

1: Center for Health and Healing

In this purposive review, we illustrate the nature of the research in the field by presenting one human and one nonhuman study on improved outcomes associated with prayer, one study showing no difference between prayer and control conditions, one study showing worse outcomes with prayer and one study suggesting that prayer may have a.

Formerly a solicitor who specialized in mental health law she then took a part-time degree in complementary therapies. She currently works as a part-time administrator, practices reflexology treatments and works for a few hours each week for a charity that offers complementary therapies to cancer patients in the Fife area. She is interested in the ways prayer is being researched by medical and social scientists. Introduction Since there has been a growing interest amongst psychologists and medical science academics about prayer. Many of these studies have findings which are informative to those involved in the healing and prayer ministry. Yet there can often be indifference, and sometimes hostility, towards research into what is seen as sacred territory. However, it does seem to me that there is a growing body of research being carried out into various subjects that may have much relevance to those in the prayer and healing ministry. I have also been struck by those who now refer to research in this area. He also highlights the fact that not only is research being carried out into an area long shunned by medical practitioners and scientists, there are also courses now being taught in medical schools in the United States which focus on the role of religious practices in health and well-being. It appears that the big, broad-brush studies which set out to establish efficacy between certain religious practices and particular health outcomes are now being replaced by more refined studies, which I find I can relate more easily to the work of CFH Christian Fellowship of Healing. There are two levels to this: I refer to one of these studies below, the experience of compassionate love amongst Trappist monks, and I see some of the findings and reflections in this paper as a potential source of new questions for CFH. Their interest for me is that they may contribute to the process of looking afresh at healing or prayer, particularly because they approach the subject from a novel perspective and therefore can help us formulate new questions. A good example of this is a small study of Trappist monks [5] which focuses on their understanding and experience with making choices involving compassionate love. The author, Lynn Underwood, conducted in-depth interviews with thirteen monks, aged between thirty-five and seventy-five. She asked them to focus on their daily experience of making such choices. Welcoming the newcomer is therefore central to the work of our groups which we see as offering healing through companionship, prayer, Bible reflection and meditation. However, finding language that describes the subtle processes that take place within our groups and that can give rise to healing can be difficult. Interestingly, Underwood found that the monks did not use explicitly religious or theological language in most of their answers. Central features mentioned in interview included humility, trust, respect, unselfishness, receptivity, openness and detachment. Part of the interview also asked about practices that might encourage and sustain the expression of compassionate love. Prayer was given as a key element to support compassionate love and spiritual reading was considered important to ground oneself in writings of wisdom. Added to these were community and relationships and particularly living in a community which supports the value of love. She notes how a comparable interview with students did not give rise to the complexity and insight that the monks articulated. Underwood also brings to the fore her own experience of the monks over a twelve year period. She also highlights the way in which the monks conduct themselves in the detail of life, for example, how they answer the phone. Whilst CFH obviously cannot emulate the intensity of monastic practice we do hope to be a community which supports the value of love. Reflecting on what the monks describe both in terms of their internal experiences and their views about what encourages compassionate love may help CFH to understand more clearly what nourishes its members and therefore what qualities we can bring to encounters with newcomers. We were introduced to simple movements so that the essence of the words became a prayer in our bodies, not just our heads. This way of praying allows the words to be felt and experienced in our bones, muscles, circulation and nervous systems, which supports the natural balancing and immune systems of the body to work well and increase health and vitality. A three year large-scale research project [6] which will finish in , is researching issues directly relevant to this style of

prayer. Professor Kevin Ladd will conduct three studies into the relationship between prayer and the physical body. In the first study, he will investigate how the body is positioned during various prayer acts. The second study seeks to discern any unique qualities associated with bodily movement walking during prayer. In a final study, relations between prayer and the body as a vehicle for sight and sound receive attention. Forgiveness In the last few years there has been a surge of research into forgiveness a good place to find out more about this is <http://> These courses were structured to give participants a basic understanding of the topic using current biology and recent psychology, and relating theology to both these disciplines. From a healing perspective, the purpose of the courses was to pray and meditate together, helping people find that which enables changes to their body, mind, emotion and spirit, and which provides a greater sense of potential and purpose to their lives. Emerging research in the field of forgiveness is beginning to establish the dramatic alteration to biological and mental processes that forgiveness produces [7]. The findings from one study suggest that emotionally experiencing forgiveness will have a more direct effect on health and well-being than simply making a decision to forgive. A very recent paper [9] reviewed seven studies and found that people are more forgiving towards their transgressors if they see themselves as capable of committing similar offences. The personal capability to forgive was more pronounced among men than women. Part of the challenge for CFH will be how we incorporate an understanding of such research into future courses or day events. Conclusion That research will continue to be published which has direct relevance to those involved in prayer and healing ministry is beyond question. Indeed there may now be a second phase underway of this type of research, where studies have become more refined, have learnt from some of the cruder assumptions of their predecessors and seem to be making an effort to be theologically sensitive. Whether those involved in the healing ministry become cognisant of this research remains to be seen. To ignore a body of knowledge which is directly relevant to our work seems myopic, not least because it may help us to ask new questions and therefore approach our work afresh. They acknowledge the troubled historical relationship between religion and science and offer this comment: The Christian Fellowship of Healing, Scotland, sadly ceased in We have hosted their various writings here:

2: The Science of Prayer and Healing

Prayer and Healing Research Anne Douglas was Chairperson of the Christian Fellowship of Healing [Scotland] for three years. Formerly a solicitor who specialized in mental health law she then took a part-time degree in complementary therapies.

Steven Novella on August 3, Shares Part of the Complementary and Alternative Medicine CAM movement is an attempt to insert spirituality into the philosophy and practice of medicine. Most energy healing modalities, for example, have spiritual underpinnings. At the same time there are many attempts to use science to validate the healing power of faith. This is also an issue that is very attractive to the media, who love articles and headlines about the power of prayer. In our culture "faith sells. A recent article in the Detroit Free Press is an excellent example of bad reporting and the sensationalizing of this issue. It does a good job of maximally confusing the issue. To be clear, SBM is not anti-faith or anti-religion. But the issue of faith in medicine raises two main areas of concern. The first is the misrepresentation of the scientific evidence, both for intercessory prayer and the health effects of faith. The second are the ethical and professional implications of mixing faith with medical practice.

Intercessory Prayer The Detroit Free Press article makes no attempt to distinguish the various issues with faith and medicine, and confuses them together in a misleading way. Intercessory prayer is, essentially, praying for the health of another person. There have been about a dozen such trials with reasonable design. In most the subjects know they may be prayed for. But of course, none of the trials can control for those who are not part of the study praying for a study subject. What we find when we look at all the studies of intercessory prayer is the type of scatter of results we would expect from a null intervention "one with no effect at all. A Cochrane review of intercessory prayer studies concluded: These findings are equivocal and, although some of the results of individual studies suggest a positive effect of intercessory prayer, the majority do not and the evidence does not support a recommendation either in favour or against the use of intercessory prayer. We are not convinced that further trials of this intervention should be undertaken and would prefer to see any resources available for such a trial used to investigate other questions in health care. These wishy washy conclusions are essentially saying the evidence is negative. The review was also criticized for its methods and discussion of the results "specifically mixing theological and scientific arguments in the discussion and failing to mention significant flaws of the positive studies. But even with these complaints, the results of the review are what we would expect from a treatment effect of zero. The results of existing research are not sufficient to rule out a small and inconsistent effect "but medical research is never designed to reach such a conclusion, and not being completely disproved is hardly a sufficient reason to endorse a medical intervention. Again "to be clear "the point of reviewing the evidence is not to argue that individuals should not pray for their loved-ones who are ill. Rather it is important to accurately report the results of the research that has been done "there is no scientific evidence that intercessory prayer is efficacious. Therefore the scientific evidence cannot be used as a justification for inserting religious faith into the practice of medicine.

The Health Effect of Faith A completely separate question from intercessory prayer is that of the health benefits of having or practicing faith. This is a much more difficult question to assess scientifically. With intercessory prayer there is a specific intervention that can be isolated as a variable. The variable of faith, however, is very difficult to isolate, and most studies barely attempt to do so at all. Most such studies are retrospective and use surveys or questionnaires to gather data, which are plagued by artifacts. One such study, highlighted in the recent Detroit Free Press article, looked at 88 patients who had suffered Traumatic Brain Injury in the last 10 years. They found a positive correlation between feeling a personal connection with god and having better rehabilitation outcomes. There are two major problems with this study, however. The first is that the survey process itself is likely to bias reporting. If you ask people about their faith or that of a family member and then ask them how they are doing, the answer to the one question is likely to influence the answer to the other. Second "the study found a correlation only, and was not designed to infer any cause and effect. One possible interpretation is that those who were doing better in terms of their recovery from TBI were more likely, as a result, to feel positive about their connection to god. Much of the research into the question of faith

and health is similarly plagued by such flaws, which makes interpreting the research problematic at best. However, my reading of the literature on this question leads me to conclude that there is a consistent signal in the noise – having a social network consistently positively correlates with better health outcomes. This can be through reduced stress and better practical and emotional support. Humans are social animals, and we simply do better when we are part of a social network than when we are isolated. Religion can provide a useful social network. Further, faith both encourages and may result from a positive and hopeful outlook, which can certainly influence the reporting of health outcomes in addition to reducing stress and encouraging better self-care. These variables are rarely controlled for or isolated, however. Conclusion The existing research does not support the conclusion that there is any efficacy to intercessory prayer. The research also does not allow for the conclusion that there are health benefits to faith or religion as specific variables. This latter question is open to further research, however. The scientific evidence can therefore not be used to support the intermingling of faith with the practice of medicine. In any case – doing so raises serious ethical and professional concerns. For example, such practices raise the potential of faith-based discrimination against both physicians and patients. Mixing of faith with medicine can also compromise the professional doctor-patient relationship. Even if one accepts that there is a health benefit to faith – such a benefit can be entirely realized through private means, without involving the medical profession. Novella also has produced two courses with The Great Courses , and published a book on critical thinking - also called The Skeptics Guide to the Universe.

3: Studies Prove the Healing Power of Prayer | www.enganchecubano.com

We received an NIH grant to look at the effects of prayer and spirituality on wound healing; research we are conducting at California Pacific Medical Center. This is a three-arm clinical trial with women, primarily breast cancer patients, who are undergoing reconstructive surgery after mastectomy.

If prayer affects health then patients, doctors and policymakers should all want to know. Scientific research has returned mixed results. Part of the confusion stems from how prayer is studied. Many of the faithful claim that prayer has cured them of blindness, deafness and metastasized cancers, and some believe they have been resurrected from the dead. Can, and should, science test such claims? A number of scientists say no, concerned that empirical studies of prayer will be misused to advance religious agendas. And some religious practitioners agree with this restraint, worrying that scientific testing could undermine faith. If prayer affects health -- for better or for worse -- then patients, doctors and policymakers should all want to know. Some studies conclude that prayer improves health, while others show no effect -- or suggest that prayer may lead to worsening health. Most research is on distant intercessory prayer. Intercessors are given the first name and condition of someone they do not know and told to pray. Researchers set up double-blinded trials -- because this is how they are accustomed to studying health interventions -- and base conclusions on the efficacy of prayer solely on whether subjects in the experimental group exhibit better health than those in the control group. But when people actually pray for healing, they usually get up close to someone they know, touch the person and empathize with their sufferings -- what I call proximal intercessory prayer, or PIP. Double-blinded, controlled trials are not the only -- or even the best -- way to gauge the effects of this kind of prayer practice. I have spent the past eight years studying PIP by Pentecostal and Charismatic Christians -- the groups most likely to pray for healing and claim that their prayers work -- in the United States, Canada, Brazil and Mozambique. And I used multiple methods, each one suited to answering a particular question about prayer for healing. Each method is like a different type of camera, offering complementary perspectives on how prayer affects health. Are healing claims documented? Comparison of medical records from before and after prayer provides a check on whether people claiming healing exhibited improvements for which there is no obvious explanation. For example, in the course of my research, I met Daisy, who had worn hearing aids for 30 years. She had a progressively worsening, hereditary inner-ear problem. In , Daisy received PIP and "felt my fingers on fire and the warmth of the Holy Spirit inside of me," after which she could hear without hearing aids. She had her hearing retested two weeks later, showing normal thresholds in lower frequencies with moderate loss in higher frequencies. A screening still showed normal hearing in speech frequencies. I also came across Frank, who claimed improved vision after prayer. Such cases of apparent fraud do not seem to be common, but medical records are one way of sifting out which claims are less credible. How do sufferers perceive healing prayer? Surveys shed light on how supplicants perceive sickness, prayer and healing. In one set of surveys I carried out, 72 percent of respondents had a current need for healing; the most common complaint was pain. Fifty-two percent reported healing. Few "claimed healing by faith," instead defining healing as noticeable improvement of symptoms. Those who self-reported high faith were no more likely to experience healing than those who admitted weak faith. Most received multiple prayers for the same problem, noting progressive improvements with each prayer. Most also went to doctors, viewing prayer and medicine as complementary. Can health outcomes of prayer be measured? Clinical trials can show whether PIP results in measurable changes in health markers. In a prospective study of hearing and vision in Mozambique, I found highly significant improvements in hearing and statistically significant improvements in vision following PIP. Two of 11 hearing subjects had thresholds reduced by over 50 dBHL. One subject, Jordan, was presented as deaf and mute since birth and made no responses to sounds at dBHL; after PIP, he responded to 60 dBHL tones, imitating sounds in a hoarse, raspy voice. Do healing experiences produce lasting effects? Multi-year observations and interviews assess whether changes are temporary or enduring. Many informants -- such as George, who reported healing from an untreatable brain tumor through prayer alone -- claimed they were still healed as many as eight years later. George and others had subsequently prayed for others who in turn reported

healing, and this new cohort prayed for still others, sometimes traveling to other countries to do so. Such ripple effects of healing prayer largely account for the wildfire spread of global pentecostalism. Bringing these four cameras into focus produces a more complete picture of how prayer affects health than using any single study method. Can science prove the healing power of prayer? Science cannot prove the existence or nonexistence of a suprahuman force or whether such an entity answers prayer. But it is an empirical question how prayer practices affect health. And we can -- and should -- use empirical methods to answer this question.

4: The Mind and Soul Foundation : Prayer and Healing Research

Abstract Prayer and spiritual healing have been researched over the last forty years. Spiritual awareness, a neglected aspect of much of this research, is finding its way into clinical practice in treatment of a variety of problems.

This article has been cited by other articles in PMC. Abstract Religious traditions across the world display beliefs in healing through prayer. The healing powers of prayer have been examined in triple-blind, randomized controlled trials. We illustrate randomized controlled trials on prayer and healing, with one study in each of different categories of outcome. We provide a critical analysis of the scientific and philosophical dimensions of such research. Prayer has been reported to improve outcomes in human as well as nonhuman species, to have no effect on outcomes, to worsen outcomes and to have retrospective healing effects. For a multitude of reasons, research on the healing effects of prayer is riddled with assumptions, challenges and contradictions that make the subject a scientific and religious minefield. We believe that the research has led nowhere, and that future research, if any, will forever be constrained by the scientific limitations that we outline. We do not intend to belittle any religion or the religious practices of those who pray, nor do we deny the medical and psychosocial benefits that have been identified to result from religious affiliations and practices. People pray for good health and for relief from illness. Prayer may result in health and healing through one or more of several mechanisms. We briefly consider these mechanisms. Meditation has been found to produce a clinically significant reduction in resting as well as ambulatory blood pressure,[2 , 3] to reduce heart rate,[4] to result in cardiorespiratory synchronization,[5] to alter levels of melatonin and serotonin,[6] to suppress corticostriatal glutamatergic neurotransmission,[7] to boost the immune response,[8] to decrease the levels of reactive oxygen species as measured by ultraweak photon emission,[9] to reduce stress and promote positive mood states,[10] to reduce anxiety and pain and enhance self-esteem[11] and to have a favorable influence on overall and spiritual quality of life in late-stage disease. Regression to the mean describes improvement that occurs as a result of random fluctuation in the severity of illness; in clinical trials, because patients are usually preselected for greater severity of illness, such fluctuations usually occur in only one direction. Nonspecific support can reduce anxiety, depression, pain and similar constructs. Spontaneous remission and regression to the mean may occur coincidental to prayer. Nonspecific psychosocial support related to prayer may arise in group prayer settings. Improvements in all these contexts are true improvements. In contrast, in randomized controlled studies on the efficacy of prayer as a treatment, rated improvements that are not true improvements may also occur; explanations for such improvement include the Hawthorne effect and the Rosenthal effect. The Hawthorne effect refers to change that occurs as a result of the act of observation or measurement,[27 , 28] whereas the Rosenthal effect refers to change resulting from observer or rater expectancy. With regard to the latter, the tendency of the rater to expect symptom attenuation across time may result in the attachment of lower significance to reported symptoms. Prayer may result in benefits that are due to divine intervention. Although the very consideration of such a possibility may appear scientifically bizarre, it cannot be denied that, across the planet, people pray for health and for relief of symptoms in times of sickness. Healing through prayer, healing through religious rituals, healing at places of pilgrimage and healing through related forms of intervention are well-established traditions in many religions. What about divine intervention as a mechanism of recovery of health through prayer? This has also been seriously investigated. A total of 23 trials involving 2, patients met the inclusion criteria and were subjected to analysis. The methodological limitations of many of the studies, however, made it difficult to draw definitive conclusions about the efficacy of distant healing. Of note, Astin et al. Therapeutic touch and Reiki were both included in the definition; as both of these may elicit an expectancy response,[31] it becomes even harder to draw definitive conclusions about the literature that Astin et al. In another systematic review, Crawford et al. There were 90 identified studies of which 45 had been conducted in clinical settings and 45 in laboratory settings. Major methodological problems of the identified studies were an inadequacy of blinding, dropped data in laboratory studies, unreliability of outcome measures, infrequent use of power estimations and confidence intervals, and lack of independent replication. In the present article, we present a purposive,

qualitative review of the scientific literature on possible paranormal healing through prayer. We then critically evaluate the scientific and religious implications of such research. Most recent studies on prayer and healing have adopted this design. In such studies, commonly, a group of intercessors prays for the health of patients who are randomized to the intervention group. These patients do not know that they are being prayed for, and the persons who are praying do not come in contact with the patients for whom they pray. Medical outcomes in these patients are compared with outcomes in patients randomized to the control group who are not prayed for. Finally and importantly, the medical treatment team is also blind to the prayer group status of individual patients. Thus, these studies are triple-blind. In this purposive review, we illustrate the nature of the research in the field by presenting one human and one nonhuman study on improved outcomes associated with prayer, one study showing no difference between prayer and control conditions, one study showing worse outcomes with prayer and one study suggesting that prayer may have a retrospective healing effect. We then provide a detailed, critical evaluation of the scientific and theological implications of such research. These women were randomized into distant prayer and control groups. The patients and their providers were not informed about the intervention. The investigators, and even the statisticians, did not know the group allocations until all the data had been collected. Thus, the study was randomized, triple-blind, controlled and prospective in design. Furthermore, the women who had been prayed for showed a higher implantation rate than those who had not been prayed for. Finally, the benefits of prayer were independent of clinical or laboratory providers and clinical variables. Thus, this study showed that distant prayer facilitates implantation and pregnancy. Lesniak[33] described a study on the effect of intercessory prayer on wound healing in a nonhuman primate species. The sample comprised 22 bush babies *Otolemur garnettii* with wounds resulting from chronic self-injurious behavior. These animals were randomized into prayer and control groups that were similar at baseline. Prayer was conducted for 4 weeks. Both groups of bush babies additionally received L-tryptophan. Lesniak[33] found that the prayer group animals had a greater reduction in wound size and a greater improvement in hematological parameters than the control animals. This study is important because it was conducted in a nonhuman species; therefore, the likelihood of a placebo effect was removed. Absence of benefits with prayer Aviles et al. In this study, coronary care unit patients at discharge were randomized to intercessory prayer or no prayer conditions. Prayer was conducted by five persons per patient at least once a week for 26 weeks. Patients were considered to belong to a high-risk group if they were 70 years old or older or if they had any of the following: The primary endpoint of the study was any of the following: By the end of 26 weeks, a primary endpoint had occurred in The difference was not statistically significant. The results remained nonsignificant when data were analyzed separately for high- and low-risk patients. Thus, this study showed that, as delivered in this study, intercessory prayer did not influence the week outcome after discharge from a coronary care unit. Other recent randomized controlled trials have also reported negative results. For example, Krucoff et al. Worse outcomes associated with prayer Benson et al. The sample comprised 1, patients in six hospitals in the USA. These patients were randomized into three groups: Prayer commenced one day before the surgery and continued for 14 days. Three mainstream religious sites prayed daily for patients assigned to receive prayer. Assessment of outcomes was made by nurses who were blind to the group assignments. The primary outcome was the presence of any complication within 30 days of surgery. Secondary outcomes were any major event, including death. The study sought to examine the efficacy of intercessory prayer and not to test the presence of God. The design was described by Dusek et al. Major events and day mortality rates, however, were similar across the three groups. This study therefore showed that remote intercessory prayer did not improve outcomes after coronary artery bypass graft surgery. In fact, the knowledge of being prayed for was associated with a slightly but significantly higher rate of postsurgical complications. Retrospective benefits with prayer Leibovici[39] reported the results of an unusual study that was conducted in Israel. The sample comprised 3, in patients diagnosed with a bloodstream infection between and Bloodstream infection was defined as a positive blood culture in the presence of sepsis. A list of the first names of the patients in the prayer group was given to a person details not specified who said a short prayer details again not specified for the wellbeing and full recovery of the group as a whole. This prayer was said about years or longer after the index admission. There was no sham intervention. Thus, this study sought to determine whether prayer has a retrospective

healing effect. The patients in the prayer and control groups were similar on important sociodemographic and clinical variables. Whereas the mortality rate did not differ significantly between the prayer and the control groups. Some points about this study are worth noting. The differences between groups, although significantly favoring patients for whom prayer was offered, were very small; the medians of the two groups differed by a small margin. Thus, the significance of the findings depended heavily upon the outliers who skewed the sample. Next, no attempt was made to compare for unusual biases, such as day of admission and discharge. It is conceivable, for example, that patients admitted toward the end of the week may have been investigated and treated more slowly and those due for discharge toward the end of the week may have been retained until the start of the next week. Importantly, considering the number of patients in each group, there must surely have been much overlap in first names. Did Leibovici consider the possibility that the prayers, then, could benefit patients in both groups to the extent of overlap? Finally, in a lighter vein, would the findings have changed had the author, in the best spirits of ethical research, offered the experimental intervention prayer for the control group at the conclusion of the study? More seriously, because the data were retrospective, it should have been possible for the study to have been repeated several times, with fresh randomization each time. Would the results, then, have remained unchanged?

5: Testing Prayer: Can Science Prove the Healing Power of Prayer? | HuffPost

Spiritual interventions: research on prayer and healing Published: December, BOSTON, MA "Stress and depression can increase the risk of heart disease and impair recovery from heart attacks.

Summary Introduction The topic of distant healing or healing intentionality brings some of the most controversial and central questions to the area of complementary medicine. They are discussed in Chapter Here we consider research approaches for assessing whether the intentions of one person can benefit the health of another independently of or in addition to any psychological factors. Of these, two-thirds found a statistically significant effect for review, see Benor, , Benor, , Dossey, and Targ, This implies a type of consciousness-mediated causality that has never been accepted within the medical sciences. Such remarks illustrate a popular belief among the scientific community. Some healers have voiced the concern that research cannot test or study the subtle effects of their treatments. Religionists have objected that research in distant healing may dissuade people from prayer for the purpose of strengthening faith and mistakenly focus them on a causal interaction between prayers and physical outcomes Thomson These concerns, when removed from the debate, do reflect important issues in studying distant healing. Clearly we must consider the limits of our studies. As we interpret results, we must remember that: This report states the underlying assumptions that: The methodological questions in research in distant healing necessarily rest on defining a specific intervention and evaluating its impact on a target system. This will be the main focus of this chapter. Questions of mechanisms depend on the successful negotiation of these first tasks, on theoretical and paradigmatic assumptions, and will be discussed more briefly at the end. Defining the intervention There are no established protocols or practice standards for distant healing practitioners as a group. Each experimenter must carefully choose and document the approach and experience level of healers in a study. The choice may have a theoretical basis, e. Or it may be based on a practical issue, e. Documentation of healer approach or experience does not require that healers be identical on all descriptors. For example, one approach might be to require 5 years of experience or a certain score on a test of concentration but not to discriminate on the basis of philosophical approach. Because the efficacy of distant healing as a modality has not been established, there is no test by which to choose an effective healer. In addition, unlike a pharmacological agent or a technical device, distant healing depends specifically on the consciousness of a human being. This raises the important issue that, in addition to possible differing efficacy of various approaches, there may be differing skill levels of practitioners of a particular approach or even of an individual practitioner on a day-to-day basis. In a large study, one runs the risk that certain patients might be treated by an effective healer and others by healers of no ability. One novel approach used by us Sicher et al. Because a healer might not always be performing at his or her maximum ability, it may also be appropriate to plan several intervention periods, rather than using a one-healer, one-session approach. Another way to think about this is that in studying intentionality as a healing modality, one has to ensure that the intentionality effort is really present and maximize the potential effects. Many terms have been used to describe interventions which may fall into the category of distant healing. Each of these describes a particular theoretical, cultural and pragmatic approach to attempts to mediate a healing or biological change through mental intentions. The following are some operational definitions of modalities which include elements of distant healing. Examples include attempts to interact with the Asian concept of chi, ki or prana or life energy through chi gong, jin shin jyutsu or reiki or chakra human energy centres energetic manipulations as taught in schools influenced by Ayurvedic teaching Brennan This approach is typical of Native American and other indigenous cultures Halifax Such healing efforts may be performed in a religious or a non-denominational context. Most healing efforts in the community occur within a cultural context either of interaction between the healer and the patient or expectation by the patient that healing is being performed on his or her behalf. This may or may not be the case in a study of distant healing. What is the healer doing? Healer strategy should be documented before any trial via interview of the healer and in extended studies healers should be asked to write daily logs describing their healing efforts. Healer selection might also involve questions as to level of experience and professional training or other issues of

relevance to the study such as healer ability at concentration. Since it has not yet been established whether healer experience and training are significant for outcome, this will be an important variable to explore. For how long is healing attempted? A majority of studies have required healers to perform their healing efforts serially on a daily or weekly basis for a series of treatments. Few, however, have indicated how much time the healer should spend on the healing efforts. For example, in three major intercessory prayer studies Byrd, Walker et al. This problem can be addressed by requiring a set amount of time for the healing effort Sicher et al. In addition, it may be important to stay in communication with and actively encourage healers during extended studies, for the purpose of motivating their performance and ensuring that healing efforts will in fact be performed. Individual versus group efforts Most distant healing interventions have been organized such that one subject is treated by one healer. A variation of this approach described above involves sequential treatment of each subject by a series of different healers, or a simultaneous treatment of one patient by several healers operating independently. Another variation is seen in the Harris study: Thus each patient was receiving pooled prayer efforts from a group of people working individually. In the study by Byrd, prayer was performed as a group effort, by pre-existing Christian prayer groups. At this point there is no evidence to suggest that individual or group healing efforts are more successful. A logistical concern is the risk that, in a group setting, group members may distract one another from the task of focusing on the subject. In addition, studies using healing groups and pooled efforts have tended to use less experienced healers than those studying individual efforts. In order to comment meaningfully on the relative roles of experience versus number of interveners, it will be important that investigators considering one or another of these approaches document the experience and practice level of the healers. Extraneous prayer Dossey has pointed out that, in clinical healing studies, especially ones in which the patient is very ill, it is quite likely that patients may be receiving prayer or healing efforts from friends and family members or may be praying for him- or herself. Although this might be true, it could be expected to be a typical random variable that is controlled for by random allocation see below. Defining the healing intention The investigator has the responsibility to define parameters of the healing intervention engaged. This may or may not involve defining the specific mental techniques used by the healers. It does, however, require carefully defining the intentions of the treatment. It is also not useful for healers to focus their intentions for change in an area which the investigator cannot measure, e. Working with healers Most healers have not worked in a laboratory or experimental setting and many are not comfortable with or sympathetic to the constraints put on their activity in the research setting. This represents a limitation of distant healing as it is performed in the community. It has been our experience that there is a great range of healing practitioners and some are eager to participate, very flexible and appreciative of research efforts. Others have been very angry about not being allowed to, for example, touch experimental Petri dishes or have felt investigators were discourteous because they were questioning the ability of the healers. As with all social and working situations, it is important that the healer-investigator team work toward mutual understanding, respect and consideration. Because of the history of scientists doubting healers, it is especially important to examine unconscious tendencies in the team to be dismissive toward healers. In addition, it is important to respect and understand cultural differences which may be present, such as whether it is important or insulting for a healer to be paid. Likewise, healers who participate in research studies should be fully apprised of the limitations they will experience and should be assessed for their motivation to participate in the study. Target systems Distant healing studies have historically shown significant effects in trials of influence not only on human medical problems but also human physiology in the laboratory, on animals Grad, Snel and Van Der Sijde, Bengston and Krinsley, Chen et al. Animal and in vitro targets are often chosen for reasons including lower cost, less complexity in running a trial and ease of isolating a particular outcome measure. In addition, in animals and certainly in in vitro systems, it is much easier to eliminate psychological and placebo effects. Population comparability The same general rules for choosing target populations in any study apply to distant healing, with special emphasis on population homogeneity and the need for thorough baseline assessments of factors which may influence outcome, such as social support, levels of depression and anxiety, meditation practice and spiritual beliefs. In smaller samples it may be appropriate to stratify or use pair-matching to ensure balance between comparison groups on these and

other relevant medical factors. Healer attitude Studies of distant healing, as with many psychosocial interventions, are studies of consciousness either directly or indirectly interacting with another living system. For this reason, it is important to consider issues pertaining to the relationship between the healer and the healing target. At the same time, we must consider the possibility of a target system contribution to the healing effect. Specifically, it may be important for the healing task to be motivating and relevant to the healer. For example, in developing studies in our own laboratory, we interview many healers who state that their preference would be to attempt to heal someone who was very ill, rather than to try and influence a minor problem. Despite staff concerns that healing someone very ill might be too hard, the healers insisted that this would bring forth their better efforts. He vehemently objected that, as a healer, he was prohibited from killing anything. The cells died significantly faster than controls Yount et al. Subject beliefs Questions have often been raised as to the relevance of subject beliefs about healing, religious orientation and desire for healing. Studies from the literature in parapsychology, for example, have repeatedly found that subjects who believe in clairvoyance or telepathy show higher scores on tests of psychic functioning than do non-believers Schmeidler Very few studies have examined the contribution of belief specifically to healing. In our distant healing study EUHEALS patients blind to the intervention who believed that they had received healing had large and clinically relevant improvements, irrespective of the actual treatment Walach et al. Subject comfort with healing In addition to differences in belief in distant healing, there may also be differences among patients in their comfort level with being the target of distant healing efforts. For example, in the Byrd study, which used subjects, an additional 57 patients who were invited to participate refused. Subject desire for healing A potential confounder in healing experiments became clear with the publication of a study by Walker et al. This emphasizes the complexity of prayer in a social context. Patients might have relied on prayer, instead of on their own decision to come clean. In designing a healing study, it would therefore be reasonable to ask subjects to indicate their own level of desire for recovery, as well as their comfort with the possibility of others praying for them. Subject participation in healing There has been debate among researchers doing studies in distant healing as to whether it is important for subjects to know they are receiving healing efforts. The primary objection to such trials is that telling subjects they are receiving healing eliminates the blinding and introduces possible placebo or expectation effects. This can be achieved by three- or four-armed trials in which some patients are informed about being prayed for and some are not Benson et al. Learn more here Share this:

6: Prayer and healing: A medical and scientific perspective on randomized controlled trials

Religionists have objected that research in distant healing may dissuade people from prayer for the purpose of strengthening faith and mistakenly focus them on a causal interaction between prayers and physical outcomes (Thomson).

Many alternative medicine therapies emphasize healing from a holistic mind, body, and spirit perspective; any discussion of the therapies would be incomplete without this perspective. Mind-body approaches to medicine have gained increasing acceptance in recent years. Almost everyone prays when faced with a traumatic injury like spinal cord injury SCI or a debilitating disease such as multiple sclerosis MS. Substantial scientific evidence indicates yes. This two-part article will discuss the scientific evidence correlating religion, spirituality, and prayer with physical health, as well as several mechanisms by which their healing effects can be mediated. Physical laws delineated by Sir Isaac Newton in the seventeenth century guide modern medicine. Under these laws, the universe - including the human body - functions by specific cause-and-effect physical principles. As such, the body can be understood by breaking down and studying each component. Because consciousness plays no role in such a system, spirituality has been considered irrelevant to health. In addition, many people are leery of scientists attempting to study prayer. Society has a tendency to compartmentalize prayer and spirituality. For example, the National Institutes of Health NIH, in Bethesda, Md, was criticized for sponsoring a study examining the effect of prayer in alcohol and drug rehabilitation because it violated the constitutional separation of church and state. Nevertheless, many scientists have thought that science and spirituality enhance each other and do not represent incompatible views of the world. Religion without science is blind. Prayer is making a medical comeback. In a growing trend, 43 percent of American physicians privately pray for their patients. The mere presence of this article in this highly respected bastion of the medical profession suggests that the barrier between spirituality and health care is crumbling. Good For Your Health? Scientific studies demonstrate that individuals who participate in organized religion are physically healthier and living longer see *Is Religion Good for Your Health*, Harold Koenig, For example, they have lower blood pressure and incidence of stroke and heart disease. Regarding mental health, they have lower rates of depression, anxiety, substance abuse, and suicide. Organized religion can promote health through a variety of social mechanisms, e. The Science Behind Prayer: In addition to the effects of organized religion, prayer-like consciousness also has been shown to exert an influence in numerous scientific studies. Although the effects of organized religion can be explained through readily understandable mechanisms, the effects of prayer cannot. After reviewing the literature, Dr. Daniel Benor *Complementary Medical Research* 4: Of these, 77 showed statistically significant results. A sample of some of these studies follows: Through conscious intent, test subjects i. These studies imply that prayer has the potential to fight infections. With potentially profound implications, subjects were also able to alter the genetic mutation rate of bacteria. If prayer can alter the genetics of bacteria, it is conceivable that it could do so also in man. If this is indeed the case, man may not be limited to what was previously thought to be his born-with, genetic destiny. Prayer-like consciousness has been shown to inhibit the growth of cancer cells, protect red blood cells, alter blood chemistry, and increase blood oxygenation. In one study, skin wounds healed at a much greater rate when treated with a spirituality-related treatment perhaps a therapy option for pressure sores. In a controversial study carried out by cardiologist Randolph Byrd *Southern Medical Journal*, July , nearly heart patients were randomly assigned to either a group that was prayed for by a home prayer group or a control group. This was a methodologically rigorous double-blind study designed to eliminate the psychological placebo effect. In such a study, neither the patient nor doctor knows who is receiving the intervention i. Patients who received prayer had better health outcomes, including a reduced need for antibiotics and a lower incidence of pulmonary edema. In these studies, the electrical activity in both the brain and body surface were measured in subjects in his Colorado Springs laboratory. Nearly a 1, miles away in California, spiritual groups would either pray or not pray for a subject. The electrical activity measured in the prayed-for subjects was significantly altered compared to controls. Healing through Secondary Materials: Spiritual healers have been shown to mediate healing through

secondary materials, such as water or surgical gauze, which they have held. A spectroscopic analysis of healer-treated water indicated an energy-induced shift in the molecular structure of the water. This healer-treated water maintained these altered properties and its effectiveness for at least two years. These findings suggest that it is, indeed, possible for sacred objects, such as holy water, to possess power.

Distant or Time-Displaced Prayer: The preceding examples indicate that prayer and spiritual healing can exert its effect from a distance. This research, much of which was carried out at Princeton University, uses random event or number generators. These generators produce large sets of data like zeros and ones, which should average out over time as in the case of flipping a coin. Subjects, however, can influence the outcome of these generators so the data is no longer averages out. Focusing and mental concentration seems to have minimal effect. Not only can test subjects influence outcomes over distance but also, amazingly, they can affect past outcomes. Specifically, the subjects influenced the output of random event generators in the past. In these cause-is-after-the-effect experiments, the random events have already been recorded but not consciously observed. This after-the-fact influencing was blocked, however, if another party even an animal observed the pre-recorded data before the mental influence is attempted. Hence, conscious observation seems to fix the past. If we can influence the past outcomes of random event generators, some of which are based on atomic decay, is it possible to influence our medical past, which is also based on atomic events? For example, although annual physical exams can uncover problems at an early stage, there is no statistical evidence that such exams increase longevity in the general population. Although being careful not to encourage individuals to forgo such exams, Dr. Larry Dossey speculates that the physical exam may serve as the act of observation that irrevocably locks the disease in place. Quantum physics is developing theories with insights into non-local phenomena such as distant prayer. A change in one creates a concurrent change in the other even if they are a universe apart. Some physicists believe that these non-local events are not just limited to sub-atomic particles but underlie everyday events, including prayer. To help understand a number of inexplicable phenomena, including non-local events, many physicists believe that a fifth form of energy exists in addition to gravity, electromagnetic energy, and strong and weak nuclear energy that operates on different principles. Perhaps the life-force energy referred to by many medical and spiritual traditions throughout history represents this energy. Is it the energy referred to as prana in India and Tibet, mana by the Polynesians, Yesad in the Jewish Kabbalistic tradition, qi in oriental medicine, or the Christian Holy Spirit?

7: Scientists Find One Source of Prayer's Power - Scientific American

In churches, mosques, ashrams, "healing rooms," prayer groups and homes nationwide, millions of Americans offer prayers daily to heal themselves, family, friends, co-workers and even people found.

But a new study conducted by Prof. Malt Friese and Michaela Wanke suggests that even non-believers can get in on the action. Though we can all agree that to do so requires self-control, the authors propose that the source of such control might not be supernatural. Instead, it might come from something more earthly. Something accessible to even the most devoted atheist: The strength model suggests that our cognitive resources, like our physical resources, are limited. We run out of gas. Researchers have, in all seriousness, found that ingestion of glucose can indeed increase self-control, but the scientists here proposed that prayer might be another means through which individuals protect themselves from breakdowns of will. Indeed, past work had already suggested such a relationship, showing that priming participants with words related to religion e. The authors made use of two experimental paradigms to test the efficacy of prayer in preventing cognitive depletion. The first, called an emotion-suppression task, simply asked participants to watch a funny video but stifle all emotional responses, verbal and non-verbal, to the content. This requires a good amount of cognitive energy to pull off successfully. The second, called a stroop task, asked participants to indicate the ink color of various words flashed to them on a computer screen. The trick is that the words spell the names of various colors that are either consistent or inconsistent with the ink they are to identify. Check it out here. Researchers have found that after cognitive depletion, this task becomes even harder. So, the authors had an elegant methodological question: In other words, will prayer give them the cognitive strength to perform well on both these challenging tasks? Participants who were asked to pray about a topic of their choosing for five minutes showed significantly better performance on the stroop task after emotion suppression, compared to participants who were simply asked to think about a topic of their choosing. And this effect held regardless of whether participants identified as religious 70 percent or not. The authors tested several possible explanations, but found statistical support for only one: Past research has found that even brief social interactions with others can promote cognitive functioning, and the same seems to hold true for brief social interactions with deities. This does not rule out the possibility that prayer has other effects on resisting temptation, and the spiritually inclined could see the hand of God as another causal factor here. But as the holidays approach, it reminds us all of where we derive so much of our day-to-day strength. Interacting and connecting with the people around us. Are you a scientist who specializes in neuroscience, cognitive science, or psychology? And have you read a recent peer-reviewed paper that you would like to write about? Gareth is also the series editor of Best American Infographics, and can be reached at [garethideas AT gmail](mailto:garethideas@gmail.com). You can follow him on Twitter [pvaldesolo](https://twitter.com/pvaldesolo) Latest News.

8: Prayer Healing: A Case Study Research Protocol. | Docphin

Research at San Francisco General Hospital looked at the effect of prayer on cardiac patients. Half were prayed for by strangers who had only the patients' names. Those patients had fewer complications, fewer cases of pneumonia, and needed less drug treatment.

The studies performed have used different structural methods and measured both hard data such as blood pressure variations and soft data such as anxiety levels and number of doctor visits. They have measured first-person effects where the beneficiary performs the prayer, second-person effects where someone with a personal connection to the beneficiary performs the prayer, and third-party effects where a group of unknown people pray for the beneficiary. What can be measured? In general, the requested outcome for a prayer as petition may be either an event in the physical world, e. There are, of course, also certain types of prayer whose efficacy can not by definition be measured in the physical world, e. Roman Catholic tradition includes specific prayers and devotions as acts of reparation which do not involve a petition for a living or deceased beneficiary, but aim to repair the sins of others, e. Mental attributes such as reverence, which are emphasized by religious figures such as popes and saints, have not been measured. The studies have also not measured whether meditation prior to prayer affects the outcome. The studies cited here have also generally not measured physical parameters, such as "proximity to the nearest place of common worship", e. Does it vary by the size of church? Does the effect increase or decrease if the Christian prays inside a Buddhist temple? What about a Buddhist praying in a church? Do prayers during Christmas have more or less effect than at other times of the year? And the distance between the beneficiary and the location of the prayer has not been clarified in the studies, e. Does the "skill level" of the person praying have an effect on the outcome as stipulated by Wisneski and Anderson in their book *The Scientific Basis of Integrative Medicine*? Pope John Paul II echoed that sentiment when he said: The reverence with which the prayer is recited has been emphasized by other religious writers, such as St. Louis de Montfort in his book *Secret of the Rosary*. In section 41, he emphasized the "purity of intention" and stated that it is not the length of a prayer that matters, but the fervor, purity, and respect with which it is said, e. For students both in Catholic and Protestant schools, higher levels of prayer were associated with better mental health as measured by lower psychoticism scores. However, among pupils attending Catholic schools, higher levels of prayer were also associated with higher neuroticism scores. It has also been suggested that if a person knows that he or she is being prayed for it can be uplifting and increase morale, thus aiding recovery. Many studies have suggested that prayer can reduce physical stress, regardless of the god or gods a person prays to, and this may be true for many reasons. According to a study by Centra State Hospital, "the psychological benefits of prayer may help reduce stress and anxiety, promote a more positive outlook, and strengthen the will to live. A study by Meisenhelder and Chandler analyzed data obtained from 1, Presbyterian pastors surveyed by mail and found that their self-reported frequency of prayer was well-correlated with their self-perception of health and vitality. A study by Bhutkar, et al. A study published by *The Journal of Alternative and Complementary Medicine* alleges evidence that eleven healers in a variety of "distant intentionality" defined as "sending thoughts at a distance" modalities were able to remotely influence the MRI-measurable brain activity in chosen partners who were physically and electrically isolated. Third party studies[edit] Main article: Studies on intercessory prayer A medical examination The Victorian scientist Francis Galton made the first statistical analysis of third-party prayer. The third party studies reported either null results, correlated results, or contradictory results in which beneficiaries of prayer had worsened health outcomes. For instance, a meta-analysis of several studies related to distant intercessory healing published in the *Annals of Internal Medicine* in looked at patients in 23 studies, and found that 13 studies showed statistically significant positive results, 9 studies showed no effect, and 1 study showed a negative result. Other meta-studies of the broader literature have been performed showing evidence only for no effect or a potentially small effect. For instance, a meta analysis on 14 studies concluded that there is "no discernible effect" while a systemic review of intercessory prayer reported inconclusive results, noting that 7 of 17 studies had "small, but significant, effect sizes" but the review noted that the three

most methodologically rigorous studies failed to produce significant findings. Those who actively pray during the week reported half as many consumed alcoholic drinks. Herbert Benson, a professor of medicine at Harvard Medical School, suggests that they may not be mutually exclusive. For instance, a study by researchers associated with Columbia University has been associated with controversy, following claims of success in the popular media. She wrote, "Often when people seem unconscious, a word of prayer reaches them". This may be partly because prayer is increasingly used as a coping mechanism for patients. Different approaches to medicine[edit] Apart from traditional medicine, alternative approaches based on prayer have been proposed. Relevant discussion may be found on the talk page. Harris also criticized existing empirical studies for limiting themselves to prayers for relatively unmiraculous events, such as recovery from heart surgery. He suggested a simple experiment to settle the issue: Get a billion Christians to pray for a single amputee. Get them to pray that God regrow that missing limb. This happens to salamanders every day, presumably without prayer; this is within the capacity of God. I find it interesting that people of faith only tend to pray for conditions that are self-limiting. For instance, in the 19th century William Peabody discussed the efficacy of prayer in the face of what he called the immutability of the laws of nature. The seasons preserve their succession We may not hope to suspend their operation by our prayers And yet notwithstanding all of this, we hold in an undoubting faith the doctrine of the efficacy of our prayers, or to use the language of another, "of an influence from above as diversified and unceasing as are the requests from below". Peabody then argued at length that prayers may have efficacy in a form that does not interfere with the arrangement of the laws of nature, and that God may respond in ways that are not anticipated, without changing the arrangement of nature. George Burnap echoed the same concept when he wrote: The fulfillment of every human desire would break up this order, and bring everything into disorder and confusion. Prayers and miracles[edit] The neutrality of this section is disputed. Please do not remove this message until conditions to do so are met. December Learn how and when to remove this template message A group of women praying The view expressed by Harris above regarding the "relatively unmiraculous" petitions used in prayers has been addressed in religious circles[which? There are different theological classifications of miracles, one of the most common[according to whom? Praeter naturam events can proceed along the laws of nature. They have been reported in a number of cases, and have been subject to a large amount of debate. Examples include the claims of miraculous cures at pilgrimage site such as Our Lady of Lourdes. Many of these claims have been analyzed and only a few have been accepted by the Lourdes Medical Bureau. Massive prayer[edit] The scientific measurement of the efficacy of massive prayer requires the coordination of the activities of a large number of people, and no direct citations for the existence of such studies appear in the scientific literature. However, non-scientific instructions for massive prayer have been issued in the past, and conclusions about the effects of the prayer have been drawn by a large number of believers, outside a scientific framework. In a historical context, in Pope Pius V called for all of Europe to pray the Rosary for victory at the Battle of Lepanto, in which the Christian belligerents included the Papal States. Trophies from the battle are now enshrined in various Christian churches which attribute the victory to the massive prayers. Many interpret Deuteronomy 6: The religious viewpoint objects to the claim that prayer is susceptible to experimental designs or statistical analysis, and other assumptions in many experiments, e. The objections also include the complaint that religion generally deals with unique, uncontrollable events; statistics, and science in general, deal with recurring phenomena which are possible to sample or control and are susceptible to general laws. Religious objections also include the complaint that as prayer starts to be measured, it is no longer real prayer once it gets involved in an experiment and that the concept of conducting prayer experiments reflects a misunderstanding of the purpose of prayer. The STEP experiment indicated that some of the intercessors who took part in it complained about the scripted nature of the prayers that were imposed to them, [64] saying that this is not the way they usually conduct prayer: With respect to expectation of a response to prayer, the 18th-century philosopher William Paley wrote: During the 20th-century, philosopher Bertrand Russell believed that religion and science "have long been at war, claiming for themselves the same territory, ideas and allegiances". And Russell believed that the war had been decisively won by science. Other theologians joined NOMA -inspired sceptics in contending that studying prayer in this way is a waste of money because

supernatural influences are by definition beyond the reach of science. But as the Templeton Foundation correctly recognized when it financed the study, the alleged power of intercessory prayer is at least in principle within the reach of science. A double-blind experiment can be done and was done. It could have yielded a positive result. And if it had, can you imagine that a single religious apologist would have dismissed it on the grounds that scientific research has no bearing on religious matters? Spear argues that the person praying needs to be "guided by the Holy Spirit" as to what needs to be prayed for and that given the "right petition" the Holy Spirit will then intercede for the prayer. It is the action of God and of man, springing forth from both the Holy Spirit and ourselves, wholly directed to the Father, in union with the human will of the Son of God made man. It is the face of the Lord that we seek and desire; it is his Word that we want to hear and keep" [74] "Once committed to conversion, the heart learns to pray in faith. Faith is a filial adherence to God beyond what we feel and understand. It is possible because the Son gives us access to the Father.

9: Spiritual interventions: research on prayer and healing - Harvard Health

After reviewing the literature, Dr. Daniel Benor (Complementary Medical Research ,) found controlled studies involving prayer or spiritual healing. Of these, 77 showed statistically significant results.

VI. August 11, 1792-December 31, 1798 PELL of Oyster Bay Whats a marketer to do? start a conversation George Villiers, Second Duke Of Buckingham; The Rehearsal Pradeep kshetrapal notes class 11 Treasury of Indian Tales Federal and State Indian reservations So now you know about family planning. Sampling the Cuisine of India (Collectors Ser: Vol 19) National center for victims of crime crimes reported Clinical decision-making Marianne Mead Broken bride erin hunter The education of a typographer Jasmines parlour day My asthma action plan Formulation in psychology and psychotherapy George Rogers Clark, boy of the Northwest frontier British empirical philosophers; Locke, Berkeley, Hume, Reid, and J. S. Mill. Zetor 5211 service manual Maid in the U.S.A. Barker (1968 and Lewin (1936), ecological psychology also relies on Beef, brush and bobwhites EVOLUTION ORE-BEARING PRECAMBRIAN STR Lotus Domino R5 clustering Drafting Legal Opinion Letters, 1989 Supplement (Business Practice Library) Glencoe accounting real-world applications connections Design and Composition Reliability for the social sciences Sex, Love and Relationships The economics of sports leads von allmen 15. Peer influences Annette M. La Greca and Ryan R. Landoll A Century in The Sun Building, measuring and improving public confidence in the nuclear regulator Sbi clerk question paper 2013 with answer Lander 2 2007 owners manual Politically active research Background to the literature Language and intelligence. Bajaj allianz health insurance brochure Religious contexts of music