self* (gender identity, spirituality, cultural identity, and self-care) and the *Physical Self* (exercise and nutrition) dimensions? It was anticipated that answers to these questions would provide a deeper understanding of the extent to which nature contributes to those specific second order factors.

Rationale and Justification for the Study

As a result of the coronavirus (COVID-19) pandemic, the year 2020 not only ushered in devastating physical consequences, but also took a substantial toll on psychological health including depression and anxiety (Reading Turchioe et al., 2021). A sense of loneliness and isolation were also identified as psychological stressors as a result of the pandemic (Ivbijaro et

al., 2020). Developing competence in providing telemental health services to an increasing caseload while navigating personal needs and crises exacerbated stress for those in the mental health professions (Fish & Mittal, 2021). This suggests that counselors remain vigilant in caring for their own wellness to insure they are able to meet the mental health demands of their respective communities. Meeting these demands and upholding the standards of the counseling profession can be fulfilling when the counselor has the rewarding opportunity to witness the client become more well, and client progress is more likely if the counselor is well (Lawson et al., 2007).

It was hoped that the findings from this research would have the potential to substantially impact the manner in which professional counselors approach personal wellness, especially regarding the physical context of their counseling sessions. While self-care strategies implemented outside the workday are effective and certainly beneficial for establishing and maintaining wellness, including aspects of the natural world in the counseling session may promote a heightened sense of well-being, which in turn may facilitate wellness. Findings from this study could result in the opening of new doors in helping counselors discover strategies that can be implemented within the counseling session, thereby improving not only their personal wellness but the well-being of their clients.

Limitations of the Study

Since early 2020, the COVID-19 pandemic required a profound shift in how counselors provide services. This undoubtedly required adjustments in the counseling context, which was prohibitive of face-to-face sessions, not only including traditional sessions held in an office setting, but also meeting in person outdoors. However, albeit limited, counselors now may have returned to previous counseling modalities. With the possibility there are fewer counselors

meeting face-to-face either indoors or outdoors, it was expected that the amount of data collected may be limited. Because of the demand to provide telehealth services, it was predicted that counselors who may not have previously included aspects of the natural world in the physical context of their counseling sessions may have made adjustments in the physical context of their counseling session. This could include whether it be conducting sessions in a room with windows, arranging potted plants in the room, or even establishing a private setting outdoors in which to conduct sessions whether conducted telemental health or face to face.

Another limitation to this study was that not all counselors have access to natural spaces or work within an environment in which they have control over the physical context of their counseling sessions. Some counselors may prefer to have aspects of the natural world in their session but are unable. For example, those counselors who may prefer to have plants in their office might be prohibited because there are no windows to expose natural light. The counselor may lack space or have limited knowledge in plant care. In addition, allergies to plants and/or animals might impede counselors from including aspects of nature in the counseling session context. Inclement weather may play a part in a counselor's choice to conduct counseling in an outdoor environment such as summer heat or winter's freezing temperatures. Limitations such as these and others considered, the general purpose of this study was to investigate the counselor's work environment and the extent to which aspects of the natural world are included, how counselors primarily sense nature, and if those who report sensing the inclusion of natural aspects in their counseling sessions score higher in wellness.

Definition of Terms

To better understand the research questions, the following terms are defined. These definitions are intended to provide clarity regarding wellness, nature, and the natural world as there are a variety of definitions that have been assigned these terms in the literature.

Wellness

Wellness has been defined from a variety of perspectives; the construct is generally conceptualized as engaging in a lifestyle that promotes optimal health (Brymer et al., 2010), and is a state of being that transcends the absence of disease (Whittier Olerich et al., 2021). Wellness is considered holistic in that it encompasses domains common to all humans, namely emotional, physical, social, and spiritual, among others (Fullen et al., 2018). For the purposes of operationally defining the construct of wellness in this study, it is was proposed to defer to Myers et al. (2000) who defined wellness as "a way of life oriented toward optimal health and well-being in which body and mind and spirit are integrated by the individual to live more fully within the natural community" (p. 252).

This definition of wellness is reflected in the all-inclusive *Indivisible Self Wellness Model of Wellness* (IS-WEL) developed by Myers and Sweeney (2005a). The IS-WEL, an evidence-based model (Myers & Sweeney, 2005a) originating from the *Wheel of Wellness* model (Hattie et al., 2004; Myers et al., 2000; Sweeney & Witmer, 1991; Witmer & Sweeney, 1992) was holistic as it approached wellness from several domains of human existence (Sweeney & Witmer, 1991). The IS-WEL provided a definition of wellness by identifying one higher order factor, the indivisible self, and five second-order factors containing 17 third order factors that when combined, collectively define wellness.

Referencing Myers and Sweeney (2005a), Freund et al. (2021) provided a comprehensive explanation of the second-order factors which included the *Creative Self, Coping Self, Social Self, Essential Self,* and *Physical Self.* Third order factors housed under the Creative Self are, positive humor, emotions, thinking, work, and control; the Coping Self contains stress management, leisure, self-worth, and realistic beliefs; the Social Self includes friendship and love; the Essential Self involves gender identity, spirituality, cultural identity, and self-care; and the Physical Self encompasses exercise and nutrition (Freund et al., 2021; Myers & Sweeney, 2005a). These factors and the respective selves to which they belong, contain the meaning of wellness and are collectively referred to as, *Total Wellness* (Perepiczka & Balkin, 2010). The instrument developed to measure Total Wellness was the Five Factor Wellness Inventory (FFWEL; Myers & Sweeney, 2005a). Scores used for this study would be gathered from the FFWEL testing instrument.

Nature and the Natural World

That which constitutes *nature* or *the natural world* is argued to be subjective (Bratman et al., 2012). To accommodate the scope of their study, Bratman et al. (2012), defined nature as, "areas containing elements of living systems that include plants and non-human animals across a range of scales of human management from a small urban park through to relatively 'pristine wilderness'" (p. 120). For the purposes of providing an operational definition for the term, nature, this definition was endorsed. However, to accommodate the scope of this study and to adequately understand the part nature might play in counselor wellness, the definition was broadened to include areas located indoors such as an office that may contain, plants, non-human animals, or other aspects of the natural world.

The five senses are the avenues provided human beings to sense stimuli such as nature and it is through the five senses humans are provided the opportunity to make meaning of their surroundings (Hutmacher, 2021). The basic five senses are seeing (vision), hearing (auditory), smell (olfactory), taste (gustatory), and touch (tactile) and are responsible for receiving, transforming, and delivering that which is sensed to the brain for interpretation (Myers & DeWall, 2019).

Chapter 2

Literature Review

Counselor wellness as a professional and ethical responsibility is justified as stories of physical, emotional, and sexual trauma, grief and loss, mingled with ethical dilemmas and other challenging issues are what define a counselor's workday, creating vulnerability to psychological stressors that compromise professional competence and human flourishing (Bray, 2018; Lee et al., 2017; Moffatt, 2018; Mullen et al., 2017). Attention to wellness is critical to the extent that professional organizations such as the ACA and the CACREP have identified counselor wellness as a professional responsibility and ethical obligation (ACA, 2014; CACREP, 2019).

The 2014 American Counseling Association (ACA) Code of Ethics, Section C, Professional Responsibility states, "In addition, counselors engage in self-care activities to maintain and promote their own emotional, physical, mental, and spiritual well-being to best meet their professional responsibilities" (p.3). Recognizing the severity of implications surrounding the lack of counselor wellness, in 2003, the Governing Council of the ACA created the ACA Task Force on Counselor Wellness and Impairment to encourage awareness and identify interventions to assist counselors who are impaired.

The obligation to meet these professional responsibilities is also reflected in the American School Counselor Association (ASCA) Ethical Standards for School Counselors (2016) B.3.f, calling upon school counselors to "monitor their emotional and physical health and practice wellness to ensure optimal and professional effectiveness" (p.7). Further, the CACREP Standards include "self-care strategies appropriate to the counselor's role" (Section 2, Standard F. 1. l., p. 10) as an educational standard for training professional counselors. Counselors who are impaired are at risk to harm their client; consequently edicts requiring counselor wellness

have resulted in a substantial amount of research on common maladies that threaten counselor wellness such as burnout and compassion fatigue (Lawson, 2007).

Burnout has been defined as, “overwhelming exhaustion, feelings of cynicism and detachment from the job, and a sense of ineffectiveness and lack of accomplishment” (Maslach & Leiter, 2016, p. 103). The causes of burnout consist not only of client factors and emotional demands imposed daily, but also of interpersonal relationships within the work environment, especially in the life of a new counselor (Fye et al., 2020; Sandhu & Singh, 2021). Factors not related to counseling duties such as perceived sense of professional identity can also contribute to counselor burnout (Maor & Hemi, 2021).

Compassion fatigue, also referred to as *vicarious traumatization* (Baird & Kracen, 2006; Hensel et al., 2015; McCann & Pearlman, 1990), as opposed to compassion satisfaction which is described as a sense of satisfaction and positive attitude toward one’s work (Waegemakers Schiff & Lane, 2019), can result from a counselor’s frequent exposure to traumatic occurrences (Bride et al., 2007). Can and Watson (2019) argued that a contributing factor to compassion fatigue involves how the client’s state of suffering may evoke similar emotions within the counselor. Further, it is argued that some have been drawn to the counseling profession as a result of a personal history of trauma (Martin-Cuellar et al., 2019) which may in turn create a vulnerability to compassion fatigue (Hensel et al., 2015). Figley and Rainer (2002) defined compassion fatigue as “a state of tension and preoccupation with the traumatized patients by re-experiencing traumatic events, … associated with the patient” (p. 1435). Figley and Rainer (2002) further argued that compassion fatigue is a “function of bearing witness to the suffering of others” (p. 1435). As providing a sanctuary in which a clients can share their suffering is one of the

hallmarks of the counseling profession, this suggests that the threat of compassion fatigue is constant and ubiquitous (Cook, et al., 2021).

It has been argued that events that occur on a global scale such as natural disasters, sociopolitical conflicts, and other societal stressors contribute to compassion fatigue to the extent that Robino (2019) introduced the term *global compassion fatigue* to reflect the emotional impact of global events on counselors. Vulnerability to compassion fatigue, especially when working with victims of trauma is omnipresent (Cowan et al., 2020), jeopardizing counselor wellness. Singh et al. (2020) posited that compassion fatigue can create emotional exhaustion, and therefore, impede a clinician's ability to provide effective treatment, which in turn compromises personal psychological health.

Those in crisis and who have suffered a traumatic event, whether personal, community or at a global level, often seek counseling to process their experience (Anderson et al., 2022; Lazar, 2022). One such global stressor, the COVID-19 pandemic, ushered a profound impact on mental health resulting in increases in depression, anxiety, post-traumatic stress disorder, and other psychological issues (Asmundson & Taylor, 2020; Boyraz et al., 2020; Xiong et al., 2020), as well as creating additional stress on familial relationships (Hervalejo, 2020). Individuals who had previously been diagnosed with a serious mental illness such as bipolar disorder, depression, or schizophrenia especially suffered as a result of the social distancing guidelines required during the pandemic (Hamada & Fan, 2020; Nieweglowski &, 2021). To investigate the impact of COVID-19 protocols on dimensions such as financial distress and anxiety, data collected from the Healthy Minds study, an on-line survey of United States college students across a variety of campuses over the 2020 fall semester, revealed that depression and anxiety were significantly associated with daily life adjustments that COVID-19 protocols enforced on college students (Oh

et al., 2021). Further, a study investigating the impact of COVID-19 at a minority serving college in New York City found that students reported significant depression, anxiety, and stress, and deterioration of psychological functioning as a result of lockdown mandates (Lopez-Castro et al., 2021).

At the least, many experienced an increase in stress and fear due to altered changes in daily habits during lockdowns and quarantine (Brooks et al., 2020; Gloster et al., 2020). For counselors, the COVID-19 pandemic not only increased mental health demands in meeting the needs of the community (McInerny, 2021), but exacerbated stress and brought new challenges such as developing a therapeutic alliance and learning to navigate telemental health technology (Maurya et al., 2020), which in turn introduced additional ethical concerns regarding confidentiality (Johnson & Rehfuss, 2021). The deleterious impact of COVID-19 on counselors' personal lives was compounded by the stresses experienced by their clients, requiring considerable resilience in the counselor (Litam et al., 2021).

A review of the literature on stress and the counselor revealed there are other precursors to stress that may not be clearly recognizable. For example, in a qualitative study exploring interpersonal stress, Moore et al. (2020) argued that counselors experience stress by mere virtue of the dynamics within the therapeutic relationship. Shell et al. (2021) investigated stress related to race, finding that race related stress predicted traumatic stress response mental health in therapists who are Black. These findings are consistent with Interiano-Shiverdecker et al. (2021) who reported that counselors in training who were foreign born reported higher levels of stress than their Caucasian counterparts. Another factor that contributes to stress is client treatment outcome. In a study exploring stress and substance abuse counselors, it was argued that client

resistance to treatment and relapse were found to contribute to counselors' psychological distress (Baldwin-White, 2016).

Historically, and especially prior to the COVID-19 pandemic, counselors conducted therapy in a traditional office setting with chairs, tables, and pictures on the walls, representative of a professional and multiculturally sensitive counselor-client relationship (Devlin et al., 2013), and in an orderly atmosphere orchestrated to convey warmth and acceptance (Nasar & Devlin, 2011). In the wake of COVID-19, sitting in an office opposite one's client was halted for many counselors as quarantining orders and social distancing protocols were implemented. As a result, counselors resorted to providing telemental health services through video conferencing (Patel, 2020), a novel demand that only exacerbated the challenges counselors and other licensed mental health professionals were experiencing in providing services to their clientele during the pandemic (Viswanathan et al., 2020).

Another challenge reported by counselors, whether meeting face to face or meeting through video teleconferencing, is that counselors are mostly sedentary and depending on caseload, are sitting for possibly several hours per day, most days of the week (Harrison & Tudor, 2020). In considering the restrictions brought by COVID-19, Meyer et al. (2020) found that the reduction in time being physically active and an increase in screen time were associated with a negative impact on mental health. These findings are consistent with Lothes and Nanney (2020) who found a relationship between physical activity in a variety of domains of wellness including sleep, intimacy, self-responsibility, love, and thinking.

These neoteric challenges introduced by COVID-19, as well as those that have historically compromised counselor wellness such as compassion fatigue, burnout, and workload (Gutierrez et al., 2019; Hendricks et al., 2009; Stebnicki, 2007) continue to impact those in the

counseling profession, creating the risk of leaving the profession prematurely (Merriman, 2015). Further, because many students upon entering the counseling profession are struggling with existing issues, Witmer and Young (1996) recommended that the counseling program curriculum require students to create a personal statement of commitment to wellness and that faculty members should model a lifestyle that promotes wellness. Building upon the imperative of Witmer and Young (1996) for counselors to be well, Myers et al. (2016) further proposed that counselor wellness begins with well counselor educators, asserting, "well counselor educators produce well counseling students who, in turn, can produce well clients" (p. 29). This call of duty for counselor educators to be well was supported by Yager and Tovar-Blank (2007) who argued that to be effective in educating their students in the value of wellness, counselor educators should model wellness behaviors.

Attention to the wellness of the counselor-in-training (CIT) has become center stage to the extent that there has been a call to incorporate counselor wellness practices into CACREP counselor education curriculum (Harrischand et al., 2021). This pedagogical imperative translates to the supervisory context to provide support and encouragement for their counselor in training supervisees to engage in self-care (Lenz et al., 2012). Attention to the wellness and self-care practices of counselors in training is not only an ethical obligation of counselor supervisors (Orht et al., 2014), but supervision provides the optimum context to monitor wellness practices of counselors in training in their professional development (Callendar & Lenz, 2018) and has been argued to have positive impact on supervisee wellness (Meany-Walen et al., 2016). This is supported by Gleason and Hays (2018) who contended that counselor educators are responsible in promoting wellness in their students. Further, Mellin et al. (2011) argued that within the

context of supervision, wellness should be considered a key element in counseling students' professional identity development.

The term, self-care, is frequently used in dialogue regarding wellness and well-being; yet, literature has been unable to deliver a universally accepted agreement of that which defines self-care (Wyatt & Ampadu, 2020). However, there does appear to be a consensus in acknowledging that the practice of self-care is inclusive of both the psychological and physical domains. For example, Eckstein (2001) argued that balanced self-care involves attending to five specific areas. According to Eckstein (2001), those consist of the mental, emotional, spiritual, social, and physical domains. This is supported by Myers et al. (2012) who described the practice of self-care as, "engagement of behaviors that maintain and promote physical and emotional well-being" (Myers et al., 2012, p. 56). Myers et al. (2012) included as examples of self-care practices such as physical activity, sleep, and mindfulness.

It is generally supported that counselors who engage in self-care are more likely to be well, including counselors in training (Guler & Ceyhan, 2021). Further, failure to attend to self-care as a professional responsibility can have disastrous consequences as a fatigued counselor is not only susceptible to committing ethical and boundary violations but is at risk of leaving the profession prematurely (Merriman, 2015). Recognizing the serious implications of unwell counselors, literature dedicated to wellness research has generously attended to self-care activities in which counselors can engage outside of work. Examples include mindfulness (Dye et al., 2020; Friedman, 2017), creative activities such as scrapbook journaling (Bradley et al., 2013), the practice of self-compassion (Coaston, 2017), creative writing (Warren et al., 2010), yoga (Thompson et al., 2018), attention to spirituality (Hardiman & Simmonds, 2013), and personally engaging in psychotherapy (Norcross, 2000).

A review of the literature on counselor wellness has revealed that while attending to self-care is recognized as critical in providing competent and effective treatment, psychotherapists tend to prioritize the needs of their clients at the expense of their own self-care (Figley & Rainer, 2002). While it is imperative for counselors to monitor their own stresses and remain mindful of vulnerability to impairment (Cummins et al., 2007), some counselors may feel they are impenetrable to burnout because of their insight, professional experience, and training (Meyers, 2015). In research addressing barriers to self-care, Baker and Gabriel (2021) found that lack of financial resources, feelings of guilt for spending time away from family, and time constraints from workload were the most common themes. In an innovative approach to addressing counselor wellness and self-care, Plath and Fickling (2020) argued that counselors could benefit from intentional disengagement by engaging in self-care activities unrelated to their training as clinicians, suggesting that there remains effective, yet undiscovered, novel approaches to counselor wellness.

The Wellness Paradigm

Wellness is often confused with wellbeing. Consistent with Hall (2015) who maintained that well-being connotes simply the absence of disease, Kihm and McGregor (2020) argued well-being suggests a state or fixed condition whereas wellness is a dynamic process involving change and lifestyle. Bill Hettler, co-founder of the National Wellness Institute (Hettler & Hardie, 2015), defined wellness as, “an active process through which the individual becomes aware of and makes choices toward a more successful existence” (Hettler, 1980, p. 77). Personal choice and responsibility required in being well is also reflected in the definition of wellness adopted by the National Wellness Institute (n.d.) which articulated, “Wellness is a conscious, self-directed, and evolving process of achieving full potential.” While there remains some debate regarding the definition of wellness, it is generally accepted that wellness is not simply absence of disease, but

is holistic, containing a variety of dimensions that define what it means to be human (Bart et al., 2018; Roscoe, 2009; Steinhardt, et al., 1997).

A review of the wellness literature reveals those dimensions most commonly believed to comprise wellness consist of the intellectual, social, environmental, emotional, physical, spiritual, intellectual, occupational, financial, (Hettler, 1980; Kihm & McGregor, 2020; Montoya & Summers, 2021; Swarbrick, 2006) and ability to adapt to an everchanging environment (Dunn, 1959). With the advent of the wellness concept, several models were crafted in an attempt to capture and describe what it means to be well. According to Beauchemin et al. (2019), Hettler's hexagonal model of wellness (1980), Ardell's components of wellness (1977), and Dunn's high level wellness (1977) were considered to be the forerunners of wellness models.

Oliver et al. (2019) argued that Dunn's high level wellness model originally introduced in 1961, Hettler's six dimensions of wellness model, also known as the hexagonal model of wellness (1980), and the Indivisible Self Wellness model (Myers & Sweeney, 2004) have been foundational in the advancement of wellness research. This claim is not unreasonable as Halbert Dunn (1961), creator of the high level wellness model (1961) is considered the progenitor of the wellness movement and described wellness as the "balance between one's physical health status and their external environment" (Oliver et al., 2019, p. 44). The six dimensions of wellness model, also referred to as the hexagonal model of wellness developed by Bill Hettler (1980), co-founder of the National Wellness Institute, also endorses a holistic approach to wellness, and includes the physical, emotional, social, occupational, intellectual, and spiritual dimensions of human existence. The *Lifestyle Assessment Questionnaire* (LAQ), originally created in 1976, was developed as an instrument to measure wellness based on the six dimensions model of wellness (Hettler, 1980). Among other venues, this model has been used in the university student setting

(Granello, 2000; Hettler, 1980), support for those who have been diagnosed with cancer (Nixon et al., 2021), understanding self-efficacy in teachers (Green & Batool, 2018), and as the rubric for providing a framework for wellness standards within the Commission on Accreditation of Rehabilitation Facilities (CARF, Nathenson et al., 2014).

These models represent just a few of the extant wellness models, and while there is not yet a consensus of the definition of wellness, each model deems wellness to be multidimensional, fundamentally holistic, and similar in wellness dimensions (Oliver et al., 2019). Roscoe (2009) conducted a comprehensive content analysis on nine wellness models, finding that the physical, social, emotional, intellectual, and spiritual dimensions were the most common aspects of wellness models. These findings are consistent with Pomeroy and Clark (2015) who argued that, to achieve optimum wellness, all areas of human functioning should be addressed. While the indivisible self wellness model (IS-WEL; Myers & Sweeney, 2004) is a multidimensional model that embraces wellness holistically, it stands apart from the rest because it was the first counseling-based wellness model, reinforcing that wellness is a cornerstone in the field of professional counseling (Myers, 1991; Sweeney, 2001). The wheel of wellness (WoW; Witmer & Sweeney, 1992), predecessor to the IS-WEL (Myers & Sweeney, 2004), was first to introduce counseling theory as a foundation for a wellness model. The WoW offered a holistic approach to wellness that closely aligned with Adlerian ideology by embedding love, work, leisure, and friendship into the model with spirituality serving as the core of wellness (Myers & Sweeney, 2008).

Counseling theory continued to provide a theoretical guiding light, resulting in the refinement of WoW and giving birth to a new evidenced based model called the indivisible self wellness model (IS-WEL; Myers & Sweeney, 2005a). The IS-WEL maintained the Adlerian

theoretical underpinning, which contended that humans are unconsciously driven by a sense of belonging (Freund et al., 2021), and can only be understood when viewed from a holistic lens, involving an interconnection of the mind and body that cannot be separated and are hence, indivisible (Carlson & Englar-Carlson, 2017). Instead of spirituality serving as the core of the model as presented in the WoW, the IS-WEL established the *indivisible self* as a single higher order factor, true to the Adlerian tenet of humans being indivisible (Myers & Sweeney, 2008). The argument of human indivisibility was also supported by Ansbacher and Ansbacher (1956) in their interpretation of Adler's holistic approach to understanding what it means to be human.

In addition to Adlerian thought, Abraham Maslow's belief in a human's intrinsic need to reach one's full potential and experience self-actualization (Hale et al., 2019) is also reflected in the IS-WEL (Roach & Young, 2007). Aside from the evidence establishing the IS-WEL as a counseling-based theoretical model of wellness, Adlerian principles on which the IS-WEL are grounded reverberate with several counseling theories and counseling tenets from other influential "master counselors" such as Carl Rogers, William Glassner, Aaron Beck, among other major contributors in counseling techniques (Maniacci et al., 2017, p. 95).

Serving under the indivisible self as the first order factor referred to as the higher order factor, *Total Wellness,* Myers and Sweeney (2005a) placed five second order factors in the model that included the Creative Self, the Coping Self, the Social Self, the Essential Self, and the Physical Self. Providing a comprehensive explanation for each second order factor, Myers and Sweeney (2008) assigned third order factors to each second order factor. Third order factors assigned to the Creative Self are positive humor, emotions, thinking, work, and control; the Coping Self includes stress management, leisure, self-worth, and realistic beliefs; the Social Self encompasses friendship and love as third order factors; the Essential Self embraces gender

identity, spirituality, cultural identity, and self-care as third order factors; and exercise and nutrition comprise the third factors for the Physical Self. All of these factors are collectively reflected in the higher order factor, Total Wellness (Perepiczka & Balkin, 2010).

The IS-WEL was originally recommended to provide counselors with the resources to assist clients in improving their wellness (Gibson et al., 2021; Myers & Sweeney, 2005). When considering each of the selves and their corresponding third order factors, counselors could also benefit in the assessment of their individual wellness through personal application of the holistic model's precepts. For example, one of the third order factors housed under the Creative Self is a sense of humor; the value of humor was supported by Lawson (2007) who conducted a survey among counselors to determine the factors that contribute to counselor wellness, finding that counselors identified the ability to maintain a sense of humor as a wellness strategy. The emotions, another third order factor, and the ability to regulate them daily is not only critical to counselor wellness but critical to providing effective treatment (Miller & Spring, 2017; Newton et al., 2020).

When considering stress management, one of the factors that make up the Coping Self, Moore et al. (2020) found that not only did interpersonal stressors commonly experienced through the therapeutic relationship impact the counselor, but intrapersonal stressors such as questioning their professional and personal identity, and even placing their client's well-being above their own contributed to their stress. In support of work as a third order factor, a study investigating work values of licensed professional counselors found that approximately 90% of the 463 counselors polled reported the desire to assist their client to self-actualize as one of the most important values (Burns et al., 2020). Leisure is another third order factor serving to define the Coping Self as Caldwell and Smith (1988) argued that leisure contributes greatly to physical

health, psychological health, and spiritual health, contending that engaging in leisure activity while outdoors can reawaken one's creativity and enrich one both personally and professionally.

Third order factors under the Social Self involve love and friendship (Myers & Sweeney, 2005a). Literature supports how interpersonal relationships are not only enriching to the counselor but support the counselor in withstanding the challenges of the profession (Meyer & Ponton, 2006) and contribute to the quality and longevity of life (Limberg et al., 2021). Spirituality, initially occupying center stage in the WoW (Myers & Sweeney, 2008) remained a critical component to wellness in the IS-WEL, serving as a third order factor under the Essential Self. A construct difficult to define yet universal, spirituality contains the essence of personal intimacy and is transformational over the lifespan (Cashwell et al., 2007). Bohecker et al. (2017) described spirituality as an internal acknowledgement of something greater, which transcends religiosity, calling for the inclusion of spirituality into CACREP standards of core curriculum. The value of the professional counselor's attention to spirituality is well-supported in several professional counseling organizations including the ACA and the ASCA (Giordano et al., 2016), suggesting that the dimension of spirituality is not only an area to be considered within the context of client wellness, but also within the context of counselor wellness.

Without including the Physical Self as a dimension of wellness, the IS-WEL could not be respected as a holistic wellness model as a substantial amount of evidence has corroborated the connection between physical health, specifically the part diet and exercise play, in wellness and well-being (Anshel et al., 2010; Barwais et al., 2014; Chen et al., 2020; Downes et al., 2020; Lewis et al., 2021; Lothes & Nanney, 2020; Najafabadi et al., 2021; Townsley et al., 2021). Considering the Physical Self and each of the other selves, the holistic IS-WEL model possesses strengths that offer testimony to its application in the concept of wellness; one strength is that the

second order factors do not stand isolated from the others, and each should be being taken into consideration (Cummins et al., 2007; Kissenger, 2020; Watson & Kissenger, 2007). Myers and Sweeney (2008) accommodated for the environment and the lifespan, positioning the second order factors within the contexts of the *Local* which included family and neighborhood; *Institutional*, involving government and education; *Global*, including politics, culture, and global events; and *Chronometrical*, which represented the context of change over time and how the impact of choices made early in human development influence one's wellness later in life (Cummins et al., 2007).

Myers and Sweeney (2008) argued that the IS-WEL is a counseling-based model, founded on counseling theory. Further support for the creation of a counseling-based wellness model is reflected in a definition for counseling that was ultimately adopted over a two-year span by delegates representing some 30 professional counseling associations in the United States (Kaplan et al., 2014). The definition adopted, and which the authors endeavored to capture the essence of professional counseling was, "Counseling involves professional relationships designed to assist individuals, families, and groups toward mental health, wellness, educational, and career goals" (Kaplan et al., 2014, p. 368). This comprehensive definition of what it means to be a counselor and aligned with solid theoretical underpinnings, the IS-WEL has served as the wellness rubric to guide, encourage, and establish wellness practices in clients (Avera et al., 2015; Ohrt et al., 2019; Watson, 2015), counselors in training including counseling education doctoral students (Branco & Patton-Scott, 2020; Perepiczka & Balkin, 2010), and counselor supervisors (Lenz et al., 2012). Though it may be an assumption of the client that the counselor is well, counselor wellness is an expectation of counselor educators, employers, and counselor supervisors (Glen et al., 2015). The IS-WEL has served as a guide and impetus for the inclusion

of wellness courses into CACREP counselor education curricula and continues to inform the literature on counselor wellness (Gibson et al., 2021; Harrichand et al, 2021; Stokes, 2020).

To assess wellness, Myers and Sweeney (2008) developed the *Five Factor Wellness Inventory* (5F-WEL, also referred to as the FFWEL), an instrument that reflected the holistic and multidimensional IS-WEL model, found to be psychometrically sound (Shannonhouse et al., 2020), and to render a cumulative Total Wellness score (Kissenger et al., 2020). The FFWEL contains 91 items that measure each of the factors addressed in the IS-WEL (Shannonhouse et al., 2020). The FFWEL is considered culturally sensitive, has been used internationally, and has been used in a variety of settings outside the counseling environment (Lau et al., 2017; McDonald, 2011; Pranckeviciene et al., 2012). The FFWEL has been used to establish predictors of alcohol use in undergraduate students (Lewis & Myers, 2010) and assess the impact of wellness of law enforcement officers (Tanigoshi et al., 2008).

Within the counseling profession, the FFWEL has been the testing instrument used to investigate the person of the counselor in a variety of areas. For example, one common area of research within the counseling profession and in which the FFWEL was used, was the relationship between counselor wellness and job burnout (Puig et al., 2012). Stalnacker-Shofner and Manyam (2014) implemented the FFWEL to measure the efficacy of a wellness intervention in wellness of masters-level graduate practicum students. The FFWEL was also used by Foster et al. (2016) to understand predictors of anxiety in entry level counseling students. Other areas of counseling research in which the FFWEL instrument was used include factors related to counselors' professional quality of life and career (Lawson & Myers, 2011), and wellness of traditional and non-traditional undergraduate students (Myers & Mobley, 2004).

Literature is replete in support of the effective use and source of wellness knowledge the IS-WEL has provided the counseling profession, as well as other fields and groups in search of a deeper understanding of that which deems individuals as well (Rice & Williams, 2022). As literature continues to mount in affirming the IS-WEL as a comprehensive model of wellness, so too, the FFWEL testing instrument has gained recognition as a viable and effective means by which to assess wellness (Shannonhouse, 2020). That the IS-WEL as a counseling-based wellness model adds further credibility to the place it holds in the counselor wellness paradigm (Fetter & Koch, 2009).

Sensing Nature

The basic five sensory systems, seeing (vision), smell (olfactory), touch (tactile), hearing (auditory), and taste (gustatory) are the mechanisms by which human beings are able to perceive external stimuli in the world around them, make meaning of that stimuli, and behave accordingly (He et al., 2022). There are occasions we may only sense our environment in a one-dimensional way (Nielsen, 2018) such as seeing the sky or hearing the birds. Lindstrom (2005) argued that when there is an intersectionality of the senses, we are less likely to forget the experience as it can hold more value. To interpret this within the context of the natural world, the five senses afford humans who are able the opportunity to simultaneously appreciate the color and shape of rainclouds as they build, hear distant thunder, feel the breeze, detect the smell of rain within it, and taste a raindrop.

As testament to the powers of human sensation, physical and mental responses from exposure to nature have become the impetus in urban planning, development of gardens, parks, landscape designs, green spaces, and team loyalty (He, et al., 2022; Lee & Maheswaran, 2011; Lee et al., 2013; Shanahan et al., 2015). The advantage in attending to humans' sense of vision,

taste, smell, hearing, and touch is reflected in the tourism industry as it is has been discovered that tourist destinations that provide pleasurable experiences for the senses foster tourism satisfaction and unique branding of tourism destinations (He, et al., 2022; Lee & Maheswaran, 2011; Lee et al., 2013; Shanahan et al., 2015; Shao & Lin, 2020).

In their investigation of the impact visualizing nature has on health and well-being, Grinde and Patil (2009) argued that the visual presence of plants, whether indoor or outdoor, can reduce tension and provide relief from stress. These findings are consistent with Genjo et al. (2019) who found that green plants relaxed visual fatigue in office workers. Toyoda et al. (2019) argued that workers who were able to gaze at small office plants in the office reported less psychological and physiological stress than those workers who were unable to see plants from their vantage point in the office.

One's sense of sight is not the only avenue to experience the psychological benefits of the natural world. He et al. (2022) maintained that hearing, taste, smell, and touch can enhance physical and mental health. He et al. (2022) further contended that natural sounds, tactile stimuli, natural aromas from vegetation, and the taste of natural objects each provide specific physical and psychological advantages to the human being such as reduction in blood pressure, stimulus for experiencing feelings, and generating cognitions. In a qualitative study exploring a nature-based intervention involving plant scents for participants struggling with stress-related psychological disorders, it was found that nature smells may reduce stress (Pálsdóttir et al., 2021).

In addition to the psychological benefits of visual scenery and aromas of the natural world, sounds of nature have also been found to contribute to stress reduction. In a study investigating the efficacy of nature sounds on reduction of stress, muscle tension, and pulse rate,

it was found that participants who were given a brief exposure to ocean waves reported less stress than the control group or the group who listened to classical music (Largo-Wight et al., 2016). These findings are consistent with those of Uebel et al. (2021) who contended that exposure to soundscapes that especially include bird sounds produce restorative results such as relaxation, stress reduction, and improvement in mood.

The importance of relaxation and stress reduction cannot be overestimated especially when considering the onus is on the counselor engage in self-care (Brickham et al., 2021). Within the counselor's workday, challenges to maintaining wellness are constant (Long et al., 2022; Venart et al., 2007). Literature strongly supports Mother Nature as a viable partner and ally to wellness, and through simply tapping into any one of the five senses, counselors can embed within their counseling session aspects of the natural world that will foster wellness (Frumkin et al., 2017; He et al., 2021).

Nature in Counseling

The restorative power of the natural world on psychological well-being is well supported in the literature (Anderson et al., 2018; Mayer et al., 2008; Greenleaf et al., 2014; Kamitsis & Simmonds, 2017; Mavoa et al., 2019; Phillips, 2018; Wolsko & Hoyt, 2012). Nghiem (2018) argued that natural settings, especially settings that are biodiverse, not only have restorative powers but that restorativeness serves as a mediator and is linked to positive affect. This is consistent with McMahan and Estes (2015) who performed a meta-analysis investigating the effect of a brief encounter with nature on psychological state, finding not only evidence of nature's positive effect on emotional well-being, but even exposure to simulated nature increased positive affect. In addition to psychological functioning, the influence of the natural environment has also been argued to improve cognitive function (Prentice & Waliczek, 2021; Zijlema et al.,

2017), even if only provided through a window exposing a natural environment (Jamrozik et al., 2019). Glenn et al. (2015) argued that time spent in nature, among other activities such as mindfulness and meditation could produce positive emotions that contribute to characteristics considered valuable specifically to those in the counseling profession.

As further testament to the value of nature and consistent with Freeman et al. (2019) who argued that connecting with nature was critical for successful aging, Maller et al. (2006) contended that while western progress in medicine has promoted longer and healthier lives, detachment from nature in daily life has ushered in new psychological health risks. Tomasso et al. (2021) explored the impact of constraints to natural spaces brought upon by COVID-19, finding limited access to nature compromised emotional health. This argument of how nature deprivation negatively impacted mental health during the COVID-19 pandemic is supported by Robinson et al. (2021) who contended increased time spent outdoors during the pandemic resulted in improved psychological well-being and ability to cope with the struggles brought on by the pandemic.

White et al. (2013) found that those with access to green spaces reported being happier than those with limited access; in contrast, when deprived of the natural world, psychological health can suffer (Barnes et al., 2019). These findings are consistent with Haas et al. (2021) who found that across Japanese and American cultures, a sense of harmony with nature during the COVID-19 pandemic contributed to psychological health. For example, Shinrin-yoku, a Japanese term translated in English as *forest bathing*, has become popularized and exemplifies the healing power of nature when walking in a forest (Kotera et al., 2020) and which also can become a transformational experience (Hansen, 2014). In data collected from a review of 52 Japanese research articles regarding physiological benefits that are derived from exposure to

nature, Song et al., (2016) conceded that simply walking in a forest for 15 minutes decreased heart rate, blood pressure, and cortisol levels, and induced relaxation. In a similar study synthesizing research conducted over a span of 10 years, Jimenez et al. (2021) found that exposure to nature was far reaching in benefitting both physiological and psychological health.

Recognizing the profound impact the natural world has on psychological health, many counselors have invited nature into their counseling sessions (Swank & Reese, 2022). The use of natural artifacts such as plants, driftwood, rocks, feathers, and other relics of nature including activities involving the use of nature within the context of counseling are commonly referred to as *nature-based interventions* (Bloomfield, 2017; Moeller et al., 2018; Pretty & Barton, 2020). Nature-based interventions such as forest bathing and green exercise would also include, but are not limited to, outdoor therapeutic modalities such as walk talk therapy, wilderness therapy, horticulture therapy, the practice of yoga outdoors, or simply sitting outdoors while engaging in counseling (Villasenor-Galarza, 2013). The inclusion of non-human animals such as horses, cats, dogs, and fish, or an indoor setting that contains natural elements such as potted plants, rocks, water fountains, and windows with a view of the outdoors are also argued to improve psychological well-being and could be included in the counseling setting (Jo et al., 2022; Overbey et al., 2023; Raanaas et al., 2010).

Ecotherapy, a protocol that embeds the principles of ecopsychology, pulling from ecological and psychological principles into psychotherapeutic practice has emerged as a viable therapeutic intervention (Buzzell & Chalquist, 2009; Tudor, 2013). Chaudhury and Banurjee (2020), in their research regarding COVID-19 and psychological health, argued that humans suffering from loneliness and isolation could benefit from engaging in activities that involve the natural world such as walking outdoors, gardening, and listening to birds. *Ecowellness* is defined

as “one’s appreciation, respect for, and awe for nature that contributes to greater connection to one’s self and nature … resulting in holistic wellness” (Reese et al., 2019, p. 204). Ecowellness is the term that addresses the human’s innate connection to the natural world (Kellert & Wilson, 1993) and the part this connection plays in wellness (Reese & Lewis, 2019).

Berger (2020) argued that inviting nature into the counselor-client relationship can facilitate a sense of empowerment within the client. The term, *nature-based*, has emerged to describe the physical setting that is an alternative to the conventional indoor setting limited to chairs, lamps, and wall hangings (Maund et al., 2019; Naor & Mayseless, 2021; Shanahan et al., 2019). Employing a nature-based intervention with intention to facilitate the therapeutic process could involve many forms of interventions (Moeller et al., 2018). A counseling session held in a garden setting (Adevi et al., 2018), the presence of arranged potted plants and other organic relics placed in the office (Barnes et al., 2019), and activities involving horticulture (Lorber, 2011) or non-human animals (Chandler et al., 2010) are examples of purposeful nature-based interventions.

As research continues to support the efficacy of physical movement as a treatment to psychological distress, combining the restorative power of the natural world with the psychological benefits of physical movement is also gaining popularity in the field of mental health (Bernard et al., 2015; Chu et al., 2009; Pickett et al., 2012; Robertson et al., 2012; White et al., 2009). The fusion of the natural world with physical movement has resulted in interventions such as wilderness therapy (Davis-Berman & Berman, 1994; Jordan, 2009; Reese et al., 2019), walk talk therapy (Revell & McLeod, 2016), and nature-based interventions that involve gardening outdoors (Swank & Shin, 2015).

Evidence continues to mount in favor of positive treatment outcomes for clients who engage in nature-based interventions. Clients have reported a heightened sense of agency and reflective opportunities (Carlson et al., 2020), clarity in personal sense of purpose (Hawkins et al., 2016), emotional well-being (Richardson et al., 2020), and a natural unfolding of physiological and psychological healing (Oh et al., 2020). In their study exploring spiritual experiences with nature from the perspective of therapists who invited nature into the counseling session, Naor and Mayseless (2021) were able to identify four major themes. The Naor and Mayseless (2021) themes included (1) nature's ability to embody physical and sensual experiences, (2) enriching one's personal perspectives as the result of recognizing nature's power and immensity, (3) having a sense of interconnectedness and belongingness with nature, and (4) nature as a facilitator of self-discovery.

The Natural World and Human Beings: Theoretical Perspectives

The positive effect of the natural world on the human being is not only strongly supported in the extant literature, but it is also entrenched in theory. One such theory, the *biophilia hypothesis* (Wilson,1984), argued that, from the evolutionary perspective, there is an innate connection between humans and the natural world, or a genetic endowment of a connection with nature (Clowney, 2013). Wilson stated, "The living world is the natural domain of the most restless and paradoxical part of the human spirit" (1984, p. 10). Recognizing the implications of the human being's profound intrinsic affinity to the natural world and the part the natural world plays in mental health, some counselors invite aspects of nature into the counseling session (Walter et al., 2023; Wilson et al., 2023). This interconnection between the human psyche and the natural world is reflected in ecopsychology, encompassing the major tenet that human beings are not separate, but part of the natural world (Conn, 1998).

The part this biophilic connection plays in the human world has been addressed in a variety of contexts such as a study conducted by Chang et al. (2020) who analyzed image content of 26,172 photographs on social media, finding that images depicting recreational activities and events such as weddings and honeymoons were more frequently tagged as containing natural elements than images of ordinary daily life. To enhance life and human flourishing, awareness of the nature connection is frequently reflected in urban planning in the development of biophilic cities (Panlasigui et al., 2021). Yulmaz et al. (2020) argued that one solution to environmental issues is to improve behaviors by enhancing biophilic tendencies in children through educational programing.

Attention Restoration Theory (ART), introduced by S. Kaplan and R. Kaplan (1989) postulated that directing one's attention over a prolonged period of time results in mental fatigue and can adversely impact effectiveness (Kaplan, 1995) and that placing oneself in a natural environment can have a restorative power on mental processes and psychological health through alleviating stress (Kaplan & Kaplan, 2008). The ability to intentionally direct one's attention plays an important role in separating the relevant from the irrelevant, being able to avoid distractions, and remaining mentally competent (Kaplan, 2001). Including aspects of the natural world into the counselor's workday could be beneficial, as it has been argued that senses of incompetence and ineffectiveness contribute to counselor burnout (Maslach et al., 2001).

Moran (2018), drawing from ART as a theoretical underpinning, studied the impact of outdoor spaces and photographic images of nature on prisoners and found these had a restorative effect as inmates reported a heightened sense of calm and capacity to reflect. Nghiem (2018) argued that natural settings, especially settings that are biodiverse, not only have restorative powers but that restorativeness serves as a mediator and is linked to positive affect. Menzel

(2020) reported that research participants felt less stress after taking a nature walk and endorsed an improved body image. Findings from a meta-analysis investigating the effect of nature on emotional well-being established that while exposure to nature has a positive effect on well-being, even simulated nature produced a positive effect (McMahan &Estes,2015).

A discussion of the theoretical framework on which to build the human's connection to nature would be remiss without considering Stress Reduction Theory (SRT) introduced by Ulrich (1991). Ulrich (1991) contended that stress is reduced when a person engages with nature in a nonthreatening environment. SRT was supported by a seminal study conducted at a hospital, finding that patients in rooms with a window exposing a natural scene such as trees, when compared to patients with windows bearing a wall, fared better in terms of length of hospital stay, medication adherence, evoked less negative feedback from nursing staff, and had fewer postoperative complications (Ulrich, 1984). The effect of a window with a view of the natural world was also explored by Kaplan (2001) who found that nature not only promoted satisfaction, but improved well-being, adding further evidence of the influence of the natural world on the human condition. According to Beto (2014) SRT and ART are complementary as both theories support the restoration nature offers, as reduction in stress would only be possible in the absence of mental fatigue. Wilkie and Davinson (2021), in their investigation of nature-based interventions, argued that SRT and ART were prevalent in providing theoretical basis in support of nature-based interventions.

Summary

There is a paucity of literature in two areas specific to counselor wellness. The first area concerns how little attention has been given to wellness among counselors (Lawson & Myers, 2011), specifically with a focus on how counselors who incorporate elements of nature within

the context of counseling compare in wellness to those counselors who do not include aspects of nature. The second area pertains to the lack of literature addressing the counselor's experiences and professional approach to nature-based therapeutic protocol. In a mixed methods study exploring the experiences of therapists who incorporate walk talk therapy in their private practice, participants reported the client's mind body connection was strengthened, body position of walking side by side encouraged clients to be more open, and the relationship was perceived to be more collaborative (Revel 2016). In a similar study, Revell and McCleod (2017) identified specific themes that emerged from therapists' experiences in walk talk therapy. These themes included the physical aspect involved in walking while talking, general enrichment of the therapeutic experience, improved collaboration between client and counselor, and ethical concerns (Revell and McCleod, 2017).

Recognizing the necessity in establishing guidelines for nature-based counselors, Reese and Gosling (2020) conceptualized the *EcoWellness Model of Change* to serve as a paradigm and conceptual rubric in guiding counselors who wish to incorporate the natural world in their treatment protocol. In attending to the psychological needs of the nature-based therapist, Marchand (2008) addressed issues that wilderness therapy staff may face including stress and burnout. Becker (2010) addressed challenges faced by nature-based therapists and argued the necessity for guidelines when providing therapy outdoors, bringing awareness to ethical concerns of working in an outdoor setting. The focus of these findings and those of similar studies approached the inclusion of nature from: (a) how the counselor perceives nature's contribution to client treatment outcome; (b) impact on therapeutic relationship; or (c) how issues relating to a nature-based modality may be addressed. To date, current literature relating to how nature contributes to counselor wellness appears to be void, and at best, scarce.

Though wellness literature is plentiful in attending to self-care strategies in which counselors may engage outside the context of the counseling session, little research has been dedicated to how counselor wellness may be influenced by the physical context within the counseling session. A thorough search in the literature has revealed that while attention has been given to the value of nature-based interventions regarding the client's treatment outcome, very little has explored the nature-based counselor's perspective of nature-based interventions, or how these interventions have influenced counselor self-care behaviors and wellness. Regarding the physical context in which counseling sessions are held, little attention has been given to the ecological aspects of the counseling environment (Tudor, 2013). A significant gap in the literature remains in addressing how the inclusion of nature may contribute to counselor wellness.

The literature strongly supports that the emotional, physical, and cognitive demands experienced daily by professional counselors have deleterious implications on their wellness (Can & Watson, 2019; Fye et al., 2022; Rumsey et al., 2020). In addition to their personal responsibilities, many counselors have a caseload size that creates such emotional fatigue they are at risk of quitting their job (Murphy & Kruis, 2023) which suggests that making time to engage in daily self-care is challenging. This is consistent with Guler and Ceyhan (2021) who argued the necessity in preparing counselors in training for the challenges that lay ahead. It would be worthy to investigate strategies that could be implemented during the workday which would not only contribute to wellness, but as a residual advantage, potentially defend against occupational hazards such as compassion fatigue, burnout, stress, and other impairments that compromise wellness, ethical obligations, and professional responsibility. Literature is abundant in supporting

the contribution nature plays in improving psychological health and human functioning in general but lacks exploration of how nature may contribute to counselor wellness.

Further, expanding the literature on counselor wellness and newly discovered strategies to improve wellness aligns with two of the nine counselor wellness competencies argued by Gibson et al. (2020). Gibson et al. (2020) contended that promoting wellness within the profession and conducting research to expand the body of knowledge in counselor wellness are ways by which counselors can contribute to the counselor's well-being, competence, and empowerment of clients to become more well.

Chapter 3

Methods

The purpose of this study was two-fold; to explore what part the natural world might play in counselor wellness and to find what sensory mechanisms may occupy the most valuable role in sensing nature. Should the findings support that nature contributed to counselor wellness, then it can be argued that incorporating aspects of the natural world into the physical context of the counseling session may have a positive impact on counselor wellness. This evidence could provide an additional strategy for counselors in their current self-care practices and endeavors to be well. If findings supported nature's contribution to wellness, investigation of the five senses and the extent to which each of them served could be beneficial to counselors. Counseling professionals would be better informed as to what sensory mechanisms may occupy the most valuable role in sensing nature.

The extent to which elements of nature are included within the counseling context was measured with data gathered from a self-report instrument referred to as the *Nature Survey* (see Appendix A). One of the purposes of the Nature Survey was to serve as the instrument for participants to record the extent to which they either purposefully or unintentionally include elements of nature in their counseling sessions. Another purpose of the Nature Survey was to determine the extent to which the participant reported use of each of the five basic sensory processes that are required to sense the presence of natural elements. The Nature Survey is a 10-point Likert style survey containing five items. Each item on the Nature Survey corresponds to one of the five senses. The Five Factor Wellness Inventory, Revised Adult Form (FFWEL-A2, Myers & Sweeney, 2005, 2014) is a testing instrument proposed to measure counselor wellness.

This study was conducted quantitatively. Serving as the independent variable was the extent to which nature was sensed in the counseling session which was measured by calculating the composite scores from the Nature Survey, and scores from each of the five items. Because this study also investigated the sensory processes involved when sensing the presence of nature, the independent variable contained five levels that each reflected one of the five senses (vision, hearing, taste, smell, and touch). The wellness scores served as the dependent variable. The dependent variable was quantitatively measured by calculating the composite Total Wellness scores from the FF-WEL (Myers & Sweeney, 2005, 2014). It was hypothesized that if participants who score higher on the Nature Survey also score higher on the FFWEL, it could be argued that elements of nature present in the counseling sessions are associated with counselor wellness.

To determine if there were differences that exist between the groups, a parametric test referred to as, the one-way ANOVA was proposed. The one-way ANOVA, an inferential statistical procedure, would not only indicate there is a difference in mean scores among the groups, but it would identify where those differences lie. This statistical procedure would first determine if there was a significant difference between wellness scores and scores reflecting the extent that natural elements were present in the counseling sessions. This would be revealed by comparing differences between composite wellness scores (Total Wellness scores) (Myers & Sweeney, 2005, 2014), and composite scores from the Nature Survey that represented the extent nature was included in the counseling context. Second, as there are five senses that are each responsible for a different mechanism by which to experience nature, scores could be compared to determine any differences between each sensory property and the other four; and assuming

differences were found, in the extent nature is present and wellness composite scores, the ANOVA statistical analysis would reveal where those differences existed among the five senses.

It was hypothesized that those counselors who reported having a greater amount of nature in their counseling settings would also score higher on the FFWEL, in turn suggesting that the inclusion of nature has a beneficial influence on wellness. It was anticipated that, using a one-way ANOVA statistical procedure, a comparison between the data from the composite Total Wellness scores on the FFWEL (Myers & Sweeney, 2005, 2014) and the composite scores from the Nature Survey would reveal a statistically significant variance in means between the two groups. It was also hypothesized that there would be a statistically significant difference in means between each of the five senses.

Participants

Upon obtaining approval from the Institutional Review Board at St. Mary's University, a recruitment email was be sent to licensed professional counselors and licensed professional counselor associates (see Appendix B). Only professional counselors and professional counselor associates who are licensed in the State of Texas were invited to participate in the study. Inclusion criteria included that licensed professionals were currently practicing and that they read English. A variety of resources to solicit participation in the study were implemented through searches in organizations such as The Texas Behavioral Health Executive Council National Board for Certified Counselors (NBCC), *Psychology Today*, and listservs such as CESNET-L (Counselor Education and Supervision Network). Solicitation to participate in the study was also offered at professional counseling conferences including the 2022 Texas Counseling Association Professional Growth and Development Conference.

In the recruitment email, I identified myself and explained the purpose for which I was contacting them, along with my contact information and contact information of my dissertation chairperson should they have questions. A link for those who chose to participate was embedded in the email. This link was created by Mind Garden, Inc. (https://www.mindgarden.com), a private company that publishes digital psychological testing instruments and assessments. Mind Garden, Inc. was provided with the informed consent document, demographic survey, and Nature Survey, along with financial compensation required by Mind Garden, Inc. to purchase the licenses for providing a link to the participants, build and create the link. Mind Garden, Inc. digitally formatted the informed consent document, demographic survey, Nature Survey, and the FFWEL testing instrument into one link. This link was embedded into each solicitation email sent to the potential participants. 200 licenses were purchased. After the last license was used, the survey link was disabled.

The informed consent document (see Appendix C) explained the purpose of the study, assurance of anonymity, any foreseeable risks, expected benefits, list of procedures, length of time required to participate, assurance that participation was voluntary, and assurance they could withdraw at any time without penalty. If 200 counselors had not participated within two to three weeks from the date of the solicitation email, a follow-up email (see Appendix D) was be sent, expressing gratitude for those who had chosen to participate, and again requesting assistance from those who had not yet responded.

Once counselors who agreed to participate in the study accessed the link and completed and submitted the research materials, Mind Garden, Inc. calculated the scores from the demographic questionnaire, the Nature Survey, and the FFWEL (Myers & Sweeney, 2005, 2014). The generated scores from the demographic questionnaire, the Nature Survey, and the

FFWEL (Myers & Sweeney, 2005, 2014) were tabulated, calculated, and transmitted to me via an account that was established with Mind Garden, Inc. as a student researcher at St. Mary's University. Once the required data was gathered, it was analyzed.

Measuring Instruments

Data was gathered with the use of a survey that was crafted called, the Nature Survey (see Appendix A), and a measuring instrument called the Five Factor Wellness Inventory (5F-WEL, FFWEL) developed by Myers and Sweeney (2005, 2014). For the purposes of collecting general demographic information, a non-identifiable survey was crafted querying each participant regarding years in practice, licensure credentials, gender, age, racial/cultural identity, and employment setting (see Appendix E).

The Nature Survey, a self-administered questionnaire, was created to ascertain the extent to which the participant included aspects of nature in the counseling sessions. The Nature Survey contained five items, each corresponding to one of the five senses (vision, hearing, smell, touch, and taste). Responses were in a 10-point Likert style format. Within each of the items, examples of nature that could be experienced through that sense were provided. For example, the first item on the scale regarded vision and was expressed: On a scale of 0 to 9, please indicate the extent to which you are able to **visually sense** elements of nature during your counseling sessions. Examples of visual elements can include plants/vegetation, non-human animals, visual pictures/art depicting nature, feathers, rocks, shells, water, candle, and sky.

Responses ranged from 0 (I am not able to visually sense any elements of nature during my counseling sessions) to nine (During my counseling sessions, I consider myself visually immersed in nature as I conduct counseling sessions outdoors and am able to visually sense elements of nature either sitting or engaging in nature-related physical activity such as horseback

riding, walking, yoga, hiking, camping, gardening, or other nature-related physical activities). To provide participants the freedom to report their subjective interpretation of the extent to which nature was present in their sessions, the Nature Survey did not differentiate between organic elements such as live plants from artificial elements such as pictures of nature scenes or artificial plants.

Mind Garden, Inc. formatted the survey with a scale whereby the participant chose and clicked on a number ranging from zero to nine to reflect the extent they were able to sense nature in their counseling session. Because the Nature Survey was to be presented in a 10-point Likert format, zero indicating the absence of nature and nine indicating immersion in nature, scores were categorized as: 0-3 (minimal presence of nature), 4-6 (moderate presence of nature) and 7-9 (maximal presence of nature).

The Five Factor Wellness Inventory Form A-2 (FFWEL-A2; Myers & Sweeney, 2005, 2014) was the instrument used to measure counselors' wellness. This version of the FFWEL was chosen because of the three versions of the FFWEL that have been developed, the FFWEL-A2 is the adult version (Myers & Sweeney, 2005, 2014). The participant was invited to indicate the extent to which each statement applied. The response options were: (a) strongly agree, (b) agree, (c) disagree, and (d) strongly disagree. Each response was assigned a numerical value from four (strongly agree) to one (strongly disagree) (Myers & Sweeney, 2005, 2014). Examples of statements are: (a) I have sources of support with respect to my race, color, or culture, (b) I accept how I look even though I am not perfect, and (c) I have to do all things well in order to feel worthwhile (Myers & Sweeney, 2005, 2014).

As explained in the Five Factor Wellness Inventory (FFWEL) 2nd Edition Manual (Myers & Sweeney, 2005, 2014), the FFWEL was developed not only as a testing instrument to

holistically assess wellness but captures how personal responsibility in lifestyle effects human health. As a holistic model, wellness is considered a first order, or higher factor order; second order factors reflect the five dimensions that encompass wellness (Myers & Sweeney, 2005, 2014). The indivisibility of the human being is reflected in these five dimensions, each dimension considered a subscale of the FFWEL. They include the Creative Self, Coping Self, Social Self, Essential Self, and Physical Self and are defined by third order factors embedded within these second order factors. The number of third order factors vary among dimensions as the Creative Self houses thinking, control, positive humor, and work; the Coping Self includes realistic beliefs, leisure, stress management and self-worth; friendship and love comprise the Social Self; gender, spirituality, self-care and cultural identity define the Essential Self, and the Physical Self involves nutrition and exercise (Myers & Sweeney, 2005, 2014).

Of the 91 items in the FFWEL wellness testing instrument, 73 items address wellness related items regarding the respondents' attitude and behaviors (Shannonhouse et al., 2020). The remaining items consist of a Validity Index item and items related to context identified as the Local Context (5 items), Institutional Context (4 items), Global Context (3 items), and Chronometrical Context (4 items) (Myers & Sweeney, 2005, 2014). The FFWEL (Myers & Sweeney, 2005, 2014) also contains seven demographic items (items 92-98) related to information regarding marital status, employment status, academic degree, and other demographic markers. Responses from each of their respective subscales are summed and produce one composite score. The Five Factor Wellness Inventory (FFWEL) 2nd Edition Manual (Myers & Sweeney, 2005, 2014) explains the scoring process by describing the Total Wellness score as, "The sum of all items on the FFWEL; a measure of one's general well-being or total

wellness" (p. 10). Higher scores reflect higher wellness (Shannonhouse et al., 2020). The eight demographic items are not factored into the Total Wellness score.

Reliability of the FFWEL (Myers & Sweeney, 2005, 2014) was addressed in the FFWEL manual (Myers & Sweeney, 2005, 2014). In the FFWEL testing manual, the alpha coefficients of internal consistency for the five second order factors ranged from .90 to .94, and the alpha coefficient for internal consistency for Total Wellness was .94 (n = 3,343), suggesting that the FFWEL is a reliable testing instrument. Validity was also addressed in the FFWEL testing manual (Myers & Sweeney, 2005, 2014) and argued to be a valid testing instrument, based on structural equation modeling and on a substantial amount of support from the literature. Further support of the FFWEL was argued by Shannonhouse et al. (2020), who performed a psychometric synthesis involving 59 studies, finding that since its publication as a psychological testing instrument, the FFWEL had been utilized in more than 100 peer reviewed articles on wellness and contending that the FFWEL is a psychometrically sound testing instrument.

Statistical Analysis

The Statistical Package for the Social Sciences (SPSS) Ver. 28 software was used to analyze the data collected from the Nature Survey and the FFWEL. The one-way ANOVA was originally proposed as the statistical method to analyze the data. This form of statistical analysis provided information regarding any differences in means when comparing participants' composite scores from the Nature Survey with their scores on the FFWEL. The one-way ANOVA accommodated for one independent variable, with three or more levels. This research involved one independent variable (presence of elements of nature), one dependent variable (wellness scores). It was originally thought that the five levels of the independent variable were vision, hearing, smell, touch, and taste, but later adjusted to accommodate for their being five

independent variables (vision, hearing, smell, touch, and taste), each containing three levels (minimal, moderate, and maximal). This required the data to be analyzed using a factorial ANOVA. The F-ratio, generated by the ANOVA statistical test, revealed if there was a statistical difference in means between each of the senses. It was also anticipated that a comparison of group means and analysis to reveal a significant relationship would suggest that those who scored higher on the Nature Survey would also score higher in wellness scores from the FFWEL. Thus, it could be established that sensing elements of nature within the physical context of the counseling session contributed to wellness. It could also be established if any one of the senses played a greater role in wellness.

To determine the necessary sample size to conduct this research, the G*Power, version 3. 1.9.4. statistical software (https://www.psychologie.hhu.de/arbeitsgruppen/allgemeine-psychologie-und-arbeitspsychologie/gpower.html) (Balkin & Sheperis, 2011; Faul et al., 2009) was downloaded and implemented. The statistical analysis selected was *ANOVA, fixed effects, omnibus one-way statistical test*. To lower the chances of committing a Type 1 error and rejecting a true null hypothesis, the alpha level was set at .05. To avoid committing a Type II error and not finding a significant difference when there is one, the probability level was set at .80. The effect size was set at the standard of .25. It was projected that 200 participants would be required.

Chapter 4

Results

The primary emphasis in the literature concerning nature based therapeutic protocols and the restorative benefit of nature is focused on the client's experience and treatment outcome. As previously mentioned, findings from a generous amount of literature on nature-based therapy have established that aspects of the natural world does indeed have a positive impact on wellness and psychological well-being of the client. Though research is ample in the area of ways counselors can improve wellness through engaging in activities outside the counseling session, there is little attention to how the presence of nature within the physical context of the counseling session might also contribute to counselor wellness.

The purpose of this study was to determine if the presence of nature within the physical context of the counseling session contributes to counselor wellness. Further, because humans experience nature through the five senses (vision, hearing, smell, touch, taste), this study explored the extent to which each of the five senses are involved to experience nature in the counseling session. Through examining the extent to which nature is sensed in the counseling session and how it is sensed, it was anticipated that the findings from this study would contribute to the existing literature on counselor wellness by potentially revealing new approaches to improve counselor wellness and identifying any psychological benefits of the natural world for the counselor in counseling sessions.

Data was collected from the *Five Factor Wellness Inventory* (FFWEL; Myers & Sweeney, 2005, 2014), which was used to measure counselor wellness scores, and from the *Nature Survey*, which was created to measure the extent nature is sensed through the five senses (vision, hearing, smell, touch, and taste) in the counseling session. These instruments, along with

an informed consent document and general demographic questionnaire were contained in a link that was embedded in the recruitment email.

Over a four-month period, in excess of 500 recruitment emails were sent. It was originally proposed that participants would be recruited through websites such as The Texas Behavioral Health Executive Council, National Board for Certified Counselors, and *Psychology Today*, but was later discovered that these websites provide counselors' physical addresses, but do not provide email addresses. Email addresses were gathered by inviting attendees at the 2022 Texas Counseling Association Professional Growth Conference, accessing email addresses through conducting on-line searches of professional counselors licensed in the State of Texas, and accessing email addresses from university faculty web pages at Texas institutions. In addition, over the four-month period, faculty members from three Texas institutions agreed to place the recruitment emails on their listservs. Because it was originally proposed to gather data from 200 participants, 200 licenses were purchased from Mind Garden, Inc. (https://www.mindgarden.com). The sample size to conduct this research was generated by the G*Power, version 3. 1.9.4. statistical software (https://www.psychologie.hhu.de/arbeitsgruppen/allgemeine-psychologie-und-arbeitspsychologie/gpower.html) (Balkin & Sheperis, 2011; Faul et al., 2009). 200 participants accessed the link to the surveys but only 58 participants of the 200 who clicked on the link completed the survey. It was decided to proceed with analysis of the data with 58 participants instead of the originally proposed 200 participants.

Participants

Demographic variables consisted of gender, race/ethnicity, age, credentials, years of experience, employment setting, and sensory abilities (see Table 1). The majority of the participants were female, White, and between the age of 41 and 50. Most of the participants were licensed professional counselors with between one and 10 years of experience and in private practice. Regarding sensory abilities, all reported being able to see, hear, taste, touch, and smell except for one participant who reported they were unable to see (see Table 1).

Table 1

Participant Demographic Information

Demographic Variables	N	%
Gender		
Male	7	12.1
Female	50	86.2
I prefer not to answer	0	0
Transgender	1	1.7
Race/Ethnicity		
Hispanic or Latino	10	17.2
White	36	62.1
Hispanic/White	2	3.4
Black or African American	8	13.8
American Indian or Alaskan Native	2	3.4
Asian	0	0
Native Hawaiian or Other Pacific Islander	0	0
Age		
20-30	7	12.1
31-40	18	31.0
41-50	19	32.8
51-60	8	13.8
61-70	5	8.6
71-80	1	1.7

Participant Demographic Information

Demographic Variables	N	%
Credentials		
LPC	31	53.4
LPC-S	19	32.8
LPC-A	8	13.8
Years of Experience		
0-5	20	34.5
6-10	20	34.5
11-15	9	15.5
16-20	4	6.9
21-25	2	3.4
26-30	1	1.7
Over 30	2	3.4
Employment Setting		
Private Practice	32	55.2
Hospital	0	0
Agency	6	10.3
Academic	13	22.4
Other	7	12.1
Sensory Abilities		
Able to See	57	98.3
Able to Hear	58	100
Able to Taste	58	100
Able to Touch	58	100
Able to Smell	58	100

Research Questions

The impetus of this study was to determine if the presence of nature within the counseling session contributes to wellness. Further, the pathway by which humans are able to perceive and interpret human experience is through the five senses consisting of vision, hearing, taste, touch, and smell. The aim of this study was not only to determine if the presence of the

natural world is associated with counselor wellness, but to determine if any one of the five senses used to sense nature plays a greater role in wellness when compared to the other four. The following questions were addressed:

1. Is there a significant difference in means between the composite scores on the Nature Survey and composite scores on the Five Factor Wellness Inventory (FFWEL; Myers & Sweeney, 2005, 2014) that would reflect the more natural elements that are sensed in the counseling context the higher the wellness score?
2. Is there a significant difference in means between the individual vision scores and the hearing, smell, touch, and taste individual scores as reflected on the Nature Survey that would suggest counselors who are able to visualize aspects of nature score higher on the Five Factor Wellness Inventory (FFWEL; Myers & Sweeney, 2005, 2014)?
3. Is there a significant difference in means between the individual hearing scores and the vision, smell, touch, and taste individual scores as reflected on the Nature Survey that would suggest counselors who are able to hear aspects of nature score higher on the Five Factor Wellness Inventory (FFWEL; Myers & Sweeney, 2005, 2014)?
4. Is there a significant difference in means between the individual smell scores and the vision, hearing, touch, and taste individual scores as reflected on the Nature Survey that would suggest counselors who are able to smell aspects of nature score higher on the Five Factor Wellness Inventory (FFWEL; Myers & Sweeney, 2005, 2014)?
5. Is there a significant difference in means between the individual touch scores and the vision, hearing, smell, and taste individual scores as reflected on the Nature Survey that would suggest counselors who are able to touch aspects of nature score higher on the Five Factor Wellness Inventory (FFWEL; Myers & Sweeney, 2005, 2014)?

6. Is there a significant difference in means between the individual taste scores and the vision, hearing, touch, and smell individual scores as reflected on the Nature Survey that would suggest counselors who are able to taste aspects of nature score higher on the Five Factor Wellness Inventory (FFWEL; Myers & Sweeney, 2005, 2014)?

To provide a comprehensive answer to the first question, not only was it necessary to determine if there was a difference in means between the composite scores of the Nature Survey and the Five Factor Wellness Inventory (FFWEL; Myers & Sweeney, 2005, 2014), it was also necessary to measure the relationship between the two variables. Correlational analysis would indicate the degree to which scores on the Nature Survey are related to scores on the Five Factor Wellness Inventory (FFWEL; Myers & Sweeney, 2005, 2014).

Composite scores on the Nature Survey ranged from zero to 45. Analysis of the data on the Nature Survey (n = 58) revealed a mean score of 19.03. The scores on the Five Factor Wellness Inventory (FFWEL; Myers & Sweeney, 2005, 2014) ranged from 25 to 100 (Myers & Sweeney, 2005, 2014), and the mean score was 79.79 (n = 58). A correlation coefficient was computed among the Five Factor Wellness Inventory (FFWEL; Myers & Sweeney, 2005, 2014) Total Wellness composite scores, which served as the dependent variable, and the Nature Survey composite scores, which served as the independent variable. To control for Type 1 error, a p value of .05 or lower was required for significance. This alpha level is customary in research and accepted as being the cutoff to determine significance in a statistical analysis. The correlation between the Five Factor Wellness Inventory (FFWEL; Myers & Sweeney, 2005, 2014) composite scores and the Nature Survey composite scores was r (56) = .257, p > .05 (see Table 2). Data output for this statistical analysis reflected the probability value of .051. Assumptions of correlational research with two variables were satisfied as the bivariates were normally

distributed in the population, the cases represented a random sample, and scores from each of the two variables were independent of each other.

Table 2

Correlation Between Total Wellness and Nature Scale Composite With Means and Standard Deviations

Variable	*M*	*SD*	1	2
1. Total Wellness (FFWEL)	79.79	7.37	-	
2. Nature Scale Composite	19.03	14.47	0.257	-

n = 58

To answer research questions two through six, it was originally proposed to analyze the data with a one-way ANOVA. However, because of the incorporation of levels (minimal exposure to nature, moderate exposure to nature, and maximal exposure to nature) to each of the five factors (vision, hearing, smell, touch, and taste), it was determined that a factorial ANOVA would be better able to compare the individual main effects of sensing nature by seeing, sensing nature by hearing, sensing nature by smell, sensing nature by touch, and sensing nature by taste on wellness scores as reflected on the Five Factor Wellness Inventory (FFWEL; Myers and Sweeney, 2015, 2014), and any interactions that may exist among them. To test homogeneity of variances, the Levene's test indicated that the variances of the group were not significantly different F (6, 31) = .852, p = .541.

The main effect of visually sensing nature on wellness scores was nonsignificant, F (2, 31) = .755, p > .05. The main effect of sensing nature by hearing was nonsignificant, F (2, 31) = .118, p > .05. The main effect of sensing nature by smell was nonsignificant F (2, 31) = 2.196, p > .05. The main effect of sensing nature by touch was significant and yielded an effect size of .190, indicating that 19% of the variance in scores on the Five Factor Wellness Inventory (FFWEL; Myers & Sweeney, 2005, 2014) was explained by touch after considering the other

four sensory variables, F (2, 31) = 3.647, $p < .05$. The main effect of sensing nature by taste was nonsignificant (F (2, 31) = 3.106, $p > .05$ (see Table 3). When examining the data regarding the interaction between each of the five senses, for each interaction, the findings were nonsignificant (see Table 4).

Table 3

Omnibus Factorial ANOVA Results Comparing Senses and Total Wellness

Predictor	*df*	MS	*F*	*p*	η^2
Vision	2	33.28	.76	.48	.046
Hearing	2	5.22	.12	.89	.008
Touch	2	160.77	3.6	.04	.190
Taste	2	136.95	3.1	.06	.167
Smell	2	96.82	2.2	.13	.124
Error	31	44.09			

Note: n = 58, DV is Total Wellness Composite

Table 4

Univariate ANOVA Results Comparing Levels of Nature Exposure and Total Wellness

Predictor	*df*	MS	*F*	*p*	η^2
Vision	2	135.7	3.08	0.06	0.16
Hearing	2	53.47	1.21	0.31	0.07
Touch	2	114.52	2.6	0.09	0.14
Taste	2	74.59	1.69	0.2	0.1
Smell	2	71.35	1.62	0.22	0.1
Error	31	44.09			

Note: n = 58, DV is Total Wellness Composite

Exploratory Analysis

After conducting an exploratory correlational analysis of the relationship between the five dimensions of the FFWEL (Myers & Sweeney, 2005, 2014) and Nature Survey composite score, the only significant relationship found between the Nature Survey composite score and

each of the five selves subscale scores was with the Physical Self, r (56) = .29, $p < .05$ (see Table 5).

Table 5

Exploratory Analysis of FFWEL Dimensions and Nature Scale Composite With Means and Standard Deviations

Variable	*M*	*SD*	1	2
1. Physical Self	70.13	14.5	-	
2. Nature Scale Composite	19.03	14.47	0.254*	-

*n = 58, *p < .05*

Summary of Results

In conclusion, the results of these statistical analyses revealed that there is not a significant relationship between composite wellness scores as reflected in Five Factor Wellness Inventory (FFWEL; Myers & Sweeney, 2005, 2014) and composite scores from the Nature Survey. Further, when comparing the means of wellness scores and means of nature scores in each of the five senses, it was determined that there is no difference in means among vision, hearing, smell, and taste, but there was a difference in touch when compared with the other senses, suggesting that counselors who reported sensing nature by touch scored higher in wellness than those who reported seeing, hearing, smelling, and tasting nature. When considering any differences in the extent to which nature is sensed across the five senses, whether minimal, moderate, or maximal, there were no significant differences found.

Chapter 5

Summary, Implications, and Recommendations

Because the onus to be well rests on the counselor, the importance of being a well counselor and subsequent strategies that can be employed to improve wellness continue to occupy a vital role in the literature. The COVID-19 pandemic introduced new challenges to maintaining wellness for the world of humankind at large, including licensed professional counselors (Hervalejo et al., 2020; Mayers et al., 2023; Ward et al., 2022). As a result of a substantial influx of clients seeking psychological relief from COVID-19 stress, increased workloads especially compromised counselor wellness (Cook & Fye, 2022; Humer et al., 2022; Litam et al., 2021).

The literature has addressed ways by which counselors can engage in self-care to protect or to improve their wellness. Wendell (2022) reported, however, that current research suggests many counselors continue to fall short of living up to the wellness standards proposed by the American Counseling Association Code of Ethics (ACA; 2014), suggesting that the current literature advocating for wellness and suggesting wellness activities for counselors is simply not enough. This is understandable as engaging in wellness practices requires time outside of the workday, and many professional counselors simply do not have the time because of their workload, personal obligations, and responsibilities. This raises the question of what wellness practices counselors might employ that do not require time outside of the counseling session, and the question that was the conceptual catalyst for this study.

Findings

The purpose of this research was not only to determine if the inclusion of nature in the counseling session contributes to counselor wellness, but also to learn if any one of the five

senses used in detecting nature, when compared to the other four, plays a greater role in wellness. It was originally proposed to answer these questions using a one-way analysis of variance. In the attempt to analyze the data through this statistical analysis, it became apparent that using a factorial ANOVA would be more efficient in accommodating for the five senses and their respective levels that revealed the extent, on a scale of one to nine, categorized as minimal, moderate, and maximal, to which nature is sensed. Another adjustment that was made in analyzing the data involved the first research question that addressed a possible difference in means between the composite scores on the Nature Survey and composite scores on the Five Factor Wellness Inventory (FFWEL; Myers & Sweeney, 2005, 2014); a correlation coefficient was computed to determine if the more natural elements that are sensed in the counseling context the higher the wellness score.

Natural elements could involve the simple placement of a potted plant, whether organic or artificial, in the consulting room. It could also include the presence of a window that exposes a nature scene, such as the sky, clouds, birds, and treetops. Including nature in one's physical context is uniquely multidimensional. It could involve a candle that smells of lavender, the taste and smell of cinnamon herbal tea or a dark roast coffee, the sound of water in a fountain, or perhaps a device that generates sounds of nature such as rainfall, waves, or insects. It includes the ability to hear a purring cat or feel a dog's fur.

While this study did not find a statistically significant relationship between the total composite Nature Survey scores and the total composite Total Wellness scores from the Five Factor Wellness Inventory (FFWEL; Myers & Sweeney, 2005, 2014), it does not negate the current literature in arguing in favor of the psychological benefits of the natural world (Buxton et al., 2021; Clissold et al., 2022; Frumkin et al., 2017). It was anticipated that the results of the

analysis addressing the first research question would corroborate the existing abundance of literature supporting the connection between nature and wellness. The correlational statistical analysis in this study reported a significance value of .051 which exceeded the alpha level of .05, establishing that the results of this analysis were not statistically significant by .001. While the data analysis did not return a statistically significant *p*-value, the value that was determined, $p = 0.051$, is remarkably close to significance. Insomuch that larger sample sizes are more likely to return a significant *p*-value than smaller sample sizes (Durlak, 2009), the sample size for this study, $n = 58$, may not have been sufficient to return a significant value. A greater sample size may have resulted in a finding of significance.

Considering the correlation coefficient reflects strength of the relationship (effect size), Gignac and Szodorai (2016) argued that a correlation of .20 should be considered "typical (or medium), rather than small." (p. 75). This analysis rendered a correlation coefficient of .257 which suggested there was a moderately strong effect size between nature and wellness despite there not being a significant *p*-value, and despite the small sample size. In arguing the importance of reporting effect size, Barry et al., (2016) not only maintained that reporting effect size is suggested by the American Psychological Association, but that, when considering effect size and null hypothesis statistical significance testing, "Good research and good reporting practice require that both sides of the coin be taken into account to reach sound quantitative research decisions" (p. 525).

The Nature Survey, designed to determine the extent to which nature is sensed within the physical context of the counseling session, was provided in a 10-point Likert style format. The participants were invited to record, on a scale of zero to nine, the extent to which they sense nature in their counseling sessions. The survey consisted of five questions, each question relating

to one of the five senses (vision, hearing, smell, touch, and taste). Of interest is that raw data from the Nature Survey indicated that eight of the 58 participants scored between 40 and 45, which suggests they were immersed in nature during their counseling sessions. Immersion in nature inferred that these counselors conduct their sessions outdoors and can fully sense the natural world, which is not common for the settings in which most counselors practice. Of those eight participants, five exceeded the FFWEL (Myers & Sweeney, 2005, 2014) mean score of 79.9.

Of the 58 participants, one counselor reported not being able to visualize nature, but reported sensing nature over the remaining four senses. Six counselors reported having no sense of nature over all of the five senses. While this data was unexpected, it is possible that counselors are unable to choose a counseling setting that has a window exposing the sky, or an environment that they can configure to be more natural. They may not be able to choose the décor of their office setting in terms of visual art that depicts a nature scene, or a device that generates nature sounds, or an animal to touch, see, feel, and smell. Some may simply not have the freedom or the space to include aspects of nature due to policies or rules out of their control. Although some counselors who counsel in an indoor setting have a window, they may not open window coverings to expose the outdoors to maintain privacy and protect the confidentiality of the client.

Further, some counselors may not be compelled to purposefully include nature into their sessions if they have had negative experiences with the natural world. Or, they may have never been introduced to the natural world in a context that is welcoming and safe, or simply not drawn to incorporate nature in their counseling session. Not everyone shares the same meaning of the natural world (Firby & Raine, 2023) and so may not be inclined to include nature in their counseling session. Interestingly, of those six counselors who scored zero in sensing nature, three

exceeded the FFWEL (Myers & Sweeney, 2005, 2014) mean score of 79.9. Possibly these counselors were reporting their perception of sensing nature through mindfulness techniques and could mentally visualize, hear, smell, touch, and taste nature in their counseling session; the Nature Survey scales did not accommodate for mindfulness techniques in sensing nature. These counselors also may intentionally interact with nature outside of the counseling session.

The remaining five research questions addressed if any one of the five senses, when compared to the other four, plays a greater role in wellness when experiencing nature in the counseling session. It was hypothesized that at least one of the senses would make a greater contribution to wellness than the other four senses and was expected that vision would play the greatest role. Analysis of the data refuted this, revealing a statistically significance when sensing nature through touch, but not through the other senses. According to Douglas (2021) "… we live in and experience the world through the wholeness of our bodies, primarily as tactile beings" (p. 9). This simple, yet profound description of the connection between physical touch and the ability to experience the world has found application in therapeutic techniques that include non-human animals such as dogs, cats, and horses which are able to be touched (Beauchin, 2017; Fine, 2018; Monfort et al., 2022; Kedanis, 2016).

For example, wood, cotton, and wool also are natural substances, and counselors may intentionally choose furnishings made from these substances or clothing made from natural fibers to stay in tactile connection with the natural world. Additional thought into this finding revealed that of all the five senses, those most often compromised or lost by individuals are vision, hearing, smell and taste. Less frequently does the human lose their capacity to experience the world through touch.

This considered, the significant difference in sensing nature through touch, when compared to the other four sensory pathways is both reasonable and enlightening. When contemplating these research findings, it is assumed that those who reported sensing nature through touch were influenced by non-human animals, plants, feathers, plants, rocks, wood, natural fibers, or other aspects of nature that can be touched in the counseling session. Further, within the appropriate context, counselors who reported touch may have experienced meaningful moments in holding their client's hand, providing a reassuring gesture through touching their client's shoulder, or other times in which proper physical touch was powerful in the healing process and in demonstrating the counselor's empathic stance in connection with their client.

Implications for Counselor Wellness

There is an adequate amount of literature advocating for counselor wellness, not including the requirements and standards set forth by professional organizations such as the American Counseling Association (ACA), Counselor for Accreditation of Counseling and Related Educational Programs (CACREP), Chi Sigma Iota (CSI), and the National Board for Certified Counselors (NBCC). Yet the literature has not addressed how attending to the physical context of the counseling session could facilitate the counselor's wellness. Further, literature is generous in attending to the psychological value the natural world offers in well-being, but has not addressed how the natural world, when included in the context of counseling, could relate to counselor wellness. Undoubtedly, literature is vast in addressing how nature contributes to the client's positive treatment outcome when engaging in a nature-based therapeutic protocol, but lacking in exploring the possibility of a residual psychological advantage nature may offer to the counselor who administers nature-based therapeutic protocols.

The purpose of this study and discovering potential findings that might support the hypotheses of the study, were not intended to divest the client of an effective and productive counseling experience, nor to suggest prioritization of the counselor's needs. Without question, the client's welfare is of first concern to the counselor, and is especially the primary concern for counselor educators and supervisors (Chang, 2019; Harrichand et al., 2022; Homrich, 2009). For this reason, the impetus of this research was to discover new ways of improving counselor wellness because maintaining personal wellness is critical to helping the client (Meyer & Ponton, 2006).

The findings in this study lean toward supporting the concept that the natural world can potentially play a part in counselor wellness. This has important implications for how the counselor can approach wellness practices. Engaging in wellness activities outside of the counseling session is certainly effective, but incorporating nature into the physical context of the counseling session can be accomplished in a variety of ways. Simply placing a potted plant, hanging visual art or tapestry depicting a nature scene, including a water fountain, sipping on herbal tea or coffee, keeping close at hand a piece of soft wool or silk fabric or a non-human animal to touch could open new opportunities and ideas in ways for counselors to be more well.

Nature and the Five Selves

In addition to finding answers to the six research questions, it was proposed that the results of the analysis might also provide additional information on how the ability to sense nature might be reflected in the specific five second-order dimensions of the *Indivisible Self Model of Wellness* (IS-WEL, Myers & Sweeney, 2005a). It was found that the only significant relationship found between the composite Nature Survey scores and the five self subscales on the FFWEL (Myers & Sweeney, 2005, 2014) was between nature and the Physical Self. Each of the

five questions on the Nature Scale accommodated for a maximal amount of nature that is sensed in the counseling session. The participants who scored higher on the Nature Survey may have been more likely to engage in physical activity such as yoga, walk talk therapy, wilderness therapy, or equine therapy (a few therapeutic modalities that are more likely to be conducted outdoors). Because these modalities include physical movement, the relationship between the Physical Self and the inclusion of nature may be more attributable to the physical activity than the outdoor environment.

Limitations to the Study

The final analysis of the data was based on a small sample size, which consisted of 58 participants instead of the originally proposed 200. While 200 attempted the study and exhausted the prepaid licenses, only 58 of those completed the study and submitted the research materials. Although the recruitment email explained the approximate amount of time the study would require of the participant, it is likely that many of the participants clicked on the link and accessed the surveys but were not able to complete the survey in its entirety. In the event the research participant did not complete the survey in the first sitting, and later returned to the original email with the link, an additional license was used. Participants could return a series of times to the link, but each time they clicked on the link, a license was used. This explains why 200 licenses were exhausted but there were only 58 completed surveys that could be analyzed.

This issue could have been preempted had arrangements been made for the link to be accessed under the condition the participant created an account with the testing instrument publisher. In this situation, the participant would have maintained access to the survey and could have returned to it at a later time without using an additional purchased license. In the initial

analysis, this seemed to be prohibitive, as well, assuming the test participant may be reluctant to spend the time to create an account and a password with the testing publisher.

Another limitation to the study involved the criterion that to participate, professional counselors and professional counselor associates were required to be licensed in the State of Texas. Had the opportunity to participate also been made available to counselors outside the State of Texas, there may have been a greater participation response. Another criterion that may have impeded the amount of participants was that only licensed professional counselors and licensed professional counselor associates were invited to participate. Had the criterion included certified school counselors, more counselors may have participated. Finally, licensed professional social media platforms were not used to recruit participants. Using this venue most probably would have increased visibility and availability of the study for licensed professionals.

Implications for Future Research

Considering the amount of literature on counselor wellness, it is apparent that licensed professional counselors, counselor supervisors, counselors-in-training, and leaders in professional counseling organizations understand the necessity in maintaining wellness. For many counselors, improving and maintaining wellness is extremely difficult; it could be a benefit to counselors to learn there are ways of improving and maintaining wellness within the counseling session. Perhaps if counselors could be introduced to wellness strategies that required very little money and time, and could be a part of the workday such as incorporating the natural world into the counseling context, counselors and their clients could benefit.

Nature-based therapies such as horticulture therapy, walk talk therapy, wilderness therapy, and equine therapy, among others, have received attention. Based on current research, the benefits of the natural world that nature-based therapeutic protocols offer for the client

continue to be corroborated. In general, the power of the natural world on psychological health continues to be validated. However, the literature has not addressed how these therapeutic protocols that include nature may also benefit the counselor. Future research examining this possibility may open the door to fresh, alternative hypotheses in counselor wellness research. It may also provide the impetus to investigating how a counselor's physical environment in the counseling session may be supporting or sabotaging their own wellness.

Recommendations

The purpose of this study was to gain a deeper understanding of how the presence of nature might contribute to counselor wellness, and to determine if any one of the five senses, when compared to the other four, make a greater contribution when sensing nature. It was anticipated that the sample size of 200 would be adequate. Upon analyzing the data based on 58 participants, it was anticipated that a smaller sample size than proposed might affect the outcome of the statistical analysis. Sheperis et al. (2010, 2017) argued that a sample size of less than 100 could compromise finding a significant correlation. While the results of this study revealed a connection between nature and counselor wellness, despite a small sample, it is recommended to broaden the eligibility requirements for participation. For example, inviting participants who are also certified school counselors would be appropriate. In addition, recruiting participants at a national level is certainly worthy of recommendation. An additional recommendation is to further explore the part physical movement plays in nature-based therapies such as walk talk therapy, equine therapy, wilderness therapy, and other therapeutic protocols in which the body is called upon to move. This study examined wellness and the part nature plays, not only in an indoor setting, but in an outdoor setting that involved physical activity. Attention to nature-based therapeutic modalities involving physical movement within the context of counselor wellness is

worthy of research. Based on the findings of this study, it is recommended to further investigate the part that physical movement, when in the context of the outdoors, might play in counselor wellness.

While certain aspects of this study's results were unexpected, some of the findings support that inclusion of the natural world into the physical context of the counseling session was associated with greater wellness. The findings of this study leaned toward ways by which counselors can nurture their wellness and well-being through incorporating elements of nature into their counseling sessions. Understandably, engaging in counseling with complete immersion in nature in an outdoor setting may be difficult for many counselors, and might be impossible for most. However, creating an indoor environment that allows one to sense nature through vision, smell, touch, taste, or hearing may not be as difficult as it seems. There are many ways to bring the outside in. It simply needs an invitation.

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Appendix A

Nature Survey

1. Vision:

On a scale of 0 to 9, please indicate the extent to which you are able to ***visually sense*** elements of nature during your counseling sessions. Examples of visual elements can include plants/vegetation, non-human animals, visual pictures/art depicting nature, feathers, rocks, shells, water, candle, and sky.

0: I am not able to visually sense any elements of nature during my counseling sessions.

9: During my counseling sessions, I consider myself visually immersed in nature as I conduct counseling sessions outdoors and am able to visually sense elements of nature either sitting or engaging in nature-related physical activity such as horseback riding, walking, yoga, hiking, camping, gardening, or other nature-related physical activities.

0 1 2 3 4 5 6 7 8 9

2. Hearing:

On a scale of 0 to 9, please indicate the extent to which you are able to ***sense by hearing*** elements of nature during your counseling sessions. Examples of elements of nature that can be heard consist of the sounds of wind/breeze, rain, thunder, water, and/or non-human animals including insects.

0: I am not able to sense by hearing any elements of nature during my counseling sessions.

9: During my counseling sessions, I consider myself immersed in nature as I am able to sense through hearing sounds of nature in an outdoor setting, either sitting or engaging in nature-related physical activity such as horseback riding, walking, yoga, hiking, camping, gardening, or other nature-related physical activities.

0 1 2 3 4 5 6 7 8 9

3. Touch

On a scale of 0-9, please indicate the extent to which you are able to ***sense the physical touch*** of elements of nature during your counseling sessions. Examples of natural elements that can be sensed by touch are physical touch with humans or non-human animals, plants, shells, feathers, wind/breeze, or other elements of nature you are able to sense by physical touch.

0: I am not able to sense by physical touch any elements of nature during my counseling sessions.

9: During my counseling sessions, I consider myself immersed in nature as I am able to sense by touch elements of nature in an outdoor setting, either sitting or engaging in nature-related physical activity such as horseback riding, walking, yoga, hiking, camping, gardening, or other nature-related physical activities.

0 1 2 3 4 5 6 7 8 9

4. Taste

On a scale of 0-9, please indicate the extent to which you are able to ***sense by taste*** elements of nature during your counseling sessions. Examples include food sources such as water, herbal/spice teas, or other food sources with ingredients reflective of nature.

0: I am not able to sense by taste any elements of nature during my counseling sessions.

9: During my counseling sessions, I consider myself immersed in nature as I am able to sense by taste elements of nature in an outdoor setting, either sitting or engaging in nature-related physical activity such as horseback riding, walking, hiking, yoga, camping, gardening, or other nature-related physical activities.

0 1 2 3 4 5 6 7 8 9

5. Smell

On a scale of 0-9, please indicate the extent to which you are able to ***sense by smell*** elements of nature during your counseling sessions. Examples include smells of human or non-human animals, aromas emitted from food products containing natural elements, aromas emitted from infusers or candles that reflect nature, or outdoor air from an open window.

0: I am not able to sense by smell any elements of nature during my counseling sessions.

9: I consider myself immersed in nature as I am able to sense by smell elements of nature during my counseling sessions in an outdoor setting, either sitting or engaging in nature-related physical activity such as horseback riding, walking, yoga, hiking, camping, gardening, or other nature-related physical activities.

0 1 2 3 4 5 6 7 8 9

Appendix B

Recruitment Email

Greetings! My name is Naomi Coleman Medina, and I am a doctoral candidate in the Counselor Education and Supervision program at St. Mary's University in San Antonio, Texas. I am in the process of completing my dissertation and would greatly appreciate your assistance. I am interested in counselor wellness and how the natural world in counseling sessions could contribute to counselor wellness. You were contacted because you are a licensed professional counselor or licensed professional counselor associate in Texas. This study was approved by The Institutional Review Board at St. Mary's University, San Antonio, Texas.

Included at the bottom of this email is a link. Should you agree to assist, please click on the link. There you will find the informed consent document, a personal demographic survey, a brief questionnaire relating to the extent that aspects of nature are part of your counseling sessions, and a testing instrument called the Five Factor Wellness Inventory (FFWEL). Completing this set of instruments will take approximately 15 to 20 minutes. There are no anticipated risks associated with participating in this study, and no information that could identify you will be collected.

To participate in this study, participants must be licensed in the State of Texas, fluent in English, and currently providing counseling services.

If you have any additional questions regarding this study, please feel free to contact me, Naomi Coleman Medina, at nmedina9@mail.stmarytx.edu or my supervisor, Dr. Melanie C. Harper, at mharper@stmarytx.edu.

By clicking on the link below, you will be directed to the research materials.

(LINK)

Thanks so much.

Sincerely,

Naomi

Naomi Coleman Medina, M.A., LPC-S (she, her, hers)
Doctoral Candidate
Counselor Education and Supervision
Department of Counseling and Human Services
St. Mary's University, San Antonio, Texas
Nmedina9@mail.stmarytx.edu

Appendix C

Informed Consent

St. Mary's University, San Antonio, Texas, supports the practice of protection of human participants in research. This consent form will provide you the information you need to understand what is being done and why you are being invited to participate. It will also describe any known risks, inconveniences or discomforts that you may encounter. We encourage you to ask questions at any time. If you agree to participate, please be aware that you are free to withdraw at any point. If you want, you can print a copy of this consent form.

Purpose and Background

You are invited to participate in a research study to learn more about the relationship between nature and counselor wellness. The information gathered will be used to increase knowledge about counselor wellness, and how the natural world in counseling sessions may contribute to counselor wellness. You are invited to participate because you are a licensed professional counselor or licensed professional counselor associate in Texas.

Procedures

If you agree to participate in this study, you will be asked to complete a personal demographic survey and a brief questionnaire asking about the extent nature is included in your counseling sessions. You will also be invited to complete the FFWEL, a testing instrument that will render a composite wellness score. The FFWEL will require approximately 15-20 minutes to complete. Each of these materials are included in this link. All information you provide will remain confidential and your name will not be collected or associated with any research findings. When this study is complete, you will be provided with the results if you request them, and you will be free to ask any questions. If you have any further questions concerning this study, please

feel free to contact us through phone at 210-436-3011, or e-mail: Researcher Naomi Coleman Medina at nmedina9@mail.stmarytx.edu or Supervisor Melanie C. Harper, Ph.D. at mharper@stmarytx.edu.

If you have any questions about your rights as a research participant or concerns about this research study, please contact the Chair, Institutional Review Board, St. Mary's University at 210-436-3736 or email at IRBCommitteeChair@stmarytx.edu. ALL RESEARCH PROJECTS THAT ARE CARRIED OUT BY INVESTIGATORS AT ST. MARY'S UNIVERSITY ARE GOVERNED BY THE REQUIREMENTS OF THE UNIVERSITY AND THE FEDERAL GOVERNMENT.

Risks/Discomforts

There are no foreseeable risks or discomforts.

Please indicate with your signature on the space below that you understand your rights and agree to participate in the study. If you agree to participate, please be aware that you are free to withdraw at any point, and you will not be penalized or lose benefits to which you are entitled.

Appendix D

Follow-up Recruitment Email

Greetings! My name is Naomi Coleman Medina, and I am a doctoral candidate in the Counselor Education and Supervision program at St. Mary's University in San Antonio, Texas. I contacted you a few weeks ago regarding the possibility of your participating in my study and thought I would follow up. I am interested in counselor wellness and how the natural world in counseling sessions could contribute to counselor wellness. You were contacted because you are a licensed professional counselor or licensed professional counselor associate in Texas. This study was approved by The Institutional Review Board at St. Mary's University, San Antonio, Texas. If you have already completed the questionnaires, thank you. If not, I would greatly appreciate your assistance.

Included at the bottom of this email is a link. Should you agree to assist, please click on the link. There you will find the informed consent document, a personal demographic survey, a brief questionnaire relating to the extent that aspects of nature are part of your counseling sessions, and a testing instrument called the Five Factor Wellness Inventory (FFWEL). Completing this set of instruments will take approximately 15 to 20 minutes. There are no anticipated risks associated with participating in this study, and no information that could identify you will be collected.

To participate in this study, participants must be licensed in the State of Texas, fluent in English, and currently providing counseling services.

If you have any additional questions regarding this study, please feel free to contact me, Naomi Coleman Medina, at nmedina9@mail.stmarytx.edu or my supervisor, Dr. Melanie C. Harper, at mharper@stmarytx.edu.

By clicking on the link below, you will be directed to the research materials.

(LINK)

Thanks so much.

Sincerely,

Naomi

Naomi Coleman Medina, M.A., LPC-S (she, her, hers)
Doctoral Candidate
Counselor Education and Supervision
Department of Counseling and Human Services
St. Mary's University, San Antonio, Texas
Nmedina9@mail.stmarytx.edu

Appendix E

Demographic Information

Please describe your gender

Male

Female

I prefer not to answer

I prefer to describe myself as: _____

Please describe your race/ethnicity (select all that apply)

Hispanic or Latino

White

Black or African American

American Indian or Alaskan Native

Asian

Native Hawaiian or other Pacific Islander

I prefer not to answer

I prefer to describe myself as: _____

Age

20-30

31-40

41-50

51-60

61-70

71-80

Over 80

Credentials

LPC

LPC-Supervisor

LPC Associate

Years as a licensed counselor (any category)

0-5

6-10

10-15

16-20

20-25

26-30

Over 30

Employment setting

Private Practice

Hospital

Agency

Academic

Other

Vita

Naomi Coleman Medina is a licensed professional counselor supervisor and owns a private counseling practice in San Marcos, Texas, called, “Metamorphosis,” a name she felt that reflected personal growth and change over the lifespan. Prior to becoming a professional counselor, Naomi was a personal fitness trainer for 25 years. While this career was rewarding, she felt the need to broaden her ability to help others. In her 40’s she embarked on an educational career, and with the support of her husband and family, was able to fulfill her dream in becoming a licensed professional counselor. Her appreciation for the restorative powers of the natural world and the value of gentle physical movement resulted in her becoming a walk talk therapist. For many years, Naomi has valued the part education plays in personal growth for the student and the teacher. For nine years, she was a member of the adjunct faculty at Austin Community College. Following, she enjoyed the experience of teaching in the department of counseling and human services at St. Mary’s University. Naomi is currently a lecturer in the department of psychology at Texas State University.