

# **Chapter 6**

## **The Effectiveness of the Spiritual Enhancement Group for Chinese Elders (SEGCE): An Outcome and Process Evaluation**

### **6.1 Introduction**

After developing the SEGCE protocol, we conducted a study of its effectiveness from both an outcome and process perspective. In terms of outcome, the focus was on whether the SEGCE enhanced participants' spiritual well-being using a quasi-experimental design. In terms of process, the study examined the possible barriers to, and facilitators of, using SEGCE with Chinese older adults in the community and in residential institutions. Focus groups with key stakeholders (participants and intervention leaders) were conducted. The implementation process was also evaluated with reference of the context, input, product, and process (CIPP) program evaluation model. This chapter reports on the method and findings of this study.

### **6.2 Methodology**

#### ***6.2.1 Design***

A mixed methodology was employed which included a quasi-experimental study and a quantitative study using self-reflecting by intervention leaders and focus group discussions.

#### ***6.2.2 Sampling***

A multistage sampling procedure was adopted for the quasi-experimental study. At the first stage, eight service units, including six residential facilities and two community elderly service centers, were invited to participate. Each unit

was randomly assigned to the experimental or recruitment group and asked to recruit participants accordingly. In stage two, the research team prepared letters of invitation to potential participants with brief statements on the background, objectives, and procedures of the study. The service unit supervisor and/or social workers then promoted the SEGCE to their client groups and conducted an initial screening based on inclusion criteria 1–3. In stage three, social workers invited those who met these inclusion criteria to participate and referred them to the research team to conduct an initial screening using the Spirituality Scale for Chinese Elders (SSCE). Finally, in stage four, those who fulfilled all the inclusion criteria were invited to take part and their informed consent was obtained.

The four inclusion criteria for the present study were given as: (1) aged 50 or above; (2) cognitively intact; (3) able to communicate in Cantonese; and (4) scored lower than the 33 % quartile cutoff on the SSCE.

Participants for the focus groups were recruited from among the study members in both residential facilities and community centers. The intervention leaders were also invited to take part.

### ***6.2.3 Procedures***

A total of 112 older adults were referred by service units of whom 107 fulfilled all inclusion criteria and agreed to participate. A trained research assistant conducted a pre-intervention assessment within a week before the first session for experimental group participants. Post-intervention and follow-up assessments were conducted immediately after the intervention, and two months later, for those in the experimental group. The control group participants underwent pre- and post-assessments within an eight-week interval. All assessments were completed during face-to-face interviews using standardized questionnaires.

### ***6.2.4 Primary Outcome Measure***

The SSCE was used to measure the spiritual well-being of the study participants. As discussed in previous chapters, the SSCE comprises 44 items in 7 subscales: meaning of life, spiritual well-being, transcendence, relationship with self, relationship with family, relationship with people other than family members, and relationship with the environment. Respondents were asked to rate the degree of frequency they experienced each of the items using a 5-point Likert scale. The subscale scores were computed by summing the item scores, with a higher score associated with a higher level of spiritual well-being.

**Table 6.1** Focus group theme questions

	Older participants	Intervention leaders
Impact	What has been the impact of the SEGCE on your daily life?	What impact has SEGCE had on participants' daily lives?
Success factors	What motivated you to participate in the SEGCE group? What can be done differently but better based on your experiences?	What are your views on SEGCE in regard to its impact?
	If you were asked to recommend the SEGCE to your peers, what would you highlight?	If you were asked to recommend the SEGCE to potential intervention leaders, what would you highlight?
Good practice	What impressed you most/what did you like best about the SEGCE?	What was your experience as a group leader? What were you most impressed by and/or liked best?

### 6.2.5 Measures for Control Variables

The control variables were measured as follows: (1) age (continuous variable measured in years); (2) living arrangement (residential facility or community dwelling); (3) self-rated financial adequacy (collected using a 5-point Likert scale ranging from very inadequate to more than adequate; (4) whether or not significant life events had been experienced within the period between pre- and post-assessment, including hospitalization of the participant or his/her family members, clinical health concerns such as pain or wounding, death of family members, and loss of money (Yes/No item measures).

A semi-structured guideline was developed to guide the focus group discussions. Four themed questions for older participants and intervention leaders were developed to identify the success factors for the SEGCE and good practice during the implementation process (Table 6.1). A total of 17 participants from residential facilities participated in three focus groups; 21 community-dwelling participants in three groups; and 7 intervention leaders in two groups.

### 6.2.6 Data Analysis

Descriptive analyses of the demographic characteristics of participants were performed. Changes in spiritual well-being as measured by the SSCE were analyzed using the latent growth linear mixed model (LMM) across three time points (pre- and post-intervention and two-month follow-up) between experimental and control group participants. The control variables included age, gender, self-rated financial adequacy, living arrangement (community vs. residential), whether or not the

participant had experienced significant life events during the intervention period, and their interactions with the SEGCE intervention. Models were continuously adjusted by eliminating non-significant contributing factors.

All the focus group discussions were audiotaped. A college student with suitable training transcribed the recordings, which were then checked by a research assistant. Themes were identified by the research team by repeatedly reading through the transcripts.

## 6.3 Findings

### 6.3.1 Demographic Characteristics

The ages of the 107 participants who completed the baseline assessment ranged from 57 to 95. More than 70 % were female and over 60 % had been widowed by the time of interview. Around 60 % had not received any formal education and around 70 % reported no formal religious affiliation. No significant differences were found between the intervention and control groups in terms of these demographic characteristics (Table 6.2).

**Table 6.2** Sociodemographic characteristics of participants

	Intervention group ( $n = 53$ ) (min, max) (mean, SD)	Control group ( $n = 54$ ) (min, max) (mean, SD)
Age	(66, 95) (81.9, 6.2)	(57, 94) (78.4, 8.8)
	Frequency (%)	Frequency (%)
<i>Gender</i>		
Female	41 (77.4)	40 (74.1)
<i>Marital status</i>		
Married	14 (26.4)	16 (29.6)
Widowed	35 (66.0)	34 (63.0)
Other	4 (7.5)	4 (7.4)
<i>Level of education</i>		
No formal education	30 (56.6)	31 (57.4)
Primary school	17 (32.1)	18 (33.3)
Secondary school or above	6 (11.3)	5 (9.3)
<i>Religious affiliation</i>		
No	16 (30.2)	10 (24.3)
Chinese traditional worship	24 (45.3)	24 (44.4)
Christian, Catholic, Buddhist, Muslim	13 (24.5)	20 (37.0)

### 6.3.2 The Effectives of SEGCE

#### 6.3.2.1 Impact on Spiritual Well-Being

At baseline, no significant differences in SSCE subscale scores were identified except for the meaning of life subscale (Table 6.3) where intervention group participants scored significantly higher than those in the control group.

According to the LMM, the SEGCE intervention demonstrated a significant effect on enhancing elements of spiritual well-being, including meaning of life, affective aspect of spiritual well-being, and transcendence (Table 6.4). Moreover, experiencing significant life events, particularly at a comparatively young age,

**Table 6.3** SSCE subscale scores at pre-intervention

	Intervention group (n = 53) Mean (SD)	Control group (n = 54) Mean (SD)
Spiritual well-being	35.0 (5.2)	33.3 (6.9)
Meaning of life*	19.6 (4.4)	16.1 (5.9)
Transcendence	18.3 (6.4)	18.0 (5.6)
Relationship with self	17.4 (3.5)	16.7 (3.5)
Relationship with family	32.9 (8.1)	30.2 (9.5)
Relationship with people other than family	28.8 (4.7)	26.7 (5.3)
Relationship with environment	26.2 (4.0)	26.3 (2.7)

Note \* $p < 0.01$

**Table 6.4** LMM results with estimated fixed effects<sup>a</sup>

	Estimate (95 % CI)	Standard error
<i>Spiritual well-being</i>		
SEGCE intervention**	4.2 (1.3, 7.1)	1.5
<i>Meaning of life</i>		
SEGCE intervention*	2.8 (0.5, 5.1)	1.2
Community dwelling**	3.0 (0.8, 5.1)	1.1
Experiencing significant life events**	928.3 (270.3, 1586.4)	327.4
Experiencing significant life events × age**	-0.5 (-0.8, 0.1)	0.2
<i>Transcendence</i>		
SEGCE intervention**	12.8 (6.0, 19.6)	3.4
Community dwelling*	3.0 (0.6, 5.5)	1.2
Experiencing significant life events**	1124.5 (464.1, 1784.9)	329.1
Financial difficulties*	1.9 (0.1, 3.7)	0.9
Intervention × financial difficulties	-2.9 (-5.1, -0.8)	1.1
Experiencing significant life events × age	-0.6 (-0.9, -0.2)	0.2

Note <sup>a</sup>Only significant results were reported. \* $p < 0.05$ , \*\* $p < 0.001$

was found to be associated with a greater impact of participation in the SEGCE. Participants who reported financial inadequacy were less likely to have benefited from the SEGCE intervention.

### 6.3.2.2 Themes Emerging from the Focus Groups—Participants

In regard with impacts on spiritual well-being, thematic analysis of the focus group transcriptions revealed three themes: transcendence changes, enhanced harmonious relationships, and good practice on multimedia activity design involving choice and respect.

Changes in transcendence were articulated by participants, with particular reference to being equipped with the competence to go beyond previous boundaries for optimal life experience. As one participant put it, “after I joined the SEGCE, I learned how to relax (my mind). Previously I had tended to focus on the dark side of life. Now I know how to let go.” Another felt that “the SEGCE enlarged my perspectives and introduced me to a life that seems to make me younger than before (*Fan Lao Huan Tong*).” As another put it,

I realized the importance of connecting to my life energy. For example, my previous boss treated me very well and gave me a lot of support. I now put his family photo into my pocket and let his support be always with me.

The theme of improved harmonious relationships was reflected by participants’ describing an extended sense of connectedness with the people around them, more constructive communication with family and oneself, and a greater appreciation of their living environment. For example, participants said:

- Even today I can remember the name of another participant, we say hi to each other when we meet on the street.
- I spend more time with my family members for joy.
- When I feel sad, I will eat my favorite food to boost myself up.
- When I get up, I look at the picture (with a beautiful scene) on my table, then go to do exercise.
- The *Jia Li Bu* can have sustained power. I sometimes take out and review at home now.

The theme of good practice was identified by participants’ appreciation of the multimedia activities. As participants explained:

- Breathing and passing energy through pushing hands together was a good memory, we had fun.
- I put a lot of effort into making a card to my grandson. He received it with great appreciation.
- Singing a song together (on friendship) was very memorable.
- Taking group photographs was very powerful, I liked it.

### 6.3.2.3 Themes Emerging from the Focus Groups—Intervention Leaders

The focus groups with intervention leaders generated three themes on factors contributing to effective SEGCE leadership, transcendence change and professional competence, targeting right group of older adults, and good practice on adopting multimedia activities.

The theme of transcendence change being linked to professional competence was shared by almost all group leaders, based on individual reflections and focus group discussion. The pathway to change often started from a feeling of strangeness and unfamiliarity with the concept of spirituality. Even after attending standardized training three times over, most intervention leaders still felt uncertain about how to communicate with participants on this topic and how they would respond. After their first experience of leading a group, the intervention leaders observed positive changes that became a positive reinforcement to continue and improve. After running the SEGCE three or four times, one group leader shared that she had experienced an “inviolable positive change toward spiritual well-being,” which had been a very powerful step in her professional development.

A second theme emerging related to the importance of targeting the most needy older adults. As one group leader explained,

at the beginning I doubted the validity of the SSCE to measure well-being. Some older adults seemed to be quite active according to my experience. After conducting the SSCE assessment, I identified the limitations of these participants and did observe their changes throughout the group process at an individual pace.

The third theme dealt with good practice in adopting the multimedia activity design. These activities were intended as a means toward promoting engagement and shared experiences. The intervention leaders were very impressed by how devoted an older participant could be when introduced to a new activity. For example, doing breathing exercises was not unfamiliar to many intervention leaders. However, in the SEGCE, breathing is conceptually linked to an experience that is directly linked to spiritual being based on the Greek tradition. The team purposefully identified this abdominal breathing as a breathing exercise due to its evidenced impact on stress release and health enhancement (Berger and Motl 2000). Moreover, in Chinese culture, breathing is often associated with a type of static Qi Gong, which can be easily understood by older participants in regard to its positive impact (Jahnke et al. 2010). Breathing can be practiced both individually and in a group setting, which carries a symbolic meaning of collective support and meaning making. Participants and intervention leaders can see themselves as inhaling positive energy and exhaling negative energy; thus exchanging positive energy with each other. Another example is inviting group participants to express their self-image via clay models. The intervention leaders observed the power of externalizing the self by using colorful clay materials. The rationale behind this activity is that the Chinese self-construct has been argued to be interdependent rather than independent (Singelis 1994). In other words, Chinese people are inclined to link

self-concept and self-image to interpersonal relationships. A typical example is linking the self to the fulfillment of one's children or contributions to the family as a whole when in old age (Lou et al. 2008; Lou and Gui 2010). The SEGCE therefore incorporated the clay modeling exercise for the purpose of externalizing the participant's self-image during the session on reintegration of the self. Intervention leaders said that they found it very rewarding to see the older participants making a great effort to participate in this exercise and contributing to valuable group sharing of thoughts afterward.

### 6.3.3 Successful Factors Contributing to SEGCE

Based on the findings of the quasi-experimental study and focus group discussions, the effectiveness of the SEGCE in enhancing spiritual well-being among Chinese older adults was supported. The common factor model is used to guide the following discussion on success factors.

According to Lambert's four-factor model of change, as further developed by Miller and Blow, the success factors that contribute to the effectiveness of psychotherapy can be summarized under four umbrella headings: technique/model; relationship; client/extra-therapeutic; and expectancy, placebo, and hope factors (Blow and Sprenkle 2001; Lambert 1992; Miller et al. 1997). In the context of SEGCE, the success factors are summarized in Table 6.5.

It can be seen, based on the previous chapters, that the development of SEGCE is rooted in a solid theoretical foundation of the Chinese conceptualization of spiritual well-being and its corresponding Spiritual Process Model (SPM). This clearly defined concept and theory provided all intervention leaders with a unified understanding of the theoretical background of SEGCE, which is channeled through the standardized training. During the training, the trainer makes clear that there is more than one approach to conceptualizing spiritual well-being. The SPM is unique in three ways. Firstly, it is the first model to define spirituality from a purely nonreligious perspective. While the research team members were fully aware of the potential benefits of religious-related spiritual pursuits,

**Table 6.5** Success factors of the SEGCE

Common factor	SEGCE manifestation
Technique/model	SPM
	<ul style="list-style-type: none"> <li>• nonreligious</li> <li>• relationally oriented conceptualization</li> </ul>
Relationship	Existential therapy as fundamental principle
	SSCE assessment as a tool for empathetic understanding
Client/extra-therapeutic	Integrating relationship techniques and group processes by using exercise as a means of engagement
Expectancy, placebo, and hope	Naming the group <i>Fu Le Man Xin</i>
	Using <i>Jia Li Bu</i> to externally demonstrate change for continuous review and feedback at individual and group level



the nonreligious approach of SPM has wider and greater implications for Chinese older adults. Secondly, the ultimate goal in developing the SPM was to generate practical implications, so the SPM guided the development of the SEGCE. Thirdly, both the SPM and SEGCE adopt a relationally oriented view of potential transcendence based on a culturally sensitive notion of the importance of relationship harmony (Kwan et al. 1997). Hence, even though the SPM was a new concept to the intervention leaders and participants, the underlying rationale of pursuing harmonious relationships with the environment, including the physical and social environment, was already familiar to both.

In the context of the SEGCE, relationship factors refer to working relationships between participants and the intervention leaders based on the principles of existential therapy. The intervention leader is expected to respect each participant as a unique individual who can experience, reflect, and enhance his/her spiritual well-being. It is this trust and belief that provide group leaders with the competence and confidence to share the SPM framework and engage participants in the prescribed activities. No individual anywhere lives entirely without limitations. This is a norm, albeit also a matter of degree. With reality-based choices, everyone can choose to live a life with enhanced meaning and joyfulness. By consistently communicating with the environment, each participant can achieve a higher level of awareness of the meaning of suffering and the meaning of a life lived with full respect. The intervention leader and participants learn with and from each other and become mutual role models in one way or another. The beauty of integrating the existential principle into relationship factors is that the communication and relationships between the group leader and the participants can become more constructive and focused on goal-oriented change.

When designing the SEGCE, the research team was well aware of the likelihood that the potential participants would have only limited formal education. According to the recent Census, about 30 % of the elder population in Hong Kong has no formal education at all (Census and Statistics Department 2011). Psychotherapy or therapeutic interventions are largely unfamiliar to this cohort of older people. They may sometimes find it difficult to differentiate psychotherapy from casual conversation. Moreover, most of the intervention leaders involved in this project were social workers in service units, who have multiple roles—meeting with older adults, arranging social and leisure activities for them, handling complaints, organizing interest groups, and conducting therapeutic interventions. Older participants find it much easier to participate in practical activities. Hence, the SEGCE was designed with tailored activities for each session in order to maximize meaningful engagement and participation.

In order to present an optimal vision of hope for participants, the SEGCE is named *Fu Le Man Xin* in Chinese, which means “full of blessings and joy.” This name is culturally more meaningful and motivational since *Fu* and *Le* denote two elements of the spiritual status that each Chinese person ultimately wishes to pursue. In addition, the design of the *Jia Li Bu* enables concrete visualization of what has been achieved during and after a particular session. Both the intervention leader and participants can rely on this visual tool as a positive reinforcer to induce a sense of expectation fulfillment and maintain hope for the next session.

**Table 6.6** SEGCE evaluation guided by CIPP framework

	Merits	Challenges
Core values	<ul style="list-style-type: none"> <li>• Enhancing spiritual well-being is essential to the holistic enhancement of well-being in an aging society</li> <li>• Spiritual well-being for Chinese older adults is worthy of a culturally sensitive understanding from a nonreligious and relationally oriented perspective</li> </ul>	<ul style="list-style-type: none"> <li>• Spiritual care is new to social care professionals</li> <li>• SPM is new to social care professionals in a Chinese context</li> </ul>
Context—goals	<ul style="list-style-type: none"> <li>• Clear goal setting: enhance spiritual well-being</li> <li>• Valid and reliable assessment tool (the SSCE)</li> </ul>	<ul style="list-style-type: none"> <li>• Young professionals may not have a clear idea of the needs of older adults in terms of spiritual well-being enhancement</li> <li>• Competing programs on enhancing psychological well-being have already been developed</li> <li>• Spiritual well-being is not part of the public nonreligious discourse in a Chinese context</li> </ul>
Input—plans	<ul style="list-style-type: none"> <li>• Multi-level intervention enhances feasibility and applicability for older adults with diverse needs (for example, the SEGCE, self-help, volunteer-assisted self-help, mobile device application)</li> <li>• SEGCE manual is available in both English and Chinese with multimedia resource package</li> </ul>	<ul style="list-style-type: none"> <li>• A budget is required to purchase the activity materials</li> <li>• Older participants may experience life events that cause them to miss sessions</li> <li>• Different intervention leaders may prefer to focus more on one element than another</li> </ul>
Product—outcomes	<ul style="list-style-type: none"> <li>• Effective means of enhancing spiritual well-being based on a mixed-method study</li> <li>• Consolidates success factors based on a common factor framework</li> </ul>	<ul style="list-style-type: none"> <li>• All study participants were recruited from service units within one agency, so a multi-site study is recommended</li> <li>• Regular review of program impacts with stakeholders is required</li> </ul>
Process—actions	<ul style="list-style-type: none"> <li>• Whole-process engagement with intervention leaders</li> <li>• Allows a written record of program implementation with standardized evaluation/reflection forms for intervention leaders</li> <li>• Revised version of SSCE based on training feedback was made available in September 2014</li> <li>• Authors present and discuss evaluation results in training workshops</li> </ul>	<ul style="list-style-type: none"> <li>• Strategies are challenging for maintaining close communication with intervention leaders, as are wider dissemination</li> <li>• Strategies to update intervention protocol need to be further developed</li> </ul>

## 6.4 A Process Evaluation of SEGCE with Reference with context, input, product, and process (CIPP) framework

The CIPP (context, input, product, and process) program evaluation framework developed by Stufflebeam (1983) was used to assess the process of developing the SEGCE and highlight its strengths and challenges with reference to the literature (Table 6.6). Both merits and challenges of the SEGCE were highlighted under five key sections, including values, goals, plans, outcomes, and actions. It is expected that such critical review based on our findings and reflections could provide future intervention leaders with great confidence to start SEGCE for a better spiritual well-being among our seniors.

## 6.5 Conclusion

The research team and I confidently believe that the SPM and its corresponding intervention, the SEGCE, are value-driven, effective, feasible, and cost-effective programs that fill a gap in the context of promoting healthy aging. It accordingly deserves further dissemination among social care services for Chinese older adults. The SEGCE demonstrates, both academically and practically, the power of strategic collaboration between academics and the community through stakeholder partnership, engagement, and participation. The positive impact of the project is demonstrated in the academic publications it has generated, newspaper reports based on public seminars, a TV program that introduced the SPM to a wider audience, the development of a two-level standardized certificate course, and the mobile device application currently being developed.

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