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Prepublication Draft

**Ordinary Spiritual Experience:
Qualitative Research, Interpretive Guidelines, and Population Distribution for the Daily Spiritual Experience Scale.**

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Abstract

The Daily Spiritual Experience Scale (DSES) is an instrument designed to provide researchers with a self-report measure of spiritual experiences as an important aspect of how religiousness/spirituality is expressed in daily life for many people. The sixteen-item scale includes constructs such as awe, gratitude, mercy, sense of connection with the transcendent, compassionate love, and desire for closeness to God. It also includes measures of awareness of discernment/inspiration and transcendent sense of self. This measure was originally developed for use in health studies, but has been increasingly used more widely in the social sciences, for program evaluation, and for examining changes in religious/spiritual experiences over time. It has been included on the U.S. General Social Survey (GSS), and the items have shown high prevalence in that population. The challenge of identifying items that tap the underlying constructs was addressed through qualitative methods, both in the development and testing of the instrument. Translations have been made into Spanish, Korean, Hebrew, Vietnamese, and French, and the scale has been effectively used outside the United States. Detailed discussion of item construction based on qualitative work is given to assist in use, interpretation and translation development. Options for scoring and suggestions for exploring correlations with other variables using individual items and subgroups are also presented.

Introduction

The Daily Spiritual Experience Scale (Underwood and Teresi 2002) is a sixteen-item written self-report measure designed to measure ordinary or “mundane” spiritual experiences, not the more dramatic mystical experiences such as near death experiences or hearing voices or seeing visions. It measures experiences of relationship with and awareness of the divine or transcendent. It measures how beliefs and understandings are part of moment-to-moment features of life from a spiritual or religious perspective. This paper has three main purposes. First, it aims to facilitate use of the DSES, interpretation of results, and translations of the instrument by providing background on the conceptual and qualitative development of the DSES and examples of studies using it. Second, it aims to contribute substantively to various discussions about measurement and the multidimensional construct of religiousness/spirituality through the description of the evolution of this instrument. And finally, it aims to present some of the details of the qualitative work and quantitative data from the U.S. General Social Survey (GSS) that are, in and of themselves, informative about the nature of spiritual experience.

Context of this measure: Religiousness/Spirituality. The DSES was originally developed in the context of an initiative to compose a multidimensional measure of spirituality/religiousness that could be effectively used in health studies targeting various domains of religiousness/spirituality. This larger multidimensional measure, funded jointly by the National Institute on Aging of the National Institutes of Health and the Fetzer Institute, is increasingly used in many studies of health care (Idler et al. 2003). As the group of social science researchers reflected on which domains were appropriate for inclusion in that initial set of multi-domain instruments, they decided to include: Religious Social Support, Religious Coping, Private Practice, Public Practice, Meaning, Values, Beliefs, Religious/Spiritual history, Denominational/Traditional Affiliation, and Commitment. As the list became solidified and psychometric measures of those domains were filled in, a gap appeared. As a member of the group, Underwood noted that “mundane” or ordinary experience of the transcendent or sense of the divine was not explicitly included, and that this experience might be particularly salient for health. Underwood had spent much time studying psychosocial factors such as stress and social support and edited textbooks detailing how these factors are and should be measured and how they affect health (Cohen, Kessler, and Underwood 1997; Cohen, Underwood and Gottlieb 2000). In that context, the nitty-gritty of daily inner attitudes and feelings seemed an important aspect of people’s spiritual/religious lives. At the invitation of the group, Underwood rapidly developed such a measure of “daily spiritual experiences” so that that domain could be included in the brief multidimensional measure that was needed immediately for use in a variety of studies, and for inclusion in a national social survey, the GSS, conducted every two years by the National Opinion Research Center (NORC) at the University of Chicago. Simultaneously with this, a full sixteen-item version was developed and has been used in many studies (Underwood and Teresi 2002).

A key intention of Underwood, as a major organizer of the working group developing the multidimensional measure in 1994, was to heal some of the fragmentation that was beginning to develop in the field of scientific study of religion, as social science and medical researchers who had not been doing religion research began to gravitate towards the notion of “spirituality.” Most of the research up until that time had focused on the study of “religion,” with a broad definition of that term. Much of the data at the interface of health and religion had emphasized the positive relationship of frequency of church attendance to health, an explicitly “religious” measure and an implicitly social one. Attendance at religious services, however, forms only a small part of how religious orientation expresses itself in people, omitting domains such a commitment, beliefs, and private practices such as prayer and meditation. Meanwhile, the concept of “spirituality,” both within religions and without, was gaining in usage. In the early 1990’s, many researchers in both the health and social sciences, most of whom were not religious themselves, were more comfortable with the word and concept of “spirituality” than with explorations of religiosity. But also at that time, the word “spirituality,” for many religious people, often had a “New Age” connotation. Thus, another issue was how to actually define “spirituality.”

Since that time, general usage of the word “spirituality” has spread, and its meaning and that of “religiosity” have changed in general usage. The phrase, “I am spiritual but not religious,” is becoming familiar, often supported by scientific survey research which has frequently encouraged the dichotomization of those constructs. The DSES was constructed as a scale that allows for an “overlapping circles” concept of religiousness/spirituality. A few people are engaged in religious activity with no spiritual sense of it—for example a person who goes to church, reciting the creeds aloud, in order to make contacts for his insurance business. Most people nest their spirituality in some sort of religious faith, wording, and/or activities (spiritual and religious). And a relatively small group of people have a spirituality that is not historically or presently connected to any form of religious belief, activity, or concepts (spiritual but not religious). Various authors have tackled refinement of these definitions (Zinnbauer et al. 1997, Hill and Pargament 2003). In this paper, “religiousness” will refer to a person’s relationship to a group of people who believe in a like-minded way, adhere to a common set of beliefs, and share

group affiliation and practices. The word itself has been gaining more negative connotations. For example, one hears the statement “science has become a religion for many,” and probably hears a negative connotation. “Spirituality” has many fluctuating definitions. When connected to a religious context, it can express the more personal or intrinsic dimension of the religious life, for example a personal relationship to God, or a set of practices in the personal life aimed at cultivating compassion. In particular traditions, it can refer to specific streams of belief and practice, such as Ignatian spirituality, Franciscan spirituality or particular types of Buddhist practice, that are manifested differently. I have encountered over two hundred different definitions of the word. When the word “spirituality” is taken out of the religious context it can become so vague as to ultimately become meaningless. But it generally points to aspects of personal life that include the transcendent, “more than” what we can see or touch or hear.

Another way of referring to the overlapping circles construct is “religiousness/spirituality.” This phrase was used in the multidimensional measure described above. It has the benefit of referring to the “overlapping circles” and allowing for the fact that this is a multidimensional construct that is still in the process of analysis as instrument development and testing proceeds and language evolves. “Religiousness/spirituality” has been adopted by a variety of groups over time and has proved especially useful in National Institutes of Health contexts. A group gathered together by the Office of Behavioral and Social Research (NIH) in the late 1990’s to develop position papers in this area used religiousness/spirituality in many of the summaries (Miller and Thorsen 2003). It was also useful in the formative stages of the development conferences as the National Institute on Alcoholism prepared its Request for Proposals in this area.

The importance of these issues is highlighted as others interpret research in areas such as religion and health, making sweeping claims such as: “Religion is good for your health.” Specificity about the measures used, using measures in a targeted manner, and clearly defining exactly what each measure contributes will lead to less confusion and better selection of interventions or implementations of practice. This approach has been very helpful in the field of social support measurement and intervention development (Cohen, Underwood and Gottlieb, 2000).

References to the DSES in discussions of spiritual and religious variables within the social sciences demonstrate the value of the constructs that the DSES is tapping and the relevance for the general field of study (Keeley 2004, Stuber and Houskamp 2004, Richards et al. 2003, Egbert et al. 2004).

Methodology

Qualitative Research—Approach and Methods: In some ways, the construction of the DSES was like a translation, taking specific ideas from theological and religious texts and reports and from experiences of individuals and putting them into words that were easily understood and able to touch similar experiences in others. People of different religious persuasions, educational levels and cultural contexts needed to find that the instrument’s language elicited in them various experiences of relationship with and awareness of the divine. The goal was to create an instrument that both touched ordinary individuals and could be understood to be valuable and inclusive by investigators in health studies, many of whom were agnostic or atheist. The instrument was designed both to get at breadth of experience found in various religious and spiritual traditions and also assess the depth of that experience.

Increasing attention is being paid to the need for measures of spirituality and/or religiousness that address the psychological experiences of individuals alone and in groups (Emmons and Paloutzian 2003; Hill and Pargament 2003). The Daily Spiritual Experience Scale seems to do that well and has been shown to predict outcomes more effectively than many other measures (Koenig, George and Titus 2004; Koenig et al. 2004; Parker et al. 2003; Zemore and Kaskutus 2004). The DSES also lends itself well to studying change over time, as variability can be documented. For example, it was used in a daily diary study of pain quite effectively (Keefe et al. 2001), and a study of effects of meditation on pain tolerance (Wachholtz and Pargament 2005).

It is important that this instrument not be called a “measure of spirituality.” As noted, “spirituality” itself has far too many different usages. Any complete operational definition of “spirituality” would need to consider the inclusion of beliefs and practices and other factors. This instrument measures subjective experiences that form an integral part of daily life for many ordinary people. The goal of this instrument was to obtain a measure of the spiritual life as it plays out in the experiential and emotional details of daily life. The experiences tapped by this instrument are feelings and sensations, rather than cognitive awareness of specific beliefs. For many people these experiences may have a highly charged emotional tone, for others, the sensations may seem less specifically emotional, and more like direct sensation. Some of the feelings that the DSES is attempting to capture can be best articulated using religious language; some do not require explicitly religious language. Some feelings or direct sensations are considered more important for particular religious traditions than others. Thus a breadth of particulars was included such as a sense of awe, a sense of thankfulness, feelings of compassionate love, mercy, and desire for divine closeness. It was not expected that everyone would have all of these experiences but it was hoped that the spectrum would cover the variety present.

In the design of the original items in this scale, I tried to identify aspects of the mundane daily felt experience or sense of the spiritual as it can manifest itself throughout life, and used theological works, works in comparative religion, my own experience, and lots of general interviews and reading to construct items. (For more detail on theoretical background see Underwood and Teresi 2002.) I tried the items on myself, colleagues, friends and on people from as many orientations as I could find. I tried to get at what is really true for people, a reporting of experience that is true to what motivates the person to action and is an intrinsic part of internal processes. To do that I used words, sometimes in a way that was more poetic than analytical, which better enabled me to tap the underlying construct. The idea is that the words used in the question elicit memories of feelings and events relevant to the concept or feature of interest. So the draft set of items was built on a set of constructs that were considered important, and then items were developed to tap those constructs and refined through interviews and feedback. This technique provided content validity, which has been borne out by the subsequent usefulness of the scale.

After constructing a draft set of items, I did a series of structured interviews and convened a focus group using a draft version of the items, in order to specifically address whether the items tapped the intended aspects of spiritual experience. Following evaluation of those, I developed the final form of the instrument.

The first set of interviews was with a population sample from Chicago, collected at Rush Medical School as part of an on-going group for preventative health study. They included people from a wide variety of religious and non-religious backgrounds, educational levels, and ethnic groups. This was particularly important as I wanted the items to be in a language understandable by all. I had designed them with that in mind, but only by testing could I know for sure. Following these interviews, I needed to fill out the demographics, and to do that I interviewed an additional group in Michigan, ending up with a total of 34 initial interviews.

The second major set of interviews was with Trappist (Cistercian) monks and with a selection of Benedictine monks. I had interviewed the Cistercian monks in an earlier project on the nature of compassionate love and the internal mechanism of its daily expression, and found their insights into motivation and spiritual process quite helpful (Underwood 2005). This set of eighteen interviews provided feedback on the completeness of the set of items and the relative importance of the underlying constructs and was useful for guiding future work and interpretation of results.

I also did some abbreviated interviews (which are not discussed in detail in this paper), including a group of students aged 9-15, a group of college students, and a working group gathered for a World Health Organization (WHO) project on spirituality, religiousness and personal beliefs as a contributor to quality of life. The WHO project included people from eighteen cultures and all major religious traditions and a number of minor ones (Saxena et al. 2002). The DSES items were used as a springboard for discussion and item development for that working group. These interviews and group discussions also provided feedback on language and conceptual clarity in the context of specific religious and cultural approaches not represented in the U.S. sample.

The main interviews were structured as follows. Following a brief introduction to the possible uses of the instrument and the role of these interviews in the development process, the full set of items was administered, plus two additional items at the end: "Do you consider yourself a religious person? Do you consider yourself a spiritual person?"

Then, for each item, each person was asked, "Did you find it easy to understand what was being asked? Were there any particular problems with any of the words or the way the item was stated? What were they?" Each respondent was asked to tell what daily events, thoughts or perceptions he or she considered as he tried to tally the frequency of response. They were also asked to identify what was provoked in terms of particular thoughts, feelings, and incidents, as they tried to answer the question. By asking these questions, the precision of feelings, the detail of experience, and the kinds of environments and events surrounding them were drawn from the people interviewed.

The tone of such interviews was important. There needed to be a respectful attitude towards the experiences of those with whom one might not agree and for experiences one has not had oneself. The interviewer needed to leave lots of space to allow for elaboration. A level of trust needed to be established as the topic and experiences are often very personal. Soliciting disagreements and problems by probing, and welcoming them when presented, were critical to the success of the interviewing for informing instrument development and interpretation.

Particular concerns or questions with particular items had to be addressed. Also, general issues that might indicate potential problems overall were addressed, such as how exactly the substitutional possibility for the word "God" (see discussion of the specific items below) worked for the interviewee. Interviewees were also each asked why they considered themselves a spiritual person, a religious person, or neither. Finally input was sought on whether there were any qualities left out that they thought crucial and whether the ones included were important.

The results presented below give overviews of the interview results from the general populations sample and from the monastics, highlighting particular issues of concern and giving some direct quotes.

Results

The major focus of this paper is on the qualitative interviews involved in the development and testing of the instrument. This will include 1) general issues that emerged in and were resolved by the interviews, and 2) item by item discussion of meaning and wording.

Data from the GSS will be presented to help with overall context and provide an example of distribution in the US population. The GSS has base funding provided by the National Science Foundation. The survey, which is currently conducted every two years and has been in existence since 1972, does an excellent job of drawing on a random sample of the US population, making a good effort to represent the proportion of various religious, ethnic, age, socio-educational and geographic groups as in the US population. All sixteen items were placed in the 2004 GSS, with a sample population for the DSES items of 1329. The distribution of responses and percentages from this is presented in the table. Eight of the items (two in combined format) had been put on the GSS in 1998, with a sample size of respondents of 1145 people. The 2002 sample included the two compassionate love questions added, with responses from 1323 people. It is hoped that this paper will help others in the further analysis of the data from those surveys, which are in the public domain. The broad spectrum of responses on the GSS in past versions and in other studies continues to confirm the lack of skew of these items (Underwood and Teresi 2002), with a nice distribution over response categories, which was reassuring regarding the possibility of social desirability responses and concerns about accessibility of the items.

General issue: “God.” One original challenge was whether and how to use the word “God.” Very often measures in the social science of religion are either explicitly framed in religious language or leave it out altogether. Intentionally in this measure, half of the items included non-God words so that the questions could be accessible also to those who are not comfortable with the word. In the Introduction, subjects are invited to replace the word “God” with some “other word or phrase which constitutes the divine or holy for you.” This proved useful to some people who were not religious or for whom connotations associated with the word “God” did not point to the divine. For one college student being interviewed, the word “God” meant an old white man on a cloud, and this was not the being she understood herself relating to in the questions, so she preferred to substitute the word “divine.” In an example of a different issue, one woman stated that she was an atheist. Nevertheless, that phrase enabled her to use the word “God” as a place marker for a sense of the divine, which was a real feature in her life as evidenced by her responses to the Daily Spiritual Experience questions, even though she stated that she did not believe in God. The group interviewed included atheists and agnostics in addition to people from various religious groups. The original respondents were not a random sample but by intent included a wide spectrum of religious and spiritual views and personality types and ages.

The only groups for whom the word “God” frequently creates conflict, confusion or other problems are Buddhists and many of the atheists. For those groups, there are a number of non-God items on the scale to which they can respond in a way that captures their spiritual experience. And then they can answer “never” or “almost never” to the God items. But for most people the word “God” is superior to a words like “higher power,” “divine,” or “transcendent.” When other words were tested in the place of “God,” the result was that the scores on those items reflected lower frequency of occurrence. When interviewing the various individuals, the word “God” was highly preferred as the mode of capturing the experience of relating to the transcendent. Focus groups addressing this issue among others were conducted with inner city African-American adolescents in an alcohol risk behavior study, and the reply to the use of the term ‘higher power’ in place of God in questions was “Do you mean God, then why not just say it!” from both religious and non-religious youth (Goggin 2003). Ultimately the concept of the divine for most people is ineffable, but rather than being accurate in the abstraction, it is more effective to use a word which may be approximate but is particular enough to elicit experience, and then allow for substitution.

General issue: Feeling, experiencing. The word “feel” is used in a number of the items. Although I tried to vary the wording, when I replaced “feel” with “sense” or “experience,” it became less understandable to many. “Sense” is probably the more accurate word in terms of the construct, as the experiences in the scale do not necessarily have intense emotional valence. In this regard, frequency rather than intensity is a good marker for response categories, as even mild sensations “count” in reporting experiences.

A few of the monks who were interviewed said they would prefer the word “sense” or “experience” to the word “feel.” However, “sense” or “experience” proved to be less accessible to the general population sample, particularly those of lower socio-educational groups. So the compromise in the end was to keep the word “feel.” If the word “experience” was used, given the interview feedback, I would expect that response rates for males might increase slightly, and rates for lower socioeconomic groups and females overall would decrease. However male-female scores are not so different on the GSS results to indicate any dramatic kind of shift. So a compromise word ultimately was one that would appeal to the widest group. And even though a few monks said that they were not so comfortable with the word “feel” in a number of items, they were still able to answer it, by somehow translating that

word internally when answering the question.

Introductory Instructions: The introductory instructions are key in a number of ways. The introduction needs to be placed prominently and people need time to read it thoroughly, or it needs to be read aloud. The introductory comments are designed to create a relaxed environment, to instill a sense of respect for the respondents' unique experiences, and to lower the social desirability responses. Thus one point made in the introduction is that these are neutral items that one may or may not experience, and that there are no "right" or "better" answers. The items themselves were constructed to reinforce this quality, and the interviews indicated that it seemed to be conveyed. I asked explicitly whether people felt that some of the answers were more "right" than others, especially in the context of discussing particular questions, and, in general, respondents seemed to feel content with giving answers across the spectrum.

There are no negatively valenced items in the scale. Originally, negative spiritual experience was considered for inclusion. But as particular items were conceived, it seemed that negatively valenced items tapped an orthogonal construct, not the flip of the experiences mentioned here. In the meetings with the WHO group there was much discussion from those representing cultures in Africa, Asia and South America in particular of the importance of negative spiritual experiences to undermining quality of life, underscoring that one could not just assume that these experiences were positive. However, to look at negative spiritual experiences would be the job of another scale. This scale provides adequate space for people to be comfortable reporting an absence of the spiritual experiences.

Items: Connection. *1. I feel God's presence. 2. I feel a connection to all of life.* Connection with the divine or transcendent is important in both Eastern and Western traditions and also in people's notions of "spirituality" in a more generic way. Two items were particularly selected to address connection. One ("I feel God's presence") was expected to tap predominantly theistic ways of seeing daily interactions with the divine. The other item ("I feel a connection to all of life"), although possibly relevant for the theistic group, was designed to particularly tap that sense of connection considered important for Buddhists, Hindus, many indigenous religious groups, and others. Connection was also highlighted in this instrument because of its initial construction for use in health studies. The importance of social relationships in mental and physical health has been confirmed over time (Cohen, Underwood and Gottlieb 2000). Other items in the instrument assess the sense of spiritual support, both practical and emotional.

The interviews confirmed that the item "I feel a connection to all of life" is less frequently reported and less easily understood by those who have a Jewish, Christian, or Muslim religious understanding of their spiritual experience than by atheists or agnostics. Although many people of these religious backgrounds did experience connection frequently, a substantial number found this experience not one they easily related to. A number of interviewees could not easily see how this might be expressed in daily life, but understood what it meant overall. However this item was retained because for a significant subgroup this was very important to their spiritual life, and theoretically it addresses non-monotheistic religious and spiritual perspectives. Words used to describe this experience might include "merging with the infinite, a sense of oneness with all," but people who had this experience frequently thought the "connection to all of life" phrase captured it for them. Two people reported this happening in nature, and it was often connected to a belief in interconnectedness and a conscious choice. Items such as this one also increased the appeal of the instrument for those seeking a spirituality measure of some kind that addressed people with a range of beliefs. In the 2004 GSS, 35% of respondents reported experiencing this from many times a day to most days, and 13% never or almost never. (See the Table for mean scores for various individual items.)

The other item, "I feel God's presence," describes connection in more theistic terms. For those who experienced this, the sense was somewhat indescribable. Nevertheless, as can be seen from the GSS 2004 data, 37% of the US population experience this many times a day or most days, so this feeling is not uncommon. On the other hand 22.4% of the population never or almost never experienced this. The permission to substitute some other term for the divine for "God" increases the response to this item. A sample representative description of this item by someone who had this experience was that it was a strong sense of "not being alone, being accompanied." Another description for this item, by one of the monks, was sensed connection with a "ground of being." Another person had a sense of a personal being with human qualities somehow there with them. Someone described being tired and waiting for the bus home, and having the experience of "God's presence, right there, with me, and this happens a lot."

Item: Joy, Transcendent sense of self. *3. During worship, or at other times when connecting with God, I feel joy which lifts me out of my daily concerns.* This item was aimed at detecting moments of self-transcendence that were spiritual/religious in nature. The goal of the items was to exclude moments of "zoning out" without a religious or spiritual nature. This item uses a specific example of worship, but also taps into experiences of the spiritual-but-not-religious group, as they sometimes reported feeling this connecting with the divine when out in

natural settings, and could reply with frequent experiences here. A number of people reported that the spiritual experience of worship—especially singing and speaking aloud, and body movements—can have a strong experiential component, connecting the cognitive belief with spiritual feeling. Even though, in the interviews, most people did not report feeling this during actual worship services, the example of “worship” placed the sense of “transcending” concerns in a spiritual context. People in the general sample, including the younger age group, felt this during a variety of situations such as prayer, during a walk in nature, singing in church, or in the midst of the ordinary events of the day.

The responses to this item were somewhat different in the monastic interviews. One eighty-year old monk, who had been in charge of practical details of the monastery for many years, said that although he got the point of the question, he didn’t need to be “lifted out” of his daily concerns, but that joy was found in the midst of them, a valid point, particularly given the Benedictine spiritual approach. Also, since the importance of worship is so central to the Trappist and Benedictine communities, one monk felt that this link to joy was too limiting, as there were other much more important qualities that emerged in the worship experience. For example, one felt that the prayers of the community together have more power, and he felt carried by the community in joint worship, and making the bond with others stronger. These observations suggest future items that might be added.

In the 2004 GSS, 44% of the population reported that they experienced this many times a day to most days, and 14.3% report never or almost never experiencing this.

Items: Strength and Comfort. *4. I feel strength in my religion or spirituality. 5. I feel comfort in my religion or spirituality.* Conceptually the experiences of strength and comfort differ. In the interviews, too, the same person often gave examples that showed the differences between these two experiences. Comfort was reported to be associated with a feeling of safety in danger or in vulnerable situation and a general sense of security. Strength enabled people to be courageous, to step out in difficult situations and do what they would not ordinarily feel confident doing. Comfort examples were experienced during moments ranging from loss of a child to failing an exam. Strength examples included a single mom from the inner city coming home exhausted after a day’s work and being more able to look after her children, or an older workman being willing to confront his boss on an ethical issue despite fear of job loss. The monastic interviews also confirmed the difference between these two experiences. Finally, both items did seem to be a critical part of many people’s daily spiritual experiences.

The original six-item scale included in the Multidimensional Measure used the combination item “I find strength and comfort in my religion.” This item had been found to independently correlate well with mortality following cardiac surgery in a study by Thomas Oxman and others (1995) when tested with other religious and social support variables. The value of this item encouraged the original development of the DSES. When the six-item DSES was first placed on the 1998 GSS, in the context of rapid ad-hoc composition of the Multidimensional Measure, this combination item was used as it helped make the case for the validity of the six-item DSES used in that context. However I do not advocate this combined item because of the distinctive experiences. Adding the phrase “or spirituality” allowed those with a religiously nested spirituality and those who do not place their spirituality in a religious context to respond positively and gave a wider capacity for response as expressed numerically, but also during the interviews. “Spirituality” enabled even those who were quite religious to recall examples more easily and was more inclusive for others. The interviews led me to maintain these as separate items, rather than eliminating one, even though the answers can be highly correlated in research studies of various kinds.

In the 2004 GSS 33.3% experienced strength in their religion or spirituality, and 29.5% comfort many times a day or most days. This was reported as never experienced by 18.8% and 19.4% respectively.

Item: Peace. *6. I feel deep inner peace or harmony.* This item was one of those that has increased the appeal of this scale for atheist and Buddhist researchers and those with target populations in these or similar categories. And yet it also can elicit experiences for theistic subjects.

Important in constructing this item was to ascertain whether the item tapped into some feeling beyond mood. I asked people when exactly they felt this, and particularly probed whether it depended on being happy or in a good mood. I asked people if they could feel this when they were anxious, stressed, or worried. This item did seem to represent something different from mood for all of those interviewed, distinguishing the answer to this item from just a feeling of general calm. One woman in particular, who had been repeatedly treated for clinical depression, said that she could have this feeling even when she was very depressed. It just was not as vivid, and took more energy to pay attention to it. One of the monks commented that “anxiety and peace were not contradictory.” The wording for this item contributes to its effectiveness in this regard. “Deep inner peace” might sound like too many words, but it is just these words that enable the question to touch the right construct. Alternative formats did not work as effectively when tested in interview settings.

On the 2004 GSS, 34.1% reported experiencing this many times a day to most days. 14.7% never experienced this.

Item: Divine help. 7. *I ask for God's help in the midst of daily activities.* John Cassian (345-445), whose writings helped shape Benedictine spiritual approaches, suggested that throughout the day one should repeatedly use the phrase “Come to my help, O God, hurry to my rescue,” to promote connection to the divine (Luibheid 1985). Ken Pargament, in his studies of religious coping, suggests that the collaborative coping style, where one works together with God, is most productive of psychological well-being (Pargament 1990). This DSES item addresses the component of “social support from God,” as a Jewish agnostic scientist at the National Institute on Aging summed it up. Even atheists may find themselves praying when an airplane they are riding in starts to have trouble, and this shows how discrepancy between belief systems and daily experience might play out here. Some of the people interviewed who responded to this item with “some days” or “once in a while” do not necessarily report believing that help will be forthcoming, but asking for God’s help was a positive experience nevertheless. The collected data indicate that people with a variety of beliefs report some experience of asking for help. The non-religious usage of vernacular phrases such as “God help us” is also interesting in this regard. This item represents something that is understood and acknowledged to occur by a wide range of the general population. Those interviewed reported this in situations varying from driving to dealing with children to work challenges.

One example particularly shows the relevance of this experience, and the dynamic it may reflect that is operating both here and in the next question. A Hispanic woman saw the incorporation of prayer as something akin to the other practical things of daily life. She cited a time when her son had been burned badly, and he wanted to wash off the burned skin. She prayed, asking for God’s help, and then received guidance that the washing was going to be good for the boy. The dead skin washed off and the skin healed well. She gave this as an example of asking for help, and being guided to act in a particular way. Other examples were usually less dramatic. Asking for help to see the right thing to do in ordinary daily events such as child-rearing and job activities and relationship issues were common themes.

It was interesting to note the high presence of this activity among the monastics even apart from that articulated in ritual form. One monk commented that this worked for him by starting the day with prayer, and then a trusting sense was engaged and followed him throughout the day.

This was frequently reported on the GSS, with 40.5% reporting doing this many times a day to most days. On the other hand, a substantial 22.3% never did this.

Item : Divine guidance. 8. *I feel guided by God in the midst of daily activities.* This item was one way of getting at what might be termed “grace” in the Christian tradition, but by allowing for substitution of an alternative to the word “God” it also proved to be accessible to those who don’t believe in God. The interviews were very interesting in informing the ordinary quality of this experience. One woman in the inner city of Chicago said that it was like being “nudged” by God at various times throughout her day, to do one thing rather than another. This summed up well a large group of the responses. The experiences this item elicited were not generally a response to a guiding principle, but a sense of allowing oneself to be gently encouraged or discouraged.

This question elicited a variety of interesting responses from the monks. One of the monks said, “When my response to a situation which is beyond my capabilities is a creative one...pieces come together.” Another monk mentioned the relationship of commandments, conscience, and natural law. Another answered that it was more like trust, and was also expressed in the context of the Christian community in which he lived. Another mentioned how morning prayer set up the expectancy of God’s actions and help throughout the day, which opened his capacity to be aware of that.

On the 2004 GSS, 42.9% reported feeling this many times a day to most days, and 17.4% never or almost never.

Items: Perceptions of divine love. 9. *I feel God's love for me, directly.* 10. *I feel God's love for me, through others.* The second of these two items was easier to answer positively for those who had no strong religious affiliation or beliefs or who were agnostics or atheists. I started with a single item, “I feel God’s love,” but by the end of the interviews and descriptions, I had separated it into two items. In the responses to this question, I found that some people definitely found it easier to receive God’s love directly, and others found it easier to receive God’s love through others.

One monk responded that it was easier to feel God’s love through others than directly. This was experienced as “support and acceptance.” This varied among the monks. One thought that it was easier to feel love from God directly than through others. And the monks argued for two separate items to discriminate the subtleties of this spiritual experience in daily life. One monastic comment on the experience of God’s love from others was, “Hell would be being alone.” And another said, “Through others—this is the obvious way to experience the spiritual... receiving love from them” and “God can act through people, loving providence.” God’s love from others can even be felt when the person is not present. For example, “I thank my parents every morning for the love they showed me.”

In the general population sample it seemed somewhat more common to feel God's love through others (40.7% many times a day to most days) than directly (35%). 20.8% reported never feeling God's love directly, and 15.0% reported never feeling God's love through others.

Item : Awe. *11. I am spiritually touched by the beauty of creation.* This item was included particularly to capture the sense of awe, and it is one of the items that is universally relevant across religious and non-religious boundaries. The wording as expressed did seem to bring out a sense of transcendence given the feedback from interviews. Adrian van Kaam, in his multi-volume series on spiritual formation, written for those both within and outside of a Judeo-Christian belief system, suggests that awe is the central quality of the spiritual life and that all other aspects flow from it (van Kaam 1986). Awe comes from a realistic picture of the fact that one is not the center of the universe and from a sense that the universe speaks of the transcendent. This view can have a significant effect on how one approaches life. An example of this might be in dealing with the inevitable hassles of daily life, where an awe-inspired view could prevent catastrophizing. Awe can also be a way putting more extreme suffering in perspective (Underwood 1999). This item also has the capacity to address the spiritual experience of those not professing religious or theistic beliefs. On the other hand, its construction does not require people to assume that nature and God are one and the same, so it can still address mainstream religious spirituality. Also, the construction of the item, as it was tested in and refined by the interviews, drew out memories of experiences beyond a more superficial enjoyment of being outdoors, or "that's a nice leaf." Other comments relative to this item included: "Being in the park and forgetting about myself for a while"; "when my baby daughter was born, I was transported, and had a sense of a bigger meaning than I had understood before" (from a father); "when I am working outside, and look up and see light in the sky through the clouds, I realize more what matters." One person mentioned watching horses move and feeling moved inside by their motion in a way that felt like grace.

The 2004 GSS results showed that 25.7% reported this many times a day to most days, and 20.3% never or almost never.

Item: Thankfulness, appreciation. *12. I feel thankful for my blessings.* This item builds on gratefulness as a central feature in many religious traditions and in the spiritual life. The Psalms are full of an awareness of gratitude. And this orientation was expressed by one of the interviewed people as "life is a gift rather than something owed to me, and this can affect how I approach things as they emerge throughout the day – it comes out as thankfulness." Other comments included: "As the day moves along, I make an effort to think of the things I am glad of in my life, and when I do that I find a lot more of them"; "when I say a blessing before meals, I find myself thinking of all the things to be thankful for, it's as if I experience them again, and in a new way, and see things I had not noticed as they happened." One of the monastics said, "When things go well, I acknowledge God's role in this and am grateful." The monastic set recitation of the Psalms throughout the day are full of acknowledgement of blessings.

This item also gets at the notion of generally saying yes to life. The interviews confirmed that blessings can be seen in both the good events and those that seem bad on the surface. It was interesting that the words "thankful" and "blessing" were able to tap the experience of non-theists quite well.

The item was also able to identify a significant group for whom this experience was not present at all, 30.9% in 2004. This is one of the items of the scale that seems to take more internal mental effort than some of the others. In the U.S. population surveys it is one of the least frequently reported items, with the 2004 GSS results showing that only 11.2 of the population reported this many times a day to most days. The mean score of 4.88 (sd 1.11) was the highest, indicating the lowest average experience.

Items: Compassionate love. The next two items together assess the construct of compassionate love. Originally I labeled them the "compassion item" and the "mercy item." They have been separated off from the instrument as a whole and used in a variety of studies designed to examine altruistic attitudes and motives with a spiritual impetus and have proved helpful in that regard. These two items were also placed on the GSS in 2002, together with a set of items on empathy and altruistic behaviors.

13. I feel a selfless caring for others. Compassion emerges in many spiritual traditions as a central component in the spiritual life. This item applies across religious traditions and to the non-religious. The interviews on this item were particularly helpful. I started out with the items in two versions. The first was phrased "I care for others without expecting anything in return," and the second as stated above. There were two particular things I wanted to avoid, and needed the interviews to help. I was concerned that the "not expecting anything in return" item might convey an attitude of martyrdom in an unhealthy way—a cynical view of others' capacities. This did come out in the interviews, and this is why I ultimately chose the selfless caring item. The other concern I had was with the word "selfless." First, was it easily understood, and, secondly, did it portray a total self-abnegation, which I did not wish to convey. The goal of the item was to identify times in daily life when caring for the other was centered on the other, rather than being done for primarily selfish reasons. I was pleasantly surprised by how well this item got at

those moments. The interviewees talked about times when caring was done to look good, or because you were being paid for it, and those didn't really "count" in the tally of frequency. Examples were given of doing something for a child when exhausted, or buying groceries for a sick neighbor, or helping someone when you did not initially want the person to succeed. When asking people whether they lost themselves in the act, they usually said no, but that the other person was at the center of the action, and self was set aside. Using the word "selfless" as an adjective for caring enabled those interviewed to locate the caring appropriately. When I asked specifically in this regard, did you think that this means you cannot think at all about your own welfare in the midst of selfless caring, no one stated that they had to be completely selfless.

The monastic insight into the dynamics of this concept was particularly illuminating. The item did sum up the concept well for them. If anything, the monks were perhaps more critical of their motives than some people in the general population sample. "There are times during the day that I don't but I should," said one of the monks. "When I am feeling useless, it can indicate selfishness," another said. "If I am not acting with the same amount of respect for each person it signals to me that I am not being selflessly caring." One mentioned helping out another monk that he didn't particularly like. One mentioned that it was the opposite of selfish.

In the 2004 GSS sample 29% reported this many times a day to most days, and 14.1% never or almost never.

14. I accept others even when they do things I think are wrong. The second item of the pair of compassionate love questions addresses the concept of mercy. The underlying attitude that this question tried to address was that of giving the benefit of the doubt, of dealing with others' faults in the light of one's own: mercy and acceptance. This item addresses the felt sense of mercy, rather than the mere cognitive awareness that mercy may or may not be a good quality. Mercy, as presented in this item, is closely linked to forgiveness, yet is a deeper experience than isolated acts of forgiveness. Fruitful links with measures of forgiveness might be explored in future work, exploring reciprocal interactions.

Another thing that came out of the interviews was the un-valenced aspect of this question. I did not want to signal that there was a "right" answer, which encourages social desirability effects, which can be especially strong for religious measures. On this item, those who said they never did it, felt not doing it was "right" and justified. "Of course I don't accept others when they do things I think are wrong—they don't deserve it." Those who did it a lot thought it was "right" to do this. In the interviews overall it seemed easy for most people to identify moments when people did things thought to be wrong. In the monastic interviews one monk said, "People are foolish and stupid, and it is so important to accept them anyway." "My own awareness of my own failings really helps me have this experience," said another. And, "Self-knowledge helps me not to judge others."

The 2004 GSS data shows 27.3% reporting this many times a day to most days in 2004. On the other hand this item had the lowest percentage of those reporting the "never" category, 10.7%.

Items: Union and closeness. *15. I desire to be closer to God or in union with the divine. 16. In general, how close do you feel to God?* This pair of items express frequency of the experience of desire for the divine and sense of closeness. At the end of the interviews I always asked, "Is there anything I have left out any daily sensations, experiences or feelings relating to your spirituality or religiousness?" The last two items were added after the interviews with the group in Chicago, based on an expressed need to capture a longing for an interaction with or relationship to the divine, especially when that sense of closeness was not there. This issue was raised originally by agnostics. The original form of the item developed at this time was: "I desire to be closer to God or in union with Him." This original wording was changed after further consideration and feedback from the remaining population sample and the monks, to "in union with the divine," removing the specific pronoun and inserting the divine to capture a wider breadth of response.

The 2004 GSS results showed that 33.9% report this many times a day or most days, and 18.2% never or almost never.

The "How close do you feel" item was also added in conjunction with the "desire" item because longing for closeness did not map directly onto the actual feeling of closeness or distance. In interviews, some people wanted to be close a lot and felt very close; however, others wanted to be close, but felt very distant. A few did not desire to be close because they felt they were as close as they could get. I personally felt ambivalent about this last item, and it complicates the scoring (see below), so I was inclined to drop it. But feedback encouraged me to retain it. In the interviews with the monks, one said, in response to the desire for closeness item, "This is primary to a monk, it is *the* question for a monk..." Another heartily agreed that this was the key question. While the item was added for agnostics, it ended up being central for these Christian monks. An agnostic female scientist indicated that this question captured something very important to her spiritual experience, a felt longing for a relationship of intimacy with God, even though she no longer believed in God.

Additional comments on the experience of closeness to God came in the monastic interviews. Two monks

expressed that closeness was not a feeling thing but a will thing. One of the monks said, “The more we go to the presence of God in contemplation... the more of God we see in daily life.” Another said, “God has no grandchildren... we are all children... close and direct.” Further work on the relationships between these two items would be worth pursuing in future data analyses of both existing data sets and new ones.

In the 2004 GSS, 17% express that they feel as close as possible to the divine, and 10.2% report feeling not at all close. Individual differences in degree of correlation between these two items might be fruitful to explore in the future.

Additional experiences. There were two concepts with associated items that were in the list originally, but none of the questions devised seemed to tap the relevant concepts in the general population sample interviews. They were dropped from the set of items following the interviews. The first concept was that of being fully present in the moment, rather than continually reflecting on memories or worrying about or planning for the future, and therefore being distracted from living life more fully each moment. The devised items were either too hard to understand for the average person or missed the concept for many. Wordings explored included as “I live fully in the moment,” or “I am fully present to life, not focused on the past or future.” The interviews showed that these items just did not tap the construct. They could refer to lack of planning or foresight and spontaneous attitudes, which was not the goal of the item. This is still an important experience, dealing with the “mindfulness” that is encouraged by Buddhism, and also a focused presence that is raised by a variety of other religious traditions, and might be worth exploring in the future (de Caussade 1982, Hanh 1994).

The other concept was that of integration of the spiritual with physical and mental aspects of life. It looks at issues of actions and beliefs working together, but also addressing the Eastern Orthodox concept of “putting the mind in the heart, and acting from that through the day” (Kadloubovsky 1992). A variety of items on this were used in the WHO scale mentioned earlier, based on the importance of this in Hindu beliefs. The main item tested in this regard for the DSES was, “My spirit, mind and body work together well.” This was just too abstract for this measure, and interviews did not give a sense that there was a common experience which this reflected as people tried to answer it. Nevertheless, it may be possible to also investigate this further in the future.

A third concept that would be worth exploring is the notion of detachment. Again, a satisfactory item was not found that tapped the particularly spiritual nature of this kind of experience such that it would address ordinary experiences of this kind. “I have a sense of observing myself thinking or acting, without being emotionally involved, and able to make fair judgments of those thoughts and actions to inform myself in the future.” This, like the living in the present item, has capacity for interpretation in a number of ways, some of which are not relevant to spiritual experience, and the an item did not emerge. However in the future an item on this could be worth working on. Support for adding these additional three concepts came primarily from the interviews with those from world religions in the WHO context, rather than from the questioning of the general populations sample or monastics.

Response categories. The response categories for the items were a modified Likert scale (Many times a day, Every day, Most days, Some days, Once in a while, Never or almost never). The reason for this was to get the one answering the question to try to find specific moments in which they had this feeling or experience and be concrete in answering the questions, and to have the alternatives finely tuned enough so that subjects would have to think specifically. A variety of different response categories were tried out. Feedback on the frequency distributions generally mentioned that respondents could easily find an answer that fit their experience, and the variety of possible responses helped people to think clearly about the past, getting specific, which helped to clarify the presence or absence of experiences. One critique of the response categories from a few of the older monks was that the frequency response did not fit their experience, and they had to stretch to find an appropriate response category. For many items their experience was more of an abiding, constant sense, with peaks and troughs. The individual experiences were less isolated and recognized as such, and blended together into a flow of life of which they were a part. For example, with the inner peace question, one monk mentioned it as “abiding,” as a mainstay of life. This notion of “abiding” emerged in interviews with others. One older monk said the same to the “spiritually touched by the beauty of creation” question. As he got older, he had fewer “peak experiences”: “My life is less segmented.” One responded to the strength and comfort items, “I no longer need to become aware of these things as much.” This may be more the case for those in a more mature stage of the spiritual life. As in a number of other areas, I had to pick a compromise position, going with the frequency response in the end. Future work may want to explore the option of a continuous response option further, but the utility of the instrument in its present form suggests that it works well as is.

The item, “In general, how close do you feel to God?” item has a different response set. (1=not at all, somewhat close, very close, 4=as close as possible.) Trying to stretch this such that it had a six item total was confusing for respondents, so I finally settled on these four possible responses which captured the variability most effectively for this item.

Religiousness and Spirituality questions. In the interviews I also included in the general population sample the two questions “How religious are you?” and “How spiritual are you?” And although this was not the focus of the interviews and is not a question on the DSES, the responses to those items together with the answers to the other questions gave additional insight into what people see those words as addressing in their own lives. One finding is that there is a lot of variability in meaning for the general population sample, and these terms do not necessarily have meanings that correspond to those of most theologians or social scientists of religion. One quite representative example was of a woman who said that she was not religious, but she was spiritual. We all may have our own ideas of what this means. However, her language throughout the interviews on the other questions referred to Mary, the saints, and Christ. In response to my questions about what caused her to answer the way she did, she said that she did not go to mass every day, and therefore she was not religious. From the outside, if one was categorizing this woman, given the definitions I used previously, one would call her religious and spiritual. For many, the “how religious” question addressed something with a negative connotation, whereas the “how spiritual” question was given a positive valence, describing both individual practices and feelings and religious sensibilities. Given these issues, the DSES can aid us in indirectly getting an answer to this question of how people feel and perceive their spirituality in daily life, how it operates, and together with other measures, can get a more accurate picture than from directly asking “How spiritual are you?” and “How religious are you?”

Scoring Considerations

The practical details of scoring the DSES build on the conceptual issues discussed here. Detailed scoring instructions have not been previously provided in published work although scoring recommendations have been provided to individuals involved in various studies. The following suggestions for scoring can enable comparison of various data sets using this scale, and especially comparison with the data in the original paper. As further work is done on the instrument and data from the 2004 GSS and other studies are analyzed, more input will be available to aid in interpretation.

To start with, at a purely practical level, the raw score for item 16 needs to be adjusted. It is reverse scored, so to agree with the directionality, the raw score should be reversed. Also the numerical scale for item 16 is a four-point Likert, and this can be handled in a variety of ways. Since it is only one item, this is not a critical issue. If a total score is being used, the four-point score can just be added in to the total after reverse scoring. If a mean total score is used, it may be useful to spread the four points over a six-point spectrum, and then average it into the total for the resulting mean total.

Total score is one way to score the entire scale, and was one scoring method used in the original paper. A frequently more useful method, also used in the original paper, is a mean score for the entire scale. One of the reasons for using the mean score for the entire DSES is that one can also look at individual items, or subgroups of items, and take that mean score of the item or subgroup and compare it with the mean score for the entire scale. So, for example, taking a mean score for the “selfless caring for others” item and comparing that with mean score on the subset of other non-God items for an atheist subpopulation would be possible. The mean score approach enables this well. Mean scores enable subgrouping of items into sections that might be analyzed differently in different population groups. Another value of using mean scores is that one can compare the results on specific items, or two items, e.g. feeling divine love directly or through others, and examine correlations and differences that might give further insight into the nature of the constructs. For example, it might be worth exploring the hypothesis that varying responses to those two questions may depend on attachment styles, or various other social relationship variables.

Although some social scientists are disdainful of single item scales, others in practical applications have strongly supported such scales for such varied and multidimensional constructs as quality of life (Feinstein 1985, Gorsuch and McFarland 1972). On the one hand, the DSES has a set of items that support one another. But also the distinctiveness of individual items as they address particular features can allow one to hone in on particular aspects of spiritual experience as they vary from person to person. For example, it might be interesting just to look at the “spiritually touched by beauty” item alone and look at change over time. If certain single items prove to be predictive and useful, for those who prefer the multi-item approach, additional items might be added to create subdomains of measurement in the future.

Although mean scoring is appealing overall, for some analyses it might be useful to examine extreme subgroups. For example the group that responds “many times a day” to items may have particular qualities that are interestingly different from the group that answers “never or almost never.”

To date, analyzing the responses as a continuous variable has been easier and has proven useful (Tower and Lobi 2004). In the original paper on the scale (Underwood and Teresi 2002), the variables were analyzed additionally as a dichotomized variable (never, once in a while, and some days vs. many days, every day and many times a day), and the internal consistency of the scale remained high (.93) when this was done. Although not ideal,

this indicated that it provides another way to do analysis of the results that might be helpful in some situations.

Some studies have divided the scale into “God-items” and “non-God-items” (referred to as “Theistic” and “Self-Transcendent” in one study, Zemore and Kaskutus 2004). This may be a useful subdivision, and may work particularly well for certain kinds of populations. However there are significant overlaps, as one can see looking at the qualitative and conceptual development. In the original paper, exploratory factor analysis showed that all the items loaded on one factor, with the two compassionate love items loading less strongly. The fact that there is a high Chronbach’s alpha for this scale supports the notion that this scale measures a group of experiences that appear frequently in life for many kinds of people. For people who articulate their spiritual experience in theistic religious terms, there are lots of items to which they can reply strongly and affirmatively—most of the items, in fact. But findings from the interviews and the GSS also show that the items can be used for people who do not profess theistic beliefs or have those organizational religious affiliations. It seems that for many, translation from the word “God” as perhaps often misunderstood and narrowly conceived can take place in the context of answering the questions. This scale affirms the value of not watering down the concept of spirituality by discarding religious terms, but leaving space for spirituality that is religiously grounded and framed, as well as that which may not be. Factor analysis of 2004 GSS data and other studies could shed further light on these issues.

Direction of scoring: The original items were developed to have the same scale direction as the entire Multidimensional Measure. Thus the original scores were reverse scored, with higher numbers indicating less spiritual experience. This is, however, counterintuitive, and in reporting the results of studies, investigators may want to change the scoring direction so that in discussing the results, higher score represents more frequent experience. If this is done in the reporting, the transformation algorithm should be given so that comparison with data using the original scoring method, such as the GSS results, can be made.

Stability: One outstanding question that needs full exploration is whether the DSES is stable or changes over time. Is it primarily a state or a trait? The DSES was effectively used in two longitudinal study of pain and provided a good measure of change over time (Keefe et al. 2001, Wachholtz and Pargament 2005). And it has been used in other studies as a measure of change. There may be a more stable range, but variability within that range can express change. In the monastic interviews, the abbot of the monastery commented that he suspected that the DSES score would be reasonably constant in the short run in the monks, but would change over the long haul, as the monks became more secure. It would be interesting to follow up on this in the general population, and see what kinds of changes might take place over the long term, as well as the cohort and age effects that might emerge in cross-sectional age comparisons. It will also be interesting to track the impact of key experiences, and various lifestyles and interventions.

Short form / long form issues. The six item version of the instrument that is currently part of the Multidimensional Measure is not the best form of the instrument, since it was developed ad hoc, and not as the best selection of items using conceptual and psychometric criteria. The double-barreled nature of two of the items, and the alternative wording of the strength and comfort item are not the best choice for use. Using the now extensive 2004 GSS data, a preferable short form could be developed. However, it seems premature at this time to eliminate the subtle distinctions and develop an official short form. If one needs a shortened form, I would suggest looking at the items and the descriptions in published works on it, including this paper, and deciding on a set for inclusion based on theoretical and empirical considerations given the hypothesis of interest.

Translations

The full-length DSES has been translated to date into Spanish, Korean, Hebrew, French and Vietnamese (Tower and Lobi 2004; see also <http://www.dsescala.org>). Translations should take into account the background provided in this article. They should also obtain input from people who frequently have the experiences and speak the translation language. This also applies to the introductory section and the substitution words for “God.” Translators should get input from those who are religiously grounded and also from those who are not connected to a religious belief system, to enable the instrument to stretch. This is important, for example, for items such as “I feel a connection to all of life,” as one decides on words for “life” and for “connection.” For example, one needs to avoid a translation that ends up meaning “I am linked to other life-forms,” which carries a very different tone, and will not elicit the experiences of interest. This same care needs to be taken especially with words such as “spirituality,” “religiousness,” “joy,” “life,” “feel” or “sense,” and “blessing.” Information from the interviews can be very helpful in developing translations. The words for translation always should fit the underlying meaning rather than duplicate the words. During the back-translations this can be checked, refinements substituted and re-tested. For example, the Spanish translation of the item “I am spiritually touched by the beauty of creation” was finally translated “*La belleza de la creación me mueve espiritualmente.*” This phrase literally translates as “The beauty of creation moves me spiritually,” but that phrasing captured the meaning well. The ideal for translations is to use an abbreviated form

of the original set of interview questions to confirm that the meanings and connotations of the items and the introductory remarks are maintained. Particular care needs to be given to groups of words that convey the underlying sense of connection to the “more than.” Once preliminary items are constructed, give the instrument to a variety of individuals in the new language, and do appropriate back-translations to validate meaning.

Conclusions

Given the plethora of scales in the field of religiousness/spirituality research, why is this scale worth serious attention? The full DSES complements other scales and can be usefully combined with scales of attendance, affiliation, coping, and private and public practice to flesh out a larger construct of religiousness/spirituality. It was originally developed in the context of a multidimensional measure that has provided a common scale used in many studies of physical and mental health, so is an integral part of these. A multidimensional measure including a six-item form of the DSES is regularly put on NIH project applications looking at spiritual and religious factors and is becoming part of an extended database of comparable information. Often the full DSES is additionally included in these studies. The DSES is more acceptable than many scales to non-religious researchers partly due to the substantive section of non-explicitly religious questions. On the other hand, many religiously oriented researchers see that orientation also reflected. It is being used in over fifty studies to date including a NIH-funded cardiovascular health study, a longitudinal study of health in women, alcoholism studies, and eight large end of life studies, and a number of web studies of relationship and health. It is a popular scale for graduate student research. There are US population data norms for the entire scale and for the revised set of six items. It deals with both spirituality and religiousness and some practical expressions of both, without requiring exclusive separation of the constructs. Links have been established between the DSES and health and mental health outcomes (Fowler & Hill 2004; Koenig, George and Titus 2004; Koenig et al 2004; Ciarrocchi and Deneke 2004; Keeley 2004; Parker et al 2003, Keefe 2001, Wachholtz and Pargament 2005, Holland and Neimeyer, 2005). The items tap a particular set of constructs and the validity of that has been tested qualitatively. The concreteness of the items facilitate recall and accurate self-report.

Much of the work using this scale is not yet completed or published. One of the particular uses of the scale has been as a measure of change over time, before and after an intervention. Currently it is being used with a web-based spiritual intervention aimed in particular at developing the kinds of experiences included in the scale directly. It has been used to assess the impact of a video intervention in chronic disease at Johns Hopkins, a holistic health intervention (Lawson and Horneffer 2002), as a class assessment for a Religion and Literature class, and in an alcoholism intervention (Hart and Shapiro 2002). In India, the instrument is being used in a study of spirituality and the caring capacity of health care organizations. It has been particularly useful in a series of eight large ongoing studies of end of life, and in the field of addictions research.

A number of studies using the multidimensional measure have found the DSES items to be one of the more predictive subscales of that larger instrument in studies of epilepsy, inner city elders, adolescents, and substance abuse (Hayton 2002, Dunn 2004, Pearce 2003). The scale has provided conceptual grounding for other work (Richards et al. 2003; Doswell, Kouyate and Taylor 2003). It has been tested in a cross-cultural context in Hawaiians and found to be useful (Mokuau, Hishinuma and Nishimura 2001), and use in cross cultural studies in Koreans, Vietnamese, and French populations and others indicate utility of the instrument in these populations (Tower and Lobi 2004).

One of the strengths of using social science tools is that it helps us to better understand those who are not like ourselves. This has definitely been the case for medical and social science researchers, for whom spiritual experience sometimes has little place in their lives or who have a particular articulation of that experience. This scale and its results help them not to extrapolate that orientation to others. It also has alerted medical researchers to the role religiousness/spirituality plays in the lives of many different kinds of people and how it may operate in daily life for many. The utility of this instrument is linked to its development, as building this instrument with a strong qualitative verification phase helped significantly in linking the measure to the constructs of interest. The details of this background can be useful in subsequent interpretation and research. The method of drawing out meaning of items in interviewing added in a bottom-up approach that added to the value of this instrument.

Work using this scale has potential to continue to inform us about the nature of these experiences, and insight into various aspects of the spiritual and religious life and its development. It also has the potential to continue to inform us about how ordinary spiritual experience and mental and physical health and well-being interact with one another.

Table: GSS data 2005, (Davis, Smith and Marsden 2005) Percentages of total respondents to the items are in parentheses. Means are weighted averages, s.d.= standard deviation.

	Many times a day 1	Every day 2	Most days 3	Some days 4	Once in a while 5	Never/almost never 6	Mean	s.d.
1. God's presence	161 (12.3)	173 (13.3)	151 (11.6)	179 (13.8)	347 (26.6)	292 (22.4)	3.96	1.71
2. Connect all	102 (8.1)	168 (13.3)	175 (13.9)	287 (22.7)	368 (29.1)	165 (13.0)	3.91	1.48
3. Joy lifts	186 (14.3)	200 (15.3)	197 (15.2)	272 (20.9)	261 (20.1)	186 (14.3)	3.60	1.63
4. Strength in R/S	152 (11.6)	147 (11.2)	138 (10.5)	233 (17.8)	393 (30.1)	246 (18.8)	4.00	1.63
5. Comfort in R/S	128 (9.8)	143 (10.9)	117 (9.0)	238 (18.2)	427 (32.7)	254 (19.4)	4.11	1.58
6. Deep inner peace	94 (7.2)	129 (9.9)	224 (17.0)	335 (25.5)	338 (25.8)	192 (14.7)	3.97	1.43
7. Ask God's help	175 (13.4)	161 (12.3)	194 (14.8)	170 (13.0)	317 (24.2)	292 (22.3)	3.89	1.72
8. Guided by God	206 (15.7)	176 (13.4)	180(13.8)	177 (13.5)	343 (26.2)	228 (17.4)	3.73	1.73
9. Feel love directly	191 (14.6)	144 (11.0)	124 (9.5)	185 (14.0)	393 (30.0)	272 (20.8)	3.96	1.73
10. Feel love others	164 (12.6)	144 (11.1)	221 (17)	270 (20.8)	305 (23.5)	195 (15.0)	3.76	1.59
11. Spir touched by beauty	77 (5.9)	102 (7.8)	156 (12.0)	251 (19.2)	456 (34.8)	266 (20.3)	4.30	1.43
12. Thankful for blessings	25 (1.9)	29 (2.2)	94 (7.1)	186 (14.2)	573 (43.7)	406 (30.9)	4.88	1.11
13. Selfless caring	50 (3.8)	100 (7.7)	229 (17.6)	338 (26.1)	398 (30.7)	183 (14.1)	4.14	1.30
14. Accept others	20 (1.5)	123 (9.4)	214 (16.4)	452 (34.6)	360 (27.5)	140 (10.7)	4.09	1.17
15. Desire divine	130 (10)	136 (10.5)	175 (13.4)	183 (14.0)	441 (33.9)	237 (18.2)	4.06	1.59
16. How close?	134 (10.2)	484 (37.0)	469 (35.8)	222 (17.0)			2.60	0.89
	Not at all close 1	Somewhat close 2	Very close 3	As close as possible 4				

DAILY SPIRITUAL EXPERIENCE SCALE

“The list that follows includes items you may or may not experience. Please consider how often you directly have this experience, and try to disregard whether you feel you should or should not have these experiences. A number of items use the word ‘God.’ If this word is not a comfortable one for you, please substitute another word which calls to mind the divine or holy for you.”

	Many times a day	Every day	Most days	Some days	Once in a while	Never or almost never
I feel God’s presence.						
I experience a connection to all of life.						
During worship, or at other times when connecting with God, I feel joy which lifts me out of my daily concerns.						
I find strength in my religion or spirituality.						
I find comfort in my religion or spirituality.						
I feel deep inner peace or harmony.						
I ask for God’s help in the midst of daily activities.						
I feel guided by God in the midst of daily activities.						
I feel God’s love for me, directly.						
I feel God’s love for me, through others.						
I am spiritually touched by the beauty of creation.						
I feel thankful for my blessings.						
I feel a selfless caring for others.						
I accept others even when they do things I think are wrong.						
I desire to be closer to God or in union with the divine.						

	Not at all	Somewhat close	Very close	As close as possible
In general, how close do you feel to God?				

Spanish translation of The Daily Spiritual Experience Scale

Las siguientes preguntas incluyen puntos o asuntos que usted puede o no tener experiencia con ellos. **Por favor considere si y cuán a menudo tiene estas experiencias, y trate de pasar por alto si usted siente que debería o no debería tener estas experiencias.**

Algunas declaraciones utilizan el término Dios. Si esta no es una palabra con la que usted se siente cómodo(a), por favor sustitúyala con cualquier otra idea que traiga a su mente lo que es divino o santo para usted.

	Muchas veces al día	Todos los días	La mayoría de los días	Algunos días	De vez en cuando	Nunca o casi nunca
• Encuentro mi fortaleza en mi religión o creencias espirituales						
• Siento gran paz interior o armonía						
• Siento el amor que Dios me tiene, directamente						
• La belleza de la creación me mueve espiritualmente						
• Siento la presencia de Dios						
• Siento una conexión con todo lo que es vida						
• Mientras estoy adorando, o en otros momentos cuando me conecto con Dios, siento una felicidad o júbilo que me levanta de mis preocupaciones diarias						
• Encuentro consuelo en mi religión o espiritualidad						
• Le pido ayuda a Dios en medio de mis actividades diarias						
• Me siento guiado(a) por Dios en medio de mis actividades diarias						
• Siento el amor que Dios tiene por mí a través de otros						
• Me siento agradecido(a) por mis bendiciones						
• Siento cariño desinteresado por otros						
• Acepto a otros aún cuando hacen cosas que pienso que están mal						
• Deseo estar más cercano(a) a Dios o en unión con Dios						

¿En general, cuán cercano(a) se siente usted a Dios?

- Para nada cercano(a)
- Algo cercano(a)
- Muy cercano(a)
- Tan cercano(a) como es posible

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