

SPIRITUAL PERSPECTIVES AND HEALTH: A RANDOM SURVEY IN A SOUTHERN STATE

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ABSTRACT

While multiple studies have shown that there is a relationship between Religion/Spirituality and self reported health, as well as health and spiritual well-being, no studies could be found that correlated spiritual perspectives with Self Reported Health. This study was a part of a random-digit-dialing telephone poll of 452 adult respondents 18 years of age or older in the State of Alabama. The 10-item Spiritual Perspectives Scale (SPS) was used to measure participants' perceptions of the extent to which they hold certain spiritual views and engage in spiritually-related interactions. Respondents were also asked to rate their health on a four point Likert type scale from poor (1) to excellent (4) (SRH). Significant differences were found for the SPS on age, marital status and rurality. There was a positive correlation between SPS and SRH. Rurality did not show a significant correlation with SRH. Three variables were significantly different on gender: SPS, age and current marital status. However, only three variables were significantly different between men and women: SPS, age, and current marital status. This study adds support to the literature that spirituality is positively related to one's health and brings to focus the need to pursue the study of the spiritual experience and health connection.

INTRODUCTION

Nursing has historically viewed humans as holistic: body, mind, and spirit. As the United States of America (USA) becomes more diverse in culture, lifestyles, religions, and worldviews, nurses are challenged more than ever before in providing holistic care to patients (Fawcett & Noble, 2004). Religion and spirituality are two important aspects of one's culture that permeates this holistic view, particularly in the healthcare arena where RS beliefs may determine the patient's choices for treatment or end-of-life decisions, as well as affect the way one copes with illness or finds sustaining comfort and support in illness (Johnson, Elbert-Avila, & Tulsy, 2005). Additionally, during physician-patient encounters, patients want physicians to respect their spiritual beliefs (Hebert et al., 2001). The spiritual dimension of humans is universal and relative to one's state of health (Miller & Thoresen, 2003). Health has been defined as a state of holistic well-being, not just the absence of disease or infirmity (Venes, 2005). Even though self-rated health (SRH) is a subjective assessment of one's health, it has been shown to be a strong predictor of morbidity, mortality, and health care utilization (Daaleman, Perera, & Studenski, 2004; Erikson, Unden, & Elofsson, 2001).

Reed (1992) defined spirituality as the tendency to make meaning through one's intrapersonal, interpersonal and transpersonal relationships that empower one to transcend. She further clarified that spiritual perspectives are "the extent to which spirituality permeates their lives and they engage in spiritually-related interactions" (Reed, 1987, 337). Thus, it is spiritual perspectives that guide choices, provide comfort, formulate personal values/morals, and assist with coping during illness, suffering, grief and loss.

BACKGROUND

Koenig, McCullough, & Larson (2001) reviewed more than 1,200 studies and found that religious beliefs/practices were consistently associated with better health. Space within this article prohibits specific discussion of the studies they reviewed. However, empirical studies continue to demonstrate a positive relationship between religion, spirituality, and health, albeit most research has focused more on religion than spirituality (Ameling & Povilonis, 2001; Koenig, 2002; Mauk & Schmidt, 2004). There have been reports that some religious beliefs/practices are harmful and irrelevant to health, such as refusing medical treatment, failure to seek medical care, maladaptive coping practices, and involvement in cults (Flannelly, Ellison, & Strock, 2004; George, Larson, Koenig, & McCullough, 2000; Koenig, McCullough, & Larson, 2001).

Daaleman, Perera, & Studenski., (2004) examined the relationship between religion, spirituality and self-reported health (SRH). They brought to light that geriatric outpatients who reported greater measure of spirituality, but not greater religiosity, were more likely to rate their health as good. Koenig, George, & Titus (2004) concluded that patients who considered themselves to be both spiritual and religious were more likely to have more social support and better psychosocial and physical health outcomes than patients who did not consider themselves spiritual and religious. Interestingly, one group of investigators found spirituality to be associated with one's subjective perception of health status (Boero et al., 2005). Yi, et al., (2007) ascertained that the self-rated health of young, resident physicians was not only lower than expected, but was also positively correlated with current resident placement in internal medicine, higher level of depressive symptoms, and lower level of spiritual well-being. While numerous populations have been investigated, limited spiritual research has been conducted with rural dwellers (Craig et al., 2006).

Several studies have investigated the spiritual perspectives within various populations, such as hospitalized adults, healthy and chronically ill older adults, bereaved adults, homeless substance abusers, chronic mentally-ill, and healthcare providers. For example, Reed (1987) reported significantly higher spiritual perspective scores among hospitalized, terminally ill, older adults than for hospitalized, non-terminally ill as well as healthy older adults. Martin (1996) confirmed a high level of spiritual perspectives in African American women with arthritis. Brush & McGee (2000) identified spiritual perspectives to be important in the lives of homeless men in substance abuse recovery. Walsh et al., (2002) concluded that people who profess stronger spiritual beliefs could more rapidly and completely resolve their grief after the loss of a loved one. Johnson, Elbert-Avila, & Tulsy (2005) demonstrated through an extensive literature review that spiritual beliefs strongly direct decisions by African Americans on both treatment decisions and end-of-life choices.

Despite these findings, there continues to be much controversy in how spirituality and religion are defined. The authors of this study distinguish between religion and spirituality as follows: Spirituality is more abstract than religion and can be described as that which gives life meaning and purpose and enables one to transcend. Religion is an organized system that designates beliefs, values, rituals, practices, behaviors, and symbols that enhance a relationship with God/higher power. We believe that just as each patient has physical needs (air, water, shelter, food), each patient also has spiritual needs: trust, love, hope, peace, forgiveness, connectedness, and meaning/purpose in life. While all humans are born spiritual, religious affiliation is an individual choice.

Many studies have shown a relationship between spirituality, religion, and self-reported health (SRH) as well as health and spiritual well-being (Boero, et al., 2005; Daaleman, Perera, & Studenski, 2004; Koenig, George, & Titus, 2004; Reed, 1987; Yi, et al., 2007); however, no studies could be found that correlated spiritual perspectives with SRH. Also, much of the published research on spirituality, religion, and health has focused on older adults, women, end-of-life issues, as well as cross-sectional designs (Becker et al., 2007; Flannelly, Ellison, & Stock, 2004; George, Ellison, & Larson, 2002). Therefore, the purpose of this study was to investigate the relationship of spiritual perspectives to SRH in a sample of adults 18 years and older living in the state of Alabama.

METHODOLOGY

The purpose of this article is to report the findings related to spirituality from the Omnibus Poll, an annual statewide telephone survey conducted by the Capstone Poll of the University of Alabama. The Omnibus Poll, comprised of sets of questions submitted by University of Alabama faculty members and other organizations, covers a wide range of topics and differs somewhat from year to year. Permission was obtained to include Reed's (1986) Spiritual Perspective Scale (SPS) as one set of questions.

Once IRB approval was obtained from the University of Alabama, this 1999 Omnibus Survey was conducted between March 22, 1999 and April 21, 1999 and was based upon a random-digit-dialing (RDD) telephone poll of 452 adult respondents 18 years of age or older in the State of Alabama. The survey had a margin error of plus or minus five percentage points for the total sample. The sample of households was drawn by using the three area codes and all of the three-digit telephone exchanges in Alabama. Random telephone numbers were generated beginning with the specified area codes and exchanges. These numbers were then used to establish house hold contacts. For each house hold contact, a respondent was randomly selected by asking for the adult whose birthday had occurred most recently. If that person was available, the interview was conducted. If the appropriate person was not available, a call back was

arranged. Telephone interviews were conducted by employees of the Capstone Poll who were trained and experienced in telephone interview techniques. They received additional training specific to the questionnaire for this project. An experienced supervisor was present at all times during the interview process. Data for this study were analyzed using the SPSS.

The 10-item Spiritual Perspective Scale (SPS) (Reed, 1986) was designed to measure participants' perceptions of the extent to which they hold certain spiritual views and engage in spiritually-related interactions. The SPS has been used successfully in a wide variety of adult populations: healthy, terminally ill, chronic mental illness, Appalachian pregnant women, substance addiction, and African-Americans (Brush & McGee, 2000; Conner & Eller, 2004; Jesse & Reed, 2004; Reed, 1987). The psychometric properties of the SPS are good. Criterion-related validity and discriminant validity have been demonstrated (Reed, 1986, 1987). Using the Cronbach's alpha, reliability has consistently rated above .90 with very little redundancy among the items. Average inter-item correlations range from .54 to .60 across the adult groups. All item-scale correlations have been above .60. Women and lower socioeconomic groups tend to score higher on the SPS, as they have on similar instruments, and participants who identify no religious affiliation score significantly lower on the SPS than participants who identify a religious affiliation. The SPS is scored by calculating the arithmetic mean across all items for a total score that ranges from 1.0 to 6.0. Each of the 10 items use a 6-point Likert-type scale that is anchored with descriptive words (i.e. 1.0=Not at all or Strongly Disagree) (Reed, 1986). The Chronbach's Alpha for this study (N=452) which included both men and women was .864 which is very close to what Reed (1987) reported.

Self reported health (SRH) has most frequently been reported in the literature by asking only one question. This question simply asks patients/participants to rate their overall health on a scale from poor to excellent (Fayers & Sprangers, 2002).

FINDINGS

The sample for this study included adults who answered a random digit dial survey at their home telephone number. Four hundred fifty-two subjects completed the telephone survey. Sixty three percent (n=295) of the respondents were female and 67% (n=301) were married. The age of the respondents ranged from 18 years (n=2) to 95 years (n=1), with the mean age being 48.58 years.

Thirty three percent had completed high school (n=148) and another 29% had some college education (n=131), while 17.5% (n=79) completed college. Twenty six percent chose the "don't know/not applicable" response to the question.

Interestingly, 46% of the respondents were employed full time and another 41% were not employed. There were approximately 11% who were employed part-time and most surprising was the 26 % who responded that they didn't know or felt that it was not applicable to them. This is the same percentage that did not provide data in response to the family income question. Fully, two-thirds of the sample reported being married (66.6%) with nearly equal distribution of the rest across widowed, divorced/separated, and single. The family income category most frequently chosen was \$30-40,000 (14.6%); however, it is interesting to note that the income categories surrounding that were very close with approximately 12% in the three surrounding categories. Twenty-six percent of the subjects did not respond to the family income question. See table 1A for all the respondent demographics.

Chi-Square Goodness of Fit

In analyzing the data for this study, we compared age, race, and education to the 2000 Alabama Census data. As expected with a telephone survey, there was an over representation of Caucasian and an under representation of African Americans. There was an over representation of higher levels of education in the study sample compared to the 2000 Alabama Census. There was no significant difference on age. See table 1B.

Rate Your Health

Respondents were asked to rate their health on a Likert scale from 1 to 5 with 1 being poor to 5 being excellent. There was also a selection of "Don't Know/Not Applicable". Two respondents chose that response. The mean for Rate Your Health was 3.39 (N=452), with the median and mode both being 3 (good). The standard deviation was 1.135. The details of the responses can be found in table 2.

Table 1A
Respondent Demographics

Item	Frequency	Percent	Item	Frequency	Percent
Gender			Family Income		
Male	166	36.7	<10,000	33	7.3
Female	286	63.3	10 – 20,000	41	9.1
Marital Status			20 – 30,000	55	12.2
Married	301	66.6	30 – 40,000	66	14.6
Widowed	41	9.1	40 – 50,000	56	12.4
Divorced – Separated	49	10.8	50 – 70,000	53	11.7
Single	59	13.1	70 – 90,000	11	2.4
DKNA	2	.4	>90,000	18	4.0
			DKNA	9	2.0
Race			Education		
White	360	79.6	0-8 Grade	15	3.3
African American	80	17.7	9-11 Grade	44	9.7
Other	10	2.2	High School – GED	148	32.7
DKNA	2	.4	Some College	131	29.0
Religion			Complete College	79	17.5
Protestant	356	78.8	Graduate / Professional	30	6.6
Catholic	36	8.0	DKNA	5	1.1
Jewish	9	2.0	Employment		
Christian	6	1.3	Full-Time	206	45.6
Non-Denominational	9	2.0	Part-Time	49	10.8
Other	8	1.8	Not Employed	187	41.4
None	20	4.4	DKNA	10	2.2
DKNA	9	2.0			

TABLE 1B
Comparison of Survey Sample and State Demographics

VARIABLE	STUDY	2000 ALABAMA CENSUS	Chi-Square
Race	White = 79.6% Black = 17.7% Other = 2.2%	White = 71.1% Black = 26.0% Other = 2.9%	17.74, df=2,p<.001
Education	0-8 = 3.3% 9-11 = 9.7% HS = 32.7% Some = 29.0% Coll. = 17.5% Grad = 6.6%	0-8 = 8.3% 9-11 = 12.3% HS = 34.5% Some = 25.9% Coll. = 12.2% Grad = 6.8%	28.69, df=5,p<.001
Age	20-29 = 19.1 30-39 = 20.1 40-49 = 20.7 50-59 = 16.0 60-69 = 11.2 70-79 = 8.4 80+ = 4.5	20-29 = 14.4 30-39 = 17.7 40-49 = 21.0 50-59 = 21.2 60-69 = 10.9 70-79 = 9.9 80+ = 4.9	1.16, df=6,p=.98

Table 2
Rate Your Health

Item	Not at All	About once a year	About once a month	About once a week	About once a day	DKNA
1. In talking with family and friends, how often do you mention spiritual matters?	3	18	43	129	250	9
2. How often do you share with others the problems and joys of living according to your spiritual beliefs?	7	10	72	143	197	15
3. How often do you read spiritually-related material?	15	17	57	113	236	8
4. How often do you engage in private prayer or meditation?	10	5	31	49	349	7

Table 3A
Spiritual perspectives Scale: Beliefs (N=452)

Response	Rate Your Health (N)	Percent
POOR	27	6.0
FAIR	62	13.7
GOOD	161	35.6
VERY GOOD	112	24.8
EXCELLENT	88	19.5
DKNA	2	0.4
Total	452	100.0

Spiritual Perspective Scale

The Spiritual Perspective Scale (PSP) consisted of two sections. The first section addressed the frequency of spiritual activities and the second section focused on the role of spirituality in the person's life. All items were on a 6 item response scale. See tables 3A and 3B for detailed descriptions of the responses to each item. All items were scored with the highest number (6) being the desired response. The mean for the SPS was 42.75 (SD= 5.47) (N=452)

Correlations

Significant correlations were found between the Spiritual Perspective Scale, Rate Your Health, and each of the three definitions of rurality, employment, religion, race, family income, respondent sex, current marital status, education, and age. This information is displayed on table 4.

Table 3B
Spiritual Perspectives Scale: Behaviors (N=452)

Item	Strongly Disagree	Disagree	Agree	Strongly Agree	DKNA
5. Forgiveness is an important part of my spirituality.	2	5	234	204	7
6. I seek spiritual guidance in making decisions in my everyday life.	5	25	262	153	7
7. My spirituality is a significant part of my life.	2	19	236	187	8
8. I frequently feel very close to God or a “higher power” in prayer, during public worship or at important moments in my daily life.	0	14	252	176	10
9. My spiritual views have had an influence upon my life.	0	11	240	193	8
10. My spirituality is especially important to me because it answers many questions about the meaning of life.	2	21	249	167	13

Table 4
Correlations

Item	SP Scale	Rate Your Health	Urban/Rural	U/R Level	U/R North/South	Religion	Family Income	Employment	Education	Age	Race	Gender	Marital Status
SP Scale	1												
Rate Your Health	.007 – .887	1											
Urban/Rural	.048 – .306	-.024 – .611	1										
U/R Level	.044 – .306	-.027 – .562	.915**	1									
U/R North/South	.059 – .213	-.015 – .751	.857**	.842**	1								
Religion	-.031 – .517	-.038 – .038	-.094* – .046	-.116* – .013	-.104* – .026	1							
Family Income	.120* – .011	.0112 – .017	-.068 – .148	-.060 – .203	-.081 – .086	.020 – .676	1						
Employment	.091 – .052	-0.000	-.070 – .136	-.052 – .273	-.025 – .593	.027 – .570	.068 – .146	1					
Education	.116* – .013	* – .000	-.106* – .024	-.124** – .008	-.121* – .010	.060 – .203	.196** – .000	-.146** – .002	1				
Age	.139* – .003	.72*** – .000	.048 – .309	.044 – .347	.097* – .039	-.091 – .052	.104* – .027	.405** – .000	-.076 – .109	1			
Race	.019 – .694	-0.983	-.136** – .004	-.119* – .011	-.095 – .044	.091 – .054	-.026 – .582	-.015 – .757	-.041 – .387	.36**	1		
Gender	.114* – .015	-0.839	.043 – .363	.054 – .253	.024 – .609	-.015 – .748	.053 – .264	.208** – .000	-.018 – .710	.100* – .033	.083 – .077	1	
Current Marital Status	.124* – .015	-0.674	-.114* – .016	-.119* – .011	-.084 – .075	.014 – .762	-.193** – .000	-.014 – .774	.081 – .084	.53** – .000	.74** – .000	.098* – .037	1

*p=.05 **p=.01 ***p=.001

MANOVA on Gender

Since much of the research on spirituality, religion, and health has been conducted frequently with samples that were mostly women, older adults, and end-of-life issues (Becker et al., 2007; Flannelly, Ellison, & Stock, 2004; George, Ellison, & Larson, 2002), we purposely designed the inclusive sample to be open to all men and women who were 18 years of age or older. To determine whether there were significant differences in the variables of interest in this study, a multiple analysis of variance (MANOVA) was performed between men and women. The group was almost 2 to 1 female (286 to 166). Those variables that demonstrated significant correlations were included in the MANOVA. It is interesting to note only three variables were significantly different between men and women: SPS, age, and current marital status. Table 5 displays the details of this analysis.

Table 5
MANOVA on Gender

Variable		Sum of Squares	df	Mean Square.	F	Sig
SPScale	Between Groups	175.486	1	175.486	5.94	.016*
	Within Groups	13330.255	450	29.623		
	Total	13505.741	451			
AGE	Between Groups	1345.668	1	1345.668	4.570	.033*
	Within Groups	132504.140	450	294.454		
	Total	133849.810	451			
Current Marital Status	Between Groups	5.488	1	5.488	4.392	.037*
	Within Groups	562.264	450	1.249		
	Total	567.752	451			
EDUCATION	Between Groups	.205	1	.205	.138	.710
	Within Groups	667.111	450	1.482		
	Total	667.316	451			
RACE	Between Groups	.783	1	.783	3.137	.077
	Within Groups	112.358	450	.250		
	Total	113.142	451			
FAMILY INCOME	Between Groups	9.092	1	9.092	1.251	.264
	Within Groups	3269.926	450	7.267		
	Total	3279.018	451			
RATE YOUR HEALTH	Between Groups	.054	1	.054	.041	.839
	Within Groups	581.849	450	1.293		
	Total	581.903	451			
COMPARE YR AGO RATE YOUR HEALTH	Between Groups	.023	1	.023	.030	.862
	Within Groups	338.533	450	.752		
	Total	338.555	451			
LEVEL OF RURALITY	Between Groups	.978	1	.978	1.308	.253
	Within Groups	336.270	450	.747		
	Total	337.248	451			
URBAN/RURAL	Between Groups	.206	1	.206	.830	.363
	Within Groups	111.909	450	.249		
	Total	112.115	451			
RURAL NORTH/SOUTH	Between Groups	.158	1	.158	.262	.609
	Within Groups	271.689	450	.604		
	Total	271.847	451			

Spiritual Perspective Scale Patterns of Response by Gender

Because there was a significant difference found on the Spiritual Perspective Scale and Gender we examined the Spiritual Perspective Sub-Scales (Beliefs and Behaviors) by Gender. Figure 1 illustrates the significance that was found on the Beliefs subscale. No significant differences were found on the Behaviors Sub-scale. Remember that the Beliefs subscales measures the role spirituality plays in a person's life and the Behaviors is the activities associated with one's spirituality.

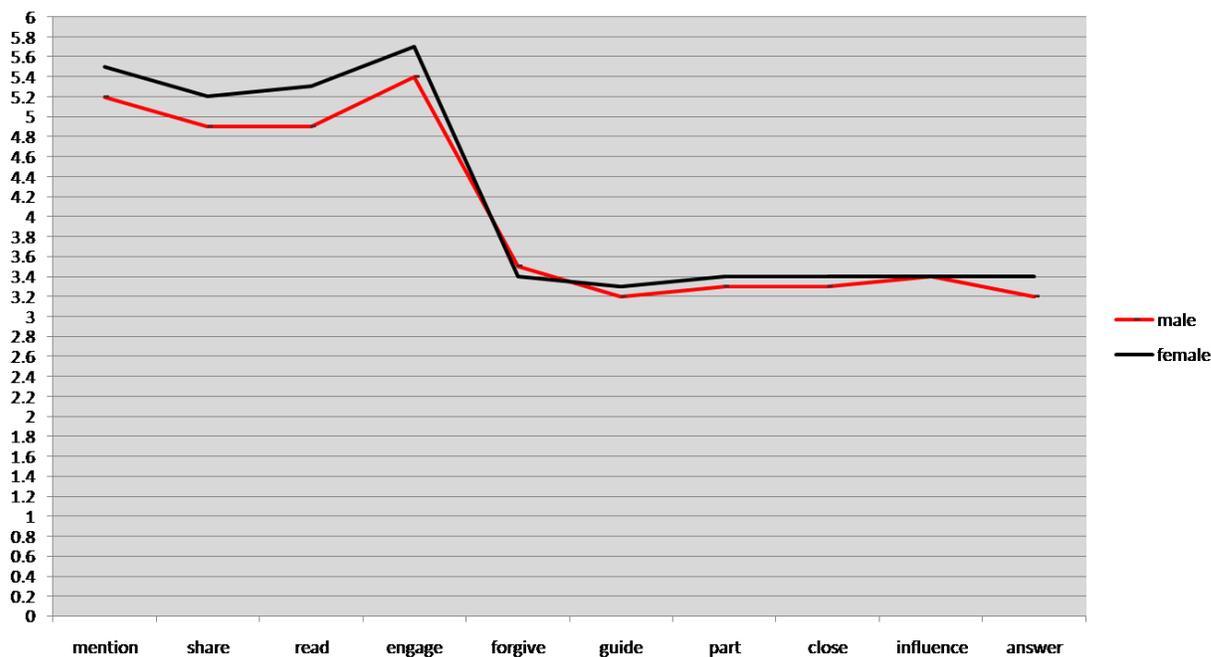


Figure 1: Beliefs and Behaviors by Gender

LIMITATIONS

Since this study utilized a random digit dialed survey methodology, people without home telephones or those persons with unlisted numbers were excluded from possible inclusion in the study. Those surveyed were primarily female (63%); however, the methodology was random selection and could not control for gender. The findings from this study cannot be generalized to people in other geographic locations.

DISCUSSION AND CONCLUSIONS

To our knowledge, this was the first study to report on the correlations between spiritual perspectives and self-reported health. Significant differences were found for the Spiritual Perspective Scale (SPS) on age, marital status and rurality. Additionally, there was a positive correlation between SPS and Self Reported Health (SRH). Rurality, however, did not show a

significant correlation with SRH. SPS, age and current marital status were significantly different on gender.

While this study offers additional support to the literature that spirituality is positively related to one's health, it again brings to focus the need to pursue the study of the "epidemiology of spiritual experience" (George, et al., 2000, 113) since the spiritual experience is perhaps the area in religious and spiritual research that is the least explored. Furthermore, this study lends support to the findings of Brush & McGee (2000) who concluded that health care providers should encourage patients to share their spiritual perspectives and spiritual experiences.

We believe the findings from this study have major implications for healthcare providers. Every patient should receive a spiritual assessment. For the participants in this study, more than half reported that they talk about spiritual matters and read spiritual materials daily while 77% pray daily (see table 3A: Beliefs) Knowing what is important spiritually to the patient should be incorporated into the treatment plan, particularly in relation to coping with or transcending the illness experience. In addition, each of the Spiritual Perspectives behaviors (see table 3B) were either scored "agree" or "strongly agree" by 92-97% of the participants. The findings from this study demonstrated that for this Alabama sample, spiritual perspectives are valued and correlated with self-reported health.

REFERENCES

- Ameling, A., & Pavidonis, M. (2001). Spirituality, meaning, mental health, and nursing. *Journal of Psycho-Social Nursing and Mental Health Services*, 39(4), 14, 16-20. [[MEDLINE](#)]
- Becker, G., Xander, C.J., Blum, H.E., Lutterbach, J., Momm, F., Gysels, M., & Higginson, I.J. (2007). Do religious or spiritual beliefs influence bereavement? A systematic review. *Palliative Medicine*, 21, 207-217. [[MEDLINE](#)]
- Boero, M.E., Caviglia, M.L., Monteverdi, R., Braida, V., Fabello, M., & Zorzella, L.M. (2005). Spirituality of health workers: A descriptive study. *International Journal of Nursing Studies*, 42(8), 915-921. [[MEDLINE](#)]
- Brush, B.L., & McGee, E.M. (2000). Evaluating the spiritual perspectives of homeless men in recovery. *Applied Nursing Research*, 13(4), 181-186. [[MEDLINE](#)]
- Conner, N.E., & Eller, L.S. (2004). Spiritual perspectives, needs and nursing interventions of Christian African-Americans. *Journal of Advanced Nursing*, 46(6), 624-632. [[MEDLINE](#)]
- Craig, C., Weinert, C., Walton, J., & Derwinski-Robinson (2006). Spirituality, chronic illness, and rural life. *Journal of Holistic Nursing*, 24(1), 27-35. [[MEDLINE](#)]
- Daaleman, T.P., Perera, S., & Studenski, S.A. (2004). Religion, spirituality, and health status in geriatric outpatients. *Annals of Family Medicine*, 2(1), 49-53. [[MEDLINE](#)]
- Eriksson, I., Unden, A., & Elofsson, S. (2001). Self-rated health. Comparisons between three different measures. Results from a population study. *International Journal of Epidemiology*, 30, 326-333. [[MEDLINE](#)]
- Fawcett, T.N., & Noble, A. (2004). The challenge of spiritual care in a multi-faith society experienced as a Christian nurse. *Journal of Clinical Nursing*, 13, 136-142. [[MEDLINE](#)]
- Fayers, P.M., & Springers, M.A. G. (2002). Understanding self-rated health. *Lancet*, 359(3), 187-188. [[MEDLINE](#)]
- Flannely, K.J., Ellison, C.G., & Strock, A.L. (2004). Methodologic issues in research on religion and health. *Southern Medical Journal*, 97(12), 1231-1240. [[MEDLINE](#)]

- George, L.K., Ellison, C.G., & Larson, D.B. (2002). Explaining the relationships between religious involvement and health. *Psychological Inquiry*, 13(3), 190-200.
- George, L.K., Larson, D.B., Koenig, H.G., & McCullough, M.E. (2000). Spirituality and health: What we know, what we need to know. *Journal of Social and Clinical Psychology*, 19(1), 102-116.
- Hebert, R.S., Jencks, M.W., Ford, D.E., O'Conner, D.R., & Cooper, L.A. (2001). Patient perspectives on spirituality and the patient-physician relationship. *Journal of General Internal Medicine*, 16(10), 685-692. [[MEDLINE](#)]
- Jesse, D.E., & Reed, P.G. (2004). Effects of spirituality and psychosocial well-being on health risk behaviors in Appalachian pregnant women. *JOGNN*, 33, 739-747. [[MEDLINE](#)]
- Johnson, K.S., Elbert-Avila, K.I., and Tulsky, J.A. (2005). The influence of spiritual beliefs and practices on the treatment preferences of African Americans: A review of the literature. *Journal of the American Geriatric Society*, 53(4), 711-719. [[MEDLINE](#)]
- Koenig, H.G. (2002). *Spirituality in Patient Care: Why, How, When, and What*. Philadelphia and London: Templeton Foundation Press.
- Koenig, H.G., George, L.K., & Titus, P. (2004). Religion, spirituality, and health in medically ill hospitalized older patients. *Journal of American Geriatric Society*, 52(4), 554-562. [[MEDLINE](#)]
- Koenig, H.G., McCullough, M.E., & Larson, D.B. (2001). *Handbook of Religion and Health*. New York: Oxford University Press.
- Martin, J.C. (1996). Determinants of functional health of low-income black women with osteoarthritis. *American Journal of Preventive Medicine*, 12, 430-436. [[MEDLINE](#)]
- Maulk, K.L., & Schmidt, N.K. (2004). *Spiritual Care in Nursing Practice*. Philadelphia: Lippincott Williams & Wilkins.
- Miller, W.R., & Thoresen, C.E. (2003). Spirituality, religion, and health. *American Psychologist*, 58(1), 24-35. [[MEDLINE](#)]
- Reed, P.G. (1986). *Spiritual Perspective Scale*. Unpublished instrument, University of Arizona.
- Reed, P.G. (1987). Spirituality and well-being in terminally ill hospitalized adults. *Research in Nursing and Health*, 10(5), 335-344. [[MEDLINE](#)]
- Reed, P.G. (1992). An emerging paradigm for the investigation of spirituality in nursing. *Research in Nursing and Health*, 15, 349-357. [[MEDLINE](#)]
- Venes, D., ed. (2005). *Taber's Cyclopedic Medical Dictionary*. Philadelphia: F.A Davis.
- Walsh, K., King, M., Jones, L., Tookman, A., & Blizard, R. (2002). Spiritual beliefs may affect outcome of bereavement: Prospective study. *British Medical Journal*, 324, 1551-1554. [[MEDLINE](#)]
- Yi, M.S., Mrus, J.M., Mueller, C.V., Luckhaupt, S.E., Peterman, A.H., Puchalski, C.M., & Tsevat, J. (2007). Self-rated health of primary care house officers and its relationship to psychological and spiritual well-being, 7, 9. [[MEDLINE](#)]