

**AN ANALYSIS OF WHO USES COMPLEMENTARY AND
ALTERNATIVE MEDICINE IN CONJUNCTION
WITH ALLOPATHIC CARE**

THESIS

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By

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By

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2001

Dedication

This work is dedicated to my wonderful and patient wife

Natalie Susan Emerson

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CHAPTER 1

INTRODUCTION

Studies done during the past decade show the use of complementary and alternative medicine increased by about eight percent United States. In two studies reported in medical journals by David Eisenberg and his team of researchers, one published in 1993 in the *New England Journal of Medicine*, and one in 1998 in the *Journal of the American Medical Association* there was an increase from 34 to 42 percent of the population using Complementary and alternative medicine (CAM) between the two studies. CAM are those treatments, which are not taught in accredited medical schools. These therapies include such things as chiropractic and acupuncture to *tai chi* and massage therapy among others. In 1993

The Eisenberg *et al* article in the *New England Journal of Medicine* awakened the allopathic medical community to the pervasive use of these CAM therapies. Noting that nearly 90 percent of the respondents saw a CAM provider without the recommendation or their family physician and that 72 percent of the respondents never even told the physician about the alternative care, and that there were 425 million visits to CAM providers in 1990 and only 388 million visits to primary care providers, the medical community began to take notice.

This thesis attempts to verify or note differences in who are the users of CAM therapies as described by Eisenberg *et al.* In particular I am trying to confirm that there was no narrow segment of society exclusively using CAM. I also wanted to see if insurance might be a determining factor in using CAM. I included some discussion on the strength of the locus of control of CAM users. This was not an area covered by any of the studies mentioned in this paper and we could find no mention of attitudes as a determining factor of any kind in any of the research done to date.

CHAPTER 2

REVIEW OF LITERATURE

What is Complementary and Alternative Medicine?

Complementary and Alternative Medical (CAM) therapies include relaxation techniques, chiropractic, massage, imagery, spiritual healing and other therapies most of which are focused on non-invasive treatments for chronic pain, anxiety and similar complaints. According to David Eisenberg *et al* (1993: 246) “Alternative therapies can be defined as medical interventions that are neither taught widely in U.S. medical schools nor generally available in U.S. hospitals.” Eisenberg also quotes N. Gevitz as saying “from a sociological standpoint, unconventional therapy refers to medical practices that are not in conformity with the standards of the medical community” (Eisenberg *et al* 1993:246). In testimony before the United States Senate, Eisenberg (1997c:1) quoted a woman on a panel discussion as saying “I would define alternative therapies differently. In my mind, these are therapies which, by and large, I have had to pay for out of pocket and which I did not feel comfortable discussing with any of my doctors.” The definition of CAM has different meanings depending upon what perspective one takes, the medical, sociological or patient.

Some History of Alternative Medicine

Alternative medicine is considered alternative in some countries such as the United States, Canada and parts of Europe. Much of the rest of the world integrates western or allopathic care into indigenous therapies we call alternative. A prime example is oriental or Chinese medicine that for nearly five thousand years incorporated the use of herbs, acupuncture, and the concept *yin* and *yang* and the *chi* or vital energy (Weiss and Lomnquist 1994:230).

Western medicine is traced back to the Greeks, particularly Hippocrates of Cos who “is often hailed as the father of medicine” (Mayeaux 1989:1). From the time of the Greeks and Romans until the early Middle Ages medicine was an art performed primarily by the monks and priests of the Catholic Church, and a few mystics. It was only in the Middle Ages that there was a mingling of medical culture and the founding of the first medical schools, sometime around 700-800 A.D. Before that medicine was taught one-on-one. Medicine was finally being divorced from magic and astronomy (Mayeaux 1989:4-6).

In 1347 the Plague began in Europe and the ancient writings in medicine had no answers. Again, physicians began making their own observations and experiments and relying less on traditional cures because of traditional ineffectiveness. Once the printing press became available, literature on herbs and other methods of healing began to circulate (Mayeaux 1989.6)

In the middle of the nineteenth century there was a possibility that homeopathy, a medical practice based on Hippocrates’ theory that minute doses of plants, minerals or animals may provide protection from diseases, might prevail as the dominant form of

medical practice in America. It was popular for its non-invasive techniques (Freund and McGuire 1999:207). During the late nineteenth century, two new forms of medicine also became prominent, those of chiropractic and osteopathy (Freund and McGuire 1999:178). Today homeopathy is considered just one of the CAM therapies while chiropractic and osteopathy have only recently been recognized as mainstream treatment options by the medical establishment. Even so, some MDs still "rankle when chiropractors call themselves 'doctor'" (Rosenfeld 1996:108). Internal bickering among specializations and a rural economy were two reasons a "professional" medical community was late in coming in the United States (Starr 2000:557). The rural aspect of the economy gave the few educated people, the doctors in particular, substantial authority over many things including but not always limited to medicine. There was little incentive to share authority. Once the country made a shift to an urban society, several things happened that made it possible for a medical community to take the authority of a professional organization. Hospitals and specializations made doctors dependent on each other for referrals and access to hospital facilities. As the division of labor in society became more pronounced, patients developed more confidence in the skills and methods of the biomedical model and in technology in general. Western medicine was not ashamed to pronounce on its successes (Starr 2000:558).

In 1847 the American Medical Association (AMA) was formed to attempt to bring some standards to the medical profession that in the United States was fragmented and rife with medical schools and doctors of dubious quality. Medical education, even as late as the early 1900's was in the hands of entrepreneurs - doctors who formed schools for profit. The AMA also turned its attention on gaining state licensing laws and forming

state medical boards. The first state medical board was formed in Texas in 1875. Almost all of the states had similar boards by the end of the nineteenth century (Freidson and Lorber 1972:98).

During the past one hundred and fifty years, particularly in Europe and North America, healing has been *legalized* to include a very narrow range of treatments, principally those performed by medical doctors who train under the authority of the medical establishment. By *legalize* we mean that treatment of illnesses has been restricted to a group of practitioners by law. In the United States that establishment is the American Medical Association. While a doctor is not required to be a member of the AMA, not doing so closes many potential services and associations that benefit a medical practice. Doctors of Medicine and Osteopathy are required to take the same license exams (Freund and McGuire 1999:178). Each state sets license requirements although there are numerous reciprocal agreements among the states. The medical establishment through the state medical boards and the AMA has attempted to legalize or medicalize (the attachment of medical labels to behavior considered deviant or a when non-medical problems are treated and defined as medical problems) or bring under their control many aspects of life that were considered natural, even such things as death and midwifery, a practice going back to prehistory and considered a natural procedure (Freund and McGuire 1999:199). Many of the Complementary and Alternative therapies have existed far longer than western allopathic medicine, but until these therapies are proven, according to the methodology of the AMA, they are not legitimate. As these therapies are proven or approved they are covered and controlled by the medical establishment.

During the last part of the nineteenth and the early twentieth century medical practice took several turns. The establishment of the medical school at Johns Hopkins University in 1893 and similar actions at other schools such as Harvard University began bringing medical education into the university. Instructors became part of the faculty and not "voluntary lecturers" (Freidson and Lorber 1972:98) who earned their livings with their medical practices. But until early in the twentieth century, there was neither a central licensing organization nor an accrediting institution for medical colleges. The result of the lack of control over the training and practice of medicine was that doctors, many of whom trained as apprentices, were poorly trained. There was little contact between practicing physicians and the academic universities so medical practice frequently did not use any of the new techniques or treatments that were becoming available. The poorly trained physicians were also not scientifically trained and were not held in high regard by the public, so "instead, home remedies and folk medicine were usually the first choice for cures" (Wolinsky 1988:215).

In 1906, Abraham Flexner, supported by the Carnegie Foundation, performed a review of the existing medical schools in the United States to determine "the extent of the gap between medical knowledge and its application." There were 155 medical schools at that time and twenty closed before the review was completed "to avoid revealing the poor quality of their programs" (Wolinsky 1988:215).

The only national standards in place to accredit medical schools then were those of the AMA. The states and federal government called on the Council on Medical Education to set the accreditation standards for medical training. This is known as the *Great Trade* because in exchange for allowing the AMA to have a monopoly over

establishing the licensing and training standards, the government received “the best and most efficient medical care system possible” (Wolinsky 1988:215). The new standards for medical education also reduced the prevalence of some alternative practices such as osteopathy, chiropractic and naturopathy. In 1906 the passing of the Pure Food and Drug Act also provided some legal power to control medicine (Freidson and Lorber 1972:98).

We have during the past 25 years witnessed a resurgence of treating the whole person, and not just the illness, and the reemergence of some ancient healing practices. Some of this is due to the homogenizing of society, and the relatively shorter distance (time) between cultures. Immigration from the Western Pacific Rim countries has brought with it the many forms of Oriental Medicine. But much of the interest in alternative health care is due to the “crisis in our health care system – crises of cost, confidence and conscience” (Marwick 1995:106)

Since the middle of the twentieth century there has been an upsurge in the use of CAM. In 1990 there were an estimated 388 million visits to “all primary care physicians” (Eisenberg 1993:250) while there were 425 million visits to CAM providers.

Who Uses Complementary and Alternative Medicine?

The results of a study in the *New England Journal of Medicine* titled “Unconventional Medicine in the United States” (Eisenberg 1993) started a long series of investigations and articles on CAM that continue today. Eisenberg’s group conducted a nationwide survey in 1992 of persons 18 years of age or older and asked about conventional and unconventional medical treatments they have used. The authors limited the treatments to 16 therapies that they found to be most representative based on

preliminary research. The survey included 1,539 adult respondents with a response rate of 69%. Thirty-four percent of the respondents reported using unconventional therapy in the past year. A third of those saw an unconventional therapist more than once. The 16 unconventional included chiropractic and acupuncture, but also included folk remedies and exercise. The most prevalent problem for which respondents sought these unconventional therapies was back problems, with chiropractic and massage being the major therapies used. Almost 90% of the respondents of unconventional care did not receive a recommendation from their medical doctor for this care. In fact 72% did not inform their medical doctors about their treatment. Eighty-three percent of those surveyed used both CAM and allopathic care for the same ailment (Eisenberg 1993:249). The recommendations of the Eisenberg study were:

1. Because the authors were skeptical of the safety and efficacy of most of the therapies, they suggest more "well-designed, stringently controlled" research be done;
2. Physicians should talk to their patients to see if they are using CAM, particularly about ceasing conventional therapies in favor of CAM,
3. Educate patients about the hazards of CAM; and
4. Courses in medical schools "should present the scientific view of unconventional theories, treatments, and practice as well as the potential therapeutic utility, safety, and efficacy of these modalities."

Eisenberg along with a new group of researchers (1998) performed a parallel study in 1997. Between 1990 and 1997 Eisenberg found CAM users were increasingly likely to have had at least some college, and Hispanics more likely and whites less likely to use CAM. In looking at the breakdown by age of the CAM users there appears to be a

move to older cohorts over the seven years between studies but a finer breakdown of the cohorts would be helpful in examining the differences.

Who uses complementary and alternative medicine? According to Eisenberg *et al* (1998:1571) women (48.9%) are significantly more likely to use CAM than men (37.8%). African Americans are the least likely ethnic group to use CAM (33.1%). People 35-49 years of age (50.1%) are more likely than older (39.1%) or younger (41.8%) age groups to use CAM. Those surveyed that had some college (50.6%) were more likely to use CAM than those without college, as were people with higher income than those with lower incomes. Another possible reason for the surge in CAM is that we have progressed through the age of degenerative diseases and even well into an age of delayed degenerative diseases, where the acute problems are yielding to chronic ailments (Strauss 1975:277). The age of degenerative disease started toward the end of World War I and was identified by a drop in mortality rates and a shift in causes of death from contagious diseases to degenerative diseases such as heart disease and strokes.

Certain ethnic groups may tend to use CAM more than others. For example, according to Fox (2001:299), the Navajo believe in a *naturalistic* health care perspective. Illness is a disruption in the balance of nature, a similar view to that of many Asians (Weiss and Lomnquist 1994:230). In a Vancouver, British Columbia study of several family practices with predominantly Chinese patients, the researcher discovered that more than 25 percent of the patients used acupuncture and herbal medicine in conjunction with their allopathic care during the past year. Variations in use were only significant for

age (Kwan-Ho 1998:1810). Vincent and Furnham also confirm that “those with relatively more education and higher incomes” (2001:309) are more likely to use CAM.

In a study of Mexican Americans with diabetes, researchers found that few of the patients interviewed used herbal remedies such as prickly pear cactus, loquat or Chinese plum, and Aloe Vera, although 84 percent of the participants heard of their use for diabetes. Only 9% said they actually used herbs for their ailment. Twenty seven percent of the patients felt that God had “a direct influence on their disease management” (Hunt, Hamdi, and Akana 1999:7). There was no evidence of these patients using the services of a *curandero* or other traditional healer, in fact the research found that the patients were “unanimously skeptical about *curanderos*” (Hunt, Hamdi, and Akana 1999:8).

Folk remedies and folk healers are most commonly used by low-income ethnic minority groups in the United States such as “African Americans, Hispanics, and American Indians” (Cockerham 1998:135). Many of the instances of folk healing among these groups combine medicinal as well as religious aspects to the healing. The African American healers sometimes use a system that transparently uses a mixture of science and religion. “Being sick is an example of misfortune” while “being healthy is an instance of good fortune like having a good job” (Cockerham 1998:136).

While visits to primary care practitioners remained about the same between the two Eisenberg surveys, visits to alternative practitioners were up by over 200,000 in 1997. As with the earlier study, most of the people sought used CAM for help ailments closely associated with stress and anxiety. These conditions included back problems, allergies, fatigue, arthritis, headaches, neck problems, high blood pressure, sprains and

strains, insomnia, lung problems, skin problems, digestive problems, depression and anxiety (Eisenberg *et al.* 1998:1572).

Most people still paid for CAM therapy out-of-pocket, 64% in 1990 and 58.3% in 1997. The conclusions of the 1997 Eisenberg study confirmed an increase in expenditures in CAM and recommended that all practitioners and research be more “proactive” in the “implementation of clinical and basic science research, the development of relevant educational curricula, credentialing and referral guidelines, improved quality control of dietary supplements, and the establishment of post market surveillance of drug-herb (and drug supplement) intentions” (Eisenberg *et al* 1998:1575). Landmark Healthcare, a provider in Sacramento, California, commissioned a study to see whether Health Maintenance Organizations (HMOs) are covering CAM. According to this study 77 percent of the HMOs “offer at least one type of alternative care” (Landmark Healthcare 1999:2)

Why Use Complementary and Alternative Medicine?

In 1998, Dr. Wes Alles, director of Stanford Center for Research in Disease Prevention (SCRDP) presented research that indicated that in a random telephone survey sixty-nine percent of the “respondents had used complementary and/or alternative medicine in the past year.” This survey also found that the “respondents had also seen a traditional medical doctor an average of four times yearly.” Fifty-six percent of the respondents in this study also indicated that they felt that health plans should cover complementary medicine (See also Goodkind 1998:1). According to the article, Alles says “The public doesn’t choose between alternative and traditional medicine, rather,

they see the options in a single toolbox and want to choose what works best for them instead of being restricted by arbitrary definitions” (Goodkind 1998:2). This statement brings together the main idea of many of the anecdotal comments, letters and editorial comments found in major medical journals, especially those journals that focus on complementary and alternative therapies. Dr. Alan Tractenberg, former acting director of the Office of Alternative Medicine (OAM) in the National Institutes of Health (NIH) is quoted in *Nature* as stating that the “interest in alternative routes to health by consumers and health professionals alike is due to the current crisis of cost, confidence, and conscience” (Marwick 1995:106). Trachtenberg also stated that some critics of alternative therapies, in an example of elitism, see the rise of CAM as a way of characterizing medicine and other natural sciences as a “collection of ideas by one social group – namely natural scientists – and of no greater intrinsic value than any other such collection of ideas” (106).

According to Thomas *et al.* (1991:207-210) as quoted by Charles Vincent and Adrian Furnham (2001:310), “it is relatively rare for complementary patients to abandon orthodox medicine. Complementary therapies which are generally used for chronic, as opposed to life-threatening conditions are generally used as an adjunct to conventional treatment, rather than as a replacement for it.” Vincent further states that “the failure of conventional medicine was the main reason for attending” CAM therapies. It must be noted here that by the general tenor of medical journal articles in both Europe (*The Lancet*) and the United States (*JAMA* and *NEJM*), and from texts (Freund and McGuire 1999:178-179), Europeans appear to have a more liberal attitude toward the use of CAM therapies, especially in places such as The Netherlands and Germany. Other reasons for

seeking CAM therapies in favor of allopathic care cited in this source are: the patients view CAM as a positive value, and that experience with orthodox medicine proved ineffective. Also there is a fear of the dangerous side effects of orthodox medicine, an argument considered against the use of CAM by the AMA, and “poor communication with doctors” (Vincent and Furnham 2001:313) which concurs with the AMA position. Further in the article by Vincent and Furnham, the authors list more reasons patients have for seeking complementary treatment. They include several which indicate a desire for a closer locus of control such as “Because I have a more equal relationship with my complementary practitioner than with my doctor” and “Because I believe that complementary medicine enables me to take a more active part in maintaining my health” (314). Locus of control is a measure that indicates the degree to which a person feels they control their destiny. The higher the locus of control, the more the person feels in control.

Eisenberg (1997a:3) suggests that the reason patients seek CAM include health promotion and disease prevention as well as an option when conventional medicine fail to give the desired results either in their efficacy or side effects. These side effects can include some emotional help of which western medicine is notably lacking. These comments coincide with the findings in Vincent and Furnham (p. 310).

In his original study, Eisenberg stated that the most prevalent use of CAM was for back problems, headaches, chronic pain and cancer or tumors (1993:249). That 90 percent of the patients in the study did not receive the recommendation of their doctors or that 72 percent did not even tell their primary care provider that they even used CAM leads us to conclude that the patients may be exhibiting a desire to have more control of their health care.

There are letters and articles published regularly in many medical journals that discuss CAM. One of these articles, by Charles Marwick, was a review of the first International Congress on Alternative and Complementary Medicine in 1995 which gives a brief review of the history of the recent emergence of CAM, the legal issues including the legislative moves on the part of both the federal and state governments to ensure access to CAM, and the general tenor of the meeting. In this article Marwick says that Wayne Jonas MD reminds the conference goers that in the end physicians must relate to the patient and suggests that the relationship includes an "honest, open, and trusting dialogue presenting all the facts, and we come to an agreement on which the best course of action..." (Marwick 1995:107). The *JAMA*, in a recent call for papers on "Complementary, Alternative, Unconventional, and Integrative Medicine," notes the "burgeoning interest in alternative medicine among the general public, patients, physicians..." (Fontanarosa 1997:2111-2112).

Kaiser Permanente, a leading health care organization also reports that in a study they conducted in Northern California "nearly 90 percent of the health plan's primary care doctors had recommended alternative therapies or used them on adult members during the previous 12 months" (Gordon and Sobel 1998:1). And in an Internet article by Landmark Healthcare, the insurance provider had research done by National Market Measures Incorporated to find out where Health Maintenance Organizations (HMOs) are going with regard to alternative therapies. The research showed that the reasons HMOs are beginning to pay for more CAM treatments are because of customer preferences and legal requirements. The researchers in this survey polled 114 HMOs nationwide from November 1998 through January 1999. Of those HMOs responding, 67% already offered

at least one of the types of alternative care. Based on the survey and other factors, they expect the trend of paying for CAM to continue and distinctions between CAM and traditional medicine to become more blurred. The research also concludes that while "Chiropractic is often associated with alternative care, many HMOs do not consider it alternative, further validating the reputed mainstreaming of this treatment option." (Landmark Healthcare 1999).

S. Mitchell Weitzman (1999:128) states that one of the principal reasons for the resurgence of CAM after a decline over the last century is that allopathic practitioners practicing disease-based medicine have difficulties in identifying and treating psychosocial stress manifested problems such as back pains, fatigue and high blood pressure. This is the area of treatment to which CAM therapies generally apply and seem to have the most success and agrees with the Eisenberg *et al* (1998) about prevalent areas for which CAM is used. It appears that insurance companies that provide any CAM coverage at all focus on the therapies that are least controversial. Examples include coverage for acupuncture for lower back pain only by Kaiser Permanente, Blue Cross of Washington and Alaska limit massage therapy under the same conditions as physical therapy. The insurers also have significant limitations on experimental therapies. Experimental as a term differs in allopathic and alternative therapies in that allopathic experimental treatment is designed to tests hypotheses while experimental CAM therapy is usually preventive or focuses on the general health of a patient.

Although it has been alluded to several times, and except for work by Vincent and Furnham, the research in CAM in the United States has not directly addressed the idea that patients may want more control over their medical treatment and their lives in

general. The fact that patients seldom consult with their primary care physicians when they use CAM suggests that there is an effort to control their own health care management.

The AMA Position

The AMA's adopted position on Complementary and Alternative Medicine is stated in Report 12 of the Council on Scientific Affairs (A-97) (American Medical Association 1997). Their position can be found in Eisenberg (1993:251-252):

1. There is little evidence to confirm the safety or efficacy of most alternative therapies. Much of the information currently known about these therapies makes it clear that many have not been shown to be efficacious. Well-designed, stringently controlled research should be done to evaluate the efficacy of alternative therapies.
2. Physicians should routinely inquire about the use of alternative or unconventional therapy by their patients, and educate themselves and their patients about the state of scientific knowledge with regard to alternative therapy that may be used or contemplated.
3. Patients who choose alternative therapies should be educated as to the hazards that might result from postponing or stopping conventional medical treatment.
4. Courses offered by medical schools on alternative medicine should present the scientific view of unconventional theories, treatments, and practice as well as the potential therapeutic utility, safety, and efficacy of these modalities.

Eisenberg reiterates these views in several places (see Eisenberg 1997a, 1997b, 1997c) before the United States Senate, his address to the American Board of Internal Medicine, and in an article titled "Advising Patients Who Seek Alternative Medical Therapies." According to Eisenberg, the AMA is against alternative therapy, but acknowledges that it will be a continuing presence, so it backs up its recommendations

with a system to research CAM and discredit any therapy that can't scientifically be proven effective, and counsel patients about the hazards of using CAM. The AMA is taking a paternal approach to dealing with patients.

The worry the AMA expresses is mostly about the efficacy of the treatments, its safety and about control and liability. Ezzo *et al.* (1998:1628-1630) described an effort to organize reviews on all topics in health care. This effort, called the Cochrane Collaboration state that the keywords common to CAM were usually missing, for example *Qigong* or *Tai Chi*, two forms of exercise which oriental medical practitioners claim “improve health and longevity as well as increase the sense of harmony within oneself” (Eichelberger 1995). These terms are not accessed in a MEDLINE search for alternative medicine. This makes it difficult to access background material and research for reviewers.

The National Center for Complementary and Alternative Medicine (NCCAM) at the National Institutes of Health (NIH) has been developing an aggressive strategy to expand the research in CAM and to have safe and effective “treatment” included in the “mainstream medicine.” The NIH has provided grant money for research both within the orthodox community and in extramural research on the more obscure treatments for which there is interest by the general public (Marwick 2000:1) The object is to integrate effective CAM into conventional medicine. The Health Maintenance Organizations (HMOs) are also including many CAM therapies in their insurance packages as they become acceptable and consider them “complementary” without the “alternative” tag (Landmark Healthcare 1999)(Weitzman 1998:130).

Social Theory and Alternative Medicine

We can define deviance as a “departure from group-established norms” (Freund and Maguire 1999:118) and therefore can conclude that illness is considered deviance. Talcott Parsons speaks to the deviance of illness by suggesting that it’s not the illness that is deviant but because a person is ill, he or she is not capable of performing the role (job) they have in society. Not performing one’s job is deviant behavior, even if the behavior or absence of behavior in this case is unavoidable. Parsons’ sick role contains the following responsibilities and privileges:

1. The individual’s incapacity is a form of deviance from social norms, but because it is not deliberate, the individual is not held responsible;
2. The sickness is legitimate grounds for being exempted from normal obligations, such as work or school attendance;
3. The legitimacy of this exemption is, however, predicated on the sick person’s intent to get well;
4. The attempt to get well implies also seeking and cooperating with competent help to treat the illness (Parsons 1951:428-447) (Freund and Maguire 1999:119).

Is using CAM a form of social deviance and are the people who use alternative medicine deviant? Illness is considered deviance, and according to Parsons’ sick role the patient must seek help and want to get well (Parsons 1951, Cockerham 1998:149). While that is what a person using CAM is doing, according to Parsons it is still deviant in the eyes of the AMA and mainstream medicine. If we accept the American Medical

Association and the rules and laws that limit the practice of medicine to those sanctioned by the AMA as the “authority” in medicine, a person can violate the established norms by seeking medical care at places and by people not sanctioned, in this case alternative medical providers. Law and rules support western or allopathic medicine in the United States. The use of CAM violates the method of seeking help according to the medical establishment. Each state has a medical board, and representation by alternative practitioners is usually not accepted. Most state medical boards have osteopaths, some even have boards for chiropractic and acupuncture but that is typically the limit of the outreach.

We can look at CAM from a functionalist point of view and can see how Parsons’ sick role may be appropriate. Assume that a patient with cancer begins using CAM when conventional medicine has been shown to be ineffective. The first two of Parsons sick role responsibilities may apply. The first is that the individual is ill (deviant from the norm of healthy) not from their own will, and second that they may indeed require some exemption from the daily routine of life. This exemption would have to be made by mainstream or allopathic medical practitioners. The third responsibility is the sick persons desire to get well. If even after conventional medicine has failed the patient seeks other options in CAM. This may be inconsistent with the sick role because the CAM therapies are not approved by mainstream healthcare. Fourth, in trying to get well the patient seeks competent help. If we maintain that conventional help has failed, seeking help in the form of alternative medicine may seem appropriate, but the authority of the medical establishment and the AMA is not reduced in Parsons’ sick role, because the

competent help may be the herbalist, acupuncturist or naturopathist, none of which are acceptable to mainstream medicine.

Symbolic interactionists would look at the use of CAM in a cultural context that is probably more appropriate for the discussions in this paper. Remember that many of the ailments for which people use CAM are stress and anxiety related such as back problems and back aches (Eisenberg *et al.* 1993:249). The medical community tends to separate out the ailments that are perceived as not *real* because they are not tangible or countable. This is despite the seeming connection in the mind-body relationship that is relevant in the social and psychological discussions of health (Freund and McGuire 1999:74).

If we look at some of the CAM therapies merely as placebos, we can see that the symbolism of the therapy is productive. What if the efficacy of acupuncture were mainly due to a placebo effect, and we know that from the literature (Freund and McGuire 1999) that placebos can stimulate endorphins, which in turn do have pain-relieving qualities. We have passed on the symbolism of the placebo to the CAM therapy. Even if the acupuncture actually stimulates the nerves in a way that does reduce pain, something that I have not yet been able to verify in the literature, the effects of acupuncture have an identifiable social consequence – pain reduction.

Deviant behavior with regard to CAM also acts as a way of keeping social order intact. There must be conflict between conformity – allopathic therapies, and non-conformity – CAM therapies, to either reinforce the conformity or to show the way to social change – evolution or revolution. In this paper we are looking for connections between people who use CAM and their need to be independent and to trust in themselves.

The purpose of the present study is to verify some of the information in the Eisenberg studies with regard to what therapies are used and in general who uses them and why. I include some additional measures on what characteristics people who use CAM have regarding their locus of control and their attitude toward western medicine. I also analyze whether the patient population in the central Texas area conforms to national random-sample characteristics of those who use CAM or if they have a unique attitude.

CHAPTER 3

METHODOLOGY

Procedures

Pilot Study In conjunction with a class in research methodology, I conducted a pilot study of the survey instrument and method of data collection in the spring of 2000. The research design for the pilot study included a single survey to be distributed by selected general practitioners from their offices by office staff. I mentioned the survey to my family physician and he expressed a desire to have me select his office as the pilot study. Since his office was in the central part of a nearby city and had two primary care physicians, it gave me a chance to have a cross section of the population. The selection of these doctors met my requirements for location and doctor involvement. I contacted the doctors in person to discuss the research and officially ask permission to use their offices for the study. The two doctors who share an office agreed to allow their offices to be part of the study. The doctors notified the office staff and I briefed the staff on the procedures for handing out the survey, asking the patient to simply fill out the questionnaire and place the completed survey in the accompanying self addressed postage paid envelope. Respondents were to be asked to complete the survey and drop it in the mail within three days of the office visit at which they received the survey. The return envelope was addressed to the Sociology Department of Southwest Texas State University. This was done to assure anonymity. A complication occurred when I discovered the doctors' office

staff was not distributing the survey as agreed upon by the doctors. In an effort to get enough surveys to accomplish the preliminary study, I personally handed out surveys to every patient for several days in the doctor's outer office and asked the patients to drop the completed survey in a box in the outer office. Only two patients declined to take the survey. Because of semester time limits there was only a short time frame allowed for collecting data and as a result there were only 34 completed responses. The preliminary survey was accomplished in one week in March of 2000. Since the plan was to replicate this survey or a version of it in the spring of 2001, I made collection method adjustments for the final survey to get more completed surveys.

Current Project For the final survey I handed out the surveys personally and asked the patients that they be completed before leaving the doctor's office and dropped in a box marked "completed surveys" to assure anonymity. The final survey was done during the week of March 12th 2001. I changed the location of the study after contacting a regional clinic and discussing the study with administrative staff. They suggested I use one of their clinics in the south part of the city since it had more primary care physicians than any of their other location. I also chose the south location because the area has a broader demographic base than north. I contacted the site administrator at the south location and made my proposal for the survey to him. I gave him a copy of the research proposal and the survey instrument so he could discuss it with the doctors in the clinic. There was a delay in his talking with the doctors because of an unexpected death of one of the nursing staff due to a shooting and the staff was severely distracted. The administrator did speak with five doctors who share an office suite and got their permission to conduct the survey. Three of the doctors were eager to participate while

two agreed but were more reluctant. I promised to send the doctors and the administrators a summary of the findings when the thesis is written.

I found that by coordinating with the office staff I could complete more surveys by conducting the surveys during the busiest hours of that week and when more than two physicians were present in the office. There were times both during the pilot and the final survey when the patients filling out the forms wanted to ask about the survey and the research. I took care to have them first complete the survey, than discuss the implications of the material. I found most of the patients to be very interested in the survey topic and they appeared to feel free in discussing their opinions with me. I tried to be as factual and informative as I could in responding to questions, careful not to give recommendations. For the most part I told the patients the results and recommendations of the Eisenberg studies.

The use of office staff to conduct the survey was not an option in distributing material in doctors' offices. The staff was usually extremely busy and the survey was not important to the operation of the outer office even if the doctor directs the staff to help. The staff usually schedule patients at ten or fifteen-minute intervals and the peak and slow times are reflected in that schedule.

Subjects

In both the pilot and final surveys, the subjects include all patients entering the participating general practitioners' offices on the survey day except for pediatric, or patients under 18 years old, and patients who are required to fill out the extensive initial medical history forms. Additionally, out of consideration for the patients, we did not ask

any patient who appeared in pain or extreme discomfort to participate in the survey. This still provided an adequate mix of patients especially by sex and age. There was no preference given for diagnosis or ailment. Every patient entering the doctor's office and meeting the above criteria was given the survey. Only a small number of patients asked refused to complete the survey. The sample size was 129 that included the pilot test data and final survey responses since there was essentially no change in the instrument.

I attempted to attain a diverse sample. I had a total of 65 male and 62 female respondents with 2 coded as missing. Participants ranged in age from 18 to 88. I wanted a mix of patients with a good mix of educational attainment as well to allow comparison with the Eisenberg *et al.* studies. The educational attainments were grouped into *Up to High School Diploma, Some College, Bachelor's Degree, and Graduate Work*. Slightly more than 19 percent of the respondents had a high school diploma or less and about 48% had at least some college. The median family income fell between 30,000 and 40,000 dollars per year although most respondents reported incomes in the 20,000 to 30,000 dollar range. As Table 1 illustrates except for the ethnic composition these objectives were met by having a slightly skewed age distribution. This city has a mix of 86.3% white while the survey had 61.2%. Hispanic composition in the city is 26.2% and in our survey was 20.9%. The percentages for African American, Asian American and American Indian in the city are 10%, 3.2% and 0.5% respectively while for our survey they were 10.1%, 0.8% and 1.6% respectively. The survey results were not very far off from the city's percentages. In analyzing the ethnicity I need to note that the Hispanic population, according to the U.S. Census (the city data) is a question of language and many Hispanics are counted as white even though they speak Spanish. I attempted to

raise the other-than-white percentages by doing the survey in the south where the minority population is higher than in the north.

Table 1. Background And Descriptive Variables For The Sample

Variable	Percent	N
Age		
18 - 30	9.5	12
31 - 40	19.0	24
41 - 50	34.9	44
51 - 60	16.7	21
>60	19.8	25
Sex		
Male	50.4	65
Female	48.1	62
No Data	1.6	2
Family Income		
<20K	13.2	17
20 – 29K	20.9	27
30 – 39K	15.5	20
40 – 49K	5.4	7
50 – 59K	7.0	9
60 – 69K	7.8	10
70 – 79K	6.2	8
80K+	13.2	17
No Data	10.9	14
Ethnic Background		
White	61.2	79
Mexican	11.6	15
Other Hispanic	9.3	12
African	10.1	13
Asian	.8	1
Native American	1.6	2
Other	4.7	6
No Data	.8	1
Education		
Up to High School Diploma	19.4	25
Some College	32.6	42
Bachelor's Degree	9.3	12
Graduate Work	6.2	8
No Data	32.6	42

The Instrument

The questionnaire is composed of three main parts (see Appendix A). The first is a seventeen-item list of CAM therapies. Respondents were asked to check all that applied. These were the same therapies used by Eisenberg's 1997 research except for number 17 which was "other" with a blank for the respondent to fill in. The therapies were listed in two columns and were in alphabetical order except for "other" which followed spiritual healing. Following the list of therapies Question 1 asks if the patient _____ has discussed the use of CAM with their primary care physician. I included this question to respond to Eisenberg's second recommendation for the medical profession, "Physicians should talk to their patients to see if they are using CAM, particularly about ceasing conventional therapies in favor of CAM" (Eisenberg *et al* 1993:252). The object is to see if patients in Austin differ from the national study in their openness with their physicians on alternative medicine. Questions 2 through 5 are about insurance. It asks if the patient has health insurance, and since all patients at the offices involved in the study require health insurance we did not expect a negative response. This question was used as a prelude to the next question that asked if they had coverage for any of the CAM therapies checked in the list of therapies. There are two branching questions on the use of insurance for CAM coverage. If the respondent said they had CAM coverage they were asked if they would have used the therapy if they did not have the coverage. The next question was for respondents who said they did not have CAM coverage and it asks if they would consider using any of the therapies either alone or in conjunction with conventional medical treatment if they could have reasonably priced insurance to cover it.

The next section is primarily demographic information including age, sex, income, ethnicity and education. Income was divided into under 20,000 dollars a year through over 80,000 per year in 10,000 dollar increments. I chose these increments to get a better idea where the breaks might be when comparing the information to the Eisenberg studies which did not use as fine a breakdown and to compensate if we wanted to see what the difference is over time considering inflation. The ethnic categories include white, Mexican, other Hispanic, African, Asian, Native American and other. The separation of Mexican from other Hispanic was to match the hypothesis that suggests that this group uses CAM therapy more than other groups. I also chose to use the term “race or ethnic background” as opposed to “race or ethnicity” to seek out what the respondent felt was important in their “background.” This I hoped would find the people who identified with the ethnic backgrounds I hypothesized tended to use alternative medicine as a cultural indicator

The third section includes a ten question Multidimensional Internal-External Control Scale (Factor II), obtained directly from Robinson and Shaver (1973) *Measures of Social Psychological Attitudes*. There are six additional questions on the attitude toward primary care physicians/allopathic medicine and confidence in allopathic care. These last six questions seek to identify why patients use CAM therapy. This includes a question on the patients’ desire to participate more fully in their course of treatment, trust in their physician, on whether they feel CAM or allopathic care is more natural, about the side-effects of allopathic versus CAM therapies, the efficacy of each on their ailment, and their belief of the efficacy of CAM therapy on chronic ailments. There is a copy of the questionnaire in the Appendix.

The internal-external locus of control questions seek to examine if there were differences in who uses CAM based on how much “in control” the patient feels.

Questions 11, 12 and 14 in the last section of the survey also ask questions about locus of control in the medical environment. Specifically they ask about wanting to be involved in the determination of treatment, trust in their physician and opinions on the side-effects of CAM therapy.

The dependent variable for the hypotheses is the use of CAM therapies. In hypothesis 1, the independent variable is the internal control expressed in the mean. In hypothesis 2, sex is the independent variable. Insurance coverage is the independent variable in hypothesis 3 and ethnicity in hypothesis 4. In hypothesis 5 there are six questions that ask about the patients’ trust in allopathic versus CAM therapies. The variations on trust expressed as a mean score is the independent variable in all of these questions.

Hypotheses

The hypotheses in this thesis involve the prevalence of the use of CAM and the availability or use of insurance coverage, and the degree of internal control as an indicator of whether a person uses CAM.

1. *People who use CAM are more internally controlled than people who do not* The object of this hypothesis is to suggest that because a majority of patients do not discuss using CAM therapy with their physicians, they want to have control over more of their lives than they do and seizing control from the authority figure of their doctors is a way of showing this. I will use a comparison of means to test

this hypothesis. None of the studies in the review of literature addressed this issue.

2. *Women use CAM more than do men.* Although the Eisenberg's studies state that there is nearly an equal incidence of men and women using CAM nationwide, I hypothesized there might be more of a feeling of freedom to choose CAM by women based on the conclusions in Eisenberg *et al.* (1998:1571) and Vincent and Furnham (2001:311).
3. There is no significant difference in the use of CAM between those whose insurance covers CAM and those whose insurance does not. This hypothesis will test some of the statements by Alles (1998), Eisenbeg et al (1993, 1998) and Goodkind (1998) on the use of CAM and insurance coverage. The reports by Kaiser Permanente (1998) and Landmark Healthcare (1998) are also a basis for this question since they present information on the demand for CAM coverage.
4. Native Americans and those of Asian and Mexican background will more frequently report the use of CAM than will those of other ethnicity. Since Native Americans, Asians and Mexicans, especially Mexicans with Native Indian ancestry have been known to use "natural" therapies, I wanted to see if even in an urban environment and foreign country the use of non-allopathic treatments might prevail. The literature supports the use of indigenous and folk medicine for several ethnicities (Eichelberger 1995), (Cockerham 1998), (Kwan-Ho 1998), and (Wolinsky 1988).

5. *People who use CAM have less faith in allopathic treatment and conventional medical doctors than do those who do not use CAM.* Using some of the information in Eisenberg (1998), Alles (1998) and Goodkind (1998) it seemed possible that because nearly 83% of the people surveyed in Eisenberg et al. (1997c:1)(1993:250) use CAM and allopathic treatments for the same illness and 72% don't tell their doctors, there might be some relationship between trust in doctors and a desire for more control of their treatment. I will use a comparison of means for six questions not garnered from the studies noted above.

CHAPTER 4

RESULTS

Locus of Control – Hypothesis 1

Hypothesis 1 states that: *People who use CAM are more internally controlled than people who do not.* The null hypothesis is that there was no significant difference in the locus-of-control (LOC) mean between CAM users and non-users. The dependent variable is the use of CAM. The most appropriate test for this hypothesis would be a comparison of the LOC means between users and non-users. I found only a .05 percent difference in the LOC between the users and the non-users and we also found a standard deviation of .35 and .33 for the users and non-users respectively. This indicates that there is no significant difference in the use of CAM regardless of the LOC. An analysis of variance indicates that there was a significance level of .44 for the comparison of means and that means that in less than 44 times out of 100 would we expect to find a mean difference as large as the one in this sample if the population mean difference was zero. We cannot reject the null hypothesis. The results shown in Table 2, of a comparison of the means of the control scale for patients who use CAM, did not show a significant

relationship. The locus of control, although stronger, is not significantly stronger for CAM users than for non-users.

Table 2. Control Scale Mean for CAM Users

Category	Mean	N
Uses CAM	2.80	69
Does Not Use CAM	2.75	53

1=strongly external, 2= external, 3=internal, and 4=strongly internal
 $P \leq .44$

Women Use CAM Differently Than Men – Hypothesis 2

Hypothesis 2 states that: *Women use CAM more than do men*. The null hypothesis states that there would be no difference in CAM use between men and women. We performed a crosstabulation between the sex and the dependent variable of using CAM, and found a Pearson Chi-Square of .44 that would have us not reject the null hypothesis. Fewer than 44 times out of 100 would we expect to find the mean differences as large as the ones in our sample if the population mean differences was zero. We therefore assume there is no difference in the use of CAM between men and women. As we see in Table 3, the use of CAM is nearly the same for males and females when considering whether or not they use CAM, and not counting how many different therapies are used.

In examining the use of CAM for individual therapies by males and females I found women reported that they used a total of 133 therapies while men reported using only 95. The data shows that females use more therapies but men are slightly more likely

to use CAM (54.2%) than women (47.3%). There is not a significant difference in the use of CAM between men and women but women do use more therapies than men.

Table 3. Percent of Respondents Who Use CAM by Sex

Sex	Uses CAM	Does Not Use CAM	N
Male	54.2	45.6	65
Female	47.3	52.7	62

N=127

P≤.44

Insurance – Hypothesis 3

Hypothesis 3 states that: *There is no significant difference in the use of CAM between those whose insurance covers CAM and those whose insurance does not* The null hypothesis is that there is a difference in the use of CAM between those who have insurance and those who do not. We conducted a crosstabulation analysis and found that those with CAM insurance were more likely to use CAM than those who did not. Seventy-seven percent of those with CAM insurance use CAM while only 61% of those without the insurance use CAM. The Pearson Chi-Square was .10 for this calculation, which indicates that in ten times out of 100 would we expect to find the mean differences as large as the ones in our sample if the population mean differences were zero. Although the Chi-Square is not statistically significant at the .05 level it does appear to be important. Nonetheless we are not able to reject the null hypothesis.

All but five respondents reported having conventional insurance, but 33 of the 122 respondents with insurance, or slightly more than 25%, reported having insurance that covered one or more CAM therapies as well. Of the 33 who had CAM insurance, 23 said they would use CAM even without the insurance. Sixty-seven of the respondents said they did not have insurance covering CAM but 57 or 85% of them said they would use CAM if the insurance were available at a reasonable price.

Table 4 shows the use of CAM by the prevalence of CAM insurance. Among those who have CAM insurance 77 percent use CAM, and among those who do not have CAM insurance 61 percent use CAM.

Table 4. Percent of CAM Use by Patient CAM Insurance Coverage

CAM Insurance	Uses CAM	Does Not Use CAM	N
Has CAM Insurance	77.2	22.8	71
Does Not Have CAM Insurance	61.1	38.9	36

P=.10

We asked a follow-up question for each group of respondents, those who have CAM insurance, and those who do not have CAM insurance. For those with CAM insurance we asked if they would use the therapy they checked if they did not have appropriate insurance. For those without CAM insurance we asked if they had such insurance would they consider using any of the therapies if it were covered by that

insurance. The results of these questions shows that nearly 70% of those with insurance would still use CAM if they didn't have it, and almost 84% of those without the insurance would use CAM if they had affordable CAM insurance.

Ethnicity – Hypothesis 4

Hypothesis 4 states that: *Native Americans and those of Asian and Mexican background will more frequently report the use of CAM than will those of other ethnicity.*

The null hypothesis states that there is no difference in the use of CAM between Native Americans, Asians and people of Mexican background (NAAM), and people of other backgrounds. We performed a crosstabulation of both the aggregated Native American, Asian and Mexican people versus others and an individual analysis of each ethnicity independently and found that there was virtually no difference in the use of CAM between and among these groups. In particular we found that the difference in use between NAAM and others was only different by .1% (Table 5) and we had a Pearson Chi-Square of .99. In analyzing the data by individual ethnicity we had a Pearson Chi-Square of .79. With a Chi-Square of .99 we would expect that slightly more than 99 times out of 100 we would expect to find the mean differences as large as the ones in our sample if the population mean difference were zero. We may not reject the null hypothesis. The sample size of the NAAM categories was small compared to the other and we might see slightly different results if we increase the sample size.

Each ethnic group except for “African” showed a 50 percent or better use of CAM. The “White” category showed the highest use at 59.5% and except for “African”

at 38.5% the other categories were near 50%. The Eisenberg *et al.* study (1998:1571) also showed that those of African descent were the least likely of the ethnic groups to use CAM. We combined the three ethnicities (Native Americans, Asians, and Mexicans) into one group and labeled it NAAM. We compared this group against “All Others” and the percent of each of the two groups who use CAM was identical – 56%.

Table 5. Respondents Who Use CAM by Ethnic Grouping NAAM

Ethnic Group	Uses CAM	Does Not Use CAM	N
Native American, Asian, And Mexican Decent	55.6%	44.4%	18
Other	55.5%	44.5%	110

P=.99

Faith in Allopathic Care – Hypothesis 5

Hypothesis 5 states that: *People who use CAM have less faith in allopathic treatment and conventional medical doctors than those who do not use CAM.* The null hypothesis is that there is no difference in the faith in allopathic practitioners between those who use and don’t use CAM, and that there is no preference for control over their health care between those who use and don’t use CAM. We performed a comparison of means analysis for the six questions and found some results interesting because of the inconsistency among the responses, that is the support for allopathic therapy then a support for CAM. The Likert scale ran from 1 for strongly agree to 4 for strongly disagree with the statement. Table 6 shows the statistical results of the last six questions.

The first statement said that the patient wanted to be involved in the course of treatment. The null hypothesis would have no difference between the user and non-user. Both users and non-users of CAM agreed with this statement, the users only slightly more than the non-users. The ANOVA analysis had a significance of .12 which indicates that in fewer times than 12 in 100 would we expect to find a mean difference as large as the one in this sample in a if the population mean difference were zero. We fail to reject the null hypothesis and find there is no difference between users and non-users and their desire to participate in their course of treatment.

The second statement said that the patient trusts their physician and the prescribed treatments. The null hypothesis would have no difference between the user and non-user. Again we had an agreement with the statement for both the user and non-user with only a slight difference between the means of their answers. Using the ANOVA there was a significance of .52 for this mean. This indicates that in less than 52 times in 100 would we expect to find a mean difference as large as the one in this sample in a if the population mean difference were zero. We fail to reject the null hypothesis and find there is no difference between users and non-users and their trust of their physician and course of treatment.

The third statement said that alternative medicine is natural and better at treating the whole person than allopathic medicine. The null hypothesis would have no difference between the user and non-user. The response was slightly on the *disagree* side with both the user and non-user although the difference between them was again small. Using the ANOVA we found a significance of .57 indicating that in fewer than 57 times out of 100

would we expect to find a mean difference as large as the one in this sample in a if the population mean difference were zero. We fail to reject the null hypothesis and find there is no difference between users and non-users and their belief that CAM is more natural and better at treating the whole person than allopathic medicine.

Statement 4 says that the patients believe that alternative medicine will have fewer side effects than allopathic medicine. The null hypothesis would have no difference between the user and non-user. The response was slightly on the *agree* side with both the user and non-user although the difference between them was very small – only .03 percent difference. Using the ANOVA we found a significance of .85 indicating that in fewer than 85 times out of 100 would we expect to find a mean difference as large as the one in this sample in a if the population mean difference were zero. We fail to reject the null hypothesis and find there is no difference between users and non-users and their belief that CAM has fewer side effects than allopathic medicine.

Statement 5 says that alternative medicine does not seem to help the patient's ailment as much as western medicine. The null hypothesis would have no difference between the user and non-user. The response was slightly on the *agree* side with both the user and non-user although the difference between them was very small and was close to a neutral response. Using the ANOVA we found a significance of .75 indicating that in fewer than 75 times out of 100 would we expect to find a mean difference as large as the one in this sample in a if the population mean difference were zero. We fail to reject the null hypothesis and find there is no difference between users and non-users and their

belief that alternative medicine is not as effective as allopathic medicine in helping their ailments.

The last statement said that the patients believed that western medicine is better than alternative medicine at treating chronic ailments. The null hypothesis would have no difference between the user and non-user. The respondents tended to agree with the statement and again there was only a very small difference between users and non-users (.01 percent). Using the ANOVA we found a significance of .93 indicating that in fewer than 93 times out of 100 would we expect to find a mean difference as large as the one in this sample in a if the population mean difference were zero. We fail to reject the null hypothesis and find there is no difference between users and non-users and their belief that allopathic medicine is better than CAM at treating chronic ailments.

Table 6. Attitudes Of Respondents Who Use CAM Toward CAM And Allopathic Efficacy.

Statements	Likert Scale Mean		Sig
	CAM Users	CAM Non-Users	
I want to be involved in the course of treatment for my ailments.	1.49	1.71	.12
I trust my physician and his/her prescribed treatments.	1.79	1.85	.52
Alternative medicine is natural & better at treating the whole person than western orthodox medicine.	2.59	2.67	.57
I feel that alternative medicine will have fewer side effects than western orthodox medicine.	2.35	2.38	.85
Alternative medicine does not seem to help my ailment as much as western orthodox medicine.	2.38	2.43	.75
Western orthodox medicine is better than alternative medicine at treating chronic ailments.	2.21	2.20	.93

1=strongly agree, 2=agree, 3=disagree, and 4=strongly disagree.

Other Findings

The therapies listed in the survey instrument are the same as those in the studies by Eisenberg both in 1993 and 1998. Of those therapies the most used by the respondents of this study were chiropractic and massage, followed by relaxation techniques, herbal remedies, lifestyle diets, spiritual healing which included the “other” category which was various forms of church or prayer, and acupuncture. As a comparison, in the Eisenberg (1998:1572) study the top seven therapies in order were: chiropractic, massage,

relaxation techniques, self-help groups, energy healing, commercial diet and imagery.

The order of the first three from this study and the Eisenberg studies were identical.

One of the main functions of this thesis is to discuss who uses CAM. This section summarizes the demographics of who uses CAM.

The use of CAM by age group follows a normal distribution with the category most using CAM in the 51 – 60 age group with 66.7% followed by the 41 – 50 age category with 65.9%. A Pearson's Chi-squared analysis shows a significance of .10.

CAM use differs slightly by educational attainment. Those who only finished through high school and those with some graduate work were slightly more likely to use CAM therapy (64% for high school and 62.5% for those with some graduate work) than those with some college or a bachelor's degree (59.5 and 58.3 percent respectively). The use of CAM seems to be relatively high across educational attainment.

The use of CAM as a function of family income seems to favor those making less than 50,000 dollars per year except for the category of "over 80K per year" which had 52.9% using CAM. The income category most likely to use CAM was the "20 – 30K" dollar category with 66.7 percent using CAM. The category of "<20K" dollars per year came in second with nearly 60% of the respondents using CAM. The lowest use of CAM was from the category "70 - 80K" which reported only 37.5 percent of the respondents using any of the therapies described in the survey.

Discussing CAM Use With The Primary Care Provider

Over 62 percent of the respondents said they do not discuss their use of CAM with their primary care provider. Women (65.8%) appear to be more reluctant than men (59.1%) to discuss it. The most reluctant income category to discuss CAM is the 40 –50 thousand dollar per year category with 83.3 percent choosing not to discuss it.

Educational attainment had one unexpected result in that except for those with some graduate work the ratio of those who discussed, versus those who did not discuss CAM was nearly one to two. The category of some college work was 57% discussing versus 43% not discussing.

As might be expected, CAM users were more likely to discuss CAM with their doctors (44.4%) than were non-users (96.4%). A possible reason for this is that there was no issue about using CAM with the non-users and therefore no discussion was necessary.

The youngest by age group (18-30) are the most reluctant to talk to doctors about CAM (20%) while the “41 – 50” age category was the least reluctant (52%)

There was less than a 1% difference in “discussing” CAM with primary care provider between the ethnic category “NAAM” containing Native American, Asian and Mexican. The “Other” category includes all other ethnicities. From this we can conclude that the ethnic categories we chose either were not significant or the sample was too small to find any significance. The number of observations for the NAAM category was only 11 compared to 70 for the “other” category.

CHAPTER 5

CONCLUSIONS

The Premise

The premise of this study is to determine some of the characteristics of the people who use CAM. We tested the conclusions in the Eisenberg studies (1993, 1998) about the type of people more likely to use CAM. We then added questions in our survey on locus of control, insurance, and more detail on ethnicity. We also added several questions to test the respondent's faith in allopathic medicine and their propensity to discuss their use of CAM with their primary care physician. These areas were not covered or only reported on lightly in the Eisenberg research.

Eisenberg *et al* (1993 and 1998) did not discuss locus of control, hypothesis 1 in this thesis, so there is no way to compare this thesis with the Eisenberg studies. Vincent and Furnham (2001) did discuss some issues on locus of control but there is no way of comparing their results with the results of this study. The difference in locus of control between CAM users and non-users was determined to be only negligible in this thesis and of a statistical significance of .44.

In his 1998 study, Eisenberg found CAM use more common among women (48.9%) than men (37.8%). This study found men (54.2%) slightly more likely than women (47.3%) to use CAM. Since the significance level for this hypothesis was .44 we

understand that a larger sample size or other change in the data could reverse the results and provide a better level of significance.

Hypothesis 3 looked for a difference in the use of CAM due to insurance coverage. Most of the respondents in Eisenberg's study paid for their CAM therapies out-of-pocket and changes in the insurance coverage between his two studies was not statistically significant. While the Chi-square for the results in this thesis did not allow me to reject the null hypothesis ($P=.10$) the results were important enough to draw some speculation that insurance coverage could have a positive effect on the use of CAM therapies.

Eisenberg found that African Americans in his study were the least likely to use CAM therapies. This was the same for this study. My hypothesis 4 attempted to go into greater detail than Eisenberg's so it is not possible to compare the results. The sample size of this thesis also was not large enough to adequately test this hypothesis. Eisenberg also suggests (1998:1575) that even by combining both of his studies, there were not enough data "to provide precise estimates of the patterns of alternative therapy use among African Americans, Hispanic Americans, Asian Americans, or other minority groups."

Vincent and Furnham (2001) was the only substantial source to discuss hypothesis 5 – faith in allopathic medicine versus CAM. I used some of the contents of the responses in the Vincent and Furnham study to design the questions on my survey on faith in allopathic medicine. The statements in Vincent and Furnham were in rank order based on the therapies acupuncture, osteopathy and homeopathy, and I was trying to use the statements to measure confidence in allopathic medicine. There is no way to compare

my thesis to their study. I did find that patients wanted to be more involved in their treatments regardless of whether they are allopathic or CAM. I also found that patients said they trust their physicians. This is understandable since I did my survey in primary care physicians' offices.

What type of people use CAM? The simple answer is that there is no distinctive characteristic of the CAM user. In terms of locus of control, the indicator of how internally controlled a person is, users and non-users appear to be identical. The score on the control scale mean varied by only .05 on a 4-point scale between men and women. The users and non-users are statistically nearly the same in terms of age, sex and ethnicity. Men are seven percent more likely to use CAM but women use more CAM therapies than men. Using our ethnicity category of NAAM (Native Americans, Asians and Mexicans) there was virtually no difference in the use of CAM. Even regarding their faith in allopathic medicine and trust in their allopathic primary care physicians, users and non-users of CAM are nearly in agreement. Users and non-users also agree on whether CAM is better or worse for treating the whole person. They're nearly mutually neutral. There is also agreement between the two groups on two other questions that present a troubling conclusion, possibly about the questions or the survey instrument. There is a slight agreement by both groups that CAM does not help the patients' (their) ailments, and that allopathic medicine is better than CAM for chronic ailments. It is possible that because of the wording of these questions and their orientation toward allopathic medicine that the patients were lulled into answering in agreement. These were the last items on the survey opening interpretation to respondent fatigue.

Insurance coverage appeared to be the most reliable indication of CAM use of any of the factors covered in this study. We found that if insurance coverage for CAM therapies were more readily available more people would use it. It is possible that those who want to use CAM search for insurance that provides some coverage for some or all CAM therapies.

One of the areas that although we had no hypothesis, we did wish to see how it compared with the studies by Eisenberg (1993, and 1998) was whether patients discussed their use of CAM with their primary care physicians. Over 65 percent of female patients and slightly more than 59% of the male patients do not discuss their use of CAM with their doctors. This compares to 72% for Eisenberg's study (1993, 1998).

What are the reasons for the similarity and difference from the Eisenberg studies? Eisenberg used national data while this study is focused on Austin, Texas. Austin has two schools of oriental medicine and a school of massage therapy. This is above average for cities in the United States and compares to locations on the west coast, namely California, Oregon and Washington. A city with two schools of oriental medicine may be perceived as being favorable to these treatments.

Directions for Future Research

Since the research described above found that insurance coverage makes some difference in whether a person uses or says he/she uses CAM there is an opportunity to see if such coverage would make a real difference and for what therapies. Since this is a difficult topic to question people about using a simple questionnaire it may be best to do more qualitative research and perform personal interviews. Health insurance coverage is a topic of which people are fairly ignorant.

Another question worth investigating is if there is a positive correlation between the use of CAM therapies (or a favor for CAM therapies) and the location of schools of oriental medicine. That is, are schools more likely to locate in areas where CAM use is high versus places where the use is low?

Another area which would become a longitudinal study would be to survey primary care practitioners to see if they are initiating discussions with their patients on the topic of CAM and what position they (the doctors) are taking – warning to not use CAM or guiding patients to therapies which have shown some promise of efficacy. This would support one of the recommendations in the Eisenberg study (1993:249), that doctors discuss CAM with their patients.

My last recommendation is to suggest, as does David Eisenberg, that parallel studies be done to see what specific minority populations feel about alternative therapies, especially therapies practiced by members of their culture, only in modern settings.

APPENDIX A.

Survey

We appreciate your participation in this research project. Please answer all of the following questions, but **DO NOT PUT YOUR NAME ON ANY PART OF THIS QUESTIONNAIRE.**

Have you sought or used any other treatments for the ailments for which you also visited your family physician?
Check any that you have used from among the following list. Check as many as necessary.

- | | |
|---|---|
| 1 <input type="checkbox"/> Acupuncture | 9 <input type="checkbox"/> Hypnotherapy |
| 2 <input type="checkbox"/> Biofeedback | 10 <input type="checkbox"/> Imagery |
| 3 <input type="checkbox"/> Chiropractic | 11 <input type="checkbox"/> Lifestyle Diet |
| 4 <input type="checkbox"/> Commercial Diet | 12 <input type="checkbox"/> Massage |
| 5 <input type="checkbox"/> Energy Healing | 13 <input type="checkbox"/> Megavitamins |
| 6 <input type="checkbox"/> Folk Remedies or Therapies | 14 <input type="checkbox"/> Relaxation Techniques |
| 7 <input type="checkbox"/> Herbal Therapy | 15 <input type="checkbox"/> Self-help groups |
| 8 <input type="checkbox"/> Homeopathy | 16 <input type="checkbox"/> Spiritual healing by others |
| | 17 <input type="checkbox"/> Other _____ |

1 Have you discussed your use of these therapies with your primary care provider (Physician)?

- ☐ Yes
☐ No

2 Do you have health insurance coverage?

- ☐ Yes
☐ No

3 Do you have health insurance coverage for any of the therapies you checked above?

- ☐ Yes
☐ No

4 **IF YES** to question 3. Would you have used the therapy you checked if you did not have the coverage?

- ☐ Yes
☐ No

5 **IF NO** to question 3. Would you consider using any of the above therapies, either alone or in conjunction with conventional medical treatment if you could have reasonably priced insurance that covered part or all of that treatment?

- ☐ Yes
☐ No

SO THAT WE CAN COMPARE THIS INFORMATION WITH OTHER STUDIES PLEASE ANSWER THE FOLLOWING

6 Your Age _____

7 Sex

- ☐ Male
☐ Female

8 Annual Family Income

- ☐ less than 20,000
☐ 20,001 to 30,000
☐ 30,001 to 40,000
☐ 40,001 to 50,000
☐ 50,001 to 60,000
☐ 60,001 to 70,000
☐ 70,001 to 80,000
☐ 80,001 or over

TURN PAGE OVER

9 What would you consider your race or ethnic background?

- ☐ White
☐ Mexican
☐ Other Hispanic
☐ African
☐ Asian
☐ Native American
☐ Other _____

10 What is your highest educational attainment?

- ☐ Up to a high school diploma
☐ Some college
☐ Bachelors Degree
☐ Graduate work or degree(s)

Below are some statements. Read each statement and select a response from the list below which best describes how you feel about that statement. Write a number in the blank to the left of each statement to indicate your response

Western orthodox medicine is the medical treatment usually performed by your family physician. Alternative medicine includes any other therapy such as the ones listed in the beginning of this survey

1. Strongly Agree	2. Agree	3. Disagree	4. Strongly Disagree
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- 1 _____ I have often found that what is going to happen will happen
- 2 _____ Trusting to fate has never turned out as well for me as making a decision to take a definite course of action
- 3 _____ What happens to me is my own doing
- 4 _____ Sometimes I feel that I don't have enough control over the direction my life is taking
- 5 _____ When I make plans, I am almost certain that I can make them work
- 6 _____ It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow
- 7 _____ In my case, getting what I want has little or nothing to do with luck
- 8 _____ Many times we might just as well decide what to do by flipping a coin
- 9 _____ Many times I feel that I have little influence over the things that happen to me
- 10 _____ It is impossible for me to believe that chance or luck play an important role in my life
- 11 _____ I want to be involved in determining the course of treatment for my ailments
- 12 _____ I trust my physician and his/her prescribed treatments
- 13 _____ Alternative medicine is more natural and better at treating the whole person than is western orthodox medicine
- 14 _____ I feel that alternative medicine will have fewer side effects than western orthodox medicine
- 15 _____ Alternative medicine does not seem to help my ailment as much as western orthodox medicine does
- 16 _____ Western orthodox medicine is better than alternative medicine at treating chronic ailments

Thank you for taking time to help us with this survey. Please place this completed survey in the box marked **SURVEYS** located in the waiting room.

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VITA

John Emerson was born on February 23, 1948 in Brooklyn, New York. He graduated from Bethpage High School on Long Island. In 1966 he attended the University of Montana and then Nassau Community College while working as an ambulance attendant, musician and music teacher. He enlisted in the U.S. Air Force in 1968 and was trained as a linguist in the Vietnamese language. While still in the Air Force, after a tour in Viet Nam and while an instructor at the U.S. Air Force School of Applied Cryptologic Sciences in San Angelo he finished a B.A. in Sociology at Angelo State University. After a tour in Okinawa where he completed nine hours in the graduate program in systems management from the University of Southern California, John returned to Texas and began the graduate program in Community and Regional Planning at the University of Texas at Austin. He spent more than two years as a planner for the Brazos Valley Development Council in Bryan, Texas and thirteen years as a planner for the Texas Parks and Wildlife Department (TPWD.) He finished the MS in planning in 1981. He then spent the remaining years at Parks and Wildlife as the head of business administration and budget manager for the state parks system. He retired in May 2000 with twenty-three years at TPWD and twenty-eight years of state service. During his last year at Texas Parks and Wildlife Department he attended Southwest Texas State University pursuing a Masters degree in Sociology. John has been married to Natalie Nowak for thirty-two years and they have two daughters Jean and Christina.

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