The Correlation between CAM Users and Vitalism

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Abstract

The use of complementary and alternative medicine (CAM) has risen in the past decade due to an increasing distrust of conventional medicine. People use CAM because it gives them a sense of self-empowerment and because they are dissatisfied with conventional medical practices. Adults, ages 18 and over, were interviewed by students across the nation, and the results of these interviews were compiled and analyzed for this study. We found that there is no correlation between people’s CAM practice and their preference for being outdoors. Surprisingly, we found that CAM users are slightly less likely to hold nature-related jobs than nonusers. However, when asked what nature means to them, CAM users were more likely to report a spiritual and holistic connection than non CAM users who viewed nature as a physical entity. Through qualitative and quantitative analysis of the data, we conclude that CAM users do experience a stronger connection to nature.
Background

The use of complementary and alternative medicine is rapidly increasing in North America. Healthcare professionals must now take greater consideration of a patient’s cultural background when deciding on a course of treatment, since different cultures have their own medical and healing beliefs (Tataryn, 2002, p. 877), with many cultures using CAM instead of the Western medicinal system.

There are two main schools of medical practices in use today: conventional medicine and nonconventional medicine. Conventional medicine refers to contemporary and allopathic medical care administered by medical doctors and other health professionals. Nonconventional medicine comprises two large subcategories: complementary medicine and alternative medicine. Complementary medicine refers to the use of nonconventional treatments, such as dietary supplements and yoga, in conjunction with conventional medicine. Alternative medicine refers to the complete substitution of conventional medicine with nonconventional treatments (Snyder, 2007, p.11). At present, contemporary and alternative medicine (CAM) encompass a large set of treatment systems that have yet to be incorporated into mainstream western medicine (Nahin et al, 2004).

Many traditional natural treatments have persisted for thousands of years due to their effectiveness in treating diseases (Navarra, 2004). However starting in the 1930s, these natural treatments have become increasingly taken over by allopathic medicine and laboratory-synthesized drugs. There has been a revival of interest in these old and tried traditional remedies in the past 10 years due to the concerns for the side effects of allopathic medicine (Corrigan, 2001, p.vii). People are drawn towards CAM because they are unsatisfied with different aspects of conventional medicine, including the adverse side effects of many conventional drugs, the professional and aloof attitude of doctors, the increasing reliance on technology, and the exorbitant costs. Moreover, because CAM relies primarily on the initiative of the individual, patients feel that CAM is more self-empowering than conventional medicine (Astin, 1998, p. 1548). Through CAM, many patients seek therapies that cater to their own specific needs. During these therapies, patients often develop a sense of connection with some higher power (Kellner, 2000, p. 175). The New Age healing movement that is rapidly gaining in North America. Healthcare professionals must now take greater consideration of a patient’s cultural background when deciding on a course of treatment, since different cultures have their own medical and healing beliefs (Tataryn, 2002, p. 877), with many cultures using CAM instead of the Western medicinal system.

Although CAM is gaining popularity, it remains overshadowed by allopathic medicine. Many people consult with physicians for health-related matters, but studies have shown that CAM practitioners often do so without informing their doctors (Corrigan, 2001). (Navarra et. al 2004, p. x) proposed that because doctors are generally unknowledgeable about CAM, they refrain from mentioning these alternative forms of treatment to conceal their ignorance. As a result, many patients assume that the effectiveness of CAM is not supported by scientific evidence and thus patients do not suggest them to doctors for fear of appearing foolish or otherwise ungrateful for the allopathic treatment that the doctor recommends.

The main reason people cite that they practice CAM is their belief that “nature is a powerful source of healing (Fredericks, 2008, p8).” This belief is also the guiding principle behind the concept of vitalism, which describes an innate life force that regulates the repair and regeneration of our minds, bodies, and spirits (Fredericks, 2008, p.8). This teaching dates back to Hippocrates (c. 400 BC) who believed that all living things possess a life force that is responsible for keeping them healthy. This theory later became the basis of the concept “like treats like” (Wood, 2005, p. 50). However, knowledge of this life force is neither well-known nor well-understood by western medical practitioners (L’Orange, 2002, p. xii). It is a mysterious force that evades detection by even the most advanced and sophisticated scientific instruments (L’Orange, 2002, p. 29). Although the existence of such a life-giving energy is ungrounded in science, many people believe that it can be felt in CAM treatments (Smith, 2010, p. 271).

CAM and its concept of vitalism contrast sharply with the physical aspects of biomedicine that emphasize the genetic and external biological origins of disease. Vitalism forms the central belief that divides the CAM and biomedicine paradigms (Coulter, 2004, p. 587). Many CAM practitioners believe that diseases arise from internal imbalances in the body rather than external factors. They believe that a rebalance of internal states or a reconnection with nature will cure and prevent diseases. CAM provides users with a sense of control over their health that cannot be found in the more intrusive methods of conventional medicine (Snyder, 2007, p. 2). Adherents of CAM believe that nature is orderly and that this order is guided by an internal wisdom or power that all living things possess (Zhang, 2008, p. 67).

This study’s goal is to determine the correlation between people’s CAM practice and the connection they have with nature. I hypothesize that people who practice CAM will feel a stronger spiritual connection to nature, which is the universe and its phenomena, than people who do not practice CAM. This study will analyze qualitative and quantitative data that show that people who indeed practice CAM better spiritually connect with nature because of their belief in an innate force that guides all life. This force is cannot be found in conventional medicine and is maybe why nonCAM users do not believe in it.

Methods and Materials

1) Population

a. To take part in this research, participants must have been at least 18 years old. The data used in our analysis was collected as part of a collaborative multi-institutional study entitled the “Biocultural Diversity Project” involving...
multiple educational institutions in the US (Emory University, Wofford College, University of South Carolina, Clemson University, Hollins University) and Canada (University of British Columbia). This project did not include vulnerable populations (i.e. prisoners, hospitalized patients, cognitively impaired individuals, and children).

2) Setting
   a. The interviews were held at locations that were most convenient for the participants.

3) Recruitment/Confidentiality
   a. Each student investigator was responsible for recruiting three adults to participate in the study.

4) Procedures
   a. IRB approval (IRB00055749) was first obtained by the primary investigator and all student researchers in all classes were required to complete training in human subjects’ research, participate in mock interviews, and were given a standard survey to use as a guide when conducting the interviews.
   b. Data was obtained through one-on-one interviews where interviewers asked a pre-determined set of questions. Depending on the preference of the participant, the interview session was recorded via either audio, video, or photography. The interviews were conducted only after the investigator had read the consent script, and the participant had signed and received a copy of the informed consent. This data was then kept confidential through assigned non-identifying numbers, and the data was kept in a confidential place by the primary investigator of each university.

5) Data Analysis
   a. The data from all the interviewers were compiled into a single document, from which students may choose any appropriate data to answer their individual hypotheses. The questions used from this particular study were numbers 14, 17, 19, 20, 22, 24, 31, and 32 which can be found in Appendix 1. This data was displayed on bar graphs and subsequently analyzed.

Figure 1. Percentage of types of CAM practices by CAM users

Figure 2. Sample size and population demographics

Figure 3.

Does Background Influence Knowledge of Nature?

Figure 4. Question 20.
Table 1

<table>
<thead>
<tr>
<th>Type of Response</th>
<th>CAM users</th>
<th>Non CAM users</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>God</td>
<td>3</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Everything</td>
<td>10</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Outdoors</td>
<td>19</td>
<td>3</td>
<td>22</td>
</tr>
<tr>
<td>Relaxing</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Not man made</td>
<td>18</td>
<td>5</td>
<td>23</td>
</tr>
<tr>
<td>Total</td>
<td>53</td>
<td>10</td>
<td>63</td>
</tr>
</tbody>
</table>

Table 2 Responses from non-CAM users on “What is Nature to You?”

Whenever I can be outside I am. So, I guess nature to me is biking, tennis.

When she thinks about nature, she thinks about trees, grass and mountains. She used to go to the mountains with her family and she spends time in nature when she goes on retreats.

Whatever is around us. Whatever can me exploited by man.

Whatever happens without any effort or manipulation. We’re part of nature, we’re not apart from nature. Anything that happens on its own without any manipulation or intervention.

There is just the abundance of things that have grown or developed there without human intervention. So the wildest place in that sense, the most natural place that I have ever been is in the Yukon territory. There is one highway running through it. There is nothing, no little gas stations, or shops or houses or anything on that highway. There is just mountains, trees, animals. You have that sense of expanse and sort of non-intervention of people.

Umm, well I guess its just the flora and the fauna and everything working with each other to survive and reproduce.
Table 3 Eleven of the 55 responses given by CAM users when asked “What is Nature to You”

<table>
<thead>
<tr>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>To me, nature is the natural landscape God created for us to live off of and enjoy. To me, everyone has an “inner Eden.”</td>
</tr>
<tr>
<td>To me the natural world is very important, it represents what is real in life, what sustains us as humans. I really reject everything that is man made in the world, and I would much prefer to appreciate nature and live with nature.</td>
</tr>
<tr>
<td>Life to me, nature to me is regenerative, and human life to me is regenerative, on a regular, weekly, daily basis. appreciate life.</td>
</tr>
<tr>
<td>nature and the natural world is God’s creation and harmony and beauty and health</td>
</tr>
<tr>
<td>It is natural order. I think its everything that life is...everything the universe is evident right here right now down to smallest plant...because its like through little things in nature like through little systems and the way nature functions you can understand grand schemes of humanity. It supplies us it feeds us we are of and we are from it and we create and destroy...its the Animunda...the world’s soul</td>
</tr>
<tr>
<td>Nature is an innate state of equilibrium which allows for a greater understanding of one’s self in his or her relation to the world. The natural world allows or encourages a collective sense of belonging, love, and respect</td>
</tr>
<tr>
<td>Nature is really balanced, it is the balanced environment. Nature is a balance of systems, if you start to break apart nature, you find all these systems that balance themselves.</td>
</tr>
<tr>
<td>Nature is life, beauty of natural world. It can bring joy and peace.”</td>
</tr>
<tr>
<td>Nature is a wonderful thing. Plants and animals...the rivers and all would be a part of nature too. Trees...there’s so much that you can’t put it in words. Nature is very important...it’s a part of life to have all of that around us.”</td>
</tr>
<tr>
<td>Well, you know, it’s God’s creation. God made everything, which is what I would call nature. We are part of nature because God created us.</td>
</tr>
<tr>
<td>God’s work; beautiful; global warming; fresh air</td>
</tr>
</tbody>
</table>

Discussion

A) Sample Size
Of the 130 recorded responses, 55 individuals reported to having used complementary and alternative medicines, 10 individuals reported to have never had any CAM treatments, and 65 individuals gave no response. (Figure 1)

B) Types of CAM practices and Frequencies in a month
The percentage of CAM users that practiced each type of CAM are shown in Figure 2. The most popular form of CAM is vitamin supplements, (60.8% of sampled individuals) followed by yoga (45% of sampled individuals).

The proportion of people who practice CAM at each of the indicated frequencies is shown in Figure 3. The most popular frequency was once a day (17 individuals), followed closely by once a month (15 individuals).

C) Background and Knowledge of Nature (Question 20)
Of the CAM users, the majority (74.5%) have background that influenced their current knowledge of nature while a minority (25.5%) had no background influence. Of those that had background, most of them were exposed to nature at a young age from camping and hiking trips. Moreover, many of these individuals grew up around farms, creeks, forests, mountains, or other rural settings.

Another common source of background influence is formal science education, which encompasses courses in environmental studies, biology, and ecology as well as environment-related fieldtrips. One subject from Seattle reported that she went on outdoor educational trips to the rainforests of Washington to learn about stinging nettles. Of the subjects who reported little background in nature, many stated that they either lacked either interest or exposure to natural world. One participant stated, “I took some biology classes, but didn’t have the motivation to learn anything more because I didn’t really care.”

Of the people who do not use CAM, 40% have a background that make them knowledgeable about nature while the
remaining 60% do not have extensive knowledge of nature. Those that reported “yes” to a knowledgeable background, said that familial influences gave them their current knowledge in nature. Those that reported “no,” stated they grew up in nature, but did “not really have a great understanding of it.” (Figure 4)

D) How Knowing the Names of Things Changes Enjoyment of Nature (Question 24)
Figure 5 shows that for the majority of CAM users (73%), knowing the names of things in nature changed the way they enjoyed nature while for the majority of nonusers (70%) knowing the names of things did not affect their enjoyment. Of those who said that knowing names of things changes their appreciation for them, some stated that knowing something’s name improves their understanding of its function (9 individuals) while others said that names help them feel a better connection to nature and life (14 individuals). One subject stated that knowing the names of plants and trees, as they feel as if though they are “walking among friends.”

E) Correlation Between People’s CAM practice and Their Preference for being Outside (Question 17)
There is no statistical correlation between people’s CAM usage and their preference for being outdoors. Of the nonusers, 60% had a preference for being outdoors, while 49% of the CAM users prefer being outdoors, as shown in Figure 6.

F) Correlation Between People with Nature related Jobs and People who Practice CAM (Question 14)
As shown in Figure 7, people who practice CAM are less likely to have nature-related livelihoods. Of the CAM users, 24% have jobs related to nature while 30% of the nonusers have jobs related to nature.

G) The Definition of Nature Among CAM users and nonusers (Question 19)
When asked to define nature, the most popular response (23) among all the participants was that nature was anything that was not man-made or synthetic. The next popular answer (22) was that nature was the outdoors, and included references to trees, lakes, plants. The third most popular response (10) was that nature was everything that contains life or anything around them. Five of the participants mentioned that nature had something to do with God and His creation. Finally, three of the CAM users provided the response that nature was relaxing and it was where they found peace. These results are shown in Table 1.

For specific quotes, all of the non CAM users described nature through physical entities or activities. For an example, they described nature in terms of sports, outdoor recreational activities, trees, grass, and mountains. One person mentioned it was “Anything that can be exploited by man” and others defined nature as anything that was not man made, synthetic, and untouched by man (Table 2). None of the responses mentioned about spiritual forces or holistic life definitions. Eleven of the 55 responses were chosen to represent the relevant data. The other forty four explanations included non man made and physical entities as described by the non CAM users. However, eleven of the CAM users connected nature to a holistic spiritual life force. Some mentioned about God while others said nature encompassed life and balance. One person mentioned, “Nature is an innate state of equilibrium which allows for a greater understanding of one’s self in his or her relation to the world. The natural world allows or encourages a collective sense of belonging, love, and respect” (Table 3).

This statement mentions about collective sense which relates to holistic views on one’s self and their relations to the world. Another statement that mentions spirituality found in nature and within themselves is, “To me, nature is the natural landscape God created for us to live off of and enjoy. To me, everyone has an ‘inner Eden’.” (Table 3)

Conclusion
On average, people who practice CAM feel a greater sense of connection to nature. The quotes said by both CAM and non CAM users show that non CAM users tend to view nature as a physical entity. They describe nature in geographical features, solitary areas, and physical sports. None of them mention about spirituality or connections to a more holistic life approach. In contrast, of the CAM users, eleven of the fifty five mention God and spirituality, balance and harmony, and self empowerment. This proves that CAM users are more likely to feel a greater sense and may explain why many of these patients may have chosen CAM because it ties in with their values and beliefs. The most important reason that people practice CAM is that they find it empowering especially in areas of self-care, such as diets and supplements, that assist in preventing disease and promoting good health (Snyder).

Although CAM is not yet recognized by allopathic physicians, it is slowly being accepted and studied by medical and pharmaceutical institutions and journals. They are now accepting the fact that these therapies are indeed effective and that nature is still a “remarkable chemist capable of surprising mankind with the diversity and utility of the chemical structures that it can produce” (Corrigan, vii).

In Part D, when the participants were asked if knowledge of the names of things affected their enjoyment of them, the majority of the CAM users stated that it does affect their enjoyment. One individual stated, “you become protective once you establish this connection to your natural environment and this appreciation translates into protection, which translates into politics; there must be a balance of ignorance and knowledge...a stronger connection to place provides a greater need for protection.”

This statement correlates with the idea of vitalism which is the innate life force that regulates the regeneration and repair of the mind, body, and spirit (Fredericks, 8). In alternative medicine, vitalism exists not as a physical force but one that stems from the mind or deeply held emotions (Kaptchuk 1998, 48). This is contrasted with the majority of the nonusers who said that knowing the names of things does not affect their enjoyment of them. This may be because they did not feel the same connection and intimacy with
nature. CAM users reported that knowing names made nature become special like a friend rather than just a “clump of leaves.”

In Part G, most participants defined nature as anything not man-made and not synthetic. It is important to note that the responses that mentioned that nature was related to something relaxing or that nature was everything around them were all CAM users (3 out of 3, and 10 out of 10 respectively). This suggests that CAM users found solace in nature, perhaps as a way to relax and medicate themselves. This may also suggest that they had a stronger connection to nature as they found it comfortable to be with nature. The CAM users that responded that nature was everything around them show that they have a strong connection to nature when they mentioned that nature was all around them. There were no individuals in the nonusers section that mentioned these answers, which suggests that perhaps they are not as connected to nature as the CAM users are. Out of the five responses that related nature to a higher power or God, the majority of them (3) were also CAM users.

According to Part F, people who practice CAM are less likely to hold nature-related jobs. This was an unexpected result, but this difference may be due to random sampling error.

One of the major problems with this study was sample size. There were 55 individuals who reported themselves as CAM users and only 10 individuals who reported as nonusers. The small sample size of nonusers may have resulted in relatively large random error. In the future, the sample size of both groups should be sufficiently large (50+) to yield a more reliable comparison.

In conclusion, this data presented suggests that CAM users indeed have a stronger connection with nature than do nonusers. It is uncertain whether this connection stems from their usage of CAM or whether they practice CAM as a result of a connection that they already feel with nature. It is very likely that in many cases it is a combination of both; appreciation for nature and the use of complementary and alternative medicine feed upon each other.

Works Cited


### Appendix

**Interview Questions for Biodiversity Project- Correlation between CAM users and Stronger Connections to Nature**

<table>
<thead>
<tr>
<th>No.</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>To you, what is nature or the natural world?</td>
</tr>
<tr>
<td>20</td>
<td>What do you think influenced you learning about nature? Is there anything in your background that makes you knowledgeable or makes you not very knowledgeable about nature? Explain.</td>
</tr>
<tr>
<td>22</td>
<td>How is nature important to you? Do you think that in your lifetime, some elements of nature will be lost? What? How will that loss affect you?</td>
</tr>
<tr>
<td>24</td>
<td>Do you feel that knowing the names of things in the natural world, such as the names of insects or trees, changes your observations and/or enjoyment or use of them?</td>
</tr>
<tr>
<td>31</td>
<td>Have you ever engaged in complementary and alternative medical treatments? If yes, which ones?</td>
</tr>
<tr>
<td>32</td>
<td>Is there a link between maintaining your way of life and maintaining the natural world? Please explain.</td>
</tr>
<tr>
<td>14</td>
<td>Is your livelihood or interest somehow related to nature?</td>
</tr>
</tbody>
</table>
| 17  | How much do you like to be outside  
     a) as little as possible  
     b) some  
     c) I prefer to be outside |