

SPIRITUALITY in Successful Aging:

Data from the Singapore Successful Aging Study



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Background

Successful aging (SA) was first defined by Rowe and Kahn as avoidance of disease and disability, maintenance of physical and cognitive function and engagement in social and productive activities. More recently, spirituality has been recognized as an important contributor to SA. Unlike religiosity, spirituality has a more experiential and existential focus upon an individual's internalized faith, value and beliefs and their influence upon daily behaviour. Most of the existing studies on spirituality and SA have been performed outside Asia.

Aim

The aim of this study was to examine the role of spirituality in SA in a multiethnic community in Singapore.

Hypothesis

We hypothesised that spirituality is positively correlated with attributes of SA (resilience, better cognitive functions, optimism, mastery, satisfaction with life, and self-rated SA)

Methods

Singapore Successful Aging Study (SSOSA) was a sub-study added to the second wave of a large population-based study of aging and health (Singapore Longitudinal Aging Studies-SLAS).

- Cross-sectional survey of 489 community living Singaporeans aged 65 years and older

Measurements

- Sociodemographic characteristics
- Self-rating of global successful aging (0-10 scale)
- Physical health and function
- Cognitive Failures Questionnaire (CFQ)
- Geriatric depression scale-15 items (GDS-15)
- Connor-Davidson Resilience Scale (CD-RISC)
- The Pearlin Mastery Scale
- The Life Orientation Test-Revised (LOT-R for Optimism)
- Spirituality- Five questions:
 1. How often do you attend church, synagogue, or other religious meetings? ;
 2. How often do you spend time in private spiritual activities such as prayer/meditation? ;
 3. In my life, I experience the presence of the Divine;
 4. My spiritual beliefs are what really lie behind my whole approach to life;
 5. I try hard to carry my spiritual beliefs over into all other dealings in my life.
- The Satisfaction with Life Scale (SWLS)

Results

Our sample comprised Chinese (85%), Malay (10%), and Indians (5%). Table 1 shows the characteristics of the study sample. On hierarchical multiple linear regression analysis, spirituality was significantly correlated with female gender, ethnicity (Malays and Indians), resilience, optimism, and better cognitive status after controlling for age, marital status, education, income, depression, and chronic medical conditions (Table 2).

Table 1: Characteristics of study sample

Variable	Chinese			Malay			Indian			p
	n	Mean (SD)	%	n	Mean (SD)	%	n	Mean (SD)	%	
Age, years	416	74.1 (6.17)		52	73.7 (6.01)		21	74.4 (5.52)		0.842
Gender										
Male	167		40.1	16		30.8	12		57.1	0.110
Female	249		59.9	36		69.2	9		42.9	
Marital status										
Single	31		7.5	0		0	0		0	0.033
Married	235		56.5	24		46.2	11		52.4	
Widowed	126		30.3	27		51.9	8		38.1	
Separated	8		1.9	0		0	0		0	
divorced	16		3.8	1		1.9	2		9.5	
Income										
<\$500	154		37.0	33		63.5	9		42.9	0.000
\$500-\$999	99		23.8	14		26.9	4		19.0	
\$1,000-\$1,999	35		8.4	3		5.8	6		28.6	
\$2,000-\$3,999	7		1.7	1		1.9	1		4.8	
\$4,000 or more	3		0.7	0		0	0		0	
NIL	118		28.4	1		1.9	1		4.8	
Highest level of education										
primary	185		44.5	20		38.5	9		42.9	0.236
Secondary	94		22.6	9		17.3	9		41.9	
Polytechnic/pre-U	10		2.4	0		0	0		0	
Junior college	5		1.2	0		0	0		0	
University graduate	4		1.0	1		1.9	0		0	
NIL	118		28.4	22		42.3	3		14.3	
Chronic illness										
3 or more	30		7.3	5		9.6	4		19.0	0.133
Less than 3	383		92.7	47		90.4	17		81.0	
Self-rated health (1 to 5; 1=poor, 5=excellent)	416	2.8 (0.65)		52	2.8 (0.54)		21	2.5 (0.81)		0.04
GDS-15 score (0 to 15; 15=more depressed)	405	1.1 (1.94)		42	0.9 (1.58)		21	2.9 (3.91)		0.100
Cognitive failure scores (0 to 80; 80=poorer cognition)	384	61.08 (9.5)		48	66.2 (10.25)		21	63.8 (11.9)		0.002
Resilience score (0 to 100; 100=greater resilience)	409	60.0 (11.09)		51	63.9 (12.42)		21	57.9 (12.60)		0.041
Mastery score (7 to 28; 28=greater mastery)	414	19.4 (2.50)		52	18.4 (1.58)		21	17.3 (1.98)		0.000
Optimism score (LOT-R) (6 to 30; 30=greater optimism)	415	20.3 (2.43)		52	18.6 (1.30)		21	18.6 (1.88)		0.000
Religiosity and spirituality score (0 to 25; 25=greater religiosity)	416	9.9 (7.43)		52	22.4 (3.99)		21	20.7 (4.21)		0.000
Satisfaction with Life score (SWLS) (5 to 35; 35=more satisfied)	415	24.2 (5.50)		52	26.6 (5.78)		21	23.0 (6.26)		0.009
Self-rated successful aging (1 to 10; 10=more successful)	416	6.79 (1.54)		52	7.21 (1.50)		21	6.05 (1.83)		0.014

Table 2: Hierarchical multiple linear regression analysis of correlates of spirituality

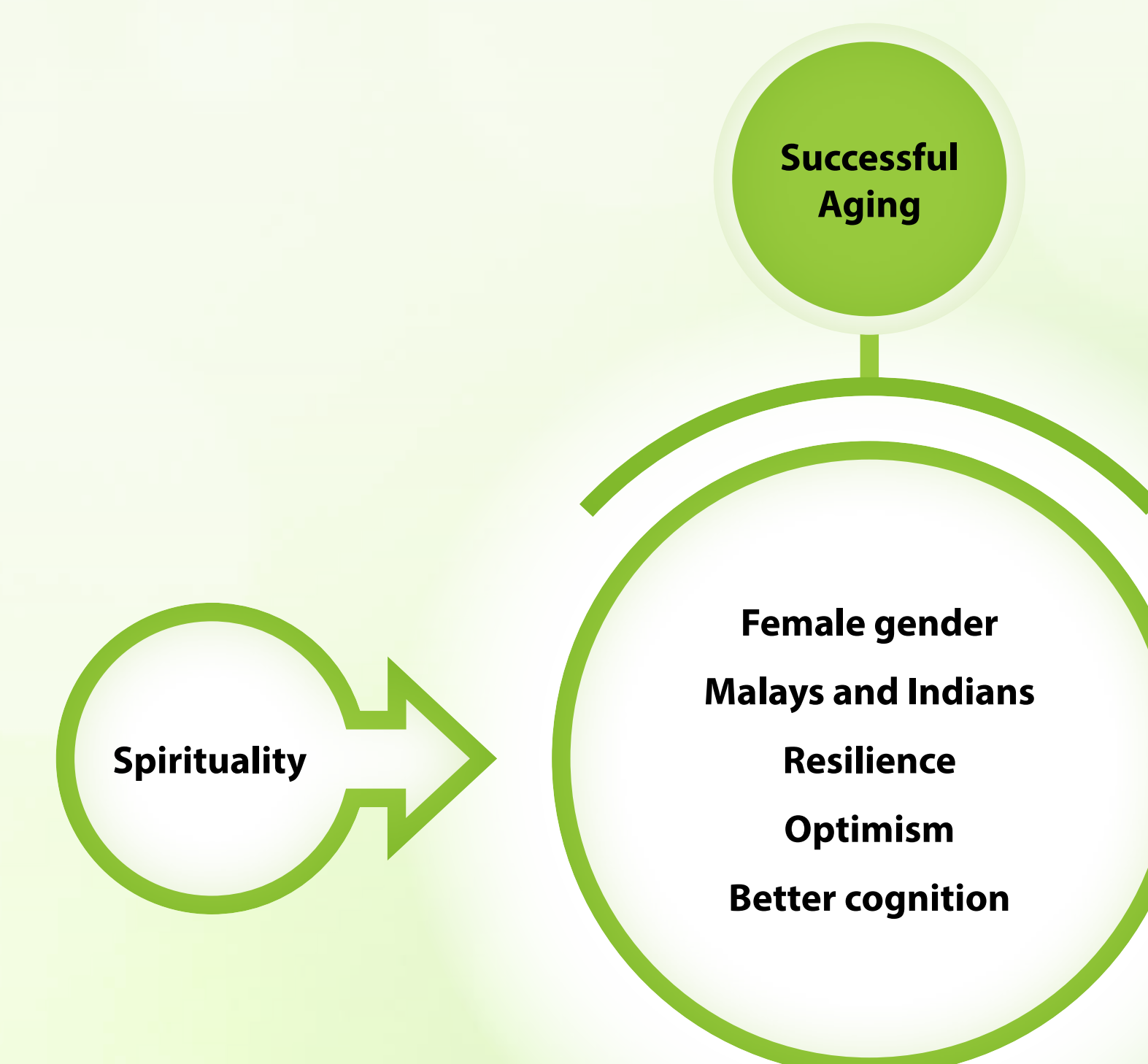
Model	Variable	Standardised beta	P value
1	Gender (female)	-.188	0.000
	Chinese	-.530	0.000
2	Chinese	-.500	0.000
	Chinese	-.470	0.000
3	Conner Davidson Resilience scale	0.135	0.004
	Cognitive Failures Questionnaire	-.157	0.000
	Life Orientation Test (LOT-R)	-.135	0.003

Model 1. Considers age, gender, and ethnicity as a single variable by themselves and with co-variables

Model 2. Considers age, gender and ethnicity dummy coded with Chinese as the reference in the first step followed by gender interactions followed by covariates.

Model 3. Same as model 2 except the reference is the Malay ethnicity.

Figure 1: Correlates of spirituality in successful aging



Conclusion

Spirituality is one of the major determinants in the attributes of SA- optimism, resilience, and better cognitive function. More importantly, gender and ethnicity play a key role in the expression of these attributes.

References

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