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The Effects on Quality of Life on Those who Pray and Meditate for Others

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Abstract

This study explored the effects of prayer and meditating for others as assessed by the global health measure of quality of life (QOL). Participants recruited from around the United States were asked to pray or meditate for 2 people every day for 4 weeks. Pretest and posttest scores on the SF-36 quality of life questionnaire showed improvements in 8 out of 10 QOL measures, with significant improvements in vitality (p < .034), decreased bodily pain (p < .011) and trends of improvement in general health (p < .067) and restrictions resulting from emotional problems (p < .097).

Key words: praying for others, distant healing, agent effects, quality of life, meditation

Background

While many studies have been conducted over the years relating to aspects of prayer, such as inward prayer, intercessory prayer, and meditation, only a few studies have addressed the effects of praying for others on the person who is the praying agent, identified here as the "agent effect." The first was conducted by O'Laoire (1997), with a group of praying agents (90) exploring whether intercessory prayer improved the health and well-being of others. Pretest and posttest instruments assessed anxiety, self-esteem, mood, and depression. Significant increases were observed in the praying agents, participants, and control group in nearly all measures. In addition, those offering more prayers experienced significantly better results in self-esteem, anxiety, depression, and mood scores compared to participants who prayed less.

One item regarding physical heath was presented at the end of the O'Laoire study asking if the participants' health improved. While the participants' subjective answers were overall positive, since the question was only asked once at the end of the study, with no pretest

comparisons, no clear determinations could be made if any change in health status occurred as a result of their prayers. The author suggested the general positive outcomes could be the result of a placebo/faith effect or unaccounted for extraneous prayers. O'Laoire also suggested the results could be the result of a time-displaced effect. This refers to the theory that participants may be influenced by future positive actions experienced in the present time.

Another study on this topic was conducted by Koenig, et al. (1998), as the authors were investigating religious coping in medically ill older adults. The results showed improvement in levels of depression in those who indicated involvement in religious helping. However, in this study, praying was one component of religious helping that included several other helping activities. Because of the lack of distinction, it becomes difficult to determine if the catalyst was the act of praying or some other form of helping.

Krause (2003) presented another study on this topic in the form of an analysis from a nationwide survey of older American adults. The population was defined as either Caucasian or African-American practicing Christians who were non-institutionalized. The 1,258 participant names were randomly drawn from eligibility lists generated by the Centers for Medicare and Medicaid Services. One survey item in this study asked how often the participant prayed for others when they were alone. The results revealed significant beneficial effects of praying for others and improvement in physical health status. In addition, the beneficial effects offset the strain brought on by ongoing financial problems, decreasing them by one-half. The author suggested that the act of praying for others may have helped agents cope with the stressors in their own lives as proposed in Reissman's classic "helper" principle (Reissman, 1965). This theory suggests that helping others bolsters self-esteem, diverts attention from the helper's own problems, and offers hope that their problems will be solved as well.

Another interesting study assessing agent effects was designed to observe changes in the wellbeing of Reiki healers as they "treated" bacteria (Rubik, et al, 2004). Samples of *E. coli* K12 bacteria were treated by Reiki practitioners with other samples serving as controls. The results indicated that the pretest and posttest scores of social, mental, emotional, and overall well-being correlated with the Reiki treatment outcomes. This could suggest that the positive effects in the agents were either brought about by the use of energies present in the Reiki treatment or as result of helping/healing behavior.

Procedures

Study Design

This study was designed to measure the effects of prayer and meditation on agents using a within-subjects design with a tested and validated generic health measure of QOL, the SF-36. After completing an Informed Consent Form and a pretest survey, the participants were given names of 2 individuals, provided a log, and asked to pray or meditate each day for them. The instructions were to pray or meditate daily for their target participant's general health and wellbeing. Specific thoughts and the amount of time spent were left up to the participant to choose. Some might see this as a deficiency in the study, in that this would leave agents providing variable time 'doses' of intervention. There is, however, little research evidence showing that duration of time spent in acting as an agent is correlated with intensity of effects of the intervention, except where healers were restricted to very brief interventions that were inconsistent with their normal practices of healing. The survey was completed at baseline and approximately 4 weeks later. The study was administered through the mail and by in-person contacts.

Exclusion criteria

Exclusion criteria related to identifying any new significant events that may have occurred during the study period. This was important to track since significant events could affect quality of life measures positively or negatively. The posttest survey asked the same question as the pre-test survey relating to the participant experiencing any significant life changes and provided a list of life events (marriage, pregnancy, loss of loved one, change in job, divorce/separation, school milestone, retirement, or no significant changes). If any new changes were indicated on the post-test, the participant was excluded from the study analysis. Two of the participants in this study were excluded, one due to the loss of loved one and another due to divorce.

Participants

The agents were recruited through contacts with religious organizations, friends, and family members. Thirty-two initial participants were recruited from San Diego and San Francisco, California, to northern Virginia and southern Maine. The 32 participants had a mean age of 49 years, and included 84% females. Their religious affiliations were largely Judeo-Christian (21), with a few Buddhists (4) and 7 indicating "Other." As one would expect regarding people who would volunteer to pray or meditate for others, the agents had high scores with respect to frequency of attending religious services, praying regularly, and feeling close to God. See Table 1 for background question scores. It is interesting to note that while the agent group's physical component summary (PCS) scores were virtually the same as the US norm (53.09 and 52.64 respectively), their mental component summary (MCS) scores were low in comparison to the US norm (49.47 and 53.70 respectively). See Appendix A for background questions and scoring. See Table 2 for QOL component scores, and explanations of the SF-36 assessment questionnaire below. At the end of the study period, 2 participants were excluded (see exclusion criteria above) and 3 others dropped out, leaving a total of 27 participants completing the study.

Item	Mean Score
Frequency of involvement in social groups	4.28
Frequency of involvement in community groups	3.45
Frequency of involvement in religious groups	4.63
Frequency of involvement in prayer groups	3.03
Closeness with family	4.34
Closeness with friends	3.88
Closeness with God	4.31
Frequency of internal prayer	4.56
Awareness of others praying for participants	3.06
Satisfaction with income	2.26
Political views	1.90
Personal style	3.48
Desire to Improve QOL	2.65

Table 1. Background Question Scores

	NB Mean*	Ν	Minimum	Maximum	Mean	Std.
PCS MCS PF RP BP GH VT SF RE	52.64 53.70 51.12 51.12 51.13 49.96 50.17 50.43 50.76	32 32 32 32 32 32 32 32 32 32 32	34.85 26.60 27.57 37.26 29.15 40.06 27.11 24.13 32.56	64.01 60.63 57.03 56.85 57.89 63.90 70.82 56.85 55.88	53.085 49.374 52.493 52.168 50.325 54.512 52.090 49.180 48.226	6.417 9.507 6.349 6.341 6.629 5.979 9.514 9.174 8.110
MH	49.61	32	30.30	61.27	51.680	6.966

Table 2. QOL Component Scores

*Based on US population norm based mean, average age 49 (Ware, Kosinski, & Dewey, 2000) PCS - Physical Component Summary

MCS - Mental Component Summary

PF- Limitations in physical activities because of health problems

RP- Limitations in usual role activities because of physical health problems

BP- Bodily pain

GH- General health perceptions

VT- Vitality (energy and fatigue)

SF- Limitations in social activities because of physical or emotional problems

RE- Limitations in usual role activities because of emotional problems

MH- General mental health (psychological distress and well-being)

Instrumentation/Measures

The measure for this study was a QOL instrument used for more than a decade in the health care industry, entitled the short form 36 (SF-36) version 2. The SF-36 (Ware and Sherbourne, 1992) is a new iteration from the authors' longer original version containing 147 items. This tool is a generic health survey distributed by QualityMetric Incorporated. It has been tested, validated extensively, documented in over 4,000 publications, and adapted for use in over 50 countries (QualityMetric, 2002). The SF-36 is referred to as a generic measure because "it assesses health concepts that represent basic human values that are relevant to everyone's functional status and well being" (Ware, et al, 2000, p 2.3). The survey contains 36 items and assesses overall health from 8 perspectives including 2 summary scores of overall physical and mental health ratings; PCS and MCS. The subscale scores consist of:

PF- Limitations in physical activities because of health problems

SF- Limitations in social activities because of physical or emotional problems

RP- Limitations in usual role activities because of physical health problems BP- Bodily pain

MH- General mental health (psychological distress and well-being)

RE- Limitations in usual role activities because of emotional problems

VT- Vitality (energy and fatigue)

GH- General health perceptions

The validity and reliability of the SF-36 has been tested in a number of studies and has consistently proved to be a stable instrument, both internally and compared with other health measures (Aaronson, et al., 1992; Brazier, et al., 1992; Garratt, et al, 1993; Jenkinson, et al, 1994; Lyons, et al, 1994; McHorney, et al, 1993). This instrument has been developed and used in a variety of health care settings, to determine the health effects of therapies on conditions such as: congestive heart failure (Jenkinson, et al, 1997), angina (Dougherty, et al)

al, 1998), allergies (Derebery & Berliner, 2000), low back pain (Bronfort & Bouter, 1999), and carpal tunnel syndrome (Atroshi, et al, 1998) among many others, including assessment of spiritual healing (Brown, 1995; Wiesendanger, et al, 2001).

Background questions were also presented at the pretest administration and included inquiries regarding the participants' age, gender, religious affiliation, social and personal support, private spiritual rituals, and knowledge of others praying for them, (see Appendix A). The background items were obtained from the 1998 General Social Survey (GSS) with the exception of items inquiring, "Do you know if anyone prays for you on a regular basis?" and "Are you experiencing significant life changes?" These questions were asked to determine current prayer support and as a screen for exceptional life events that might influence the results. Only one background question was asked both at baseline and after the study period. This item inquired if the participant was experiencing any significant changes (either positive or negative) regarding items on a list of significant life events. The answers to this question helped identify any special circumstances occurring in the lives of participants, either as they entered the study or during the study period that could possibly impact quality of life scores.

Results

In order to determine any changes in QOL measures over the study period, an analysis was conducted using paired sample *t* tests of item scores. Results showed the participants scores improved in 8 out of 10 measures, with significant improvements observed in vitality (t_{26} = -2.24, *p*= .034) and decreased bodily pain (t_{26} =-2.73, *p*= .011) with a trend in improvement in general health (t_{26} = -1.91, *p*= .067), and reduced limitations in roles due to emotional problems (t_{26} = -1.72, *p*= .097). The participants' physical component summary scores remained nearly the same, i.e. still slightly higher than national average. The mental component summary scores improved slightly, moving closer to the national average. Neither of the two component summary scores changed significantly. These results raise many questions relating to the action of praying or meditating for others in both sociological and psychological aspects. (See Figure 1.)



Figure 1. Group Pretest and Posttest scores.

Note: Bodily Pain (BP) scores significantly higher (p=.011), Vitality (VT) scores significantly higher (p=.034) General Health (GH) showed a trend of higher scores (p=.067) Role-Emotional (RE) showed a trend of higher scores (p=.097)

Discussion

This research sought to determine how prayer and meditation for others affected agents' QOL scores. The agents experienced increases in 8 of the 10 scales with significant improvements seen in 2 subscale scores, and with positive trends in 2 others. These findings are consistent with the agents' improved psychometric scores in the O'Laoire (1997) intercessory prayer study and improved levels of depression in those involved in religious helping shown in the Koenig, et al (1998) religious coping study described above. The results are also in alignment with the findings of the Krause (2003) survey indicating improved physical health and reduced strain by those who had high scores in praying for others.

The agents in this study were required to pray or meditate for others each day for 4 weeks. While these results and others cited suggest the existence of an agent effect, how and why these positive changes occur is unclear. These deliberate daily actions could have been a constant reminder of their helping behavior and, as suggested by Reissman's "helper" principle (1965), may have positively affected their overall outlook on their perceptions of their own health. Alternatively, improvements could have been a result of the positive feelings brought about by the fulfillment of a connection to "others," as proposed in attachment theory or the drive-reduction process posed by the operant conditioning perspective (Berk, 1997). Either of these two possibilities support the hypothesis that the creation of positive internal thoughts and feelings could enhance physical and emotional health.

A broader research perspective suggests the possibility of spiritual or metaphysical influences to account for the observed results. For example, the offering of prayers to a Divine source may result in positive outcomes to the giver (Koenig, 2001; Levin, 1999) Another possibility is that in meditating one's alignment with the Universe with positive intentions increases experiences of peace and wellbeing.

From a metaphysical perspective, transmitting the positive healing energies manipulated by Reiki practitioners may have also affected the therapists, as seen in the Rubik, et al, (2004) study. In addition, O'Laoire (1997) posed an interesting metaphysical explanation of the results observed in his intercessory prayer study. This related to a possible time-displacement effect as a result of some future positive events affecting the study participants in the present time.

In order to gain a better understanding of which of these factors or combination may be causative, further studies are needed to further confirm not only the existence of the agent effect, but to identify possible mechanisms of action.

Study Limitations

As with many studies, this research project could have benefitted from a larger study population. However, the significant positive results, consistent with those of the other studies cited, suggest a larger study population would most probably confirm positive outcomes of agent effects. A larger population could also offer an analysis of any differences in types of agent interventions such as such as general or specific prayers, different types of meditative practices, or any effects from just thinking about others in positive ways. Another limitation may have been in not stipulating a specific duration for each prayer or meditation session. This could lead to identifying any "dose effect" as a result of more or less time spent in offering prayers and meditations for others as seen in the O'Laoire (1997) study.

Conclusions

The findings from this study provide support for the concept of the agent effect as a result of the helping behaviors of prayers and meditations for others. Significant improvements were seen in quality of life measures after the agents offered daily prayers and meditations for others for a 4-week period. To exclude any confounding factors, one question was asked at the end of the study regarding any significant life events occurring during the study period.

Further research might include study populations that would employ variations of mental and spiritual helping behavior such as different types of prayer (directed and non-directed) and participants that just think positive thoughts for others. In addition, studies designed to compare mental and spiritual helping behaviors to physical acts of helping such as volunteerism may further identify how these activities affect those offering help to others.

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Appendix A. Background Questions and values

How frequently do you attend, social groups? (once per week-5, once per month-4, several times per year-3, once per year-2, never-1)

How frequently do you attend community groups? (once per week-5, once per month-4, several times per year-3, once per year-2, never-1)

How frequently do you attend religious services? (once per week-5, once per month-4, several times per year-3, once per year-2, never-1)

How frequently do you attend prayer groups? (once per week-5, once per month-4, several times per year-3, once per year-2, never-1)

How close do you feel with your family? (extremely close-5 very close-4, close-3, somewhat close-2, not close at all-1)

How close do you feel with your friends? (extremely close-5 very close-4, close-3, somewhat close-2, not close at all-1)

How close do you feel with your God or Higher Power? (*extremely close-5 very close-4, close-3, somewhat close-2, not close at all-1*)

How often do you pray or meditate or conduct any form of private spiritual activity? (several times per day-5, once per day-4, few times per week-3, once per week or less-2, never -1)

Do you know if anyone prays for you on a regular basis? (several-4, one or two-3, not sure-2, no one-1)

Are you experiencing significant life changes in any areas? *Marriage, Pregnancy, Loss of loved one, change in job, divorce/separation, school milestone, retirement, no significant changes*

How satisfied are you with your income level? (very satisfied-3, somewhat satisfied -2, not satisfied-1)

In general describe you political view (conservative-1, moderate-2, liberal-3, don't know-4)

Describe your personal style.

(very tense and strained-1, somewhat tense and strained-2, neutral-3, somewhat easy going-4, very easygoing-5)

How important is it to you to, right now, to experience an improvement in quality of life? *(not important-1, somewhat important-2, important-3, very important-4)*

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