FEATURE ARTICLE

Modeling psychological well-being and family relationships among retired older people in Taiwan

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ABSTRACT: *Well-being is an important indicator of an individual's quality of life, especially for retired people. In the present study, we investigated the psychological well-being (PWB) of retired Taipei (Taiwan) older people and its associations with sex, family relationships, and health status. A structured questionnaire was used to measure demographics, family relationships, and perceived health status, as well as Ryff's PWB Scales. Data were analyzed from 268 retired olderpeople recruited from social service centres and public parks from September to November 2010. The Multiple Indicators Multiple Causes model demonstrated a very good fit of Ryff's PWB Scales and their relations to sex, family relationships, and perceived health status. The link with PWB was stronger for family relationships than for perceived health. The Mandarin translation of Ryff's PWB Scales was found to be suitable and easy to administer to Taiwanese olderpeople. The findings suggest that nurses should note that improving family relations will facilitate the PWB of retired olderpeople, which results in better outcomes of care.*

KEY WORDS: *Chinese culture, family relationship, psychological well-being, retired olderpeople, successful ageing.*

INTRODUCTION

Active ageing is of imperative concern for public health and mental health nurses in industrialized countries, where medical advances have prolonged human life expectancy. Depression and cardiovascular pathologies, such as hypertension, cerebrovascular disease, and heart diseases, such as coronary artery disease, arrhythmias, and heart failure, become more common as people age (Lye & Donnellan 2000; Wood & Joseph 2010). Taiwan is cur-rently challenged by a health burden for its population of older people. In 2010, 10.74% of its population was above 65 years of age (Taiwan Directorate-General of Budget, Accounting and Statistics 2011). Heart disease, diabetes, and hypertension were three of the top 10 causes of death in Taiwan that year (Taiwan Department of Health 2011). As a result of this high mortality rate among older people in Taiwan, medical resources and nursing care are par-ticularly important.

Although health is defined as a state of complete physi-cal, mental, and social well-being, mainstream nursing for ageing populations has focused on physical illness and mortality, with less attention paid to positive approaches that promote mental and physical health. Several studies show that people who score highly on measures of psy-chological well-being (PWB) have lower rates of depres-sion, hypertension, diabetes, and respiratory tract infections than those with low scores (Richman *et al.*

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2005; Wood & Joseph 2010), and a meta-analysis confirms that PWB is a protective factor for survival in both healthy and unhealthy populations (Chida & Steptoe 2008). For these reasons, it is of critical importance to develop PWB in older populations of ageing societies, such as Taiwan.

In social-psychological terms, ageing is viewed as a holistic social-psychological phenomenon, and family engagement can provide the older family member with comfort, direction, and a sense of interaction and being understood (Crosnoe & Elder 2002). Retirement is a significant developmental stage of life. It brings major changes in a person's roles and relationships, including not only negative influences, such as a loss of the sense of self-achievement that results from no longer working and social contact with colleagues, but also positive influences, such as more time with loved ones, and more time to pursue interests (Reitzes *et al*. 1996). Ageing brings with it a decline in one's physical functions and changes in the family structure. This might result, for example, from a spouse passing away or a son or daughter marrying. Such changes might also cause a decline in the older person's mental health status and well-being. Retirement can cause people in the 50–75 age group to be overwhelmed by the self-perception of growing old. Therefore, successful ageing requires that the value of PWB be promoted (Lucchetti *et al*. 2001).

PWB is a comprehensive concept related to positive emotions, such as happiness or joy, feeling lucky, and a general satisfaction with one's life (Shirai *et al*. 2006). Ryff and colleagues (Ryff 1989; Ryff & Keyes 1995) developed their PWB scales reflecting the following six dimensions: self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth. Ryff's PWB Scales, which have been adopted by many researchers in Western countries, are grounded in an extensive literature review, and their reliability and validity have been empirically established (Ryff & Singer 2006; Wood & Joseph 2010). The validation includes confirmation of the scales' six dimensions in Western societies, but more research is needed to determine if the dimensions hold in Chinese culture.

Sex differences in PWB scores have been documented in two samples of older people (Ryff & Keyes 1995; Shirai *et al*. 2006). However, in a study of US women and men between the ages of 25 and 74 years, demographic factors, such as sex, were superseded by a positive association between role involvement and PWB (Ahrens & Ryff 2006). Because mind and body are connected, perceived health status might also be relevant to the initial development of PWB, as well as being a characteristic of successful ageing (Lee & Browne 2008). For example, a survey of 700 individuals that examined body mass index, perceived health, and happiness revealed that perceived health was strongly associated with happiness (Cornelisse-Vermaat *et al*. 2006). However, PWB is not necessarily characterized only by health status, but also by one's ability to successfully manage declining health and promote happiness.

Apart from the influence of sex and perceived health status, family engagement can comfort the older and give them the sense that other family members understand them, thereby promoting their psychological health (Crosnoe & Elder 2002). Studies have shown that family involvement is associated with PWB, and that strong family relationships help to promote happiness, especially in retired older people. For instance, a significant relationship between PWB and good family relationships was found in a 10-year prospective survey of 274 married adults (North *et al*. 2008). It is likely that positive, intimate family relationships help retired older people to cope with, and adapt to, their circumstances. In Chinese culture, PWB is understood as a harmonious state of existence (Lu 2001), and expectations of family involvement and family relationships might not be the same as those in Western societies. This difference is what prompted us to investigate PWB in retired older people living in Taiwan, and to verify the psychometric integrity of a Chinese version of Ryff's PWB Scales.

The aims of this study were to translate a Mandarin version of the PWB scales, and to examine associations of PWB with family relations and perceived health in retired Taiwanese older people.

METHODS

Participants

The participants were recruited from social service centres and public parks from September to November 2010. A face-to-face interview, based on a structured questionnaire, was used to collect data. The original sample consisted of 281 older people from Taipei, Taiwan who met the following criteria: (i) retired from full-time work; (ii) aged 50–75 years; and (iii) able to communicate verbally with the interviewer. Most participants filled in their answers. For the 15 participants who were unable to do this, the interviewer read the items out loud and recorded the oral answers. Retirement age was defined as the age at which one stops paid work.

Permission to conduct this research was approved by the Institutional Review Board at the Taipei Medical University (approval no. 201003002). The purpose and time required to complete the interview were explained to

each participant, and written consent was obtained. Each respondent was given 100 New Taiwan Dollar (approximately US $3) for participating. To protect their rights, participants were allowed to withdraw at any time if they felt uncomfortable completing the questionnaire. They were identified by a code number on all data sheets to ensure anonymity.

Instruments

The questionnaires included demographics, family relationships, and Ryff's PWB Scales. The demographics were sex, age, marital status, education level, perceived health status, and economic status. Responses for age, sex, marital status, and educational level were coded by the interviewer. Perceived health status was assessed by asking: 'How does your health affect your daily life?' Scores on this item ranged from 1 (often) to 3 (not at all). Economic status in the past 6 months was assessed by asking: 'Do you have enough money for daily expenses?' Answers were enough or not enough. The family relationships measure was constructed from a three-item scale: (i) 'How much are your significant family members involved in your daily life?' (involvement); (ii) 'How are your emotional relationships with your close family members?' (emotional ties); and (iii) 'What is the atmosphere of your family interactions?' (sociability). Responses were made on a four-point Likert scale: (i) none or bad; (ii) sometimes or fair; (iii) often or good; and (iv) always or great. Possible scores ranged from 3 to 12, with a higher score indicating more positive family relationships.

PWB

We used the short version of Ryff's PWB Scales, which has six subscales with 14 items per subscale, seven worded positively and seven negatively. The scale thus has 84 items. The short-version scale has been shown by Ryff (1995) to have good validity and reliability ($\alpha = 0.83$–0.91), and correlations with the long form range from 0.97 to 0.99. Participants respond to each item using a six-point format: (i) strongly disagree; (ii) moderately disagree; (iii) slightly disagree; (iv) slightly agree; (v) moderately agree; and (vi) strongly agree. Items with negative content were reverse scored, and the 14 items summed into a total score for each subscale. This total score was then used for further analysis. This study used the subscale scores, because previous studies in different cultures (Abbott *et al.* 2006; Ryff & Singer 2006; Van Dierendonck 2004) employing confirmatory factor analysis (CFA) with all the scale items led to the conclusion that the six original well-being dimensions should be kept intact. Higher scores indicated higher PWB.

Chinese translation of Ryff's PWB Scales

Establishing and testing the equivalence of translated instruments across different cultures or languages requires both translation and back-translation. We followed the suggestions of Hyrkas *et al.*(2003) in this regard. The short form of Ryff's PWB Scales (Ryff 1995) was translated from English to Mandarin, with Ryff's permission. The translator was fluent in both English and Mandarin, had a PhD in psychology, and had more than 10 years' experience in health-promotion research. The Mandarin PWB was then back-translated by a different translator who had a PhD in gerontology and a PhD in psychiatry. The originally translated and back-translated PWB were then compared by these two translators, and all points of divergence were reconciled to accurately reflect the intent/accuracy of the item. Next, the English and final Mandarin scales were checked for equivalence by five experts in the fields of nursing, human development, social psychology, public health, and geriatrics, respectively, who were fluent in English and Mandarin. Specifically, they evaluated each item in the Mandarin version for linguistic appropriateness, and they compared the words, phrases, and sentences in the original and back-translated English versions for proper meaning. The final scale had a high content validity index of 0.89, based on the ratings by the five experts.

The Mandarin PWB scales were then pilot tested with five older patients in a local health service centre to determine whether they could understand the items. They found the individual questions relevant to their daily life experience. They suggested rewording of some items to match their experience of well-being, and these changes were adopted without altering the context/meaning of the original PWB items.

Statistical analysis

Descriptive data and frequencies were calculated using SPSS software version 18.0 (SPSS, Chicago, IL, USA), and scores for each of PWB scales are presented as means and standard deviation (SD). Items within each of Ryff's PWB Scales were summed to provide total scores, and these were used in the CFA and structural equation modelling. Cronbach's alpha coefficient was computed to assess internal consistency of the PWB scales.

To determine the relationships between sex, perceived health status, family relationship, and PWB, a Multiple Indicators Multiple Causes (MIMIC) structural equation model was performed using Mplus software version 5.1 (Muthén & Muthén 2008). The basic MIMIC model

consists of two parts: a measurement model and a regression model. A MIMIC model was used here because it can test the factor structures of the PWB scales and family relationships using CFA while simultaneously examining the regression of PWB on sex, perceived health, and family relationships. CFA with the maximum likelihood estimation was used, as all the PWB scales and family relationships scores were loaded onto one (forced) factor and no rotation was used. No case was excluded from the analyses because of violations of multivariate normality and linearity.

Our MIMIC model allowed simultaneous estimation of the relation of two latent factors (PWB and family relationships) to sex and perceived health. It also allowed evaluation of indicator variables, which are the six subscales from Ryff's PWB scales: autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance. It also incorporated the correlation between the factors of perceived health status and family relationships, while controlling for sex (Rios-Bedoya *et al*. 2009). The criterion for acceptable factor loading is at least 0.3 (Shevlin & Miles 1998). Cronbach's alpha values equal to or greater than 0.70 were considered satisfactory (Jenkinson *et al*. 2002).

Indices of model fit manifest how the proposed model might be consistent with data. Those used for the refinement of the model and stopping criteria in this paper, from Kline (2005), are the relative/normed χ^2/d.f., comparative fit index (CFI), root mean square error of approximation (RMSEA), and standardized root mean square residual (SRMR). The χ^2 value is the traditional measure for evaluating overall model fit and 'assesses the magnitude of discrepancy between the sample and fitted covariance matrices' (Hu & Bentler 1999). The relative/normed χ^2/d.f. adjusts for the impact of sample size, because the χ^2 statistic lacks power when the sample size is small. The CFI is a relative fit index that compares the χ^2 value of the model to that of the null model, taking into account sample size and performing well even when sample size is small (Tabachnick & Fidell 2007). The RMSEA tells us how well the model, with unknown, but optimally-chosen parameter estimates, would fit the population's covariance matrix. The SRMR is the square root of the difference between the residuals of the sample covariance matrix and the hypothesized covariance model. The cut-off values for refinement of the model and stopping criteria were: (i) χ^2/d.f. <2 (Tabachnick & Fidell 2007); (ii) CFI ≥0.95 (Hu & Bentler 1999); (iii) RMSEA <0.07 (Steiger 2007); and (iv) SRMR <0.05 (Kline 2005).

TABLE 1: *Sample characteristics of retired Taiwanese older people* (n = 268)

Variables	Mean	Standard deviation	*n/%*
Age (years)	64.7	6.09	
Education level			
Elementary or below			38/14.2
Junior high school			43/16.0
Senior high school			75/28.0
College or university			112/41.8
Sex (% female)			201/75.0
Health problems			
Often			96/35.8
Sometimes			92/34.3
Not at all			80/29.9
Marital status			
Married			201/75.0
Single/divorced/separated			67/25.0
Spending money in past 6 months			
Not enough			45/6.8
Enough			221/82.5
Family relationships	10.55	1.61	
Psychological well-being scales			
Autonomy	52.19	4.95	
Environmental mastery	61.95	7.61	
Personal growth	61.55	7.11	
Positive relations with others	63.13	7.75	
Purpose in life	58.55	8.09	
Self-acceptance	56.94	7.84	

RESULTS

Sample characteristics

Of the 281 participants who completed the interviews, 13 were excluded from the analyses because of incomplete data, which defined as three or more missing items on the PWB scales. This reduced the sample size to 268. Table 1 presents the descriptive data. Most participants were women (*n* = 201, 75%), had an education level of college or university (*n* = 112, 42%), and were married (*n* = 201, 75%). Approximately one-third reported that their health had a serious adverse effect on their daily life (*n* = 96, 36%), and another one-third reported that it had some influence (*n* = 92, 34%). Most participants felt they had enough money to spend (*n* = 221, 83%). The mean score on the family relationships scale (possible range 3 to 12) was 10.55 (SD = 1.61). Mean scores for the PWB scales were similar for the six scales, and ranged from 52.2 to 63.1 (Table 1).

Reliability and CFA of the PWB and family relationship scales

Table 2 presents the results of separate factor analyses of items from the PWB and family relationship scales.

TABLE 2: *Summary of confirmatory factor analysis and reliability of the psychological well-being and family relationships scales using maximum likelihood estimation* (n = 268)

Item	Factor loadings	Item–total correlation	Cronbach's alpha
Psychological well-being scales			0.89
Autonomy	0.30	0.29	0.68
Environmental mastery	0.88	0.83	0.82
Personal growth	0.70	0.69	0.77
Positive relations with others	0.87	0.80	0.83
Purpose in life	0.84	0.81	0.81
Self-acceptance	0.87	0.81	0.80
Variance explained	60.0%		
Family relationships scale			0.83
Involvement	0.71	0.64	
Emotional ties	0.90	0.69	
Sociability	0.77	0.76	

TABLE 3: *Model fit statistics for the results of the Multiple Indicators Multiple Causes analysis*

Model fit indicators	Original	Revision 1	Revision 2
χ^2/d.f.	3.28	2.34	1.96
P-value	<0.001	<0.001	<0.001
CFI	0.94	0.97	0.98
SRMR	0.05	0.04	0.04
RMSEA	0.09	0.07	0.06
90% CI of RMSEA	0.08 0.11	0.05 0.09	0.04 0.08
Modification suggested	High correlation between personal growth and purpose in life (MI = 39.6)	High correlation between personal growth and positive relationships with others (MI = 17.0)	Very good fit

CFI, comparative fit index; CI, confidence interval; MI, modification index; RMSEA, root mean square error of approximation; SRMR, standardized root mean square residual.

Cronbach's alpha coefficients for the six subscales were 0.68–0.83, and the overall PWB (*n* = 268) was 0.89. The factor loadings of the six PWB dimensions ranged from moderate to high (0.70–0.88), with the exception of a low but significant and acceptable loading for autonomy (0.30). The total variance explained by the six PWB subscales was 60%.

Cronbach's alpha for the family relationships scale was 0.83. The data for the scale were found to be appropriate for the factor analysis (Kaiser–Meyer–Olkin = 0.70; Bartlett's test of sphericity = 318.59, *P* < 0.01). The CFA fit was adequate (*P* < 0.01). The three items accounted for 63% of the variance, and their factor loadings were high (0.71–0.90).

MIMIC model

Using the MIMIC model, we examined the latent factor PWB in terms of the effects of sex, perceived health status, and family relationships, and the three-way interactions between these variables. Table 3 shows the results of model fit indices from the MIMIC analysis. The model fit statistics of the originally-proposed model (allowing the simultaneous estimation of the relation of two latent factors (PWB and family relationships) to sex and perceived health) are as follows: χ^2/d.f. = 3.28, CFI = 0.94, RMSEA = 0.09, and SRMR = 0.05. Our original MIMIC model did not fit very well, because χ^2/d.f. was greater than 2, CFI was less than 0.95, and RMSEA was greater than 0.07.

Using the modification index (MI) programmed in the Mplus software, which suggests how the model could be improved by allowing correlations between variables in the model, we modified the original model by adding the relations between personal growth and purpose in life (MI = 39.6), and between personal growth and positive relationships with others (MI = 17). The revisions of the model by the inclusion of the above correlations improved the fit, as indicated by the CFI, which increased from 0.94 to 0.98, and the RMSEA, which decreased from 0.09 to 0.06 for the second revision
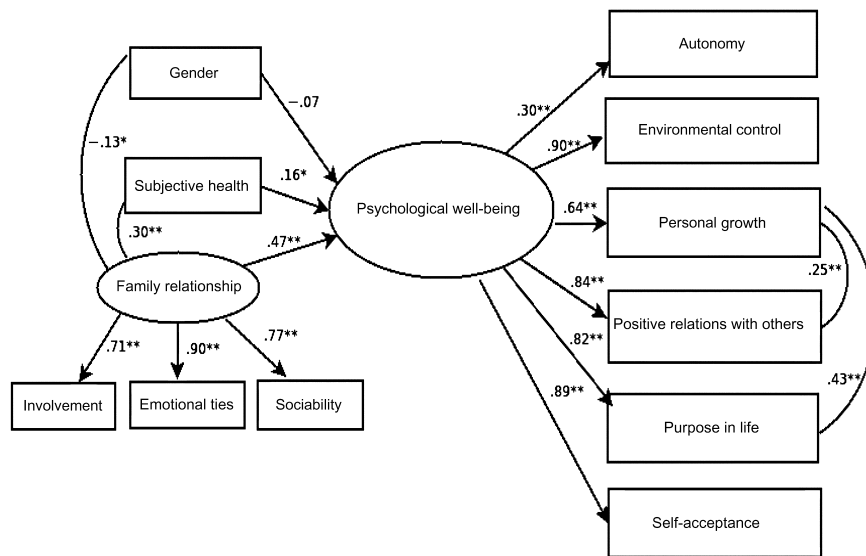
FIG. 1: *Final Multiple Indicators Multiple Causes model of psychological well-being and family relationships.* $\chi^2/d.f. = 74.36/40 = 1.96$. *P < 0.001. Comparative fit index = 0.98, root mean square error of approximation = 0.06, standardized root mean square residual = 0.04.* *P < 0.05, **P < 0.001.

(Table 3). The χ^2 difference test indicated that the model was significantly improved by the addition of these paths ($\chi^2/d.f. = 74.36/38 = 1.96$). The path diagram of the final model is shown in Figure 1.

There was no significant interaction between PWB and sex, but PWB was significantly related to both perceived health and family relationships. The standardized correlations showed that the effect was stronger for family relationships ($r_{family} = 0.47$) than for perceived health ($r_{health} = 0.16$).

DISCUSSION

Results from the MIMIC model showed that Ryff's PWB Scales have acceptable psychometric integrity, thereby providing evidence that the Chinese version of this scale is suitable for assessing the PWB of Taiwanese older people, and providing comparable results with findings from Western countries. The study showed that PWB scores of retired older people were lower than scores of participants aged 25 years and older in the study of Ryff and Keyes (1995). The current results also reveal that family relationships and perceived health are associated with PWB, with family relationships the stronger correlate.

Perceived health status was significantly associated with PWB. The magnitude of the correlation is significant but small. The paradigm of successful ageing recognizes that perceived health might play an important role in happiness or PWB (Collings 2001). The key determinants of successful ageing have been found to include living to an advanced age, good physical functioning, mental alertness, and a living spouse not residing in a nursing home

(Roos & Havens 1991). However, the concept of successful ageing also stresses psychological health and spirituality (Crowther *et al*. 2002; Phelan *et al*. 2004). In fact, Ryff (1989) identified progress and growth in old age (a dimension of PWB), rather than physical and mental health, as key contributors to successful ageing. Finally, the proposed criteria for successful ageing are culturally and historically different in Western societies than in Chinese societies (Hsu *et al*. 2010; Lu *et al*. 2001).

The results of our study indicate that family relationships play an important role in PWB among Taiwanese retired older people. However, family relationships in Chinese societies, such as Taiwan, are not comparable to those in Western societies. Lu (2006) explored participants' perceptions of personal traits representing the prototypical Western characterization of the self. This emphasizes self-actualization; the expression of one's unique configuration of needs, rights, and capacities; and the development of one's unique potential. This Western concept of the internally-oriented self defines a person as bonded, coherent, stable, autonomous, independent, and free (Lu *et al*. 2008). In contrast, the traditional Chinese conception is of a socially-oriented self that is connected, fluid, flexible, and committed to bonding with others (Lu *et al*. 2008). For example, the Confucian philosophy of virtue and ritual stresses the collective welfare of the family, which includes its responsibilities to its older members and obedience to the norms of the collective society (Lu 2001).

Chinese culture is rooted primarily in Confucian values, which emphasize group harmony and the collective welfare of the family. It emphasizes positive relations with

others, and stresses happiness as a harmonious homeostasis (Lu 2001). Among all Chinese-dominated societies in the world, retired older people in Taiwan have been described as one of the embodiments of Chinese cultural heritage. Throughout their lives they express the epitome of positive relations with others. When they retire from the workplace, they experience changes in their interpersonal relationships. At this time, they re-engage with their family and community. They feel an important obligation to keep in touch and maintain positive relations with others, especially members of their own family. This pursuit of personal growth helps promote trusting relationships with others and the capacity for strong empathy and intimacy. These considerations explain why, in our final MIMIC model, the personal growth and positive relations subscales of Ryff's PWB Scales were significantly and positively correlated with each other.

The finding that factor loading of autonomy is much lower than the other five factors is noteworthy. We speculate that collectivism might be one of the issues here. Collectivism of Chinese culture has been found to be positively related to the needs for affiliation, and negatively related to the needs for autonomy (Rudy *et al*. 2007). Chinese culture emphasizes group harmony and the collective welfare of the family before individual gains or achievement. Namely, the affiliation of family refers to respecting and honouring the public prestige of ancestors; taking care of the parents; and co-residence or staying close (Cheng & Chan 2006). To attain homeostasis, Chinese tradition emphasizes collective benefits, such as filial piety accompanied with diminishing of individuals' autonomy (Lu 2008; Lu *et al*. 2001). The differences between Chinese and Western cultures might explain why the role of autonomy in PWB in our study was not as salient, as illustrated in comparable Western studies. However, autonomy is still important in PWB in collective cultures, according to a study on Chinese children (Zhou *et al*. 2009).

Our finding that environmental mastery is the most significant factor associated with PWB is also consistent with the collectivism of Chinese culture. Environmental mastery refers to achieving a good fit in managing environmental events (Helson & Srivastava 2001). In collective cultures, people with greater environmental mastery contribute to their PWB (Cheng & Chan 2006), as they are better fitted to collectivism, which emphasizes how well an individual can fit into the crowd and work for the benefits of the group, not for individuals. In Taiwan, higher self-efficacy in controlling environmental events for retired older people might be promoted through filial piety and respecting Chinese older people.

Our results indicate that self-acceptance is highly associated with PWB among retired older people. Although aspects of the self in Chinese people are associated with collective norms and emphasize an interdependent self-concept, how we see or describe ourselves, and whether we accept who we are, are both are associated with PWB (Diener *et al*. 2003). That is, self acceptance is an integral part of the self-concept and self-enhancement (Kwan *et al*. 2003). When retired older people accept themselves, regardless of whether they behave intelligently and competently, this shows their adaptive ability, and results in greater subjective well-being (Neff 2011; Reitzes *et al*. 1996).

The significant positive correlation between, and factor loadings of, personal growth and purpose in life are consistent with past research (Ryff 1989; Ryff & Keyes 1995). Retirement is a complex stage of life in which the individual faces a large number of changes, including job loss, more time with loved ones, more time to pursue one's interests, and declines in the physical and mental functions needed for daily living. At this stage of the life cycle, a successful transition to retirement requires a sense of integrity or life satisfaction to cope with retirement stressors. Integrity involves developing a sense of contentment about how they have lived and what they have accomplished in their lives (Erikson 1982). Increasing integrity contributes to mental health, promoting motor performance, as illustrated in a study of nursing home patients with mental illness (Bråne *et al*. 1989). It is understood that the way to achieve integrity is through continued personal growth, or the development of satisfaction or purpose of life (Schilling 2006). As life expectancy is prolonged, older people who accept themselves, have good family relationships, and embrace the concept that it is never too old to learn, are more likely to experience positive mental health.

Limitations and directions for future research

It is noteworthy that most of the empirical research on PWB has been cross-sectional rather than longitudinal; future research should examine longitudinally the possible interaction between health status and family relations, including their possible moderation by PWB. It also is worth noting that we used a non-randomized, purposive sample that did not include people with severe illness or those with a disability. Thus, our findings cannot be generalized beyond this subpopulation. Extending our study to this broader population is an inviting possibility for future research. Researchers might consider broadening the definition of family relationships when designing future research. Such research should also investigate cultural differences in PWB. Finally, our results indicate that

clinical nurses should be mindful of family members of older people under their care and increase family support through counselling and education aimed at promoting psychological well-being.

CONCLUSION

The Mandarin translation of Ryff's PWB Scales was found to be a suitable and useful instrument for measuring psychological well-being in Taiwanese older people. Five subscales – environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance – were also highly associated with PWB in these Taiwanese retired older people. The exception was autonomy, because Chinese culture emphasizes this less. Our results also correspond to the claim that retired older people in Taiwan clearly preserve a Chinese cultural heritage that emphasizes collective accomplishments.

When cultural differences are considered in the context of clinical nursing, it should be kept in mind that harmonious family relationships appear to be more important than health status in promoting PWB. We recognize that clinical nurses are obliged to focus on health status in their practice, but we also believe that they should take account of the implication from our findings that it is more efficient to develop PWB by improving family relationships, at least in retired patients. As more and more health-care specialists enter family care system, evidence-based understanding of the importance of family relationships has the potential to produce a significant impact on the direction of clinical nursing care. Different cultural heritages promote different attitudes about both PWB and family relations in the health-care context. Thus, clinical nurses should be mindful of other family members of the older people they care for and increase family support through counselling and education aimed at promoting psychological well-being.

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