

Institute for Christian Teaching
Education Department of Seventh-day Adventists

**THE IMPACT OF HUMAN EMOTIONS UPON LEARNING: A
CHRISTIAN PERSPECTIVE**

By Lana Martin, Ph.D., ACSW
Assistant Professor

Department of Social Work
Walla Walla College
College Place, Washington

Prepared for
20th International Faith and Learning Seminar
held at
Loma Linda University
Loma Linda, California
June 15 - 26, 1997

**295-97 Institute for Christian Teaching
12501 Old Columbia Pike
Silver Spring, MD 20904**

The Impact of Human Emotions Upon Learning: A Christian Perspective

Introduction:

“You shall love the Lord your God with all your heart, and with all your soul, and with all your strength, and with all your mind; and your neighbor as yourself” (Luke 10:27).

We are admonished to commit our whole selves to God and humankind in love. When we live in harmony of body, mind, emotion, and spirit, we are able to learn and to love as we were created to be. When we separate and compartmentalize the components of our human wholeness, we limit our capacity to live well, think, feel, and relate effectively. Traditionally, educators have emphasized the mind for students’ ability to learn. Students’ potential to learn has been evaluated by score outcomes of intelligence tests, SAT’s, GRE’s, and numerous other testing instruments. Educators encourage students to learn the skill of critical thinking essential for developing judgment and making decisions. More recent studies have found that learning is not a function of the mind only, but of the whole person.

Daniel Goleman (1995), a Harvard psychologist, science writer for the New York Times, and author of Emotional Intelligence, postulated that, “when it comes to predicting people’s success, brain power measured by intelligence tests, and other standardized achievement tests, appear to matter less than qualities of mind once thought of as character (or qualities of the heart)” (p. 62). Educators must recognize that students learn through thoughts and emotions encompassing both hemispheres of the brain. The left hemisphere functions predominantly in the areas of language, logic, reason, mathematics, and writing skills. The right hemisphere functions predominantly in the areas of emotion, music, arts, and creativity (Myers, 1978). The ability to think creatively is equally important to the ability to think critically. Goleman (1995) suggested that educators develop their understanding of how human emotions as well as intellectual ability enhance or impede students’ capacity to learn. For example, student’s reactions to distress can affect their ability to concentrate and intellectually respond to instruction. How often have you said, “I was so angry or so upset, I couldn’t think straight!” Human emotions can override the ability to think clearly.

Purpose:

Based upon these introductory remarks, the purpose of this study is to raise the awareness of educators to how emotions impact learning. From Ministry of Healing, Ellen White wrote, “True education includes the whole being. It enables us to make the best use of brain, bone, muscle, body, mind, and heart” (p. 168). How can educators become alert and sensitive to cues that could indicate that students’ emotional distress is stimulating the brain to process information through the right hemisphere of the brain, through the emotions, instead of the left hemisphere of rational thought? When information is delayed in being processed by the left hemisphere of the brain, the result is often distortion, misunderstanding, or lack of knowledge of material presented in the classroom setting. This dynamic was vividly illustrated during a recent stay at a motel. The desk clerk was busy with customers, telephone calls, and had been on duty all day. I stopped by the desk to request an early wake up call, stated my name and room number as well as showed her my key tag, which clearly indicated the room number. Shortly after returning to my room, the desk clerk called and asked if I had requested an early wake up call, which I confirmed I had. With a tone of frustration, she stated I had given her the incorrect room number! I thanked her for the clarification. There would have been little value in defending my position by reminding her that I had shown her my room key tag. Her physical tiredness and stressful distractions resulted in processing my request through her emotions rather than reason. If she had been a student in my class, I would have believed that she understood my communication, which was further supported by a visual aide.

This paper will present physiological and emotional symptoms of potential distress indicators followed by suggestions for interventions that any educator, secular or Christian, could implement in the effort to support and help students in their experience. The question is begged, “What can Christian educators, and more specifically, Seventh-day Adventist educators, offer in the process of assisting students in educational institutions to learn more effectively? There is no intent that educators should become “psychotherapists” with students or lower academic standards, but that educators understand the dynamics of the learning process from varied paradigms for the greatest effectiveness.

Human Emotions and the Brain:

Recent research has provided scientific understanding of where human emotions originate and the purposes they serve. For example, the emotion of fear can be protective. Fear drives blood into the large muscles making it easier to run or lift heavy objects that would not be within our normal capacity. Emotions originate from an area of the brain called the limbic system, which contains a small almond shaped amygdala located in the temporal lobe. The amygdala is referred to as the “Emotion Central” (Goode et al., 1991).

Joseph LeDoux, a neuroscientist at New York University, has done extensive research to understand cerebral pathways and interactions (cited in Gibbs, 1995). LeDoux found that the amygdala may make the first judgement of emotional significance to stimuli (Goode et al., 1991). For years, scientists believed that sensory stimuli was processed by the cerebral cortex. The cortex would then send signals to subcortical areas of the brain i.e., the amygdala, which would determine if danger was eminent. The amygdala would then send messages to the cortex to stimulate the autonomic nervous system to respond to the distressor. LeDoux’s studies indicated that sensory stimuli reaches the amygdala two to three times faster than the cortex and supports that cognition and emotion, though interactional, are separate systems in the brain (Goode et al., 1991). The amygdala provides emotional interpretation of perceived stimuli. When stimuli is perceived which trigger emotional responses such as fear, anger, and passion, messages are automatically sent to every major part of the brain alerting the body responses needed for “fight or flight” action (Goleman, 1995). LeDoux’s research provided understanding that the amygdala is powerful enough to override the neocortex, the left portion of the brain which controls rational thinking, reason, and logic. Under the tension of distress, the emotions are more likely to be the first to stimulate behavior. Emotional meanings and responses are stored by the amygdala’s memory system; therefore, present perceptions may be interpreted by past experiences!

Education gives primary attention to reasoning ability and little attention to students’ emotional intelligence. The intricate connections and interactions between the amygdala and the neocortex form the center of emotional and thought responses and reactions. Human behavior is dependent upon the interplay of both rational and emotional intelligence. However, rational intelligence can be overridden by the emotional reactors, which results in behavior similar to that demonstrated by the

motel clerk. Much attention is given today to body-mind-emotion connections to healing in the medical disciplines. While less research is available concerning body-mind-emotion connections to education, the principles presented pertaining to healing seem to aptly apply to learning.

Even more amazing is the impact of emotions such as fear and anger upon the body when we are not consciously aware of these feelings. In this state, the body is constantly directed by the brain to prepare for what does not happen. The result is persistent physical tension (Kelsey, 1988). One can readily understand the implications of how human emotions can effect students as well as teachers in the classroom setting.

Human Emotions, Health, and Learning:

Dr. Jerome Frank, a psychiatrist at John Hopkins University, suggested that medical evidence emphasizes the profound influence of the emotions on health, and stated that anxiety and despair can be lethal, while confidence and hope are life-giving (Kelsey, 1988). Everyday language reveals our unconscious or conscious knowledge of how emotions effect the body as revealed by the following familiar expressions: “I was scared stiff!” “You are a pain in the neck!” “I couldn’t stomach the sight of it.” “I was so gripped by stage fright, I forgot all my lines in the play.”

A recent longitudinal study of 13 years of children’s emotional problems conducted by Thomas Achenbach and Catherine Howell (1988) found children in the United States to be more lonely, depressed, angry, and unruly as well as more nervous, impulsive, prone to worry, and more aggressive when compared to children from other countries (cited in Goleman, 1995). Goleman (1995) advocates for educators to include essential human competencies such as self-awareness, self-control, empathy, listening skills, anger and conflict management, and cooperation (social) skills as part of the school curriculum.

All human beings have potential to become habitualized to emotional stressors such as anxiety, depression, and other tensions. When asked how one feels, the likely response is “Fine”. Students will frequently reply that they feel tired. This description can become an invitation to explore the possible reasons for their tiredness and to consider options for reducing their feelings of fatigue. It is

also possible that students can appear calm and in control, but may be experiencing pronounced physical reactions in their bodies due to habitualized distress and tension.

Stress is a function of living, which can be healthy or unhealthy. The word stress originates from the Latin root word “stringere” meaning “to draw tight.” Healthy stress means we are fulfilling our created potential in ways that are constructive. Unhealthy stress, or distress, means that we are stretching ourselves physically or mentally in ways that are potentially destructive. Each individual has responsibility to understand and seek balance in the tension between the two polars of stress. Many students function in a state of distress to achieve their academic goals. As educators, we need to develop sensitivity to when we may be encouraging distress as well as opportunities for providing moments of tension relief. Healthy humor in the classroom can be a good way to reduce tension.

Ellen White was aware of the mind-body connection when she wrote, “The influence of the mind on the body as well as influence of the body on the mind should be emphasized.” (*Education*, p. 197). In *Ministry of Healing*, she wrote, “The relation that exists between the mind and body is very intimate. When one is effected, the other sympathizes. Grief, anxiety, discontent, remorse, guilt, and distrust all tend to break down the life forces and invite decay and death. Courage, hope, faith, sympathy, and love promote health and prolong life. A contented mind, a cheerful spirit, is health to the body and strength to the soul” (p. 97). Likewise, the *Bible* has several references to mind (thought and emotion) and body connections such as the familiar verse in Proverbs 17:22, “A merry heart doeth good like a medicine.” It is all too clear that when human emotions are not recognized, the body is weakened resulting in illness and even death.

Symptoms of Emotional Distress:

No part of the body is immune to the possible ill effects of unhealthy human emotions. Kelsey (1988) provides a description of “cues” to alert educators of physical symptoms and behaviors of harmful distress reactions that can be observed in students as well as the general population. Twelve descriptors follow:

- Persistent respiratory conditions such as respiratory infections, colds, asthma, and allergies are often related to emotional conflicts and distress.

- **Eyes, often called the windows to the soul, reflect the emotions. Students need to be encouraged to cry when they feel overwhelmed with intense emotions. Feelings are released through the healing capacity of tears. Most of us quickly hand people (our students) a tissue to encourage them to stop crying. Be comfortable with your own tears as well as the tears of others to allow healing release.**
- **Complaints of stomach distress. Tension, overwork, anxiety, fear, guilt and numerous other emotions can result in digestive problems ranging from difficulty swallowing to constipation to stomach ache complaints. College and high school students tend to not eat well or rely on quick foods, caffeine, sweets, and other potentially harmful foods to save time, self-nurture, or stay awake.**
- **Insomnia, headaches, and nervous system disorders result from emotional distress. Students are chronically sleep deprived. One of the leading causes of severe illness is sleep deprivation. The body is robbed of sufficient time for renewal and strengthening of the immune system.**
- **Problems with teeth. Dentists have gathered data which reveals that diseases of the mouth are correlated with emotional distress. Persistent tooth decay can be affected by anxiety. A dentist near to Notre Dame University found a marked increase in trench mouth among college students during college exam weeks!**
- **Accident prone behavior may be the result of unresolved tension and anger. Frequent accidents can reflect inner conflict, hurt feelings, and poor self-concept. Students are unable to maintain psychological presence in the classroom or other settings. Distractions, day dreaming, and worry frequently result in accidents of various kinds.**
- **The skin is an organ that reveals emotional tension. Skin reveals tension through blushing, rashes, perspiration, hives, etc. Color may be pale or darker than usual. Conscious or unconscious persistent anger, fear, shame, and anxiety may be expressed through the skin.**

- **Breathing patterns are important. Under tension, many people will tend to hold their breath or breathe shallowly.**
- **Hyper or hypo tension may accelerate under distress. Students will be unable to focus for any length of time.**
- **Immediate frustration reaction. Students may feel so overwhelmed that they are unable to organize their tasks or time in a manageable manner.**
- **Procrastination and/or perfectionism. Students who procrastinate, reflect perfectionistic tendencies, or are chronically late for class or appointments may be dealing with conscious or unconscious unresolved anger, fear, grief or other challenging emotions. Students may appear depressed and/or anxious.**
- **Poor self-esteem or self-concept. Students who do not feel good about their bodies or social relationships may have difficulty producing work that is satisfactory to them.**

While this is not intended to be a complete list of symptoms of emotional distress, it is intended to serve as a means to stimulate educators to be more observant of students' symptoms and behaviors that could indicate distress. Students with multiple symptoms over a long period of time may be in danger of potential suicidal or homicidal ideation.

Locus of Control:

My belief is that the locus of control for change must be within the student depending upon the student's age and maturity. Two challenging questions for educators might be: How can we be more effective in our relationship with our students? Is it possible to stimulate behavior changes in others, particularly our students? Educators, parents, and other significant adults in a student's experience have an awesome opportunity to influence, model, and be present with students in a variety of circumstances.

How Change Occurs:

For years it was believed that if you could inspire people to change their attitudes and beliefs, behavior would change. However, we now know that attempts to change people's behavior by changing attitudes or beliefs are usually unsuccessful. Think of all the things you do or don't do in your own experience that you know are unhealthy for you, but you persist to do them anyway! Social psychologists have repeatedly found that behavior positively effects attitude and beliefs. The familiar slogan, "Practice makes perfect" may be altered to read "Practice makes change"! As early as 1922, the education philosopher, John Dewey wrote: "There is no such thing as genuine knowledge and fruitful understanding except as the off-spring of doing" (p. 30). In a similar manner, the great theologian, Karl Barth said, "Only the doer of the Word is its real hearer" (Dewey, 1922, p. 31). The book of James adds support to the need for action to create change: "Do not merely listen to the word, and so deceive yourselves, do what it says. Anyone who listens to the word but does not do what it says is like a man who looks at his face in a mirror, and after looking at himself, goes away and immediately forgets what he looks like" (James 1:22-24).

Changes provide new opportunities, but also involve risks. Change requires openness to new paradigms of thought and understanding. In psychological terms, this might be called "reframing" or another way to view a situation. Some people respond to changes easily and view change with a sense of adventure. Others see change as threatening and disrupting of what is presently known. One's perception of both the change and potential consequences of change greatly influences readiness to accept change. Educators are challenged every day to stimulate students to changes in both knowledge and values that inspire growth and health in the dynamics of living and learning. The means used by educators to meet the challenges vary and are largely based upon their knowledge and values.

Emotional Intelligence:

If educators are to give serious attention to student's emotional intelligence, then it would be reasonable to seek understanding of what constitutes healthy emotional intelligence. If we believe that a "merry heart is as effective as a medicine", happiness would appear to be an important component to healthy emotional happiness. Unfortunately, happiness is not an easily measured variable

and is subject to many interpretations and individualized meanings. However, Myers and Diener (1995) undertook the challenge to analyze and identify who is happy and why. They looked at “subjective well-being” to determine characteristics of happy people. Subjective well-being was defined as “three correlated but distinct factors: the relative presence of positive affect, absence of negative affect, and satisfaction with life” (p. 11). They found that happy people differ from depressed or unhappy people in several pertinent ways. Happy people are less self-absorbed, less hostile, and less vulnerable to disease. They are more loving, forgiving, humorous, trusting, energetic, decisive, creative, helpful, and sociable (Myers, 1993; Veenhoven, 1988). Myers and Diener (1995) point out that happy people experience both positive and negative affect at given times meaning that happiness does not indicate exclusion of some emotions but an openness to all feelings. Chronically depressed or unhappy people are not readily open to what we might consider joyful emotions. Campbell (1981) and Larson (1989) found that people who feel empowered rather than helpless typically do better in school, cope with stress better, and view themselves as happy (cited by Myers & Diener, 1995, p. 14).

Role of Religion and Happiness:

Poloma & Pendelton (1990) studied the relationship between happiness and religiosity. They consistently found that people who rated themselves as “religious” reported higher levels of happiness, less vulnerability to depression, and physically healthier than people who did not view themselves as religious. People who identified religion as important in their lives experienced more social support, sense of purpose, and hope compared to those who did not identify religion as important. It is reasonable to consider that while the challenging emotions such as guilt, anger, shame, grief, and fear, can impede reason, logic, and other left brain functions, the healthy emotions, the fruit of the Spirit, joy, peace, forgiveness, happiness, and love can enhance learning. Stress is not the culprit, but as was discussed, emotional distress does not allow perceived information to pass readily to the left hemisphere.

What Educators Can Do:

In considering what educators can do to help students when human emotions and distress interfere with learning, I will begin with suggestions applicable to all educators, secular and Christian. I will then focus on suggestions that I believe are specific to Christian educators followed by suggestions uniquely for Seventh-day

Adventist educators. The suggestions are not intended to be competitive between secular and Christian teachers, but clarifying and stimulating for educators to examine their own values and beliefs for the best way to serve students in the educational setting. The following are recommended for secular and Christian teachers:

- Be open to listen to students' verbal expressions as well as body reflections. Encourage students to calm and express themselves. Expression decreases tendency toward depression. Observe changes in behavior such as academic performance, associations, physical complaints, and change in choice of seating in the classroom. Observing does not mean assuming a problem exists, but being open to discuss noted changes with the student.
- Express your belief in the student. Expressions can be verbal, written, or facial expressions.
- Practice the art of empathy. Use reflective responses; seek clarifications, and provide total attention during the time you are with the student. Empathy can be communicated with listening to both verbal and non-verbal messages from the student. Palmer (1993) profoundly stated that knowledge of truth requires following it in our lives. He suggested that the relationship between the teacher, students, and subject matter is one of obedience, which comes from the Latin root word, *audire*, which means "to listen", a listening for response to the speaker's reality.
- Take time to offer emotional support, encouragement, and praise. Recognition is a basic human need.
- When a student presents a particular problem, try to discover if this has been an on-going situation or a more immediate problem. What have they done so far? What do they see as options for resolution? Are there other possibilities? **DO NOT TELL STUDENTS WHAT TO DO!** Explore options and possible consequences. Can the stated problem be broken down into more manageable segments? You may be able to assist the student in developing a plan of action that is realistic and manageable. Ask the student to return for a follow-up appointment to determine how the plan is working. This is a strong statement of caring.

- Be emotionally present with the student. Guard against allowing your own thoughts to wander to other matters; do not accept telephone calls during your appointment with a student except for emergencies; use good judgment, but often students respond to a caring touch on the hand, shoulder, or a hug. Never assume it is acceptable to hug a student. Some students are threatened by touch. It is acceptable to ask if they would like a hug. If not, accept their response with understanding.
- If the student is presenting psychological, physical, or serious mixed problems, explore referral for professional services. Maintain a good reference source for services that could be available to students.
- Be clear with students from the beginning what can and cannot be held in confidence. Be familiar with school policies as well as school and agency resources.
- Educators can help students develop healthy self-images by affirming their value and worth. Refer to the student by name.
- Distressed students often feel powerless and loss of self-control. By providing exploration of choices and not telling the student what to do, students can regain lost feelings of empowerment.

In addition to the above suggestions, what can Christian-based teachers offer students experiencing distress? In Ministry of Healing, Ellen White wrote, “The world needs today what it needed 1900 years ago, a revelation of Christ” (p. 51). I would modify her words to read, “Students today need what they have always needed, a revelation of Christ.” How will students experience the revelation of Christ? I believe Christ entrusted human beings to reveal His love and goodness to others through relationships with each other. Ellen White continues in Ministry of Healing stating, “It is only through the grace of Christ that the work of restoration, physical, mental, and spiritual, can be accomplished” (p. 51).

The Christian educator, open to the Holy Spirit, is not limited to human resources for providing help with students. Prayer, silent and expressed, provides another means of confidence, trust, and strength founded in belief in Jesus Christ,

our Creator, Savior, Brother, Friend. The teacher may pray for wisdom and guidance in preparation for being with students as well as praying with students who are open to the leading of the Holy Spirit. The Bible is rich with promises, wisdom, and guiding principles for living. The united blend of human and divine resources offer students much more than human guidance alone. Several studies found one's religious experience positively associated with perceptions of well-being (Witter, Stock, Okun, and Haring, 1985; Peterson & Roy, 1985; Bergin et al., 1987; and Pollner, 1989). Christian educators not only offer social support and guidance to students, but can offer students a vision of purpose and hope, especially during times of discouragement and distress. The promise of Christ's presence in the midst of two or three gathered in His name is powerful for the teacher and student. The Christian educator is more prepared to meet the student with an attitude of caring and wholeness mentally, emotionally, physically, and spiritually.

While all Christians can rely upon their belief in Jesus Christ, the guidance of the Holy Spirit in their lives and work, and the power of God's Word and prayer, do Seventh-day Adventist educators have anything unique to offer students? I believe they do! Foremost, the Seventh-day Adventist educators benefit from the blessings of the Sabbath and can invite students to share that blessing with them. Matthew 11:28 presents Christ's invitation to all of us to "Come unto Me, all ye that labor and are heavy laden, and I will give you rest." The Sabbath hours provide an opportunity to experience the rest and peace of Jesus' love and goodness on a day set aside and blessed.

The Spirit of Prophecy, the writings of Ellen White, are rich with counsel, promises, helps, and guidance. Listen to the words from Ministry of Healing, "Let us ever be channels through which shall flow the refreshing waters of compassion....Those who are fighting the battle of life at great odds may be strengthened and encouraged by little attentions. To such, the strong helpful grasp of the hand by a true friend is worth more than gold or silver. Words of kindness are as welcome as the smiles of angels" (p. 58). She goes on to describe Christ's method of being with people in need: "The Savior mingled with men (and women) as one who desired their good. He showed His sympathy for them, ministered to their needs, and won their confidence" (p. 58). From the same volume, she wrote: "Nothing tends to promote health of body and soul more than a spirit of gratitude and praise....It is a law of nature that our thoughts and feelings are encouraged and strengthened as we give them utterance" (p. 102).

Lastly, the health message as presented by Seventh-day Adventists offers teachers a view of working with students from a health perspective that enhances mental, emotional, and spiritual growth as well as emphasis upon physical health.

Conclusions:

In conclusion, human emotions play an important role in the learning process. Recognizing that under emotional distress information is processed first by the right brain hemisphere, educators can understand that students' capacity to reason, retain, and process information presented in a classroom setting is limited. Educators who maintain a whole person perspective of students are able to help ameliorate the impact of emotional distress through varied interventions presented in the context of this paper as well as other resources. Christian educators have the rich benefit of the work of the Holy Spirit, prayer, biblical references, and belief in eternal purpose and hope. Seventh-day Adventist educators additionally add the blessings of Sabbath, wisdom and guidance through the Spirit of Prophecy, and the health message. Educators open to the promises of God are given the encouraging words of Isaiah 50:4: "The Lord Eternal has given me a tongue for teaching that I should know how to speak a word in season to those who are weary."

REFERENCES

Bergin, Allen E., Stinchfield, Randy D., Gaskin, Thomas A., Masters, Kevin, S. & Sullivan, Clyde. (1988) "Religious life-styles and mental health: An exploratory study." Journal of Counseling Psychology. 35, 91-98.

Campbell, A. (1981) The Sense of well-being in America. New York: McGraw Hill.

Cross-National Collaborative Group. (1992) "The changing rate of major depression." Journal of American Medical Association. 268, 3098-3105.

Dewey, John. (1922) Human nature and conduct. New York: Holt Publishing Company.

Gibbs, Nancy. "What's Your EQ" Time. October 2, 1995.

Goleman, Daniel. (1995) Emotional intelligence. New York: Bantam Books.

Goode, Erica, Schrof, Joannie, & Burke, Sarah. (1991) "Where emotions come from." U.S. News & World Report. June, 54-62.

Kelsey, Morton T. (1966) Psychology, medicine & Christian healing. San Francisco: Harper & Row Publishers.

Larson, David & Milano, Mary Greenwold. (1997) "Spirituality and mental health: Are they soul mates?" Paradigm Magazine. 12, 12-13, 21.

Larson, R. (1989) "Is feeling 'in control' related to happiness in daily life?" Psychological Reports. 64, 775-784.

Michalos, A.C. (1991) Global report on student well-being: Vol. 1 life satisfaction and happiness. New York: Springer-Verlog.

Myers, David. (1978) The human puzzle: Psychological research and Christian beliefs. New York: Harper & Row Publishers.

Myers, David G. & Diener, Ed. (1995) "Who is happy?" Psychological Science. 6, 10-18.

Myers, David G. (1993) The pursuit of happiness. New York: Avon Books.

New International Version of the Holy Bible. (1988) Grand Rapids: Zondervan Bible Publishers.

Palmer, Parker J. (1993) To know as we are known. San Francisco: Harper Collins Publishers.

Peterson, L.R. & Roy, A. (1985) "Religiosity, anxiety, and meaning and purpose: Religion's consequences for psychological well-being." Review of Religious Research. 27, 49-62.

Pollner, M. (1989) "Divine relations, social relations, and well-being." Journal of Health and Social Behavior. 30, 92-104.

Poloma, M. M. & Pendleton, B.F. (1990) "Religious domains and general well-being." Social Indicators Research. 22, 255-276.

Robins L. & Reiger, D. (1991) Psychiatric disorders in America. New York: Free Press.

White, Ellen. (1903) Education. Boise: Pacific Press Publishing Association.

White, Ellen (1990) Ministry of healing: Health and happiness. Silver Springs: Better Living Publications.

Witter, R. A., Stock, W. A., Okun, M. A., & Haring, M. J. (1985) "Religion and subjective well-being in adulthood: A quantitative synthesis." Review of Religious Research. 26, 332-342.

Veenhoven, R. (1988) "The utility of happiness." Social Indicators Research. 20, 333-354.