Dimensions of Subjective Well-Being and Effects of Physical Activity in Chinese Older Adults

Po-Wen Ku, Jim McKenna, and Kenneth R. Fox

Subjective well-being (SWB) and its relationship with physical activity have not been systematically investigated in older Chinese people. This study explored these issues using qualitative interviews with a purposive sample of 23 community-dwelling Chinese older adults (age 55–78 y, 12 women); 16 were physically active and 7 physically inactive. Using cross-case analyses, 7 dimensions of SWB emerged: physical, psychological, developmental, material, spiritual, sociopolitical, and social. Although elements of SWB may be shared across cultures, specific distinctions were identified. Active respondents reported the unique contributions of physical activity to the physical, psychological, developmental, and social elements of SWB. The findings suggest that physical activity could enhance the quality of life in Chinese older adults.

Key Words: exercise, mental health, quality of life, qualitative

Global population aging has profound consequences for the social, cultural, political, and economic aspects of life for older people (Kim, Bengtson, Myers, & Eun, 2000). A burgeoning body of research has focused on exploring subjective meanings of a “good later life.” Subjective well-being (SWB), as an essential indicator of a good life, has been receiving research interest in aging studies based on a range of interdisciplinary approaches (Ingersoll-Dayton, Saengtienchai, Kesphachayawattana, & Aungsuroch, 2004; Ryff, 1989; Stathi, Fox, & McKenna, 2002).

Given the concern for improving well-being in older adults, many policies have been developed to meet the challenges accompanying an aging society. Within these policies, regular physical activity has consistently been identified as an essential and viable lifestyle behavior for achieving a good later life (Kendig, 2004). For example, The National Blueprint: Increasing Physical Activity Among Adults Aged 50 and Older in the United States (Robert Wood Johnson Foundation, 2001) and The Chief Medical Officer’s Report: At Least Five a Week in England (Department of Health, 2004) both confirm that a strong evidence base substantiates both the preventive and the therapeutic benefits of physical activity for improving older adults’ well-being.
Although population aging has been common in industrialized countries, the rapidly industrializing countries in the East are also witnessing these changes, and at a faster rate than in the West (Bengtson & Putney, 2000), but few studies regarding physical activity and SWB in older adults have been conducted in Eastern societies. Indeed, existing studies have been dominated by instruments of well-being developed in Western societies (Lee & Russell, 2003; McAuley et al., 2000), meaning that few Eastern-based devices are currently available for use.

The need for culture-specific instruments is highlighted by evidence showing that SWB can have distinct meanings across different cultures (Deiner & Seligman, 2004; Keith et al., 1994; Torres, 1999). In one recent quantitative study of well-being among Chinese in Hong Kong (Cheng & Chan, 2005), measures were based on an instrument that subsequent confirmatory factor analysis revealed had limited validity and reliability for older groups. Therefore, studies designed to address the effects of physical activity on SWB in older Chinese are rare and might be criticized for their failure to adopt age- and culture-sensitive measurements.

Much of the existing research regarding activity and well-being has concentrated on the frequency of activity, whereas few studies have explored the subjective aspects of older adults’ activity (Everard, 1999). Notwithstanding its obvious strengths, quantitative research can be challenged for excluding the meanings and purposes attached by human actors to their activity and for not offering a holistic picture (Guba & Lincoln, 1994). In contrast, qualitative research provides an appropriate method for gathering comprehensive information about how physical activity associates with SWB (Mutrie, 1997). In addition, many relevant studies of SWB have been primarily conducted with participants located in physical activity environments. This limits the opportunity to examine the potential difference between physically active and sedentary people. Stathi et al. (2002) have suggested that “further qualitative research might be undertaken with older adults who are not physically active to determine whether the same dimensions are potent and how the extent to which their well-being needs are met in the absence of physical activity” (p. 89).

This study aimed to explore the underlying dimensions of SWB and the effects of physical activity engagement on SWB for Chinese older adults using a qualitative approach. To investigate any distinctive contributions of a physically active lifestyle, we drew a purposive sample of physically active and inactive participants.

Method

Congruent with suggestions for cross-cultural analyses in sport and exercise psychology (Duda & Allison, 1990), the current study employed semistructured interviews. Qualitative interviews are widely regarded as a proper method for gathering diverse information and for generating insights into respondents’ phrasing and concepts (Vazou, Ntoumanis, & Duda, 2005), which can highlight variety in dimensions of attitudes (Fielding & Thomas, 2001).

Recruiting Participants

Concurring with the policy documents on aging and health (e.g., Robert Wood Johnson Foundation, 2001) and the Taiwan governmental definition of senior citizens (Taiwan Ministry of Interior, 2000), we recruited adults age 50 years and older. To
investigate the distinct effect of physical activity on SWB, we approached active and inactive older Chinese adults living in Taipei, Taiwan. Active participants engaged in some kinds of exercise at least three times per week, whereas their sedentary counterparts did not regularly participate in any form of exercise.

To select cases providing relevant information for the research focus, we adopted purposive sampling (Creswell, Clark, Gutmann, & Hanson, 2003). Initially, 16 physically active participants were recruited from hill walking, folk dancing, and Tai Chi clubs in Taipei. In 2000, these were the most popular forms of self-reported exercise among older people (Taiwan National Council on Physical Fitness and Sports, 2000). For comparison, we used snowball sampling (Warren, 2002) to recruit 7 inactive older adults for interview.

**Interview Guide**

Two interview guides—one each for active and inactive older adults—were devised to collect information to explore the main dimensions of SWB based on Stathi (2001) and Stathi et al. (2002).

The resulting individual interview guide comprised four parts. The first provided information about the scope of the study and also extracted sociodemographic information. In the second part, participants estimated their level of SWB using the Self-Anchoring Ladder Scale (Cantril, 1965). This helped to focus all contributors to the subject of the interview. In the third section were open-ended questions focused on meanings and interpretations of SWB, for example, What does well-being mean to you? To compare active with inactive individuals, the fourth section explored subjective experiences and outcomes of either engaging in physical activity (physically active people) or other leisure involvement (physically inactive).

**Procedures**

Informed-consent letters were signed before we conducted any interviews. Individual or group interviews were performed according to participant preference. For physically active interviewees, seven individual interviews and three group interviews were conducted in participant homes, lasting 50–90 min. In contrast, apart from 1 sedentary respondent who attended the joint interview with her physically active husband, interviews with inactive people were all individually based, lasting 40–60 min. Group interviews offer distinctive insights into personal experiences that are revealed through the natural interaction resulting from discussions. Participants discussed the same issues as in individual interviews. As in the individual interviews, the order of questions was flexible.

**Data Analysis**

**Cross-Case Analysis.** A cross-case analysis identified commonalities and possible generalizability, especially for processes and outcomes (Miles & Huberman, 1994). The multiple comparisons that are central to cross-case analysis not only allowed the similarities and differences across cases to be established but also provided a detailed description of the themes and their patterns (Miles & Huberman; Patton, 2002).
Coding and Categorizing Process. We created a provisional coding framework before conducting the main fieldwork in Taiwan. We derived this from a literature review of SWB-in-aging studies, the benefits of physical activity for older people, and two practice interviews. Coding began with preparation of a brief written description of each participant. These descriptions provided a concise, individualized record of responses and were used in member checking to verify that respondents’ views had been accurately represented. Then, interview transcripts were subject to inductive coding and categorizing. Consistent with Miller and Crabtree (1992), who suggested that “the template is more open-ended and undergoes revision after encountering the text” (p. 19), our coding framework was provisional. This approach was justified when we discovered a previously unrecorded element of SWB. For example, references were made by participants to “political” issues, so this needed to be incorporated into the framework.

Credibility of Data Analysis. To ensure the credibility of the study, the following steps were taken:

1. Practice study: Two interviews were conducted before the main interviews to confirm the feasibility of that protocol (van Teijlingen & Hundley, 2001).

2. Analyst triangulation: Triangulating several observers not only helps to address the partiality of single-analyst approaches but also allows exploration of inconsistencies in the captured data (Patton, 2002). Two experienced researchers independently coded parts of the transcripts to explore possible issues of misinterpretation. Three more experienced researchers categorized the emerging themes based on their appropriateness. Subsequent discussion between the researchers helped establish consensus.

3. Translation: The interviews were carried out in Mandarin and then transcribed verbatim in Mandarin. After coding and categorizing, the table regarding the main themes and dimensions of SWB with the most illustrative quotes was translated into English. Translation was performed in collaboration with a bilingual exercise-psychology researcher (Birbili, 2000).

4. Member checking: One of the most logical methods of validation is to report research findings back to informants (Miles & Huberman, 1994). Before coding, all participants were asked to confirm the accuracy of the Mandarin version of their brief accounts.

Results

Participants included 23 Taiwanese community-dwelling adults (12 women) age 55–78 years. Fifteen reported having attended college or university, and 4 participants had achieved a maximum of primary school education. Twenty were married, 2 widowed, and 1 divorced. Fifteen were living with their families. None reported any physical disability. Three in 4 practiced some kind of religion, including Buddhism or a folk religion.

Analyses revealed a number of underlying features contributing to SWB. Seven dimensions and 21 subdimensions were identified through inductive coding and a categorizing process (see Table 1). Physical activity contributed to enhanced quality of life and made a unique contribution to several dimensions of SWB. Throughout our report each respondent has been given a pseudonym to ensure confidentiality.
<table>
<thead>
<tr>
<th>Dimension</th>
<th>Subdimension</th>
<th>Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical</td>
<td>General health</td>
<td>Health, healthy body, health decline, unhealthy, promote health</td>
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<tr>
<td></td>
<td>Physical fitness</td>
<td>Stamina decline, tired, drowsy, physical strength, endurance, flexible, nimble</td>
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<td></td>
<td>Vitality</td>
<td>Energetic, active, full of spirit, delaying aging, feel younger, feel older</td>
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<td></td>
<td>Disease symptom</td>
<td>Catch a cold, cough, a sensitive nose, dizzy, normal blood pressure, gout, headache, insomnia, pain, chronic diseases, injury, fatty liver, humpback, aching, uncomfortable, pain</td>
</tr>
<tr>
<td>Psychological</td>
<td>Positive affect</td>
<td>Happiness, safe, secure, empathy, relaxed, calm, quiet, peaceful, free, satisfaction, delight, contentment</td>
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<tr>
<td></td>
<td>Negative affect</td>
<td>Frustration, unhappiness, living pressure, bad mood, annoyed, vexed, troublesome, coercive, unwilling, loneliness, dissatisfaction, unexpected, panic, worry, be bound, mental burden, sense of loss, stress</td>
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<td></td>
<td>Self</td>
<td>Self-willingness, broad-minded, bad-tempered, good temper, self-confident, desire, get into a blind alley, optimistic, positive attitude, self-contentment, self-personal</td>
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<tr>
<td></td>
<td>Cognitive function</td>
<td>Cognitive thinking, thinking clearly, creative thinking, memory, self-control, emotional control</td>
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<tr>
<td>Developmental</td>
<td>Learning</td>
<td>Learning activity, attending community colleges, joining a sport club, acquiring different knowledge, learning new stuff, self-learning, positive drive for learning, learning new skills</td>
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<td></td>
<td>Growth</td>
<td>Understanding multiple viewpoints, broaden vision, access to new experience, pursuing personal interest, full of curiosity, pursue creative thinking, discover something interesting, realize and exceed the goal, fulfill the dream, self-actualization, set goals for self-challenge, conform to life change, adapt to life change, adapt to social change, time has changed, not to compare the present with the past</td>
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<td></td>
<td>Independence</td>
<td>Not depend on others, help yourself, live independently, not need to ask for others’ help, be independent, self-care, not cause a burden on younger generation, not depend on children, not become a trouble to others</td>
</tr>
<tr>
<td>Material</td>
<td>Financial security</td>
<td>Savings, not worry about money, independent financial source, have enough money, stable financial source, good financial situation, financial pressure</td>
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<td></td>
<td>Housing</td>
<td>Home, house, a comfortable flat</td>
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<tr>
<td>Spiritual Meaning and value in life</td>
<td>Not pursue fame and wealth, happiness lies in contentment, generosity to younger generation</td>
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<tr>
<td>Religion</td>
<td>Increase my wisdom, change my vantage points, broaden my vision, consolation, cultivate depth of spirit, atone for sin, believe in eternal life, believe in supernatural power, peace of mind</td>
<td></td>
</tr>
<tr>
<td>Sociopolitical Political</td>
<td>Political change, conflicts between political parties, political and social stability, social disorder, dissatisfied with political phenomena, bad political competition, violent and thrilling news, rifts among politicians</td>
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<tr>
<td>Policy</td>
<td>Pension system, annuity, welfare system, nursing institution, public facilities, mass transportation</td>
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<tr>
<td>Living environment</td>
<td>A satisfying neighborhood, neighborhood quality, ideal living space, entertainment, leisure facilities, opportunities for leisure and art, parks, green areas, access to natural environment, hill climbing, tourism</td>
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<tr>
<td>Social</td>
<td>Taking care of family, harmony, children live together peacefully, get along with family well, safety and security of family, children’s support, filial piety, loss of spouse, worry about children, intimate relationship, live closely, reduce the expectation of children, family’s health, dissatisfaction and complaints from family, staying with family, take care of grandchildren, conflicts with children</td>
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<tr>
<td>Family</td>
<td>Intimate friends, broaden social relationship, reduce interpersonal conflict, share happiness or unhappiness, help each other, get acquainted with more friends, close friends, concern for each other, community relationship, widen life circle, social interaction, group activity, good interpersonal relationship, willingness to engage in social activities, easygoing, chat with friends, make friends, come together to meet old friends regularly</td>
<td></td>
</tr>
<tr>
<td>Friend</td>
<td>Help others and don’t ask for a reward, volunteer, community service</td>
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Physical Activity and Physical Aspects of Well-Being

Physicality issues were the most common themes. All participants, regardless of their activity status, indicated that maintaining health and staying free from disease were important for well-being. This dimension comprised general health, physical fitness, vitality, and disease symptoms. Most of the interviewees reported that well-being meant having a healthy body. Mr. Lin (62, active) noted aging effects: “My stamina seems to have decreased a lot and I tire easily. I sometimes feel drowsy at my workplace.” Regular physical activity clearly affected the physical aspects of SWB in later life. These issues were experienced in daily life. Mr. Lin and his wife (57, inactive) discussed this in a joint interview: “If I do not exercise, I feel tired easily, lack stamina.”

Another participant also emphasized the beneficial health effects of exercising. Ms. Yeuh (61, active) reported that her physical fitness had been poor since her childhood and that as a young woman she felt that appearing weak was attractive to men. After starting to work and becoming a mother, however, she recognized the importance of health in family life and as result sought to improve her fitness.

One retired primary school teacher noted that her physical health had not been good before retirement. Since then, however, she had become more involved in regular hill walking and attributed a range of positive physical developments to this walking: “At the beginning, . . . I felt dizzy when going on the hills. Now, I can go to the hilltop directly and need not take a rest halfway” (Ms. Cheng, 62, active).

Physical Activity and Psychological Aspects of Well-Being

Psychological issues were also frequently discussed and comprised four subdimensions: positive affect, negative affect, self, and cognitive function. Many older adults linked happiness with well-being. Life experiences that generated positive (e.g., delight) and negative feelings (e.g., unhappiness and frustration) were frequently mentioned. “Self” issues also appeared within psychological well-being, including self-control, self-willingness, self-personality, and self-contentment. Finally, cognitive functioning was seen as important to mental well-being. As Ms. Chiu, an active respondent said, “If you often use it, it will keep you from dementia.”

For many contributors, regular physical activity made them feel well. Physical activity was linked to feeling open-minded and optimistic. One dancing student, Ms. Tsai (76, active), said, “I like dancing . . . beauty and melody, full of pleasure. . . . Dancing helps people to release their unhappiness and recover the balance between physical and mental aspects in life.”

Others noted how exercising mitigated work-related pressure. They found that physical activity helped them think clearly and feel more energetic and innovative at work and helped with emotional control. Tai Chi students felt that they had become calmer and less easy to anger because of the gentle and relaxing movements they undertook in classes. Other dancing novices emphasized that exercise improved their cognitive function and focused on avoiding dementia: “When we learn a new dance, we must use our brain to remember it. . . . It makes us less likely to get dementia” (Ms. Chiu, 63, active).
Subjective Well-Being and Physical Activity

Physical Activity and Developmental Aspects of Well-Being

“Learning and growth” and “independence” reflect a desire to live in a self-determined way in later life. Many interviewees mentioned that the ability to learn and having learning opportunities were all-important for their well-being. One retired person said, “I hope I can attend some learning activities in my community, for example, leisure, arts activities, or other courses” (Ms. Cheng, 65, active). Other respondents also reported, “Well-being means I am free to learn what I want to learn” (Mr. Huang, 59, active).

Many older adults were also interested in personal growth and took considerable pleasure from achieving personal goals. Ms. Yueh (61, active) said, “Well-being means becoming who you want to be. I can achieve my goals and my dreams come true.” Furthermore, adapting to later life was another feature in this growth process. Smoothly conforming to life’s changes was also important. One retired respondent reported how she had not adjusted to her own retirement (she later became active to change this): “I almost stayed at home for 1 month, dared not go outside. . . . It seemed I had become another person” (Ms. Cheng, 65, active).

Maintaining an independent life was often profoundly important, even though most participants still lived close to their friends and adult children. Of note is the fact that most did not want to impose on their families: “I wanted my children to have no burden, to be free from mental pressure. They can do what they want to do. . . . When my children grow up, they can stay with us. That is my best hope” (Mr. Gu, 61, inactive).

Active participants noted that their SWB improved through accessing exercise-related experiences, which brought new information and understanding. This was enriching and helped make their lives more enjoyable. One member of the hill-walking club said, “the sport club . . . helps me broaden my life circle and access different life experiences and knowledge” (Mr. Lingen, 63, active).

Physical Activity and Social Aspects of Well-Being

“Social relationships” was another essential factor in SWB and comprised three elements: family, friends, and making a “productive contribution.” Families were important to older individuals’ SWB. Only 1 interviewee did not mention the importance of his family relationships. Some participants thought that the health and happiness of family members strongly influenced their own well-being. Other interviewees mentioned that they were satisfied with their lives because their children and daughters-in-law remained loyal and committed to them (“filial piety”).

Some participants emphasized a cultural norm by which offspring are obliged to care for their aged parents. In this familial reciprocity, parents also make sacrifices to increase their children’s well-being, even into adulthood. Then, in late adulthood, these children are expected to reciprocate with their aged parents. Even into their 60s, interviewees felt this responsibility and were still looking after their parents in the family home: “I do not think that sending their aged parents to nursing homes meets the values and ethics of our society. . . . Older people living at nursing institutions still cannot be considered aging successfully” (Ms. Cheng, 65, active).
Friendship also contributed to SWB, and having close friends was important in maintaining an active later life. “It is too lonely if your social circle only comprises you and your spouse” (Mr. Yi, 65, inactive). One female participant (68 years old) reported, “The favorite part of my daily life is to go to the stadium for dancing because I can chat with my good friends. . . . We dance together every day. . . . Gradually, you have more friends.”

With age there was an increased need for support from social networks, including both family and friends. Many participants were afraid of loneliness, equating it with isolation. Physical activity clubs not only created groups to join but also offered valued opportunities to interact with friends, work colleagues, or family, even when the engagement involved sharing disappointments or setbacks. The moral obligation to support group events also helped ensure further engagement. Many interviewees reported that it was only after retirement that they enjoyed and actively pursued social relationships through physical activity: “I can meet my old friends regularly by joining in hill walking. However, once you join the group, you have to keep attending. . . . When people age, they need friends to share happiness or unhappiness” (Ms. Cheng, 65, active).

Furthermore, some participants also exercised with family members, noting that it provided opportunities for talking with their spouses or children. This, in turn, increased mutual understanding. Finally, another social feature was that of using spare time altruistically. One participant reported, “I would like to retire earlier to make a contribution to society. For example, being a volunteer . . . a sport or exercise instructor” (Mr. Hwang, 59, active).

Physical Activity and Sociopolitical Aspects of Well-Being

A range of sociopolitical factors (politics, policy, and living environments) influenced SWB in later life. These factors often produced unhappiness and unease. One retired respondent mentioned that the political environment was a cause of his unhappiness: “News is full of conflicts, violence, and disorder. Politicians or different parties have been feuding for a long time” (Mr. Lai, 66, active). To improve his SWB, there was a need for greater stability in politics, in the social environment, and in his neighborhood. Others were concerned about public policy, especially social welfare: “My neighbor is working at the traditional market. He is as old as me. However, he starts working at 4 o’clock every morning. Why does he still need to work so hard?” (Ms. Cheng, 65, active).

Although sociopolitical factors affected SWB, improvements were more linked to having more opportunities for exercise involvement than to the direct outcomes of exercising. Opportunities to join classes or clubs or to use good local facilities were two ways in which sociopolitical issues contributed to SWB.

Physical Activity and Material Aspects of Well-Being

Having personal property, savings, and financial stability and not worrying about money were especially important markers for a good later life. Interviewees did not want to rely on their children or increase the financial burden on their families: “A successful older person should be independent financially. . . . You don’t want to rely on your offspring” (Ms. Tsai, 76, active). Clearly, the older adults intended to
maintain their financial and residential independence for fear of imposing on their families. These were key elements of SWB. There was no evidence that physical activity contributed to this dimension.

**Physical Activity and Spiritual Aspects of Well-Being**

Spirituality was related to seeking—or having—answers to the ultimate questions about life, about meanings in life, and about relationships to the sacred or transcendent. Spiritual aspects of well-being comprised two subdimensions: meaning and value in life and religious belief. With aging, individuals increasingly thought about these issues and how they mattered in their own lives. Through their belief frameworks, individuals actively evaluated and reevaluated their earlier lives to provide direction for their remaining years.

Most participants held some form of religious belief. Religion played a profound role in their daily life, helping them broaden their life perspective and find solace in difficult times. Although spirituality was important in later life, there was no evidence that physical activity contributed to the spiritual SWB.

**Difference Between Active and Inactive People**

Responses between the active and inactive contributors were compared to explore whether or not different elements were evident among the individual participants. This process revealed only minor differences in descriptions of well-being elements, suggesting that physically active and inactive people interpret the construct of SWB similarly.

It was also found, however, that SWB could be achieved in many ways. Sedentary respondents mentioned that they enjoyed other types of leisure activities in ways similar to the active contributors. Mr. Yi (65, retired university lecturer) reported, “Drinking coffee in the morning could inspire my thinking. It is beneficial for my favorite pastime—writing.” Others noted that religious activity provided great pleasure and helped relieve anxiety or stress. Exercising should therefore be regarded as important for SWB effects, particularly for physical and social benefits, but not as an exclusive vehicle for achieving well-being.

**Discussion**

This study provides the first overview of subjective well-being (SWB) and its associations with physical activity participation in older Chinese adults in Taiwan. The findings help address a shortfall in the existing literature regarding understanding of SWB and its relationship with physical activity and inactivity in this population. It is noteworthy that the study also tackled the deficit in contemporary research on well-being by focusing on cultural and contextual factors (Christopher, 1999).

**Consistency in the Meaning of Subjective Well-Being**

The first key finding is that SWB is characterized by seven dimensions in Chinese older adults, including physical, psychological, developmental, material, spiritual, sociopolitical, and social elements. These dimensions and their meanings are
broadly consistent with previous studies of SWB (Keith et al., 1994; Ryff, 1989; Stathi et al., 2002). Exceptions were found, however, in the content of developmental, sociopolitical, and social well-being.

Meanings linked to “a good later life” are derived from cultural and normative expectations (Godfrey & Denby, 2004) because they guide the priorities for the last stage of life (Kendig, 2004). Although certain elements of SWB might be shared across cultures, they might be interpreted and weighted differently. Others might appear similar yet still not share core elements in a specific context. Although most of the dimensions identified here were broadly congruent with the literature from Westernized societies, “independence” (in developmental well-being), “family” (in social well-being), and “political” (in sociopolitical well-being) all exhibited culturally distinctive meanings.

**Independence and Interdependence: The Role of Family as the Major Caregiver.**

The attitudes that older Chinese adults held toward SWB, especially in relation to independence and interdependence, were varied. Independence and family are two themes that particularly displayed this variance. On the one hand, some individuals wanted to be independent, to avoid relying on others, and to avoid being a burden, especially on offspring. On the other hand, often these same individuals also wanted to maintain family bonds by living with, or near, their children and also by looking after their own aging parents. These interdependent attitudes toward well-being seemed strong; in our cross-case analysis they were often repeated by individuals and across the participants.

This apparently ambiguous attitude toward SWB might be related to the role of the family in Chinese society. In Westernized societies, autonomy and independence are emphasized, whereas people in South and East Asia regard individuals as closely connected and interdependent (Ingersoll-Dayton et al., 2004)—all features of collectivist culture (Markus & Kitayama, 1991; Oyserman, Coon, & Kemmelmeier, 2002). Empirical evidence suggests that Taiwan remains a collectivist society despite recent intensive modernization (Hofstede, 2001; Lu & Kao, 2002; Suh, Diener, Oishi, & Triandis, 1998). Group exercise not only characterizes these features but also sustains them.

Furthermore, East and Southeast Asian countries such as Taiwan, mainland China (including Hong Kong), Japan, Korea, and Singapore have a strong historical influence of Confucianism, which highly emphasizes the value of filial piety (Chow, 2004; Sung, 2000). Younger people are obliged to look after their aged parents, and these traditional values are reflected in the high prevalence of older adults living with their children in this region (United Nations Economic and Social Commission for Asia and the Pacific, 2000). In 2000, approximately 7 in 10 Taiwanese adults age 65 and older were still living with their offspring, regarding “living with offspring” as the ideal living arrangement (Taiwan Ministry of Interior, 2000). In contrast, most older people in Western societies live alone or with only their spouse (Bengtson & Putney, 2000).

These analyses support previous work indicating that “cultural values that define state and family responsibility may be the most consequential factor in determining a society’s response to population aging” (Bengtson & Putney, 2000, p. 264). Those authors concluded that the family plays the strong role for providing care and support for older adults across Eastern and Western societies. In East Asian
countries, however, care is dominated by families, whereas the responsibilities in the Western societies are also shared by the state, which usually provides the bulk of the resources. It is worth noting that independence and interdependence are important in all cultures. They might be weighted in different ways, however, depending on the sharing of responsibility for care among individual, family, and the state.

Political Aspects of Sociopolitical Well-Being. Political issues were identified as a culturally distinctive feature of how the environment influences SWB. Political reform in Taiwan over the last 20 years might have played a particular role here. Given the ongoing military tensions in the Taiwan Strait, Taiwan was under martial law for several decades. Democracy was only established in 1987. The first presidential election was conducted in 1996, and only in 2000 was the 54-year dominance of a single ruling party ended. Given the rifts between domestic political parties, the tense cross-strait relations in recent years, and a simultaneous worldwide economic recession, Taiwan experienced—for the first time—negative economic growth and the highest unemployment rate in over 50 years (rising from 2.9% in 1999 to 5.0% in 2003; Taiwan Council for Economic Planning and Development, 2004). These dramatic challenges inevitably affect national morale and individuals’ sense of life satisfaction (Taiwan Ministry of Interior, 2001); individual concerns for financial independence and for the security of the family amplify these apprehensions. This supports the contention of Keith et al. (1994) that state structures and policies might be dominant in affecting older adults’ well-being.

Effects of Physical Activity on SWB in the Chinese Sociocultural Context

The third finding was that physical activity made substantial contributions to SWB in the active adults. Specifically, regular physical activity contributed to physical, psychological, developmental, and social aspects of well-being. These findings are consistent with previous qualitative research in the United Kingdom (Stathi et al., 2002) and corroborate links to exercise that have previously been established quantitatively (Lee & Russell, 2003; McAuley et al., 2000). Our work also shows that exercising was largely independent of three other dimensions of well-being: material, spiritual, and sociopolitical. Further studies should explore the role of these factors in predisposing and contributing toward active living (Deiner & Seligman, 2004) because they appear important in Chinese culture. Clearly, based on this analysis, physical activity can contribute to a successful later life. The effects of regular physical activity on well-being might vary, however, depending on the characteristics of individuals and sociopolitical factors (Fox, 1999).

One link with sociocultural issues might be the style and mode of popular physical activity pursuits in East Asian countries. A number of group-style physical activities such as Tai Chi, folk dancing, jogging, and hill walking are popular among older Chinese in Hong Kong, mainland China, and Taiwan (Hui & Morrow, 2001; Ku, Fox, McKenna, & Peng, 2006; Yu, Liaw, & Brand, 2004). It is clear that these activities provide more than just a physical purpose for exercising. These ostensibly “exercise” events also provide important opportunities to build social capital (Putnam, 2000) by bonding with close friends and family and bridging to individuals, which might help in daily functioning. Taiwanese exercise is both
“physical” and “engaging” and might be in part an expression of cultural, political, and religious beliefs and personal style.

There is evidence that older Chinese are more likely to be physically active than younger generations in their leisure (Hui & Morrow, 2001; Ku et al., 2006). The physical activities mentioned in this article are compatible with the Chinese collectivistic orientation characterized by an enjoyment of being involved in group events (Oyserman et al., 2002). Furthermore, Taoism, the second major Chinese religion or tradition, suggests that humans should live harmoniously with nature. Chinese older adults traditionally believe that being with nature brings peace of mind and that breathing fresh air improves their health. These beliefs might also contribute to their interest in early morning outdoor exercising and in hill walking (Chen, 2001).

Localized, group-style physical activities bring people together and provide valued opportunities for social interactions with friends and neighbors. Active neighbors and friends provide important support systems for taking part in physical activities (Litwin, 2003; Pate et al., 1995). Therefore, these group-style physical activities might not only enhance well-being and social cohesion but also reflect the values within Chinese sociocultural contexts. Together, these factors might help make these activities appealing and consonant for older people. This process makes initiation and continued involvement in active living more likely.

Although there was substantial evidence that physical activity contributed to improved social connectedness (Turner, Rejeski, & Brawley, 1997), not everyone found this important. Positive accounts related how, after retirement, a relatively prolonged sense of social exclusion was ended by engaging in hill walking. Close relationships with friends followed. Given that social isolation is both a cause and a consequence of disease and life-threatening lifestyles, engaging in physical activities, especially those based in groups, can serve an important function for reintegrating isolated older adults. Exercise groups and clubs help defer potential burdens on central services.

Although routes to SWB might be individualized, there were no discernable differences in the conceptualization of SWB between physically active and inactive participants. The impact of physical activity on specific dimensions of SWB operating in this sample provides an opportunity for reexamination by further psychometric measurements in a large-scale population.

**Evaluation of the Study**

Inevitably, the study has limitations. Interpretations of “a good later life” can be influenced by many other factors, namely, cohort effects, period effects, and cultural effects (Keith et al., 1994). All our interviews were conducted in April 2003, when severe acute respiratory syndrome (SARS) caused 168 deaths in Taiwan from March to July of that year (Taiwan Department of Health, 2004). Individual responses might have reflected a sense of susceptibility to SARS, and this effect should not be underestimated when interpreting the findings. It might, for example, explain why transcendent issues were so prominent.

The study adopted a number of methodological steps to heighten credibility—a practice study, analyst triangulation, translation consultation, and member
checking—yet it was still limited by interviewer skill. The willingness of participants to share close personal beliefs with a relative stranger at least 20 years younger than even the youngest participant is another limitation.

On the positive side, the study presents in-depth information about the meaning of SWB among older adults. It also describes the contribution of physical activity to living in the Chinese sociocultural context. The overall direction of the narratives suggests that the respondents had relatively high SWB.

Interviews were conducted in Mandarin, the native language of the participants, which increased the possibility of achieving meaningful insights. As a result, the findings highlight the cultural distinctiveness of SWB among older Chinese adults and provide an intensive view of the perspectives in this population. Furthermore, the study recruited not only active but also physically inactive participants, and this provided an opportunity to examine their differences. Finally, these dimensions, themes, and responses supply invaluable information for understanding SWB among Chinese older adults and for developing national, culturally valid policies.

**References**


