Mixed Methodology Approaches to Exploring Spiritual Transformation

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Abstract

Research suggests that spiritual transformation, a change in the way a person considers the sacred, can change medical outcome (Pargament, 2006) Psychometric studies have failed to identify specific factors, but qualitative reports detail an experience that can be reliably shown to have an impact. We report on the development of a rubric for quantifying levels of spiritual transformation. Narrative analysis techniques were used to quantify levels of spiritual transformation from participants' life stories, experience with traditional healers, and subsequent medical status. A quantification rubric was developed and 111 assistants rated the stories after a three - hour training session. Inter - observer reliability was 0.87 (95% CI, 0.72 to 0.97, p < 0.001). Findings suggest it is possible to develop reliable coding scenarios that independent raters can follow to use in research to quantifiably assess spiritual transformation.

Keywords

Spirituality, Medical Outcome, Narrative, Narrative Analysis, Traditional Healer, Mixed - Methodology

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Research suggests that spiritual transformation, a change in the way a person considers the sacred, can change medical outcome (Pargament, 2006) Psychometric studies have failed to identify specific factors, but qualitative reports detail an experience that can be reliably shown to have an impact. We report on the development of a rubric for quantifying levels of spiritual transformation. Narrative analysis techniques were used to quantify levels of spiritual transformation from participants' life stories, experience with traditional healers, and subsequent medical status. A quantification rubric was developed and 111 assistants rated the stories after a three-hour training session. Inter-observer reliability was 0.87 (95% CI, 0.72 to 0.97, p < 0.001). Findings suggest it is possible to develop reliable coding scenarios that independent raters can follow to use in research to quantifiably assess spiritual transformation. Keywords: Spirituality, Medical Outcome, Narrative, Narrative Analysis, Traditional Healer, Mixed-Methodology

"Long before science-based health care professions, people were served by culturally defined healers. The functions of healing were often blended with those of spiritual leadership within the community" (Miller & Thoresen, 1999, p. 3). Culturally defined healers continue to operate in most world communities, including North America, blending to various degrees (depending upon healer and community) traditional healing practices with the dominant religion of the region. Varying by region, healers practice more or less openly and more or less in conjunction with science-based health professionals. Non-indigenous people are seeking traditional healers more often, especially for conditions with dire prognoses such as cancer, and usually after science-based medicine has failed (Mehl-Madrona, 1999; Miller, 2006). Engels (1977) helped to explain this phenomenon in his writings about the implicit assumptions of science-based medicine, which may actually not apply to chronic illness (Constantine & Sue, 2006, Mehl-Madrona, 2005; Miller, 2006; Thoresen, 1998).

Studies of Spiritual Healing

The question of religious or spiritual healing and how extensively it occurs and the degree to which it affects physiology is important. Csordas (1983) conceived religious healing as a form of discourse embodying a cultural rhetoric capable of performing three essential persuasive tasks: to create a predisposition to be healed, to create the experience of spiritual empowerment, and to create the concrete perception of personal transformation. This threefold process activates and controls healing processes endogenous to the supplicant

in healing, and either redirects the supplicant's attention toward new aspects of his actions and experiences, or alters the manner in which he attends to accustomed aspects of those actions and experiences. The result is the creation of both a new phenomenological world, and new self-meaning for the supplicant as a whole and holy person. Though Csordas was studying Pentacostal Catholics, the analysis is equally applicable to indigenous healing and directs our attention to those aspects of the treatment situation and the interaction with the healer that foster these three persuasive tasks.

Studies of Spiritual Transformation

Spiritual transformation as a formal area for study, has been defined as having a primary component, relating to a fundamental change in the place of the sacred or the character of the sacred as an object of significance in the life of an individual, and a secondary component referring to a fundamental change in the pathways that a person takes to the sacred (Pargament, 2006). Religion permits a reorganization of the values that accompany spiritual transformation (Coe, 1916). Recent research suggests that the specific ways in which people rediscover meaning in times of crisis may be less important than the process itself. The ability to re-ascribe meaning to a changed world through spiritual transformation, religious conversion, or existential change may be more significant than the specific content by which that need is filled (Marrone, 1999). Spiritual change and spiritual transformation could be important in improving physical illness.

Aboriginal Studies

This study was conducted in Canada, so we have chosen to use the preferred term, "Aboriginal" which in Canada includes First Nations, Inuit or Metis people. Of the studies reviewed on spirituality, religion, and health outcomes; only a handful relate to Aboriginal or indigenous cultures in other countries, and not of Canada's First Nations, Inuit or Metis. Aboriginal religions are oral, maintained within communities, and almost never seek converts. Some of this lack of research may relate to the emphasis of Aboriginal spirituality and healing upon whole systems and an unwillingness of traditional healers to participate in reductive tests of single elements of their healing traditions, related to strong beliefs in the need for cultural purity of practice and the desire to produce maximal benefit for those people they help. Wampold et al. (2005) provided a meta-analysis of psychotherapies and found no cases where the psychological literature reported on studies of these modes of aboriginal healing.

Aboriginal cultures tend to view health and illness as facets of life with an emphasis on health as the result of harmony and balance and healing as the move to restore harmony and balance when they are disturbed (Voss, Douville, Little Soldier, & Twiss, 1999). Disturbance can occur in all aspects of relationships to multiple layers of reality, including the spiritual. Disease is not always to be avoided, blocked, or suppressed. Rather, it may be appreciated as part of a process of personal and spiritual transformation, of what Jobst, Shostack, and Whitehouse, (1999) have termed diseases of meaning (p. 71). People become ill because something is out of harmony and balance in their relationships. This could occur in a wide range of areas, including relationships with food, the environment, family members, the spiritual world, ancestors, the Creator, work, and more. Disease is a meaningful state to help people heal. Health problems lead to a search for meaning and purpose, for living more fully and stronger within a simultaneous geographical and spiritual environment. In this view, diabetes becomes an issue of meaning.

Christopher Murray, head of epidemiology at the World Health Organization (WHO) endorses the 'diseases of meaning' categorization and makes it clear that such diseases of meaning will become the major causes of suffering and death worldwide by 2020 (Murray & Lopez, 1996). To deal with them, Murray asserts that we will need more than the usual biomedical paradigm. It stands to reason that we will need approaches that reconstitute meaning and lead to different relationships of people to each other and to environment, both animate and inanimate. This invites imagining ways to investigate bridges between science and spirituality, antiquity and modernity, and indigenous and modern cultures.

Major life shifts do occur following transformative spiritual experiences (Pargament, 1997); these include the curing of disease (Dossey, 1997). As an example of how spiritual transformation affects an illness, Garrett (1996) used the language of spiritual transformation to explain recovery from anorexia nervosa, noting that the most "recovered" anorectics question prevailing medical definitions of anorexia and clinical criteria for recovery. Anorexia and recovery are understood as the negative and positive phases respectively of a ritual of self-transformation. The people Garrett interviewed referred to anorexia as a spiritual quest (Garrett, 1996). Recovery involved a re-discovery (or creation) of a threefold connection: to self, to others, and to "Nature" (the spiritual realm). These connections were the defining features of spirituality. The negative phase of the ritualistic quest (anorexia) involved a confrontation with the inevitability of death as a condition of the positive phase (recovery) -- in which people actively choose life. Recovery constituted the active and metaphorical "rebellion" against forces of social control. Specific ritual processes effect the self-transformation from suffering to recovery – a series of steps as applicable to depression as to anorexia (Garrett, 1996). This explanation offered Garrett an insight into why a paradigm without this language might be less effective for recovery.

Methods

Since 1980, the first author has been facilitating people who request traditional healing to make contact with healers and to immerse themselves in local healing practices of that particular community. In the course of his medical practice and his research into and participation in ceremonies and traditions of his cultural heritage (Cherokee and Lakota), he has observed and participated in North American Aboriginal traditional healing experiences. He has also provided retreat opportunities in which people interact with traditional healers in a protected environment. The outcomes of 105 people who participated in retreat experiences, have been described elsewhere (Mehl-Madrona, 1999).

Our study took place in the context of an approved ongoing study on Spirituality in Health Care conducted at the University of Saskatchewan, in Saskatoon. The study design utilized questionnaires and interviews to elicit texts that described levels of spiritual transformation in those seeking health care from a variety of sources. Our aim was to explore and characterize the type and character of spiritual transformation associated with participation in a spiritual retreat, and to use grounded theory to gain insight into reports of spiritual transformation in order to develop a measure.

The study surveyed people with various illnesses who had sought out a traditional healer to assist in their recovery. Before their interaction with the healers, participants were asked to write their life story and a separate story about the life of their illness, from both their perspective and that of the illness. Interview questions were seen as guidelines to elicit a narrative as is common in narrative inquiry methodology. The questions reflected Pargament's (2006) understanding of the qualities of primary and secondary spiritual

transformation, and included: "Did you gain any new awareness or perspective," "Did your sense of how to pursue the sacred (your own particular path toward the sacred) change? If so, how? How much," "Are you different in any way after having this retreat experience? In what ways," "Has your sense of what is sacred changed? If yes, how," and "Has your sense of your own spiritual path changed? If yes, how?" These answers were reviewed and discussed with the participant. At the end of the work with the traditional healer, this exercise was repeated and the stories were compared. Other questions were asked to flesh out the story of what occurred during the encounter with the healer. How did the person see things differently now that they have completed the healing? How have their plans changed?

Qualitative data available for consideration was at the discretion of the participant, and included the participants' life stories written before and after the healing, their written journals, their exit interview, and transcriptions of follow-up telephone interviews. The participants' life stories ranged in length from one to over 50 pages. Participants were contacted at regular intervals (usually every six months) after their work with the healer for updates to the story of their unfolding lives. The people described here all continued with the study and contributed outcome data for up to five years following their healing encounter.

Analytic Method

The first author applied Schatzman's (1991) grounded method of "dimensional analysis," as interpreted by Kools, McCarthy, Durham, and Robrecht (1996) and Cunningham (2005) to the available stories. This method was developed to consider data from a perspective where it would be possible to use experience and expertise to identify salient items that could be considered dimensions for analysis, establish their relationship to each other and sequence them in a logical way (Schatzman, 1991).

Identification of Dimensions

The key process in dimensional analysis is naming the main components and describing their various attributes and relating their salience (Schatzman, 1991). The goal was to cluster the final number of categories into a smaller number of dimensions. Unlike the "blank slate" approach assumed in some grounded methods, prior knowledge is acknowledged as an important part of theory building in dimensional analysis, (Strauss & Corbin, 1990). The first author therefore guided the determination of the initial dimensions.

The dimensions that emerged to differentiate levels of spiritual transformation were:

1. Report of major changes in sense of self, beliefs, quality of life.
2. Increased sense of security, protection, and peace.
3. Increased sense of joy, happiness, and wellbeing.
4. Increased sense of belongingness in the Universe; a sense of containment; a sense of connectedness with the spiritual world.
5. Increased sense of guidance and inspiration from spiritual sources.
6. Increased faith and hope.
7. Degree to which participants reported the retreat to be a life-changing experience.
8. Increased sense of spirituality manifested by:
   a. Prayer more important.
   b. Connection to Nature more important.
   c. Stronger desire to feel close to God, Spirit, etc. The further requirement was that these improvements and changes were related to spirituality as defined in the

introduction.

Rating the Degree of Transformation

The researchers then worked together to use the above dimensions to create a rubric for consolidating participant stories into four larger dimensions of spiritual transformation. For each of the above 8 dimensions, the rubric specified what would constitute worsening levels of spiritual connectedness ("1") no change ("2"), mild change ("3"), moderate change ("4"), or profound change ("5"). The researchers first made a quantitative rating of the degree of spiritual transformation, following examples in the text on qualitative data analysis by Miles and Huberman (1994). A copy of our rubric is included as Appendix 1.

To facilitate the rating, the researchers wrote training stories that would qualify to be categorized as "worse", none", "minimal/mild", "moderate", and "profound" levels of spiritual transformation.

Composition of the Rating Teams

58 teams of three or more University of Saskatchewan psychology students (78 undergraduate and 53 graduate students) rated the texts as part of class activities.

The practice stories were given as guides for the raters. The researchers then chose 18 cases that expressed a wide range of ratings. These 18 cases were given to each of the teams, who used the training stories and the rubric to make their own ratings of the cases.   All study team raters made an independent categorization and majority ruled. Inter-rater reliability was calculated by having a second team rate the same data as the first team. The raters worked with this practice material until an average inter-rater reliability of at least 0.8 in pair-wise correlations was achieved (Streiner & Norman, 1989).

The following are examples of the training stories used for coding to exemplify these levels of transformation[1]:

No transformation. Thomas, from Philadelphia, was taking opioid pain medications to regulate his mood and worried about depression and occasional thoughts of suicide. His doctor and his therapist referred him, attesting that he was safe to work with a traditional healer. Thomas began the retreat with stories about his own importance (he was a powerful and wealthy man in his community). He delayed each encounter with a healer by insisting upon talking at length about himself or his problems or his family or his projects. Throughout his experience, Thomas was often talking, to the annoyance of the healers. Thomas argued frequently, had reasons why nothing would work, presented himself as too complex to be moved by the healers, and engaged in verbal sparring with them. The most transformative experience Thomas reported was that he was able to make it through his second sweat lodge without fleeing. The Yaqui healer who was involved with Thomas did a ceremony to remove his obstacles to healing, the effects of which lasted less than a day, and left Thomas complaining that the Yaqui healer had somehow traumatized him by slapping him on the back too hard. Thomas did not change after his experience. He said he was too sick, the lessons learned were not relevant to his urban environment, and he needed dental surgery. His depression didn't change, but he felt proud of his efforts and that he was able to last the entire time of his second sweat lodge. He saw the possibility of "spiritual warriorhood" that the

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[1] No one was judged as worsening as a result of the experience so no stories are presented of people getting worse.

Yaqui healer presented to him, but felt that he wasn't ready to pursue that until his dental and pain problems were resolved.

Thomas reported minimal changes in lifestyle, behavior, or emotional life. He still had his dental problems, his anxiety, his opioids, and his mood swings. He had more complaints than enthusiastic comments. He couldn't really imagine how he would continue any of the practices he had learned (prayer, ceremony, and meditation). His levels of faith, hope, and peacefulness didn't change. He didn't report specific change in his sense of spirituality. Thomas was rated as having minimal spiritual transformation. He did not experience increases in quality of life, peacefulness, or sense of belonging. He did not report receiving spiritual guidance or inspiration. The encounter was not a life-changing experience. He did not connect to nature, prayer, or God.

Mild Transformation. Morgan, from Atlanta, came for a problem with chronic sinusitis of 18 years duration. She continually questioned how the practices could help her sinuses clear. Consistently the Native healer who helped us insisted that their clearing was unimportant. What mattered was to feel connected to the world of nature around her and to the spirits. She struggled with her need for an intellectual understanding of how the practices would help her versus what the healers ask her to do – to abandon her self to the process. In a sense, they were asking her to lose herself and her identity, which was hard for her to do. In the sweat lodge ceremony before her last day, her left sinus drained, which she labeled a minor miracle. Then just as she was leaving, her right sinus cleared and she breathed normally for the first time in years. She was astounded. The healer encouraged her to take it in stride, because things could change in a moment. She was urged to continue her practices in a mindset of unconcern for if "they worked." She continued to struggle with this on her return home and came back to the practices when congestion returned, losing her motivation when health took over. Her understanding of the spiritual dimension remained on the level of technique rather than life changing experience.

Though Morgan was skeptical, she participated with the healer. She described feeling some degree of difference after the experience and was somewhat enthusiastic about her experiences. She was unsure if she would continue the practices but was considering doing so. Immediately upon returning home, she did take up dancing. Her sense of faith, hope, and peacefulness did improve somewhat. Her sense of spirituality was mildly different.

Moderate Transformation. Mary, from Chicago, came with a diagnosis of bipolar disorder and had been on medication for years. The healer with whom she worked was not impressed with the diagnosis and proceeded to teach her life-sustaining and spiritual practice skills, as well as pray for her wellness. Mary stopped worrying about the outcome and embraced the practices. She found herself feeling an intensity of emotion that had never been present for her before. She felt connected to the land, the mountains, and the animals. Coyotes sang for her. The wind talked to her. She found herself having a conversation with a great-great grandmother and neglected to wonder if it was real. She took to the practices with fervor and found that her value system was evolving. On her return home, she quit a job that she had found oppressive. She re-created her life to have more meaning and purpose. She started a healing circle in her community so that others could support her in continuing and so that she could share what she learned from others. She returned twice, one year apart. On her last return, she was studying to become a healer so that she could return the gifts she had found to others. She was long since off all medications, including the benzodiazepines she had taken for over 20 years. She felt like a new woman.

Profound Transformation. Noelle, from Los Angeles, came with a diagnosis of metastatic colon cancer. She felt lost. She had been raised Roman Catholic, but had lost her faith in that religion. Saint Teresa had been her patron saint as a child. She felt a close connection with that saint. She had busied herself with a husband who traveled extensively to

Africa setting up an international business while she raised their four children at home and worked in the town where they lived. She resented him for his absences and felt that her job was stressful and meaningless. The cancer had almost been a relief in that it gave her permission to quit her job and focus on the prayers, contemplation, and ceremony.

She prayed in the sweat lodge ceremony for her multiple liver tumors to converge into two larger tumors that could be removed.

The next night, the Yaqui healer did a ceremony to remove the spirit of the cancer from her body. In the midst of his rattling and chanting over her, the clouds appeared to take on the image of a face. We smelled roses. Noelle looked up and said, "There's Saint Teresa. I smell her roses. Now I'm healed". From that moment on, she was convinced that her prayers had been answered. On her return home, the oncologist was amazed to find that her tumors had in fact converged into two resectable ones. Surgery was scheduled. Afterwards, she dove into the practices she had learned on the retreat and renewed her Roman Catholic faith in a form that seemed to work for her. She started a new kind of work that paid less, had less status, but made her feel valuable in a different way than she had previously lived.

After a year, she began to diminish the intensity of her practices and got caught up in family conflicts. Tumors returned in her liver. She returned for another encounter with the healer and went for alternative therapies (intravenous vitamin C). The tumors disappeared again. Her encounter with the healer renewed her commitment to her practices and to her Roman Catholic faith. She continued to struggle with the possibility of tumor recurrence but has found peacefulness and a sense of meaning that transcends whether or not the tumors will return. Noelle fully embraced the philosophy of the traditional healer and felt completely transformed. She was very enthusiastic about her contact with him and was committed to continuing what she had learned when she went home. Upon return home, she stopped working and completely changed her daily life. She related these changes to her increased sense of spirituality. She reported her faith, hope, and peacefulness as having all improved dramatically. Noelle was praying daily and feeling that her prayers were being answered. She felt more connected to Nature and a strong connection to God. She felt connected again to the spiritual realm. The raters were very impressed with the depth spiritual conviction that resulted from her encounter with a healer. She described in detail how she had rediscovered her childhood Catholicism in a way that was deeply meaningful to her.

Results

As we have reported, the degrees of change included none, mild, moderate and profound, based on scores achieved along the dimensions. The dimensions included behavioral changes (including measuring change in engagement with practices such as prayer) and accounts of change in quality of life including mood, belongingness and sense of self in the context of a spiritual paradigm. The raters who read the accounts were never more than one category apart in their determinations of the level of transformation, and the dispute was always between two adjacent categories, e.g. none and mild or mild and moderate. Where differences occurred, they were related to cases where there was some ambiguity over whether there had been a consistent change in practices and approaches and where there was ambiguity in people's self-reported quality of life.

There were seldom disagreements where the categorization was rated profound, perhaps because of a reduction in equivocal language and a clarity of expression of spiritual focus and activities in cases where profound change was measured.

Raters could reliably classify people into the four categories more than 80% of the time.

The inter-observer reliability rating of 0.87 (95% CI from 0.72 to 0.97, p < 0.001), suggests that the items were sufficiently distinct and sufficiently clear to be usable as an objective assessment of spiritual transformation by psychology undergraduate students and by health professions (including nursing, medicine, psychology, and public health) graduate students.

Discussion

Kremer and Ironson (2009) were also able to identify spiritual transformation in the lives of people with HIV but did not quantitate levels of spiritual transformation. They used qualitative content analytic methods and found that spiritual transformation occurred in a sizable proportion of people with HIV. While they found this often coincided with an enduring substance-use recovery, and an improved quality of life as indicated by enhanced gratitude, appreciation, joy, sense of peace, and reduced fear of death, but because they did not quantify, they were not able to assess the level of spiritual transformation that might impact the medical outcome of HIV. Vieten, Amorok, and Schlitz (2004) also used qualitative methods to characterize types of spiritual transformation but did not quantify the level of depth of spiritual transformation. Benjamin (2005) used a similar approach as we did to quantify dangerous levels of cults, but not levels of depth of spiritual transformation. Cole et al. (2008) measured spiritual transformation subjectively through self-report and 'objective' reports only from family members. McDonough-Means, Kreitzer, and Bell (2004) write about the importance of investigating the mediators of "healing presence" and propose a similar method for assessing healing presence as the one we followed. We were able to develop scenarios for rating spiritual transformation which could be reliably applied by others. These scenarios provide a means to rate levels of spiritual transformation in an ordinal fashion so that quantitative methods can be used.

It will be useful to test this measure in the future to see whether relationships can be parsed between degree of behavioral change, including increased solicitation of spiritual guidance and increased level of spiritual practices such as prayer or ceremony, and the reports of the well being measures such as increased sense of belonging and a sense of faith and hope.

Discussion of the connection between these measures and medical outcome is being explored in a second paper in preparation by the authors (Mehl-Madrona, Pickren-Valenti, & Mainguy, in preparation).

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Appendix One

Raters Rubric for Level of Spiritual Transformation

Dimension	Rating of "1"	Rating of "2"	Rating of "3"	Rating of "4"	Rating of "5"
Change in sense of self, beliefs, quality of life	Quality of life described as worse, more pessimistic, self-sense more fragmented	No evidence of any change	Minor improvements in quality of life, optimism of beliefs, sense of self integrity	Moderate improvements in quality of life, optimism of beliefs, sense of self-integrity	Profound, dramatic change in quality of life, optimism of beliefs, sense of self-integrity
Sense of security, protection, and peace	Less security described, more sense of danger, more sense of conflict	No evidence of any change	Minor increase in sense of security, feeling of being protected, feelings of peacefulness	Moderate increase in sense of security, feeling of being protected, feelings of peacefulness	Profound, dramatic increase in sense of security, feeling of being protected, feelings of peacefulness
Sense of joy, happiness, and wellbeing	Less joy, more sadness, more sense of dis-ease.	No evidence of any change	Minor increase in joy, happiness, and sense of well-being.	Moderate increase in joy, happiness, and sense of well-being.	Major, dramatic increase in joy, happiness, and sense of well-being.
Sense of belong in the Universe, sense of containment, feeling connected to the spiritual dimension	More isolation, alienation, sense of disconnection from spiritual dimension or doubt that there is a spiritual dimension	No evidence for any change.	Minor increase in sense of belonging in the Universe, feeling positively contained by spiritual beings, and feeling connected to the spiritual dimension	Moderate increase in sense of belonging in the Universe, feeling positively contained by spiritual beings, and feeling connected to the spiritual dimension	Profound, dramatic increase in sense of belonging in the Universe, feeling positively contained by spiritual beings, and feeling connected to the spiritual dimension
Sense of guidance and inspiration from spiritual sources	Less sense of guidance and inspiration	No evidence for any change.	Minor increase in sense of being guided and inspired from spiritual sources.	Moderate increase in sense of being guided and inspired from spiritual sources.	Profound, dramatic increase in sense of being guided and inspired from spiritual sources.
Sense of faith and hope.	Less faith, more hopelessness.	No evidence for any change	Minor increase in faith and hopefulness.	Moderate increase in faith and hopefulness.	Profound, dramatic increase in faith and hopefulness.
Report of life-changing experience	Change reported for the worse	No change reported	Minor change reported	Moderate change report	Profound, dramatic powerful life change reported.
Sense of spirituality	Prayer less important, less connected to Nature, less desire to be close to Spirit	No change reported	Minor increase in importance of prayer, connection to Nature, desire to be close to Spirit (God, etc.)	Moderate increase in importance of prayer, connection to Nature, desire to be close to Spirit (God, etc.)	Profound, dramatic increase in importance of prayer, connection to Nature, desire to be close to Spirit (God, etc.)

Author Note

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