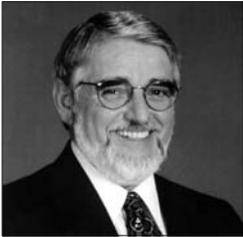


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Humor, Spirituality, and Well-Being

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The National Institute of Health has created a National Center for Complementary and Alternative Medicine (NCCAM) with five major sections for research, including a mind-body section. Mind-body research is included under the umbrella of psychoneuroimmunology (PNI). Significant progress is being made in mind-body research around the world with the field of psychoneuroimmunology expanding at a rapid rate. The areas of humor and spirituality, as each relates to well-being and quality of life, are the focal point of this paper.

*“A merry heart
doeth good, like
a medicine.”*

“Every year, more and more studies demonstrate that your thoughts, moods, emotions, and belief system have a fundamental impact on some of the body’s basic health and healing mechanisms.”¹ The basis for this assumption is a growing body of scientific evidence that corroborates the health benefits of mind-body activities as diverse as laughter, prayer, meditation, play, imagery, biofeedback, hypnosis, acupuncture, massage, and spiritual quests. Complimentary and alternative medicine is being taken more seriously as patients and physicians alike are becoming more aware of the healing possibilities.

The National Institutes of Health (NIH) created a National Center for Complementary and Alternative Medicine (NCCAM) dedicated to exploring complementary and alternative medicine (CAM) healing practices in the context of rigorous science; training CAM researchers; and disseminating authoritative information. By taking CAM seriously, NIH is adding its support to research into the effectiveness of alternative healing methods. The major domains for NCCAM include the following:

Mind/body interventions: meditation, biofeedback, distant or psychic healing,

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hypnosis, psychotherapy, prayer, art, music, humor, and dance.

Alternative medical systems, which may include traditional and ethnomedicine: acupuncture, herbal medicine, ayurveda, homeopathy, natural products, Native American approaches, and Oriental medicine.

Manipulative and body-based methods: acupressure, massage, chiropractic, reflexology, Rolfing, and therapeutic touch.

Biological-based therapies: anti-oxidizing agents, chelation, cell treatments, and metabolic therapy.

Energy therapies: electromagnetic fields, biofields, Qi gon, Reiki, and therapeutic touch.

Mind-body interventions fit well under the umbrella of psychoneuroimmunology (PNI). PNI is the study of the complex interrelationships between the immune system, the central nervous system, hormones, and one’s psychological make-up. This growing field is concerned with the interactions between the brain and the immune system at the molecular, cellular, and organismic levels, and encompasses mind-body interactions in a variety of ways. In an interview with *Psychiatric Times*, Ronald Glaser, a noted authority in the field, defined PNI as follows:

a field that studies the interactions between the central nervous system, the endocrine system and the immune system; the impact of behavior/stress

on these interactions; and the implications for health of these interactions.²

Scholarly journals such as *Brain, Behavior, and Immunity*; *Neuroendocrinology Letter*; *New England Journal of Medicine*; and the *Journal of the American Medical Association* feature current articles related to PNI. The establishment of PNI research centers and the publication of scientific research, provides the foundation for this growing field.³

Two areas of research under the mind-body domain that are now receiving serious consideration by the scientific community are the areas of spirituality and humor. It has been suggested that spiritual seeking, spiritual-disciplines or spiritual endeavors contribute to good health. Research on prayer, meditation, and spiritual seeking and their relationships to healing is included under this heading.

Humor, with all its modalities, may augment healing, promote health and well-being, as well as help us deal with psychosocial pressures. Mirth, laughter, celebration, festivity, hilarity, and joking—in the proper context and setting—may be the catalyst for reducing the negative effects of living a stress-filled and stressful life.

Psychosocial Pressures

Research articles documenting the negative effects of stressful living on the human body and mind abound in the literature.⁴ The variety and devastation of the negative effects of psychosocial pressures on the mind and body, from the pressure of taking medical exams⁵ to the stress of being the sole caregiver for a spouse who is dying from Alzheimer's disease,⁶ are substantive and convincing.

Stresses, both physical and emotional, help people stay active and alert and more prepared to face obstacles. Dehydroepiandrosterone (DHEA) and cortisol are some of the body's main hormones for coping with stress. The balance of these two hormones affects how people handle the overwhelming feeling that stress can bring. When the mind and body feel stress, cortisol is essential for maintaining energy levels during the stressful period. DHEA and cortisol work together to provide an optimal stress response. Elevation of the cortisol level is an indicator of a stress response, while a drop in the level of cortisol indicates a movement away from a stress response.

Research indicates that some diseases may be reflections of the psyche. It appears that bereavement causes a depression in lymphocyte count, that there is a depression in the quality of the immune system during marital disruption, and that there is a relationship among immunity, emotions, and stress.⁷ Our minds and our bodies are designed to respond to negative or positive stress, and to perform the work of protection, escape, action, alertness,

and healing. Although some people seem to thrive on deadlines and situations, long-term stressors or repeated peak stressors can weaken the immune system.⁸

Since the negative effects of psychosocial pressures are well documented, the question becomes one of how our minds and bodies respond to positive experiences, or positive stress. Some of those experiences are associated with humor and spirituality. Healthy humor may move people in the direction of health or healing and away from the negative effects of pressures and stresses. Prayer, meditation, and spiritual seeking may contribute to improved health and well-being.⁹

Healthy Humor

For many years, we have heard that humor and laughter are good for us and that humor promotes healing. Norman Cousins's writings promoted the idea that humor had a positive influence on the return to wellness.¹⁰ Within a few years of his publications, the idea that laughter increases a sense of well-being by causing the body to produce internal opioids, particularly enkephalins and endorphins, came into vogue. These internal chemicals were said to increase a sense of well-being and make a person feel good, contributing to positive human experiences such as sneezing, having a sexual orgasm, listening to great music, and getting a "runner's high."

Much of the material quoted by those who promoted humor, laughter, and mirth as a healing balm was speculative and anecdotal. Solid scientific research on the benefits of incorporating humor into a regimen for healing, or even to promote well being, was in short supply. All that is changing. Studies presented in 1989 by Berk and Tan, showed an attenuation and down-regulation of multiple parameters relating to the adrenal corticomedullary activity in relation to mirthful events.¹¹ These authors in association with others laid the foundation for our understanding of stress hormone changes, the alteration of immune system components, and the modulation of natural killer cells during mirthful laughter and a recovery phase.¹²

In the same laboratory, it was shown that serum cortisol levels decrease during the laughter phase of the study and remain depressed during the recovery phase. Plasma immunoglobulins IgM, IgG, and IgA all increase in response to mirthful laughter. The elevation of immunoglobulins indicates the strengthening of the immune system in general. Additional positive findings include the rise in the percentage of natural killer cell activity and an increase in the body's level of T-cells in response to mirthful laughter. The increase in these cellular immune components indicates that the immune system is strengthened. In addition, the group's work indicates that laughter increases the production of enkephalins and beta-endorphins.¹³

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A recent pilot project, studying cardiovascular responses to laughter, found that laughter caused significant increases in stroke volume and cardiac output as well as significant decreases in arteriovenous oxygen difference. Peripheral vascular resistance decreased as well and immediately following laughter there was a significant decrease in oxygen consumption.¹⁴ Laughter may help fight allergens. Even though the exact mechanism is not known, the induction of laughter may play some role in alleviating allergic diseases.¹⁵ This careful study looked at the effect of humor on allergen-induced wheal reactions and documented the decrease in the diameter of wheals following laughter.

A sense of humor is tied to psychological health. The development and administration of the Multidimensional Sense of Humor Scale (MSHS) provides one instrument for measuring a sense of humor. The MSHS has four subscales that distinguish among humor production (overt use of humor in social situations), coping humor (trying to see the funny side of things), humor appreciation (liking humor), and humor attitude (approving of humor). Administration of this instrument in a variety of settings indicates that a sense of humor relates positively to a number of factors associated with psychological health, such as optimism and self-esteem, and reacts negatively to factors associated with signs of psychological distress, such as depression.¹⁶ Other studies concur that humor and laughter have positive psychological and physiological outcomes. It is suggested that laughter has a role in improving mood, enhancing creativity, and helping to reduce pain.¹⁷

The importance of the use of humor in the doctor-patient relationship is becoming more apparent. Winder documents how humor plays a positive role in enhancing the doctor-patient relationship.¹⁸ In his article "Humor in Medicine," he provides a guide to help physicians use their own sense of humor to enrich patient care. Showalter and Skobel discuss the universal and often healing effectiveness of humor in hospice care. Their article describes the use of humor as a therapeutic mechanism for coping and surviving loss.¹⁹

Some research is suggesting that there may be a predisposition toward shyness or

extroversion tendencies. Some children may have a genetic predisposition to looking at life through optimistic lenses while other children are predisposed to look at life negatively. It is not clear whether these traits can be overcome, reversed, or otherwise altered. Jerome Kagan of Harvard University points out that just because a person may be predisposed to a particular trait, does not mean that he or she must act upon that predisposition. It is still an adult choice.²⁰

Since humor is beneficial to us, how do we go about doing "humor work"? Humor work, — i.e., the use of healthy humor to promote wellness, healing, and recovery — is complex in nature and individual in application. In order to do humor work, we must each consider our own background, our understanding of humor, and our sense of humor.

Each individual, I believe, comes from a unique childhood background in terms of his or her permission to participate in humor events. If, for example, a child is reared in an atmosphere of devastation; mental, physical or sexual abuse; cruelty; mean-spiritedness; pessimism; drug abuse; or other combinations of negative parenting, it is likely that this child will not have an appreciation for healthy humor or a positive view of light-hearted living. Humor will be foreign to his or her experience. This youngster did not have a happy childhood and therefore may not appreciate humor in its various modalities, even when he or she reaches adulthood. On the other hand, a happy, well-adjusted home where humor and laughter are abundant gives children permission to participate in humor events. A child from such a home will be familiar with harmless practical jokes, laughter, joke-telling, story-telling, and mirth. A child raised in this environment is likely to take himself or herself less seriously. This child is more likely to have a good sense of humor, to participate readily in laughter, and to understand humor. Humor, laughter, and playfulness, however, may also be used as an avoidance mechanism. Families may also use humor to avoid dialogue on serious matters, to avoid confrontation, or to hide pain.

These two extremes of upbringing provide the opposite ends of a continuum, from very little permission to be mirthful to the overuse of mirth as an avoidance mechanism. The "Humor Index" is being developed to

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assess one's background and upbringing in terms of permission to be lighthearted.²¹

The first twelve questions of the instrument are as follows:

During my childhood and adolescent years:

1. ____ *I had permission to laugh out loud.*
2. ____ *I can remember specific incidences when I laughed out loud.*
3. ____ *My mother or adult female caretaker laughed out loud.*
4. ____ *My father or adult male caretaker laughed out loud.*
5. ____ *Our family had a sense of humor, either noisy or quiet.*
6. ____ *There was a sense of optimism in our family.*
7. ____ *We celebrated birthdays, anniversaries, or other significant milestones.*
8. ____ *We had a pet in our home.*
9. ____ *I enjoyed harmless practical jokes.*
10. ____ *We sang, danced or played together, either as a partial or whole family.*
11. ____ *Mealtime was a fun time at our house.*
12. ____ *We ate ice cream or other comfort foods.*

Total this section (1-12) _____

Participants mark the instrument as follows:

1 for NEVER or RARELY, **2** for OCCASIONALLY, **3** for SOMETIMES, **4** for QUITE OFTEN, **5** for VERY FREQUENTLY or ALMOST ALWAYS.

Scores will range from 12 to 60 as a total for this section. The instrument has been administered to a number of workshop participants throughout the United States. Since the index is in its preliminary testing stages, it is premature to present statistics. However, the informal results of this index suggest that in a given population, people are scattered along the continuum, from "little appreciation and incorporation of humor" to "a great deal of appreciation and incorporation of humor" in their childhood years.

A caregiver wishing to use humor as part of his or her recommendations for healing, should not only recognize his or her own understanding of and background in humor, but also the client's humor quotient or specific style of humor. It is important to know that a rubber nose and a funny video may not be the best prescription for a particular patient at a particular time. It is also important to understand that laughter is just one of the many kinds of humor work that can be utilized in promoting health. Celebration, festivity, mirth, playfulness, hope-building, story-telling, and hilarity can each be selected at appropriate times to facilitate healing through humor.

Spirituality

At a recent conference on "Spirituality and Healing in Medicine," seven hundred professional health-care caregivers, were alerted to three recently published findings:

1. Open-heart surgery patients are twelve times more likely to survive if they depend on their social support and religious faith.²²
2. The mortality rate for people who are frequent attendees of religious services is almost twenty-five percent lower than for people who attend on a less regular basis. Surprisingly, for women the figure is nearly thirty-five percent.²³
3. People who attend religious services at least once a week have stronger immune systems.²⁴

Harold G. Koenig of Duke University's Center for the Study of Religion/Spirituality and Health, at Duke University Medical Center, provides a comprehensive overview of the current literature as well his own research.²⁵ Koenig's own search for the meaning of religion in medicine led him on an extensive research path. At a recent conference of the Mennonite Health Assembly during which Koenig presented some of his findings, he related his own journey and his understanding of how his patients coped with very difficult circumstances. His comments in *The Mennonite Health Journal* indicate that his journey has taken him from being marginalized for his ideas and convictions to gaining a fair amount of acceptance. "Now it is fun to watch colleagues change their minds and begin speaking on religion themselves," Koenig says.²⁶

Studies relating to physical health indicate that greater religious involvement is associated with lower blood pressure, lower rates of death from heart disease, fewer strokes, and longer survival in general. A strong religious faith and active involvement in a religious community appear to be the combination most consistently associated with better health. Religious involvement helps people prevent illness, recover from illness, and—most remarkably—live longer. The more religiously committed you are, the more likely you are to benefit.²⁷

In studies relating to mental health, people who are more religious demonstrate a greater sense of well-being and satisfaction with life. Actively religious people tend to have less anxiety and less depression, and they are much less likely to commit suicide. Therapies for depression and anxiety that incorporate religious beliefs result in faster recovery from illness than do therapies involving traditional methods.²⁸

Cost-benefit studies reinforce the efficacy of paying attention to the spiritual concerns of the patient. According to the summaries presented by Koenig, heart-surgery patients who are religious have twenty percent shorter post-operative hospital stays than non-religious patients,

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and hospital stays are nearly 2.5 times longer for older patients who do not have a religious affiliation. Chaplain intervention for heart-surgery patients results in an average of two days shorter length of stay, or about \$4,000 cost savings per patient.²⁹

Caution is always in order when new therapies, new approaches to healing, and other complementary or alternative approaches are considered. Members of a variety of disciplines, including psychiatry and the chaplaincy, voice this caution. Dr. Richard Sloan and chaplain Larry VandeCreek state:

Linking religion with medicine may seem intuitive. But, as we argue along with a group of healthcare chaplains and biomedical researchers in a report in the June 22 *New England Journal of Medicine*,³⁰ this movement oversimplifies two very complex and different realms of human experience. It oversteps the boundaries of medicine and diminishes the power of religion.³¹

Other authors expand on the critique of science that is being conducted to bolster the firepower of the religious. Their critical views are stated in the article, "Mixing Religion and Health: Is it Good Science?" in *The Scientist*.³²

Research is being expanded in the area of humor and spirituality. It is interesting to speculate that our religious healing communities may, in the end, have scientific legitimacy for their approach to healing. It is inspiring to see that, for a change, science is beginning to pick up on what persons of faith have known all along; that is, that there is much more to healing than simply fixing a broken body.

Anecdotally, people of faith have long known that they are members of healing communities. *Healing as a Parish Ministry* asserts that each of us is a potential healer as we promote the mending of the body, mind, and spirit.³³ Karin Garnberg-Michaelson, in *Healing Communities*, quotes Dr. Eric Ram, director of international health at World Vision as saying:

Whenever we offer acceptance, love, forgiveness, or a quiet word of hope, we offer health. When we share each other's burdens and joys, we become

channels of healing. No matter how timid or tired, selfish or crazy, young or old, we all have something important to offer each other. Each of us is endowed by God with that gift of healing.³⁴

Website Resources for Humor & Healing and Spirituality & Healing

Web sites abound that are related not only to healing and spirituality but also to humor and healing. Many sites are promotions for a given approach to healing while other sites quickly link to scientific research. For those who are interested in further investigation of PNI, or any of its many sub-fields, a listing of web sites follows.

Duke University Center for Integrative Medicine
www2.mc.duke.edu/depts/medicine/intmed/

Duke University Center for the Study of Aging and Human Development
www.geri.duke.edu/people/koenig.html

International Institute of Humor and Healing Arts
www.hahainstitute.com/

The Humor Institute, Inc.
www.humorinst.com/healing.html

American Association of Therapeutic Humor
<http://aath.org/>

International Center for Humor and Health
www.humorandhealth.com/

Laughter research conducted
www.llu.edu/news/today/mar99/sm.htm

Laughter—Still the Best Medicine
www.hey lady.com/rbc/laughter.htm

Laughing out loud to good health
<http://library.thinkquest.org/25500/index2.htm>

The National Center for Complementary and Alternative Medicine
<http://nccam.nih.gov/>

The Humor Project
www.humorproject.com/

Medscape: Humor and Medicine
www.medscape.com/Home/HumorLeisure/HumorLeisure.html

Ed Leigh's Humor & Happiness Catalog
<http://speakers-podium.com/edleigh/internetorder3.html>

Journal of Nursing Jocularly
<http://gort.ucsd.edu/newjour/j/msg02255.html>

Jest for the Health of It
www.jestthehealth.com/

The Laughter Remedy, Paul McGhee
www.laughterremedy.com/

Therapeutic benefits of humor
<http://holisticonline.com/humor-therapy-benefits.htm>

Loretta LaRoche: The Humor Potential
www.stressed.com/

It is inspiring to see that, for a change, science is beginning to pick up on what persons of faith have known all along; that is, that there is much more to healing than simply fixing a broken body.

A former director of Indian Creek Haven of Harleysville, Pennsylvania, observes: "Twenty years ago, Mennonites were considered weird. A faith-based group home that had expectations about life-style was marginalized and stigmatized, but people are seeing that what we do works." Perhaps the healing communities, found in many religious settings, may be more a factor of sensible living, community support, and spirituality than pharmaceuticals. *

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