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Introducing the Francis Indices of Perceived Spiritual Health Change (FISHCh):

A study among theists and atheists

Leslie J. Francis*

Centre for Research in Intellectual and Developmental Disabilities (CIDD)
University of Warwick, Coventry, UK
World Religions and Education Research Unit
Lincoln Bishop University, Lincoln, UK
https://orcid.org/0000-0003-2946-9980

Ursula McKenna

World Religions and Education Research Unit
Lincoln Bishop University, Lincoln, UK
https://orcid.org/0000-0002-2625-7731

Author note:
*Corresponding author:
Leslie J. Francis
Centre for Research in Intellectual and Developmental Disabilities (CIDD)
The University of Warwick
United Kingdom
Email: leslie.francis@warwick.ac.uk

Abstract

This study introduces a new measure of perceived change in spiritual health, rooted in the Fisher tradition, but designed specifically to assess the perceived impact on spiritual health of an experience or intervention, alongside other psychological measures, among a mixed constituency of theists and atheists. Data provided by 874 participants at two Christmas Eve carol services distinguished between two factors proposed as Index of Perceived Existential Spiritual Health Change (combining the personal, communal, and environmental domains) and Index of Perceived Religious Spiritual Health Change (reflecting the transcendental domain). Construct validity for distinguishing between these two factors was supported by regression models identifying different predictors for individual differences in the two indices.

Keywords: spiritual health, existential wellbeing, religious wellbeing, carol services, cathedrals, psychological type

Introduction

The notion of spiritual health (or spiritual wellbeing) is an attractive concept that has gained currency within quality of life research since the 1970s (see Moberg & Brusek, 1978; Moberg, 1984), attracting attention across a number of fields, including studies in nursing (Biag, & Angeles, 2021), nursing students (Jin, 2023), cancer care (Caldeira et al., 2017), tourism (Esfahani et al., 2017; Tsaur et al., 2025), dementia (Fisher, 2012), children attending schools (Grasmane et al., 2025; Jirasek et al., 2021), medical practitioners (Laili, & Suseno, 2016), healthcare practitioners (Chirico et al., 2023), ageing (Lifshitz et al., 2019), organ donation (Melnikov et al., 2017), palliative care (Puchalski et al., 2009), psychotherapy (Sandage et al., 2022), adolescence (Shaver et al, 2022), bullying behaviour (Dutkova et al., 2017), and depression (Shaygan, & Shayegan, 2019).

Defining spiritual health

Despite being an attractive concept, the notion of spiritual health (or spiritual wellbeing) remains both elusive and contested (Jaberi et al., 2019; Klokočka, 2025; Shaver et al., 2020). The challenge facing the development of quantitative measures in the field of spiritual health (or spiritual wellbeing) is to be found in the range of interpretations offered for the concept of spirituality itself. In a review by Francis et al. (2016), a clear divide was identified between those holding to a strong distinction between religion and spirituality and those who opted to conceptualise spirituality in religious or theistic terms. For example, Heelas and Woodhead (2005) argued that within western societies ‘Survey after survey shows that increasing numbers of people now prefer to call themselves “spiritual” rather than “religious”’ (p. 1). This position was supported by Fuller (2001), Forman (2004) and King (2009).

The distinctiveness and commonality of the two constructs of religion and spirituality have been explored by Zinnbauer and Pargament (2005). Supporting such a juxtaposition, several surveys have shown how increasing numbers of people may

describe themselves as being both religious and spiritual, while also revealing that more people tend to describe themselves as spiritual than religious. Zinnbauer et al. (1997), in a study drawing from samples of both college students and members of religious groups, reported how 93% described themselves as spiritual, compared with 78% who described themselves as religious, 19% who described themselves as spiritual but not religious, 4% who described themselves as religious but not spiritual, and 3% who described themselves as neither religious nor spiritual. Similar trends have been reported among undergraduates attending Jesuit Catholic institutions in the USA (Flemming et al. 2006) and among people with mental illness (Corrigan et al., 2003). The distinctive psychological profile of people who describe themselves as spiritual but not religious has been mapped in terms of worldviews (Francis, Laycock, & Penny, 2016) and personality (Chen et al., 2023; Schnell, 2012; Wixwat & Saucier, 2021).

The blurred conceptual boundaries between religion and spirituality have also been identified within instruments designed to measure the constructs of spiritual health, spiritual wellbeing, and spirituality (Fisher, 2009, 2015; Mata-McMahon, 2016; Moore et al., 2016; Sifers et al., 2012; Stoyles et al., 2012). Some instruments, for example the Spiritual Assessment Inventory (Hall & Edwards, 1996) and the Spiritual History Scale in Four Dimensions (Hays et al., 2001), include religious content and theistic language. In contrast, other instruments, such as the Spirituality Index of Well-Being (Daaleman & Frey, 2004), focus solely on the self and avoided any reference to religious content or theistic language. Combining both approaches, Ellison's Spiritual Well-Being Scale presents ten items for each of two factors, differentiating between Existential Well-Being and Religious Well-Being (Ellison, 1983).

The Fisher model of spiritual health

Within this context, the cumulative work of John Fisher has made a considerable impact on the literature. In his first study, Fisher (1998) defined spirituality in relational terms, argued that these relational terms should embrace four domains (personal, communal, environmental, transcendental), and proposed the term ‘spiritual health’ as distinct from the wider terms of spiritual wellbeing and spirituality. According to Fisher (2011, pp. 21-22), spiritual health is indicated by the combined quality of relationships that individuals experience within each of the four domains: the personal domain, concerning relationship with the self; the communal domain, concerning relationship with other people; the environmental domain, concerning relationship with the environment; and the transcendental domain, concerning relationship with something or someone beyond the human level, whether this be known as ultimate concern, cosmic force, transcendent reality, or God. While Fisher’s transcendental domain recognised the need to encompass the experiences of those who neither believed in God, nor practised any religion, the problem arose as to how such a broad definition could be operationalised and measured in a way that was accessible both to theists and non-theists.

Fisher operationalised the four-domain model of spiritual health through the Spiritual Health and Life-Orientation Measure (SHALOM: Fisher, 1999, 2010, 2011, 2016, 2021, 2025). Gomez and Fisher (2003) demonstrated that SHALOM showed good reliability (Cronbach’s alpha, composite reliability and variance extracted), and validity (construct, concurrent, discriminant, predictive and factorial independence from personality). Subsequent studies have examined the psychometric properties of SHALOM from a range of perspectives, including studies reported by Gomez and Fisher (2005a, 2005b) and by Hall et al. (2007). Fisher’s measure SHALOM has gained wide currency, including translations in Brazilian (Nunes et al., 2018; Valdivia et al., 2020), Chinese (Leung, 2023; Pong, 2022, 2023, 2024; Pong et al., 2020), Czech (Marciniak et al., 2017), Filipino (Pham, & del

Castillo, 2020), Hebrew (Elhai et al., 2018), Indonesian (Soeharso et al., 2023), Lithuanian (Riklikiene et al., 2018), Persian (Abhari et al., 2018), Portuguese (Neves et al., 2018; Romeiro et al., 2022), and Turkish (Baltaci, & Coskun, 2019). SHALOM has been introduced to the broad field of empirical theology by studies concerning the selection of Catholic religious novices (del Castillo et al., 2020), online Eucharistic celebration among the Catholic faithful (Rosales, 2021), and cathedral visitors (Francis et al., 2015).

Alongside SHALOM there have been other operationalisations of Fisher's four-domain model of spiritual health developed for use among different age groups and within different contexts. These measures include the Spiritual Health in Four Domains Index (SH4DI; Fisher et al., 2000), Feeling Good, Living Life (Fisher, 2004), and the Feeling Good, Living Life Measure Revised (Francis et al., 2018). In each of these measures the transcendental domain is nuanced in specific ways. In SHALOM, the transcendental domain is assessed by the following five items: I feel a personal relationship with the Divine/God; I worship the Divine/the creator; I feel oneness with the Divine/God; I feel peace with the Divine/God; and I feel prayer enriches my life. In the SH4DI, the transcendental domain is assessed by six items: religious belief; belonging to a faith community; perception of living as a response to God; personal relationship with God; reverence for God; and admiring God. In the Feeling Good, Living Life measure for children, the transcendental domain is assessed by four items: talking with your god; knowing your god is a friend; thinking about your god; and knowing your god cares for you.

Conceptually and empirically the difficulty with these measures is voicing items for the transcendental domain that work equally well among those who are conventionally religious and those who are not conventionally religious. Addressing this issue, when developing the Feeling Good Living Life Measure Revised, Francis et al. (2018) constructed an instrument for students attending church primary schools that comprised four items

reflecting a theistic operationalisation of the transcendental domain: I often talk with God, I often spend time thinking about God, I often feel that God is my friend, and I often feel that God cares for me.

In a subsequent study introducing the Junior Spiritual Health Scale (JSHS), Francis et al., (2021) focused on creating a measure that would operationalise Fisher's four-domain model of spiritual health in a way accessible to 8- to 11-year-old students but without using religious content or theistic language. They identified one distinct theme that would make each domain accessible to students, and then operationalised each theme using three items. The theme for the personal domain focused on the relationship with the self (I have a good life, I am happy with my life, I feel good about myself). The theme for the communal domain focused on the relationship with friends (I have good friends, I am happy with my friends, I feel good about my friends). The theme for the environmental domain focused on relationship with local place (I live in a good place/town, I am happy with my place/town, I feel good about my place/town). The theme for the transcendental domain focused on the wider world (The world is good to me, I am happy living in the world, I feel good about the world).

In his most recent paper, Fisher (2026) reviewed his earlier conceptualisation of spiritual health through theological and biblical lenses and seems to have concluded that the notion of spirituality needs to be reserved for the transcendental domain, now exclusively referred to as spiritual health, while the other three domains (personal, communal, and environmental) need to be reconceptualised as existential health.

Research objective

Against this background the objective of the present paper was to build on Fisher's conceptualisation of spiritual health to develop and test a bespoke instrument that met three specific research criteria:

- this instrument was required to assess perceived impact of a specific experience or intervention on spiritual health and thus needed to be introduced in a way appropriate for that task
- this instrument was required to be incorporated within a battery of other measures and thus needed to be brief with a maximum of four items per each domain
- this instrument was required to function among a mixed constituency of theists and atheists within the context of the diverse participants attending carol services in an Anglican cathedral and thus needed to embrace explicit theistic reference.

Method

Procedure

When people came into the Cathedral for the two Carol Services on Christmas Eve, the welcomers gave them a copy of the service and a white envelope containing the questionnaire and a pen. The welcomers invited participants to complete the questionnaire. The questionnaire comprised two parts: part one was completed while waiting for the service to start, and part two was completed toward the end of the service. The questionnaires required written informed consent, were completed anonymously, returned to the white envelope and left on the seat for collection after the service.

Measures

The present paper draws on the following measures included within the questionnaire.

Sex was recorded by the question ‘Are you’, followed by three options: male (1), female (2), and other, please specify (3).

Belief in God was recorded by the item ‘I believe in God’ rated on a five-point scale: agree strongly (5), agree (4), not certain (3), disagree (2), and disagree strongly (1). Those answering agree or agree strongly were regarded as theist, while those answering disagree or disagree strongly were regarded as atheist.

Personality variables were assessed by the Francis Psychological Type and Emotional Temperament Scales (FPTETS; Village & Francis, 2022, 2023a). This 50-item instrument comprises four sets of ten forced-choice items related to each of the four components of psychological type: orientation (extraversion or introversion), perceiving process (sensing or intuition), judging process (thinking or feeling), and attitude toward the outer world (judging or perceiving), and ten items related to emotional temperament (calm or volatile). Previous studies have demonstrated that the instrument functions well in a range of church-related contexts. For example, Village and Francis (2023b) reported alpha reliabilities of .84 for the extraversion – introversion scale, .79 for the sensing – intuition scale, .76 for the thinking – feeling scale, .82 for the judging – perceiving scale, and .84 for the calm – volatile scale. Scores (rather than binary preferences) were used in the present study to indicate inclinations for extraversion, intuition, feeling, judging, and emotional volatility.

Spiritual health. The impact of attending the service on perceived change in spiritual health, included in part two of the instrument, was assessed by the prompt 'Attending the service today in Liverpool Cathedral has helped me to' followed by sixteen items rated on a five-point scale: agree strongly (5), agree (4), not certain (3), disagree (2), and disagree strongly (1). These sixteen items comprised four items relating to each of the four domains of spiritual health: personal domain (e.g. to feel better about myself), communal domain (e.g. to feel better about my relationships with other people), environmental domain (e.g. to feel better about my relationship with the world), and transcendental domain (e.g. to feel better about my relationship with God).

Participants

The items employed in the current analyses within the second part of the questionnaire were thoroughly completed without missing data by 874 participants at the two Christmas Eve Carol services. Among these 874 participants, 37% were male, and 62% female; 6% were

under the age of twenty, 12% were in their twenties, 13% in their thirties, 17% in their forties, 22% in their fifties, 21% in their sixties, 8% in their seventies, 1% in their eighties; in terms of religious affiliation 81% identified as Christian, 17% as no religion, and 2% as Buddhist, Hindu, or Jew; in terms of attending public acts of worship, 18% never attended, 44% attended at least once a year, 14% attended at least six times a year, 6% attended at least once a month, and 18% attended weekly; 62% defined themselves as theist, 19% as agnostic, and 19% as atheist.

Analysis

The data were analysed by the SPSS statistical package, employing the frequency, reliability factor, regression and correlation routines.

Results and discussion

- insert table 1 about here -

The first step in data analysis explored the factor structure of the 16 items proposed for the measure of perceived change in spiritual health. Table 1 demonstrates a clear two factor solution, using varimax rotation with Kaiser normalisation. Together these two factors accounted for 69.7% of the variance. The first factor drew together the four items reflecting the personal domain, the four items reflecting the communal domain, and the four items reflecting the environmental domain. Taken together the first factor combining these three domains may be characterised as existential spiritual health, following the terminology proposed by Ellison (1983). The second factor drew together the four items reflecting the transcendental domain. Again, following the terminology proposed by Ellison (1983), this second factor may be characterised as religious spiritual health. What this two factor solution confirms is that, for the mixed constituency of theists and atheists attracted to Liverpool Cathedral, the conceptualisation of perceived change in spiritual health needs to be nuanced in order to capture the experience of participants embracing such diversity.

- insert table 2 about here -

The second step in data analysis explored the scale properties of the two proposed measures, the Index of Perceived Existential Spiritual Health Change and the Index of Perceived Religious Spiritual Health Change, in terms of the alpha coefficient (Cronbach, 1951), the correlations between the individual items and the sum of the other items in the scale, and the item endorsement in terms of the sum of the agree and agree strongly responses. The data presented in table 2 confirm that both scales display a good level of internal consistency reliability: perceived change in existential spiritual health, $\alpha = .95$; perceived change in religious spiritual health, $\alpha = .93$. The correlations between the individual items and the sum of the other items in the scale confirm that all items are playing a strong and consistent part within the two homogeneous scales. The item endorsements confirm that well over half of the participants in the Christmas Eve carol services who responded to the survey appreciated a positive impact of the experience on their spiritual health.

In terms of perceived change in existential spiritual health, within the personal domain, 71% considered the experience had helped them to reflect on their personal wellbeing, 67% to feel better about themselves, 63% to connect better with their inner self, and 56% to open their eyes to the good in themselves. Within the communal domain, 71% considered the experience had helped them to reflect on their relationships with other people, 65% to open their eyes to the good in other people, 63% to connect better with other people close to them, and 62% to feel better about their relationships with other people. Within the environmental domain, 67% considered the experience had helped them to reflect on their relationship with the world, 60% to open their eyes to the good in the world, 57% to feel better about their relationship with the world, and 48% to connect better with the natural world.

In terms of perceived change in religious spiritual health, within the transcendental domain, 63% considered the experience had helped them to reflect on their relationship with God, 59% to open their eyes to the good in God, 54% to feel better about their relationship with God, and 54% to connect better with God.

- insert table 3 about here -

The third step in data analysis explored the connection between perceived change in spiritual health (distinguishing between existential spiritual health and religious spiritual health) and levels of belief in God, where belief in God was assessed on a five-point scale from disagree strongly, through not certain, to agree strongly. This analysis construes people who agree or agree strongly with the statement, 'I believe in God' as theists, those who disagree or disagree strongly with the statement as atheists, and those who reported as not certain as agnostics. The data presented in table 3 demonstrate incremental rise on both measures of spiritual health in line with the five steps of belief in God.

- insert tables 4 and 5 about here -

The final step in data analysis employs multiple regression modelling to explore the incremental effect of four sets of factors on the two measures of spiritual health: personal factors, psychological factors, psychological type, and religious factors. Personal factors (sex and age) were entered in block one because these factors may also serve as predictors of individual differences in psychological factors, psychological type, and religious factors. Psychological factors (emotionality and extraversion) were entered in block two because of their established association with both wellbeing and religious factors. Psychological type (intuition, feeling, and judging) were entered in block three because of their established association with religious factors. Religious factors were then entered in block four to complete the model. When all four sets of factors are taken into account, model 4 in table 4 demonstrates that the three key positive predictors of individual differences in change in

existential spiritual health are belief in God, a preference for feeling and emotionality. Model 4 in table 5 demonstrates that the three key positive predictors of individual differences in change in religious spiritual health are belief in God, church attendance, and emotionality. The relatively high R^2 for change in religious spiritual health reflects the importance of belief in God for impacting this domain. It is likely that believers attend church services anticipating a spiritual uplift in ways that unbelievers do not.

Conclusion

The objective of the present paper was to build on Fisher's conceptualisation of spiritual health to develop and test a bespoke instrument that met three specific research criteria: to assess perceived impact of a specific experience or intervention on spiritual health; to be brief with a maximum of four items per each domain; and to embrace explicit theistic references as appropriate for applications within an explicit church-related context. The objective was established on data provided by 874 participants at two Christmas Eve carol services at Liverpool Cathedral, an occasion when churchgoers and non-churchgoers, people who believe in God and people who do not believe in God come together in a cathedral to celebrate Christmas, a festival combining both religious and secular motivations. Three conclusions arose from analyses of these data.

First, the Francis Indices of Perceived Spiritual Health Change (FISHCh) propose two measures: the 12-item Index of Perceived Existential Spiritual Health Change (reflecting the personal, communal, and environmental domains) and the 4-item Index of Perceived Religious Spiritual Health Change (reflecting the transcendental domain). Both indices recorded good levels of internal consistency reliability and face validity, commending their application in future research.

Second, although the measure of perceived change in existential spiritual health contained no explicit reference to God, scores on this measure rose incrementally with

certainty of belief in God. Scores on the measure of perceived change in religious spiritual health were more strongly associated with certainty of belief in God. This finding confirms the value of regarding these two measures (Index of Perceived Existential Spiritual Health Change and Index of Perceived Religious Spiritual Health Change) as complementary and independent indices rather than trying to combine the two measures into one.

Third, further evidence for the construct validity of treating the two measures of existential and religious spiritual health change separately is provided by the regression models that explored the impact of personal factors, psychological factors, psychological type, and religious factors. Two main differences distinguish between the two models. The religious factors play a much more important part in predicting individual differences in scores recorded on the Index of Perceived Religious Spiritual Health Change, with church attendance augmenting the impact of belief in God, than in scores recorded on the Index of Perceived Existential Spiritual Health Change. While psychological type (feeling) adds predictive power to the model concerned with perceived change in existential spiritual health, psychological type adds no predictive power to the model concerned with perceived change in religious spiritual health.

There are clear limitations with the present study. First, the instrument itself has been designed for application within a specific church-related context in which it is appropriate to conceptualise the transcendental domain in explicit theistic categories. Second, in this paper the instrument has been developed and tested on just one sample of 874 participants assessing the perceived impact of just one specific experience or intervention, employing a survey that did not include a full range of measure appropriate for testing convergent, discriminant, and criterion-related validity. Further studies are now required to provide data for applying confirmatory factor analysis to test the factor structure of the instrument and to strengthen the evidence for construct, convergent, discriminant, and criterion-related validity.

Disclosure statement

No potential conflict of interest was reported by the authors.

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Data availability

Data are available from the corresponding author upon reasonable request.

Ethical approval

Ethical approval was given by the Research Ethics Committee of the St Mary's Centre (approval code: SMC19EC0011).

References

Abhari, M. B., Fisher, J. W., Kheiltash, A., & Nojomi, M. (2018). Validation of the Persian version of spiritual well-being questionnaires. *Iran Journal of Medical Science*, *43*(3), 276-285.

Baltaci, A., & Coskun, M. K. (2019). Adaptation of the spiritual health and life-orientation measure to Turkish culture. *Cumhuriyet Theology Journal*, *23*(1), 415-439. doi.org/10.18505/cuid.535663

Biag, A. D., & Angeles, L. S. (2021). Testing the structural equation model of the influence of nurses' spiritual well-being and caring behaviour on their provision of spiritual care to patients. *Journal of Nursing Management*, *29*(4), 822-833. doi.org/10.1111/jonm.13224

Caldeira, S., Timmins, F., de Carvalho, E. C., & Vieira, M. (2017). Spiritual well-being and spiritual distress in cancer patients undergoing chemotherapy: Utilizing the SWBQ as component of holistic nursing diagnosis. *Journal of Religion and Health*, *56*(4), 1489-1502. doi.org/10.1007/s10943-017-0390-4

Chen, Z. J., Cowden, R. G., & Streib, H. (2023). More spiritual than religious: Concurrent and longitudinal relations with personality traits, mystical experiences, and other individual characteristics. *Frontiers in Psychology*, *13*, 1025938, 1-14. doi.org/10.3389/fpsyg.2022.1025938

Chirico, F., Batra, K., Batra, R., Őztekin, G. G., Ferrari, G., Crescenzo, N., Szarpak, S., Magnavita, N., & Yildirim, M. (2023). Spiritual well-being and burnout syndrome in healthcare: A systematic review. *Journal of Health and Social Sciences*, *8*(1), 13-32.

Corrigan, P., McCorkle, B., Schell, B., & Kidder, K. (2003). Religion and spirituality in the lives of people with serious mental illness. *Community Mental Health Journal*, *39*(6), 487-499. doi.org/10.1023/B:COMH.0000003010.44413.37

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika, 16*(3), 297-334. doi.org/10.1007/BF02310555

Daaleman, T. P., & Frey, B. B. (2004). The Spirituality Index of Well-Being: A new instrument for health-related quality of life research. *Annals of Family Medicine, 2*(5), 499-503. doi.org/10.1370/afm.89

del Castillo, F., del Castillo, C. D., & Alvarez, M. (2020). Spiritual well-being and its role on the sociality of selected Catholic religious novices. *Religions*, *11*, article 371, 1-8. doi.org/10.3390/rel/11070371

Dutkova, K., Holubcikova, J., Kravcova, M., Babincak, P., Tavel, P., & Madarasova Geckova, A. (2017). Is spiritual well-being among adolescents associated with a lower level of bullying behaviour? The mediating effect of perceived bullying of peers. *Journal of Religion and Health*, *56*(6), 2212-2221. doi.org/10.1007/s10943-017-0392-2

Elhai, N., Carmel, S., & Bachner, Y. G. (2018). Translation and validation of the Hebrew version of the SHALOM spiritual questionnaire. *Aging & Mental Health*, *22*(1), 46-52. doi.org/10.1080/13607863.2016.1222350

Ellison, C. (1983). Spiritual well-being: conceptualization and measurement. *Journal of Psychology and Theology, 11*(4), 330-340. doi.org/10.1177/009164718301100406

Esfahani, M., Musa, G., & Khoo, S. (2017). The influence of spirituality and physical activity level on responsible behaviour and mountaineering satisfaction on Mount Kinabalu, Borneo. *Current Issues in Tourism*, *20*(11), 1162-1185. doi.org/10.1080/13683500.2014.987733

Fisher, J. W. (1998). *Spiritual health: its nature, and place in the school curriculum*. Unpublished PhD dissertation, The University of Melbourne. Available from: https://minerva-access.unimelb.edu.au/handle/11343/39206

Fisher, J. W. (1999). Developing a Spiritual Health And Life-Orientation Measure for

secondary school students. In J. Ryan, V. Wittwer & P. Baird (Eds.), *Research with a regional/rural focus: Proceedings of the University of Ballarat inaugural annual research conference, 15 October 1999* (pp. 57-63). University of Ballarat, Research and Graduate Studies Office.

Fisher, J. W. (2004). Feeling good, living life: A spiritual health measure for young children. *Journal of Beliefs and Values*, *25*(3), 307-315. doi.org/10.1080/1361767042000306121

Fisher, J. W. (2009). Getting the balance: Assessing spirituality and well-being among children and youth. *International Journal of Children's Spirituality*, *14*(3), 273-288. doi.org/10.1080/13644360903086547

Fisher, J. W. (2010). Development and application of a spiritual well-being questionnaire called SHALOM. *Religions*, *1*, 105-121. doi.org/10.3390/rel1010105

Fisher, J. W. (2011). The four domains model: Connecting spirituality, health and well-being. *Religions, 2*, 17-28. doi.org/10.3390/rel2010017

Fisher, J. (2012). Staff's and family members' spiritual well-being in relation to help for residents with dementia. *Journal of Nursing Education and Practice*, *2*(4), 77-85. doi.org/10.5430/jnep.v2n4p77

Fisher, J. W. (2015). God counts for children's spiritual wellbeing. *International Journal of Children's Spirituality*, *20*(3-4), 191-203. doi.org/10.1080/1364436X.2015.1107033

Fisher, J. W. (2016). Selecting the best version of SHALOM to assess spiritual well-being. *Religions*, *7*, article 45, 1-12. doi.org/10.3390/rel7050045

Fisher, J. W. (2021). Validation and utilisation of the spiritual well-being questionnaire: SHALOM. *Journal of Religion and Health*, *60*(5), 3694-3715. doi.org/10.1007/s10943-021-01401-8

Fisher, J. W. (2026). Spirit alive: Now and forever. Critical reflection on three decades of John Fisher's research into spirituality. *International Journal of Children's Spirituality*, *31*(1-2), 7-20. doi.org/10.1080/1364436X.2025.2590479

Fisher, J. W., Francis, L. J., & Johnson, P. (2000). Assessing spiritual health via four domains of spiritual wellbeing: the SH4DI. *Pastoral Psychology*, *49*(2), 133-145. doi.org/10.1023/A:1004609227002

Flemming, J., Overstreet, D., & Chappe, S. (2006). Measuring the mission: Insights gained through the Boston College Questionnaire about the undergraduate experience. *Current Issues in Catholic Higher Education, 25*(2), 237-263.

Forman, R. (2004). *Grassroots spirituality: What it is, why it is here, where it is going*. Imperial Academic.

Francis, L. J., Fisher, J. W., & Annis, J. (2015). Spiritual well-being and psychological type: A study among visitors to a medieval cathedral in Wales. *Mental Health, Religion & Culture*, *18*(8), 675-692. doi.org/10.1080/13674676.2014.964002

Francis, L. J., Fisher, J. W., Lankshear, D. W., & Eccles, E. L. (2018). Modelling the effect of worship attendance and personal prayer on spiritual wellbeing among 9- to 11-year-old students attending Anglican church schools in Wales. *International Journal of Children's Spirituality*, *23*(1), 30-44. doi.org/10.1080/1364436X.2017.1419938

Francis, L. J., Lankshear, D. W., & Eccles, E. L. (2021). Introducing the Junior Spiritual Health Scales (JSHS): Assessing the impact of religious affect on spiritual health among 8- to 11-year-old students. *International Journal of Children's Spirituality*, *26*(4), 199-213. doi.org/10.1080/1364436X.2021.1968801

Francis, L. J., Laycock, P., & Penny, G. (2016). Distinguishing between spirituality and religion: Accessing the worldview correlates of 13- to 15-year-old students. *Research*

in the Social Scientific Study of Religion, *27*, 43-67. doi.org/10.1163/9789004322035_004

Fuller, R. (2001). *Spiritual but not religious: Understanding unchurched America*. Oxford University Press. doi.org/10.1093/0195146808.001.0001

Gomez, R., & Fisher, J. W. (2003). Domains of spiritual well-being and development and validation of the Spiritual Well-Being Questionnaire. *Personality and Individual Differences, 35*(8), 1975-1991. doi.org/10.1016/S0191-8869(03)00045-X

Gomez, R., & Fisher, J. W. (2005a). Item response theory analysis of the spiritual well-being questionnaire. *Personality and Individual Differences, 38*(5), 1107-1121. doi.org/10.1016/j.paid.2004.07.009

Gomez, R., & Fisher, J.W. (2005b). The Spiritual Well-Being Questionnaire: Testing for model applicability, measurement and structural equivalencies and latent mean differences across gender. *Personality and Individual Differences, 39*(8), 1383-1393. doi.org/10.1016/j.paid.2005.03.023

Grasmane, I., Pipere, A., Raščevskis, V. (2025). Effectiveness of a psycho-pedagogical intervention on spiritual intelligence, happiness, and spiritual wellbeing for primary school children: A non-randomised controlled trial. *Journal of Happiness Studies*, *26*(5), 4-25. doi.org/10.1007/s10902-024-00844-6

Hall, T. W., & Edwards, K. J. (1996). The initial development and factor analysis of the Spiritual Assessment Inventory. *Journal of Psychology and Theology, 24*(3), 233-246. doi.org/10.1177/009164719602400305

Hall, T. W., Reise, S. P., & Haviland, M. G. (2007). An item response theory analysis of the Spiritual Assessment Inventory. *International Journal for the Psychology of Religion, 17*(2), 157-178. doi.org/10.1080/10508610701244197

Hays, J. C., Meador, K. G., Branch, P. S., & George, L. K. (2001). The Spiritual History Scale in Four Dimensions (SHS-4): Validity and reliability. *The Gerontologist, 41*(2), 239-249. doi.org/10.1093/geront/41.2.239

Heelas, P., & Woodhead, L. (2005). *The spiritual revolution: Why religion is giving way to spirituality*. Blackwell.

Jaberi, A., Momennasab, M., Yektatalab, S., Ebudi, A., & Cheraghi, M. A. (2019). Spiritual health: A concept analysis. *Journal of Religion and Health*, *58*(5), 1537-1560. doi.org/10.1007/s10943-017-0379-z

Jin, J. (2023). Factors influencing spiritual health among nursing students in the prolonged Covid-19 situation. *International Journal of Environmental Research and Public Health*, *20*(4), 3716. doi.org/10.3390/ijerph20043716

Jirasek, I., Badura, P., King, N., Pickett, W., & Michaelson, V. (2021). Distinguishing between spiritual health and religious involvement as determinants of adolescent health in Canada and the Czech Republic. *Health Promotion International*, *36*(1), 286-296. doi.org/10.1093/heapro/daaa046

King, U. (2009). *The search for spirituality: Our global quest for meaning and fulfilment*. Canterbury Press.

Klokočka, J. (2025). Spiritual wellbeing of pupils and students: A systematic review of current empirical research. *International Journal of Educational Research*, *133*, 102689. doi.org/10.1016/j.ijer.2025.102689

Laili, L., & Suseno, M. N. (2016). Spiritual well-being and burnout in doctor education students. *Psikologika*, *21*(2), 167-177. doi.org/10.20885/psikologika.vol21.iss2.art6

Leung, C. H. (2023). Understanding spiritual health, depression, anxiety, and stress among tertiary students under the impact of COVID-19 in Hong Kong. *Asia Pacific Journal of Education*, *43*(4), 1292-1305. doi.org/10.1080/02188791.2022.2114425

Lifshitz, R., Nimrod, G., & Bachner, Y. G. (2019). Spirituality and wellbeing in later life: A multidimensional approach. *Aging & Mental Health*, *23*(8), 984-991. doi.org/10.1080/13607863.2018.1460743

Marciniak, R., Šerek, J., Sheardova, K., & Hort, J. (2017). Psychometric characteristics of the questionnaire SHALOM in the older Czech population. *Czechoslovak Psychology*, *16*(3), 230-244.

Mata-McMahon, J. (2016). Reviewing the reserach in children's spirituality (2005-2015): Proposing a pluricultural approach. *International Journal of Children's Spirituality*, *21*(2), 140-152. doi.org/10.1080/1364436X.2016.1186611

Melnikov, S., Ashkenazi, T., Amara, M., & Bortz, A. P. (2017). Transcendental spirituality and acquaintance with the activities of the Domestic National Transplant Center as factors in shaping attitudes toward organ donation. *Progress in Transplantation*, *27*(2), 139-145. doi.org/10.1177/1526924817699967

Moberg, D. O. (1984). Subjective measures of spiritual well-being. *Review of Religious Research*, *25*(4), 351-364. doi.org/10.2307/3511368

Moberg, D. O., & Brusek, P. M. (1978). Spiritual well-being: A neglected subject in quality of life research. *Social Indicators of Research*, *5*(3), 303-323. doi.org/10.1007/BF00352936

Moore, K., Gomez-Garibello, C., Bosacki, S., & Talwar, V. (2016). Children's spiritual lives: The developent of a children's spirituality measure. *Religions*, *7*, article 95, 1-11. doi.org/10.3390/rel7080095

Neves, M., Garcia, I. Q., Espírito-Santo, H., & Lemos, L. (2018). Validation of the Portuguese Spiritual Well-Being Questionnaire in institutionalized older adults. *Portuguese Journal of Behavioural and Social Research*, *4*(1), 34-42. doi.org/10.7342/ismt.rpics.2018.4.1.70

Nunes, S. A. N., Fernandes, H. M., Fisher, J. W., & Fernandes, M. G. (2018). Psychometric properties of the Brazilian version of the lived experience component of the Spiritual Health And Life Orientation Measure (SHALOM). *Psicologia Refexão e Crítica*, *31*(2), 1-13. doi.org/10.1186/ s41155-018-0083-2

Pham, T. T. B. & del Castillo, F. (2020). Understanding the spiritual well-being of the youth in the Philippines and Vietnam: An exploratory study. *Asia-Pacific Journal of Multidisciplinary Research*, *8*(2), 27-34.

Pong, H.-K. (2022). The correlation between spiritual well-being and burnout of teachers. *Religions*, *13*, article 760, 1-15. doi.org/10.3390/rel13080760

Pong, H.-K. (2023). Contributions of service learning to the development of university students' spiritual well-being and psychological health: A quasi-experimental study. *Journal of Beliefs and Values*, *44*(3), 379-396. doi.org/10.1080/13617672.2022.2133429

Pong, H.-K. (2024). The relationship between spiritual well-being and game addiction of youths: A cross-sectional study. *Journal of Beliefs and Values*, *45*(1), 1-20. doi.org/10.1080/13617672.2022.2152262

Pong, H.-K., Leung, C. H., & Lung, C.-L. (2020). Validating the Chinese-translated version of the Spiritual Health and Life-Orientation Measure (SHALOM) amongst the Chinese youth populations in 2010 and 2018. *Journal of Beliefs & Values*, *41*(4), 489-508. doi.org/10.1080/13617672.2019.1693823

Puchalski, C., Ferrell, B., Virani, R., Otis-Green, S., & Sulmasy, D. (2009). Improving the quality of spiritual care as a dimension of palliative care: The report of the Consensus Conference. *Journal of Palliative Medicine*, *12*(10), 885-904. doi.org/10.1089/jpm.2009.0142

Riklikiene, O., Kaseliene, S., & Fisher, J. (2018). Translation and validation of Spiritual Well-Being Questionnaire SHALOM in Lithuanian language, culture and health care practice. *Religions*, *9*, article 156, 1-14. doi.org/10.3390/rel19050156

Romeiro, J., Nogueira, P. J., Fisher, J., & Caldeira, S. (2022). Portuguese version of the Spiritual Well-being Questionnaire: Validation study in people under assisted reproductive techniques. *Religions*, *13*, article 400, 1-18. doi.org/10.3390/rel13050400

Rosales, R. J. J. (2021). Online Eucharistic celebration and spiritual well-being of the Catholic faithful of San Isidro Labrador Parish, Cuenca, Batangas during COVID-19 pandemic. *International Journal of Research Studies in Education*, *10*(1), 37-45. doi.org/10.5861/ijrse.2020.5920

Sandage, S. J., Jankowski, P. J., Paine, D. R., Exline, J. J., & Bronstein, M. (2022). Testing a relational spirituality model of psychotherapy clients' preferences and functioning. *Journal of Spirituality in Mental Health*, *24*(1), 1-21. doi.org/10.1080/19349637.2020.1791781

Schnell, T. (2012). Spirituality with and without religion: Differential relationships with personality. *Archive for the Psychology of Religion*, *34*(1), 33-61. doi.org/10.1163/157361212X644495

Shaver, N., Michaelson, V., & Pickett, W. (2022). Do spiritual health connections protect adolescents when they are bullied: A national study of 12,593 young Canadians. *Journal of Interpersonal Violence*, *37*(13-14), 11034-11065. doi.org/10.1177/0886260521989853

Shaver, N., Michaelson, V., Whitehead, R., Pickett, W., Brooks, F., & Inchley, J. (2020). Structural validity of a brief scale adapted to measure adolescent spiritual health. *SSM Population Health*, *12*, 1-6. doi.org/10.1016/j.ssmph.2020.100670

Shaygan, M., & Shayegan, L. (2019). Understanding the relationship between spiritual well-being and depression in chronic pain patients: The mediating role of pain catastrophizing. *Pain Management Nursing*, *20*(4), 358-364. doi.org/10.1016/j.pmn.2018.12.001

Sifers, S. K., Warren, J. S., & Jackson, Y. (2012). Measuring spirituality in children. *Journal of Psychology and Christianity*, *31*(3), 205-214.

Soeharso, S. Y., Ningtyas, L. D., & Sundari, R. (2023). The role of environmental attitude as mediator between perceived sustainability policy and spiritual well-being toward pro-environmental behavior. *ANIMA Indonesian Psychological Journal*, *38*(1), 149-173. doi.org/10.24123/aipj.v38i1.4906

Stoyles, G. J., Stanford, B., Caputi, P., Keating, A-L. & Hyde, B. (2012). A measure of spiritual sensitivity for children. *International Journal of Children's Spirituality*, *17*(3), 203-215. doi.org/10.1080/1364436X.2012.733683

Tsaur, S.-H., Yen, C.-H., & Yan, C.-S. (2025). Effects of destination sacredness on tourists' spiritual well-being and destination commitment: Mediation effect of spiritual experiences. *Current Issues in Tourism*, online first, 1-19. doi.org/10.1080/13683500.2025.2513670

Valdivia, L. J., Alves, L. P., & Rocha, N. S. (2020). Spiritual Health and Life-Orientation Measure: Psychometric properties of the Brazilian Portuguese version. *Journal of Health Psychology*, *25*(9), 1187-1197. doi.org/10.1177/1359105317751619

Village, A., & Francis, L. J. (2022). Factorial structure and validity of the Francis Psychological Type and Emotional Temperament Scales (FPTETS). *Mental Health, Religion & Culture*, *25*(9), 897-909. doi.org/10.1080/13674676.2022.2026311

Village, A., & Francis, L. J. (2023a). Introducing the Francis Psychological Type and Emotional Temperament Scales (FPTETS): A study among church leaders and church

members. *Religion, Brain and Behaviour*, *13*(4), 399-419. doi.org/10.1080/2153599X.2022.2160800

Village, A., & Francis, L. J. (2023b). God is in his heaven, all's right with the world: Psychological wellbeing and belief in divine control during the third Covid-19 lockdown among Anglican clergy and laity in England. *Journal of Psychology and Theology*. *51*(2), 263-277. doi.org/10.1177/00916471221149027

Wixwat, M., & Saucier, G. (2021). Being spiritual but not religious. *Current Opinion in Psychology*, *40*, 121-125. doi.org/10.1016/j.copsyc.2020.09.003

Zinnbauer, B. J., & Pargament, K. I. (2005). Religiousness or spirituality. In R. F. Paloutzian & C. L. Park (Eds.), *Handbook of the psychology of religion and spirituality* (pp. 21-42). Guildford Press.

Zinnbauer, B. J., Pargament, K. I., Cole, B., Rye, M. S., Butter, E. M., Belavich, T. G., Hipp, K. M., Scott, A. B., & Kadar, J. L. (1997). Religion and spirituality: Unfuzzying the fuzzy. *Journal for the Scientific Study of Religion*, *36*(4), 549-584. doi.org/10.2307/1387689

Table 1

Factor analysis: Varimax rotation

	Factors	
	1	2
To reflect on my personal wellbeing	.76	
To feel better about myself	.72	
To open my eyes to the good in myself	.71	
To connect better with my inner self	.71	
To reflect on my relationships with other people	.77	
To feel better about my relationships with other people	.80	
To open my eyes to the good in other people	.73	
To connect better with other people close to me	.74	
To reflect on my relationship with the world	.71	
To feel better about my relationship with the world	.76	
To open my eyes to the good in the world	.70	
To connect better with the natural world	.74	
To reflect on my relationship with God		.85
To feel better about my relationship with God		.84
To open my eyes to the good in God		.84
To connect better with God		.84

Note: N = 874

Factor loadings below .42 have been suppressed

The two factors account for 69.7% of the variance

Table 2

Scales of Perceived Existential Spiritual Health Change and Perceived Religious Spiritual Health Change: Corrected item-total correlations and item endorsement

	r	%
Perceived Existential Spiritual Health Change (α = .95)		
To reflect on my personal wellbeing	.74	71
To feel better about myself	.73	67
To open my eyes to the good in myself	.75	56
To connect better with my inner self	.75	63
To reflect on my relationships with other people	.77	71
To feel better about my relationships with other people	.81	62
To open my eyes to the good in other people	.78	65
To connect better with other people close to me	.73	63
To reflect on my relationship with the world	.78	67
To feel better about my relationship with the world	.82	57
To open my eyes to the good in the world	.77	60
To connect better with the natural world	.75	48
Perceived Religious Spiritual Health Change (α = .93)		
To reflect on my relationship with God	.82	63
To feel better about my relationship with God	.86	54
To open my eyes to the good in God	.85	59
To connect better with God	.85	54

Note: N = 874

r = correlation between the individual item and the sum of the other items within the scale

% = sum of agree and agree strongly responses

Table 3

Perceived spiritual health change by belief in God

	Existential			Religious	
	N	M	SD	M	SD
Disagree strongly	80	35.79	12.50	8.21	3.72
Disagree	78	37.47	9.11	10.32	3.01
Not certain	165	42.19	7.24	12.81	2.80
Agree	251	44.80	6.94	14.96	2.52
Agree strongly	279	46.24	8.59	16.79	2.69
F (df 4.848)		36.59***		202.11***	

Note: *** $p < .001$

Table 4

Correlations and regression models on Index of Perceived Existential Spiritual Health Change

	R	Model 1	Model 2	Model 3	Model 4
Personal factors					
Sex	.10**	.11**	.10**	.04	.01
Age	.07*	.07*	.09**	.08*	.04
Psychological factors					
Emotionality	.08*		.10**	.11**	.10**
Extraversion	.09*		.09**	.07	.06
Psychological type					
Intuition	.09**			.07	.05
Feeling	.21***			.19***	.15***
Judging	-.07*			.02	.01
Religious factors					
Belief in God	.38***				.31***
Attendance	.22***				.04
Δ		.016**	.015**	.037***	.105***
R^2		.016	.031	.068	.173

Note: * $p < .05$; ** $p < .01$; *** $p < .001$

Table 5

Correlations and regression models on Index of Perceived Religious Spiritual Health Change

	R	Model 1	Model 2	Model 3	Model 4
Personal factors					
Sex	.12**	.13***	.11**	.07	-.00
Age	.05	.06	.08*	.07	-.02
Psychological factors					
Emotionality	.10**		.11**	.12***	.09***
Extraversion	.05		.07*	.05	.04
Psychological type					
Intuition	.06			.04	.01
Feeling	.16**			.15***	.05
Judging	-.05			.02	-.00
Religious factors					
Belief in God	.70***				.64***
Attendance	.44***				.10***
Δ		.018***	.014**	.020***	.457***
R^2		.018	.032	.052	.508

Note: * $p < .05$; ** $p < .01$; *** $p < .001$