

Program Evaluation: The Future of the Human-Nature Relationship

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Needs Assessment Introduction

This program has been selected because of the current state of the planet, the interaction of multiple cultures, and what opportunities technology combined with different views on the human and nature relationship can provide to heal it in the world of counseling. At this point in human history if one is willing to take the journey one can master a skill that utilizes modern technology such as coding or ancient traditions such as martial arts or both. There are many different levels of interaction with nature that can occur. There are also exciting discoveries that can be made from being able to more deeply examine what is happening to the individual before and during the pursuit of mastery. The skills selected for this study are white water rafting, coding, and martial arts.

Reddon and Durante (2019) focus on prisons in their article and how the current construction results in the prisoners barely having access to nature which affects the inmate's mental health. Carlisle et al. (2021) did a study that examined cat adoption in families with children that had autism. The participants who adopted cats demonstrated better empathy and less separation anxiety. Nature helped them with coping. Other recent studies (Bang & Marin, 2015) examine the larger picture of how the human nature relationship is viewed in different cultures. Researchers in counseling see that because of the increasing layers of complexity that affect the way one interacts with the world as they move throughout their life, qualitative and quantitative design combinations could be very effective in finding solutions for when different cultures are living in the same area (Giusti, 2019). Scientists recognize that there are issues with the way the human and nature relationship is explored in science classes in certain parts of the world which can have a major impact on certain professions in public health such as psychology (Bang & Marin, 2015). This and similar studies can help counselors can become more skilled at

utilizing motivational interviewing and or Socratic dialogue when examining a client's view of the human and nature relationship to ensure proper ethics are being maintained in utilizing nature to help them. The contributions to the field of counseling would be invaluable and could even be helpful for the larger discussions that are happening across the world (Kopnina et al., 2018).

The participants, academia, and counselors could all gain things from the outcomes of this study. For counseling specifically, the more studies are done the better counselors can become at being multiculturally competent when it comes to the human and nature relationship. Then there are the benefits in academia from interdisciplinary discussions on the results of the study. For those mastering that skill, it would be a chance for them to promote it. This would lead to the benefits for those participants partially or fully concentrated on the business side and stakeholders who also care more about that.

For this study, the roles the stakeholders will play would be a combination of funding and utilizing the results. If it is an organization such as the state or federal government, academia, or scientists then it would mainly come down to funding initially after the study is finished. They would need a little time to determine implementation. If the participant is more interested in utilizing the results for business endeavors they may be able to harness the results almost immediately. If the public knows they were part of a large study it might intrigue them enough to become customers. However, these participants would need to be able to do this while respecting the privacy of the other participants.

Counseling Program Description

When it comes to counselors mastering the various skills themselves chosen throughout this program that will not be the focus. The focus of this program is to train counselors on utilizing motivational interviewing and or Socratic dialogue as effectively and ethically as

possible when determining how nature can help the client, no matter what the main modality is that they use. The different views on the human and nature relationship can change drastically from culture to culture. However, we all still share the same planet as a species. Due to this, it can be very challenging for counselors to maintain proper ethics while also protecting the planet. If there was a continuing education course on motivational interviewing and Socratic dialogue when dealing with the human and nature relationship based on the examination of mastering different skills then it could help counselors feel more confident in maintaining this balance. The course would be created and implemented after the first study in the program. After that, the facilitators would just build on the workshop using the other studies and the testimonials submitted to the main facilitators. Hopefully, this workshop could eventually be done worldwide. Enough time would be given in each workshop for the facilitators to explore what could be taken from the skills studied to apply to motivational interviewing and Socratic dialogue. Part of this would come from the fact that the studies for the program are designed in a way to be mostly qualitative while still having some quantitative aspects. There will be an assessment at the end of each workshop to see if the attendees understood the material.

Logic Model Narrative

The resources and inputs are the first sections that will be explained. Two teachers each with two students of every skill. A psychoanalytic therapist and a contemplative psychotherapist will be used for the assessments and interviews. Access to one river system that has levels 1-5 or multiple river systems that combined have all the levels. Wing Chun studios are in a location where nature is easily accessible. All participants will need to commit to one year. Coding and white-water rafting teachers must have at least ten years of experience in the field. Wing Chun lineage must go back at least two centuries. A functional magnetic resonance imaging (fMRI)

machine will be needed for the scans done for the pre-post portion. A question list assessing changes in attitude towards nature will be created by the researchers to be used during the interviews. At the end of each month, students will be interviewed and asked the questions from the list. The teachers will discuss their student's progress based on the question list used by the researchers. They will all go in an fMRI machine pre-post and focus on how they view their relationship with nature during it. Those who practice martial arts and white-water rafting will show more activity in their dorsolateral prefrontal cortex (DLPFC) and less in their default mode network (DMN) in the pre and post-test than the students practicing coding due to more likely interactions with nature. Counselors will become more skilled at maintaining the therapeutic alliance. Finally, the outcomes section. Help counselors using older therapies such as psychoanalytic utilize ancient traditions and wisdom better. Therapists can more effectively help those disconnected from nature find their connection to nature again if they want. Find more multicultural solutions to increase the human-nature relationship and solve environmental issues.

Objectives

The following are the objectives for the program: 1) Participants will attend the motivational interviewing and Socratic dialogue workshop to learn how to be more effective at it which will be shown by correct responses by at least 50% of the attendees. 2) More participants will attend the workshop each year to demonstrate its benefits to the profession which will be shown by a minimum 25% increase in attendance each year. 3) Participants will effectively utilize the lessons from the workshop in their practice to help the profession overall become more multiculturally competent which will be demonstrated by having at least 5 testimonials submitted by those who attended the workshop.

Evaluation Design

The matter of health insurance and injuries depending on the skill is one of the first things that will need to be worked out for this study and future ones in the program. In this study, there should not be any concern about the teacher or student exploring coding sustaining injuries. The other two are different matters. It comes down to how committed the student is and how far the teacher wants to push them. The harder the student is willing to be pushed the more likely they are to sustain serious injuries. This could include hospital trips and surgeries. For this study, if the teachers were not already planning for their students to sign waivers then they will need to do that. This will have to be reassessed in every study when the new skills are chosen.

The design for this study is a combination of pre-post, experimental, and case series. A pre-posttest fMRI scan will be used to have a clearer baseline for future studies. If the study were just interviews it might become difficult to maintain a consistent way to assess the human and nature relationship. At the same time, the interviews and criteria for the teachers and students bring in that qualitative multicultural dimension. The researchers will take the approach described in the logic model portion of the paper for the teacher's interviews for the following reason. Psychoanalytic therapy and contemplative psychotherapy were chosen because they represent two different ends of the spectrum. Psychoanalytic was the first modern therapy created and uses motivational interviewing and Socratic dialogue the least. Contemplative psychotherapy uses those much more often. They will both be present during the interview to be certain that interpretations of the participant's words in that modality are from someone who uses it. Students must be new to the skill, so their development is as clear as possible. The experience of lineage criteria for the teachers is to ensure they can go in-depth with their examination of the students. The testimonials submitted to facilitators will help ensure that the proper correlations are being made between motivational interviewing and Socratic dialogue. The independent

variables are the skills, the participants, the interviews, and the assessments are chosen. The dependent variables would be the researcher's assessments of the interviews and the results of the fMRI scans.

Stakeholder Needs

The stakeholders for this particular study in the program will be the counseling profession, the participants, and the academia. The findings will be used in two ways. The first will be to help counselors gain a better sense of how to be multiculturally competent regarding nature. The second will be to create a baseline of what will be carried over into future studies in this program.

Data Collection

The selection of the sample population will be straightforward. For coding, the researchers will reach out to computer programming professors at universities. Once they have found someone they are interested in they will reach out to briefly explain the study and determine if they can participate. Part of this decision will come from the researchers making sure the teacher has or can find two new students. For white-water rafting first, a river or rivers will be selected that go from level one to five. Then the researchers will look for places nearby that offer white-water rafting trips. They will reach out to those establishments to find a teacher who has the necessary amount of experience. Once that is done they will reach out to the teacher and repeat the assessment interview. For Wing Chun, the researchers will simply search until they find two. An extra step for the assessment interview will be to make sure the two studios have different lineages. They will need to make sure each one goes back at least two centuries. The students must be brand new to the skill.

The question list would be utilized during the interviews. The researchers will have an interdisciplinary discussion concerning the question list to make sure the questions are reasonable. The fMRI would be done at the beginning and end of the study. fMRI machines have been proven for decades now to be reliable. To address reliability for the interviews the researchers will make sure to test the app or device they are using before actually using it with the participants. They will also make sure the participants can send the completed forms with encryption in place. The interviews will be done with the researchers present. They will set up the meetings in a way that they are done discreetly and in private. When the results are delivered it will be made clear what skill that teacher or student was practicing but the rest will be kept private.

Data Analysis

Qualitative analysis will be utilized for the interviews. This will be used to focus on the emic or I/Thou aspect of the human and nature relationship. The fMRI results will fall under inferential statistics. These will be used to focus on the etic or I/It aspect of the human and nature relationship. This combination can give counselors a clearer sense of how and when to connect nature to whatever struggle the client is going through at the time. The more studies that are done in this program, the more this can be applied on a large scale.

Conclusion

Success for this program will be successful workshops on utilizing motivational interviewing and Socratic dialogue to effectively examine a client's view on the human and nature relationship. It will consist of increasing attendance, how effective counselors who attend it are at implementing it in their practice, and agreement between the profession and people outside of it on how the DLPFC is affected. This will be very important for the skills that involve

less connection with nature and more with technology. For each teacher and student, the researchers will create a compilation document. It will be the pre-posttest fMRI results and a summarization of what the researchers learned during the interviews.

By attempting to be very careful about the specifications and criteria for participants for this program hopefully long-term the human species can gain a deeper understanding of the nuances of the human and nature relationship. The decisions we will have to make in the coming years will be difficult, especially when it comes to environmental issues. The solutions will probably involve collaborations from multiple cultures. They will certainly affect multiple cultures. This will all have an impact on mental health. Any way to create new therapies that are holistic or modify older ones for the same end goal would be very helpful in making future collaborations more effective.

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Appendix

Table 1

Logic Model for Program Evaluation

Resources/Inputs	Activities	Output	Outcomes
<ul style="list-style-type: none"> Teachers of each skill Students of each skill Psychoanalytic therapist Contemplative psychotherapist Access to one river system that has levels 1-5 or multiple river systems that combined have all the levels Wing Chun studios that are in a location where nature is easily accessible All participants will need to commit to one year Coding and white-water rafting teachers must have at least ten years of experience in the field Wing Chun lineage must go back at least two centuries 	<ul style="list-style-type: none"> At the end of each month students will be interviewed about their overall progress The teachers will discuss their student's progress They will all go in an fMRI pre-post and think about the human and nature relationship while having the scan done 	<ul style="list-style-type: none"> Those who practice martial arts and white-water rafting will show higher DPFC activity and less DMN activity pre-post fMRI scans than the students practicing coding due to more likely chances of interaction with nature Insight for counselors on how and when to utilize nature in therapy more often 	<ul style="list-style-type: none"> Help counselors become more effective at fulfilling their duties while utilizing nature in therapy more Therapists can more effectively help those disconnected from nature find their connection to nature again if they want Find better multicultural solutions to increase the human and nature relationship and solve environmental issues

<ul style="list-style-type: none">• Functional magnetic resonance imaging (fMRI) machine• Question list to be used by the researchers			
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