



The Qualitative Assessment of Two Translated Dutch Spirituality Scales for Children

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ABSTRACT

Purpose: This article describes the translation and qualitative assessment and small scale validation of two spirituality scales designed for children from English to Dutch and includes the translation and validation process and the results of the two most commonly used and best validated measurement instruments for spirituality in children: the Feeling Good, Living Life scale (FGLL) by Fisher (2004, 2009) and the Spirituality Sensitivity Scale for Children by Stoyles et al. (2012).

Design and methods: The translation process was designed according to Beaton et al. (2000) and both the translation and the validation process followed the instructions of the Consensus-based Standards for the Selection of Health Measurement Instruments (COSMIN, 2018). The qualitative validation was done by a three-step test-interview eliciting the face validity of both questionnaires.

Results and conclusions: The results show that both instruments were reliably translated, are face valid with some minor alterations and structurally validated overall in the small-scale pilot.

Practice implications: More attention from healthcare professionals and educators should be directed at using spiritual measuring instrument to develop the spiritual vocabulary of children. A larger study is needed to also confirm the cultural validity of the translated scales.

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Introduction

To implement spirituality in healthcare as a dimension of wellbeing, we need to be able to assess this dimension in patients. There are measurement instruments available for adults (de Jager Meezenbroek et al., 2012), and several instruments have been developed for children, some of which originate from the adult versions (Fisher, 2009). Most instruments are designed in English, which can present a major language barrier for non-English speaking children. To include spiritual care as an integral part of Dutch paediatric care, it is essential that professionals and researchers have access to Dutch instruments appropriate for the intended population.

Theoretical foundation

To measure a concept as spirituality, one must first define it. The concept has been defined by different disciplines using very different terminology, which has so far not resulted in the adoption of a particular

definition by the scientific community. The theory of the spirituality of children specifically is also not well elaborated (Smith & McSherry, 2004). The most recent theory of Hay and Nye (2006) states that spirituality in children is based on a 'relational consciousness' on four domains: to the self, to others, to the world and to the Other. They add that the spirituality of children can be observed in how they sense awareness, mystery and values. This theory resonates with the work of scientists and professionals in different fields for example in pastoral psychology (Mercer, 2006) and social work (Scott, 2003). Accordingly, these four domains should be visible in any measurement of spirituality in children.

The Dutch context has specific characteristics regarding religiousness distinguishing it from the original cultural and linguistic context of the English scales. The majority of the population in Anglo-Saxon countries still identify themselves as being religious, as the Public Religion Research Institute (PRRI) reports that only 24% of all Americans do not identify with a religious denomination of some kind, and of that group only 58% report themselves as not being religious at all (Cox & Jones, 2017). The national census in Australia (Australian Bureau of Statistics, 2017) showed in 2016 that 60% of the population reported a religious affiliation. This contrasts with the Dutch population where, in 2017 for the first time ever, more than half of the population (51%)

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reported not being religiously affiliated (CBS, 2018). This secularization of Dutch society has undoubtedly affected the way religious vocabulary is becoming less known and a more generic spiritual vocabulary is needed. Therefore, it is imperative to select and use instruments that are mostly non-religious, and use appropriate non-religious vocabulary.

Usually, a quantitative analysis is used to define validity and reliability of measurement instruments, but to guarantee a proper adaption to the Dutch context the interpretation bias and face validity should first be established of any translation (Mallinson, 2002).

A literature search in EBSCO provided all available measurement instruments for children under the age of 18. The terms ‘spiritual* AND child* AND (assessment OR measurement)’ were used resulting in 390 items in full text and English. All items were scanned for the inclusion of a quantitative instrument validated for children under 18 years old.

The twelve instruments found were screened on the designated age, the general content and number of items and the available statistical information of reliability and validation (Table 1). Only the Feeling Good Living Life (FGLL) and the Spirituality Sensitivity Scale for Children (SSSC) fitted all criteria of prior validation, religiousness as a minor part of the scale, the four identified domains and developed for the purpose of assessing young children (Tables 2, 3, 5, 7).

The Feeling Good, Living Life (FGLL) scale was derived by Fisher (2009) from a scale for adolescents and adults called SWBQ-SHALOM. The FGLL consists of two sets of sixteen statements: one asks children how often they do certain things and the other repeats the statements asking how good they make them feel. Statements are scored on a five-point Likert scale. Items are equally distributed across four dimensions, indicating a relationship with the self, others, the environment and the transcendent. The FGLL was validated for children aged between five and twelve year-old with a Cronbach's alpha of 0.77 and high construct validity with alphas of 0.71 to 0.84 per domain (Fisher, 2009).

The Spirituality Sensitivity Scale for Children (SSSC) was designed by Stoyles et al. (2012) for children and contains 23 questions scored on a six-point Likert scale, ranging from Never to Always. Items are distributed across four dimensions: awareness, values, community and mystery. The SSSC has been validated for children aged between 8 and

Table 1
Available instruments.

Name	Age	Content & Items	Validation
SWBQ-SHALOM Gomez and Fisher (2003)	20+	20 items on four Spiritual-Well-Being domains:	Cronbach's alpha: (P) 0,89, (T) 0,86, (E) 0,76, (C) 0,79; and 0,92 for scale
Feeling Good Living Life (FGLL) Fisher (2004, 2009)	11–16 5–12	Personal, Communal, Environmental, Transcendental 16 items on four SWB domains, twice asked: firstly 'Does the following make you feel good?' and secondly 'Do you...'	Cronbach's alpha of 0.77 on scale; high construct validity with alphas of 0.71 to 0.84 per domain
Children Spiritual Lives Measure Moore et.al (2015)	6–12	27 items on three factors: Comfort from God, Omnipresence of God, Duality of soul	Cronbach's alpha of (C) 0,96; (O) 0,91; (D) 0,88
Ironson Woodson spirituality and religiousness index (IWSRI) Ironson (2002)	7–18	25 items on 4 subscales: Sense of Peace, Faith in God, Religious Behaviour, Compassionate View of Others	Cronbach's alpha 0.91, for total scale (Otakpor & Atanni, 2015)
Benefit Finding Scale for Children (BFSC) Phipps et al. (2007)	7–18	10 items, all based on the stem 'Having had my illness has...'	Chronbach's alpha 0.834 for scale
Youth Spirituality Scale (YSS) Sifers et al. (2012)	7–14/8–15	Unknown, not available	Pilot showed signs of validity/reliability
Spiritual Sensitivity Scale for children (SSSC) Stoyles et al. (2012)	8–11	23 items on 4 domains: Awareness Sensing, Mystery Sensing, Value Sensing and Community Sensing	Chronbach's alpha 0.77 for scale.
The Multidimensional Life Satisfaction Scale for Children (MLSSC, originally the student life satisfaction scale, SLSS) Huebner (1994)	6–18	Subscale of 7 items, not available	Chronbach's alpha 0.78. for scale (Chaves et al., 2016)
Spiritual and Religious Thriving in Adolescents Dowling et al. (2004)	9–15 years	17 items relating to values, conscience and role of family, mix of quantitative and qualitative instrument	Cohen's kappa inter-rater reliability of 0.87
Children/Adolescent Spirituality Screening Tool (CASST) Grosshoeme (2008)	10–18	17 items of which 8 items relate to God, church or prayer, others related to hope, embarrassment and loneliness	Unknown, only tested in Delphi study
Spirituality Well-Being Scale (SWBS) Ellison (1983)	12–20	20 items on 2 subscales: Religious Well-Being and Existential Well-Being, focus on spiritual beliefs, available for \$20	High test-retest reliability (r = 0.80 p = 0.0006). (Ruben et al., 2009)
Developmental Dimensions Scales (Spiritual development Scale) Spurr et al. (2012)	16–20	Subscale of 3 items relating to values and connectedness	Alpha coefficient of 0.72 or higher (Sharkey, 1999)

Table 2
Final translation: the FGLL-nl.

FGLL-nl: Doen wat goed voelt	
Geeft het volgende je een goed gevoel?	Welke van deze dingen doe jij?
2. Naar de maan en sterren kijken	2. Naar de sterren en de maan kijken
3. Buiten wandelen	3. Buiten een wandeling maken
4. Weten dat je familie van je houdt	4. Eraan denken dat mijn familie van mij houdt
5. Je gelukkig voelen	5. Mij gelukkig voelen
6. Als mensen zeggen dat je een goed persoon bent	6. Mensen horen zeggen dat ik iets goed doe
7. Van je familie houden	7. Van mijn familie houden
8. Weten dat je bij je familie hoort.	8. Beseffen dat je bij een familie hoort
9. Bedenken dat het leven leuk is	9. Bedenken dat het leven leuk is
10. Tijd doorbrengen met je familie	10. Bij mijn familie zijn
13. Tijd doorbrengen in de tuin	13. In de tuin zijn
14. Naar een zonsopgang of ondergang kijken	14. Naar een zonsopgang of een zonsondergang kijken
15. Weten dat mensen je aardig vinden	15. Bedenken dat mensen mij aardig vinden
1. Bedenken dat (jouw) God een vriend is	1. Eraan denken dat (jouw) God een vriend is
11. Praten met (je) God	11. Met (je) God praten
12. Weten dat (jouw) God voor je zorgt	12. Eraan denken dat (jouw) God voor mij zorgt
16. Aan (je) God denken	16. Aan (je) God denken

11 years with a Cronbach's alpha of 0.77, and although the four dimensions did not show construct validity, good construct validity was found for inward-focused items (a Chronbach alpha of 0.75 for items 1,3,6,8,9,17,18) and a lower one for outward-focused items (a Chronbachs alpha of 0.57 for items 7,12,15,20,21) (Stoyles et al., 2012).

Purpose and aim

The aim of this study is first to translate these two most suitable spirituality scales for Dutch practice and second, assess the face validity

Table 3
Final translation: the SSSC-nl.

SSSC-nl: Spirituele sensitiviteitschaal voor kinderen
1. Ik neem regelmatig de tijd om gewoon even na te denken
2. Zelfs normale dingen in het leven kunnen me verstoord doen staan
3. Wanneer ik me echt op iets concentreer, vergeet ik al het andere om mij heen
4. Het gebruik van plaatjes en verhalen helpt me om dingen in het leven te begrijpen
5. Wanneer ik iets doe wat ik al eens eerder heb gedaan, bijvoorbeeld voor de tweede keer naar dezelfde film kijken, dan zie ik dingen die me de eerste keer niet opgevallen waren
6. Ik leer steeds nieuwe dingen
7. Momenten worden bijzonder omdat ik ze deel met anderen, zoals het vieren van mijn verjaardag met mijn gezin, familie en vrienden
8. Wanneer ik me echt op iets concentreer vergeet ik hoe snel de tijd gaat
9. Ik vind het fijn om te praten over hoe ik me voel, bijvoorbeeld of ik me blij of verdrietig voel
10. Soms vraag ik me af waarom ik geboren ben
11. Het is belangrijk voor me om te voelen dat mijn gezin, familie en vrienden van me houden
12. Ik help graag andere mensen
13. Ik verwonder me over de dingen om me heen, bijvoorbeeld de natuur, muziek of sport
14. Ik denk na over de persoon die ik zou willen zijn wanneer ik ouder ben
15. Het is belangrijk om mensen te helpen die niet zoveel hebben als ik
16. Ik denk na over de dingen in mijn leven die belangrijk voor mij zijn
17. Ik wil meer leren over de wereld waarin ik leef
18. Wanneer ik met mijn handen werk, ben ik me bewust van wat mijn handen dan voelen
19. Het is belangrijk voor mij om een groep mensen te vinden waar ik echt bij pas
20. Ik denk dat het belangrijk is om andere mensen te helpen
21. Het is belangrijk om mijn gezin, familie en vrienden duidelijk te laten merken dat ik van ze hou
22. Mijn leven wordt interessanter als ik fantaseer
23. Ik denk na over de dingen die ik zou willen doen als ik later groot ben

among the intended population and test for an indication on the reliability and construct validity of the translated scales.

Design and methods

The translation process

The translation process was designed according to Beaton et al. (2000) conforming to the COMIN cross-cultural validity checklist. The first step is a double forward translation, with one English language expert and one expert on the concept of spirituality translating both questionnaires separately to achieve linguistic and conceptual equivalence.

Differences in translations resulted from the concept expert translator's approach to use child-friendly language, while the English language expert translated as close to the original text as possible. The two translators reached consensus on these differences based on the more closely translated version, except for some words and phrases which are not commonly used in the Dutch language. For example: item 3 of the FGLL scale 'Going for a walk in a park' sounds very specific in Dutch, consensus was reached for a translation based on 'Going for a walk outside'. Some words (*happy*) could be translated with more than one Dutch word (*blij* or *gelukkig*) with subtle differences in meaning. In those instances, translators consented on the word that captured the essence of the scale (*gelukkig*).

The second step was a double backwards translation of both scales. Two native English speakers translated both forward translated questionnaires. There were almost no differences between the two backwards translated questionnaires. The only words which resulted in translation variations were the same words or phrases from the first step that have several alternatives in one of the languages with subtle differences in nuance. Minor differences in word order occurred. Both

backward translations were sent to the original scale developers and the FGLL approval was received for the translations and linguistic adjustments. The phrasing differences in the SSSC were settled by the translators, choosing the most child-friendly phrasing.

The third step was a review of the translation by experts on the adaptation for the Dutch context without losing concept validity. Three educational experts participated in a panel discussion, which was recorded. Experts responded to two questions: 'To what extent are the translated questionnaires suitable for the Dutch context?' and 'To what extent are the translated questionnaires suitable for children aged 8, 9 or 10 years old?' Two healthcare experts, an orthopedagogical advisor, a paediatric oncology nurse and a medical researcher, and two experts on the concept of spirituality in healthcare, commented online. Most translators offered additional suggestions alongside their translation where they felt a literal translation was not suited for the Dutch context. This information was also included in this step.

The biggest issues were the items in the FGLL-nl concerning the relationship with the Transcendent, formulated as 'God-questions'. Almost all experts suggested using a more neutral term, but found no short and comprehensible neutral alternative in the Dutch language. We then chose to cluster and ask these questions last, after having asked the children whether they believed in something/someone you cannot see, which other people might describe as God or Allah. If they answered affirmative, they were asked to complete the 'God-questions'. All items were phrased with consistent word order, to be easier to understand for children. The instrument was titled 'FGLL-nl: Doen wat goed voelt', as the English title was not easy to translate literally.

The SSSC-nl it received little criticism, save for some language details: words like 'family', have two synonyms in Dutch (*gezin* and *familie*) and experts preferred mentioning both. Experts considered this instrument to be more difficult because of its longer sentences, but the application of the concept of spirituality was regarded as more appropriate to the Dutch culture and language.

Qualitative assessment and small scale cross-cultural validity pilot

Following Beaton et al. (2000) guideline we randomly selected 30 Dutch children aged between 8 and 11 years, in the third, fourth and fifth grade from a medium-sized secular primary school in an average city in the east of the Netherlands. Parents of all involved children were informed and asked to object if they did not consent to their child completing the questionnaire (passive consent). From each grade, 10 children were selected by their teachers using name sticks, a random selection method commonly used in class, excluding the sticks with the names of the four children whose parents declined permission. The children selected were asked whether they would like to decline, none did.

The qualitative assessment of the face validity was based on the three-step test-interview, designed by Hak et al. (2004) in which the respondent is first observed, is then probed by the interviewer inquiring after observed behaviour and finally afterwards debriefed to elicit experiences and interpretations. For the first step the children were observed while completing the questionnaires in groups of five. For the second step spontaneous discussions, questions and remarks were directly explored to identify the meaning of the item for the child. Prompts were also giving when behaviour was observed like frowning, sighing, hesitations or eye contact with the researcher. For the third step all the groups collectively evaluated the scales afterwards, prompted by the same two questions for both questionnaires: 'How did you enjoy the questionnaire?', and 'Which questions were easy/hard to answer and which were easy/difficult to understand?'

The analysis was also done following the three steps-test process (Hak et al., 2004). For the first step (observation) questions were marked that elicited spontaneous non-verbal or verbal comment. In

the second step (prompting to elicit meaning) the content of the comment was explored and divided in comments that regarded the topic of the question or the understanding of the question, each time the child was asked first to give their own opinion (what do you think it means?). The observations were documented with detailed field notes inspired by *Phillippi and Lauderdale (2018)* guide for field notes. For the third step (evaluating meaning) comments relating to ‘How did you enjoy the (first/second) questionnaire?’ were categorized as *process experiences* and comments relating to ‘Which questions were easy/hard to answer and which were easy/difficult to understand?’ were categorized as *content experiences*.

All sessions were video recorded. The children who participated in the pilot received additional information on the use of the video material and a consent form was attached for their parents to complete and return to the school (active consent). As most parents did not give consent to the use of the video material as data, the recordings were not analysed but only used to triangulate the field notes of the observing researcher. The two quotes used are based on the field notes and are translated from the memory of the researcher.

Descriptive analysis was performed to determine the children’s characteristics. An analysis of the whole FGLL-nl scale (32 questions, doing and feeling) was performed on the separate sets (16 questions on doing; 16 questions on feeling) and on the subscales (Self, Others, Nature, the Other), both separately (4 questions on doing or feeling) and as combined sets (8 items on doing and feeling). An analysis was performed on the whole SSSC-nl scale, on the two original clusters (Inward and Outward focus) as identified by *Stoyles et al. (2012)* and on the four subscales (mystery, values, community and awareness).

Results

Descriptive results

Thirty children in the pilot completed the FGLL-nl questionnaires: 15 boys and 15 girls. Ten children participated from each grade, but the age differences within the groups were varied (see *Table 4*). Nine children completed the (optional) ‘the Other’ subscale, seven of which identified themselves as ‘believing in Someone you cannot see’.

The majority of the children who completed the SSSC-nl were the same children for the FGLL-nl, but to compensate for three girls from the third grade who quit after completing the FGLL-nl, four additional children with the same regional and background characteristics – three girls and one boy – found through snowballing, were asked to complete this questionnaire. This additional data is only used to reach a statistical sufficient number of respondents for quantitative analysis.

FGLL-nl

Questions addressing ‘familie’ elicited spontaneous comments of content experience, children were wondering who were exactly meant by this. They discussed the scope of the concept, whether to interpret it on a small scale (direct family members like parents and siblings) or more inclusive (including grandparents, aunts and uncles) and about the concept of ‘family’: what about separated parents the child did not live with or family living abroad?

Table 4
FGLL-nl descriptives: age and grades.

Group	8-year-olds	9-year-olds	10-year-olds	11-year-olds	12-year-olds
5 (3rd grade)	5	3	2	0	0
6 (4th grade)	0	5	4	1	0
7 (5th grade)	0	0	6	3	1

Table 5
SSSC-nl descriptives: sex and grades.

Group	Boys	Girls	Total
5 (3rd grade)	4	3	7
6 (4th grade)	9	3	12
7 (5th grade)	3	8	11
8 (6th grade)	0	1	1
Total	16	15	N = 31

Table 6
Cronbach’s alphas for the FGLL-nl. *Indicating validity above a 0.70 cutoff point.

Scale and subscale	Do and Feel	Do	Feel
Self (n = 29)	0.74*	0.40	0.78*
Others (n = 30)	0.72*	0.80*	0.30
Nature (n = 30)	0.64	0.08	0.70*
The Other (n = 9)	0.98*	0.96*	0.96*
Total (n = 9 with the Other)	0.89*	0.61	0.89*
Total (n = 29 without the Other)	0.80*	0.63	0.79*

Table 7
Cronbach’s alphas for the SSSC-nl. *Indicating validity above a 0.70 cut-off point.

Scale and subscale	All children (n = 31)	Only children from pilot (n = 27)
Awareness	0.56	0.54
Mystery	0.53	0.59
Community	0.29	0.30
Values	0.64	0.64
Inward focus	0.57	0.58
Outward focus	0.46	0.48
Total	0.77*	0.77*

Q1 was confusing according to the children because it asked two things (moon and stars). Q4 (feeling happy) also gave cause for confusion, because according to the children: who does not want to be happy? Regarding Q10 some children spontaneously remarked that they did not have a garden and were wondering how to answer: did the park or a nearby forest also count? Some children only had a backyard, did that count as well? One girl asked whether thinking about the weather outside counted as being outside. Even though most children did not identify as religious, when a child filled in these questions, the others were very interested. Items about what people think or say about you led in some sessions to discussions about it not being important what other people think about you, but what you think about yourself.

In the debriefing afterwards most process experiences were shared. The use of brackets to represent a tick-box for the descriptive data caused difficulties for the children as they struggled to see between which brackets the answer should be noted.

The children from the third grade had to concentrate seriously on the first questionnaire (FGLL-nl), as (do/feel) and the separate questions on religion proved complicated. One group asked for the questions to be read aloud and to go through the questionnaire together. Once the researcher read each question aloud with the prefix: ‘how often do you do...’ and ‘how happy do you feel when...’, the children had no trouble distinguishing the two lists (do/feel). This questionnaire took the most time to complete for the lower grades but was completed within 10 min by the older children in the fifth grade.

The children sometimes found the ‘feel’ list of questions in this questionnaire difficult to answer, as one girl explained (loosely translated): ‘I had never thought about these things before today, but now I do, but I don’t know – yet – how I feel about them’.

Quantitative analysis was performed to indicate the reliability of the scale. A Cronbach’s alpha of 0.70 was considered as indicating internal

consistency. The scale as a whole ($n = 29$) had a Cronbach's alpha of 0.80, the subscales scored 0.64 to 0.98 (Table 6). Separate list analysis was performed, showing that the overall 'do' list of questions showed reasonable consistency, with alphas of 0.61 and 0.63; the overall 'feel' list was reliable, with alphas of 0.89 and 0.79. The Self and Nature scales concerning 'do' and the Others scale concerning 'feel' showed no consistency. This pilot of 30 respondents is too small for a conclusive factor analysis, shown by a Kaiser-Meyer value of 0.274 (value without 'the Other' items, which could not be included).

It is interesting to note that it seems the 'do' items concerning the self and nature are too diverse to regard as a coherent subscale. The 'others' subscale is regarded as a coherent subscale to 'do', but do not 'feel' the same.

SSSC-nl

The children needed some time at first to develop a way to answer this questionnaire. Content experiences shared about confusing content concerned Q5 (noticing a second time), Q7 (when events become special), Q11 (to feel loved) and Q19 (finding 'your' people). The children were almost always capable of explaining to each other what they thought the question meant, in each group there usually was a child that could give a correct example. In the lower grade 'noticing a second time' was explained by referring to a movie about a horse which two of the girls had seen multiple times, noticing something new each time.

Questions the children found interesting and led to vivid discussion were Q1 (time to think), Q3 and Q8 (on concentration). Some questions literally raised some eyebrows as children found them obvious (Q12, Q14 on helping others/ Q6, Q17 on learning) or strange such as the item about wondering why you are born, about what your hands feel like, and who you want to be when you grow up ('not what I want to be?').

The conversations among the older children (4th and 5th grade) were very serious at times, about topics like identity (who am I?) and belonging (I don't get to see my family much). Their curiosity about each other's answers on this questionnaire increased during sessions as they discovered they sometimes unexpectedly differed greatly and were sometimes much more alike than expected.

Regarding the process experience this questionnaire was experienced as the most fun, as one boy -loosely translated- said: 'This is actually very fun to do!'

The quantitative analysis showed a Cronbach's alpha of 0.77 on the SSSC-nl as a whole, indicating good reliability. No subscale or previously found category could be confirmed as internal consistent, although items regarding values showed the most coherence as a scale. The Kaiser-Meyer value of 0.472 (all children) and 0.298 (only pilot children) shows that this sample is not sufficient to confirm validity.

Conclusion

The analysis shows that the translations of both show face validity as they are reliable in interpretation and meaning of the items. The FGLL-nl is more complex as it demands children to distinguish between doing and feeling. Also, because the sentences are much shorter, words need to be very precise to indicate the true meaning of the question. The SSC-nl required more reading skills, but proved to be more understandable, indicated by children giving correct examples to each other on confusing content.

The results also show that the children named different areas of improvement than the experts. It was notable that the children raised language issues on the questionnaire (FGLL-nl) that seemed simple and understandable and that the questionnaire (SSSC-nl) the experts deemed too difficult was the one that elicited serious discussions among the children, demonstrating that not only did they understand the questions perfectly, but also were inquisitive and reflective on the topics raised in it.

The quantitative data also indicates that the translation of these two spirituality scales for children as a whole are structurally valid for Dutch children aged between 8 and 11 years.

Practical implications

The pilot showed the value of first establishing face validity among target population. This step should be done before larger quantitative analysis of validity to ensure that the questionnaires that are tested are really understood by respondents, especially for groups such as children who's interpretation is hard for experts to imagine. The children's experiences and feedback show room to improve both scales on minor issues, like the brackets.

Both measurement instruments show face validity and seem reliable translated, so they could be tested in paediatric settings to assess spirituality of children. The FGLL-nl proved challenging for younger children, especially the 8-year olds, so the SSSC-nl would be better equipped for them. The scales can assess the spiritual sensitivity of children, and analysis of the results can indicate if illness, hospitalization or disabilities endanger spiritual wellbeing by prohibiting what is most important for the child. Currently the scales are not tested in paediatric settings to assess spiritual distress, as they focus on sensitivity and were not designed to be a diagnostic tool, but researchers could investigate the Diagnostic Test Accuracy of the scales by combining them with other relevant scales. When used for example in combination with a Quality of Life scale, or a Happiness scale as Holder et al. (2010) did, it can indicate the impact of spiritual distress on health and wellbeing.

This pilot however showed that not only children in healthcare settings can benefit from the use of an assessment of their spirituality, 'well' children, such as the ones in this pilot, need to develop their spirituality too. This insight is not new, it was advocated years earlier by healthcare professionals like Pridmore and Pridmore (2004), but in many countries it is not yet common practice. The discussions and questions raised among the children gave a beautiful insight into the children's diverse worldview, connectedness with their peers, their imagination and values. New spiritual vocabulary was learned and explored by going through the questionnaire. Researchers and professionals in paediatric care and in other child-oriented disciplines like education, should not resort to spiritual questionnaires as a goal in itself, but as a means to an end: to promote and stimulate the spirituality of children while teaching them the spiritual vocabulary to do so.

Lastly a more extensive study is required to confirm the construct and cultural validity of the scales with a confirmative factor analysis. One was performed in this pilot but the Kaiser-Meyer value showed that the numbers of participants were not enough to be definitive. The results are therefore regarded as indicating statistical validity. A larger study with inclusion of a nationwide, heterogenic population should be performed to confirm these indicative results and can additionally confirm that Dutch children are as competent in completing the Dutch questionnaires as Australian children (SSSC) and American children (FGLL) who use the English version. A regression analysis and/or a differential item functioning should be performed between the data from the groups.

Declaration of competing interest

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Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.pedn.2021.01.017>.

References

- Australian Bureau of Statistics (2017). Census of population and housing: Australia revealed, 2016. Available at: <http://www.abs.gov.au/ausstats/abs@.nsf/mf/2024.0> (accessed November 18th 2020).
- Centraal Bureau voor Statistiek (2018). Meer dan de helft Nederlanders niet religieus. Available at: <https://www.cbs.nl/nl-nl/nieuws/2018/43/meer-dan-de-helft-nederlanders-niet-religieus> (accessed November 18th 2020).
- Beaton, D. E., Bombardier, C., Guillemin, F., et al. (2000). Guidelines for the process of cross-cultural adaptation of self-report measures. *Spine (Phila Pa 1976)*, 25, 3186–3191.
- Chaves, C., Hervas, G., García, F. E., & Vazquez, C. (2016). Building life satisfaction through well-being dimensions: A longitudinal study in children with a life-threatening illness. *Journal of Happiness Studies*, 17(3), 1051–1067.
- COSMIN (2018). The COSMIN checklist. VU Medical Center Available at: https://www.cosmin.nl/wp-content/uploads/COSMIN-RoB-checklist-V2-0-v17_rev3.pdf (accessed November 18th 2020).
- Cox, D., & Jones, R. P. (2017). *America's changing religious identity*. Public Religion Research Institute Available at: <https://www.prrri.org/research/american-religious-landscape-christian-religiously-unaffiliated/> (accessed November 18th 2020).
- Dowling, E., Gestsdottir, S., Anderson, P., Von Eye, A., Almerigi, J., & Lerner, R. (2004). Structural relations among spirituality, religiosity, and thriving in adolescence. *Applied Developmental Science*, 8, 7–16.
- Fisher, J. (2004). Feeling good, living life: A spiritual health measure for young children. *Journal of Beliefs & Values*, 25, 307–315.
- Fisher, J. (2009). Getting the balance: Assessing spirituality and well-being among children and youth. *International Journal of Children's Spirituality*, 14, 273–288.
- 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, 1975–1991.
- Hak, T., Van der Veer, K., & Jansen, H. (2004). The Three-Step Test-Interview (TSTI): An observational instrument for pretesting self-completion questionnaires. Retrieved from SSRN <https://ssrn.com/abstract=636782>.
- Hay, D., & Nye, R. (2006). *The spirit of the child* (Revised ed.). Jessica Kingsley Publishers.
- Holder, M. D., Coleman, B., & Wallace, J. M. (2010). Spirituality, religiousness, and happiness in children aged 8–12 years. *Journal of Happiness Studies*, 11(2), 131–150.
- Huebner, S. (1994). Preliminary development and validation of a multidimensional life satisfaction scale for children. *Psychological Assessment*, 6, 149–158.
- de Jager Meezenbroek, E., Garssen, B., van den Berg, M., Van Dierendonck, D., Visser, A., & Schaufeli, W. B. (2012). Measuring spirituality as a universal human experience: A review of spirituality questionnaires. *Journal of Religion and Health*, 51(2), 336–354.
- Ellison, C. W. (1983). Spiritual well-being: Conceptualization and measurement. *Journal of Psychology and Theology*, 11, 330–340.
- Mallinson, S. (2002). Listening to respondents: A qualitative assessment of the Short-Form 36 Health Status Questionnaire. *Social Science & Medicine*, 54(1), 11–21.
- Mercer, J. A. (2006). Children as mystics, activists, sages, and holy fools: Understanding the spirituality of children and its significance for clinical work. *Pastoral Psychology*, 54(5), 497–515.
- Otakpor, A. N., & Akanni, O. O. (2015). A validation study of the Ironson–Woods Spirituality/Religiosity Index in Nigerian adolescents. *Journal of Child & Adolescent Mental Health*, 27(3), 189–197.
- Phillippi, J., & Lauderdale, J. (2018). A guide to field notes for qualitative research: Context and conversation. *Qualitative Health Research*, 28(3), 381–388.
- Phipps, S., Long, A., & Ogden, J. (2007). Benefit finding scale for children: Preliminary findings from a childhood cancer population. *Journal of Pediatric Psychology*, 32, 1264–1271.
- Pridmore, P., & Pridmore, J. (2004). Promoting the spiritual development of sick children. *International Journal of Children's Spirituality*, 9(1), 21–38.
- Ruben, D., Dodd, M., Desai, N., Pollock, B., & Graham-Pole, J. (2009). Spirituality in well and ill adolescents and their parents: The use of two assessment scales. *Pediatric Nursing*, 35(1), 37–42.
- Scott, D. G. (2003). Spirituality in child and youth care: Considering spiritual development and “relational consciousness”. *Child and Youth Care Forum*, 3(2), 117–131.
- Sifers, S., Warren, J., & Jackson, Y. (2012). Measuring spirituality in children. *Journal of Psychology and Christianity*, 31, 205–214.
- Smith, J., & McSherry, W. (2004). Spirituality and child development: A concept analysis. *Journal of Advanced Nursing*, 45(3), 307–315.
- Spurr, S., Bally, J., Ogenchuk, M., & Walker, K. (2012). A framework for exploring adolescent wellness. *Pediatric nursing*, 38(6), 320.
- 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, 203–215.