Leisure-styles and life satisfaction among recent retirees in Israel

GALIT NIMROD* and HANNA ADONI†

ABSTRACT

This article examines the leisure behaviour, attitudes and life satisfaction of a sample of 383 retirees aged 50 or more years in an Israeli national survey. Multivariate analyses identified four leisure-styles on the basis of the type of leisure activity engaged in, its relative sophistication, whether it was a formallyorganised cultural activity, and its location (at home or outdoors). The four styles were: 'company seekers', 'media consumers', 'culture enthusiasts' and 'sophisticated choosers'. The levels of participation in the four styles were associated with nine background characteristics: gender, education, income, former occupation, work status, retirement pattern, origin, residential area and health. Differences in life satisfaction were associated with leisure participation and leisure satisfaction. Two of the groups, the 'culture enthusiasts' and the 'sophisticated choosers', were relatively active, and enjoyed significantly higher levels of satisfaction in both their leisure and their lives. These findings tend to support Havighurst's 'activity theory'. Since these two leisure-styles were followed by minorities, and most of the sample pursued the other leisure-styles, the findings imply that a large proportion of the retired population are inadequately prepared to take up 'active leisure'. If more older people are to become engaged in active leisure, with benefits to both themselves and to society, they require more guidance and support.

KEY WORDS – retirement, activity, attitudes, well-being.

Introduction

In most western societies, the transition into retirement is to a phase of leisure in one's life. While some retirees seek part-time or even full-time jobs, most devote their additional free time to leisure interests (Harvard School of Public Health 2004; Robinson and Godeby 1997). The transition may not be easy. After life-long involvement in work, a newly-retired person needs to create a lifestyle that will be at least as satisfying as their

- * Department of Communication and Journalism, Sapir Academic College, Israel.
- † Department of Communication and Journalism, Hebrew University of Jerusalem, Israel.

previous lifestyle. While some welcome the opportunity to explore a wide range of activities and to do things that they have wanted to do for years, others are troubled by the emptiness created when work ceases. Successful adaptation to the substantial extra free time is a major challenge of retirement. Whereas previous studies have explored the leisure-styles developed by retirees (e.g. Chiriboga and Pierce 1993; Dumazedier 1972; Havighurst and de Vries 1969), none have examined the relationships between those styles and subjective well-being. The present investigation examines simultaneously 'activities' and 'life satisfaction'. It explores not only the different leisure-styles of recently retired people, but also the relationship between the leisure-styles and subjective well-being. The aim is to identify which styles are associated with higher life satisfaction and, by implication, a better adaptation to retirement.

Background

The leisure activities of older people have been well researched since the early 1960s, with the types of activities, the benefits, the family and social context, and the limitations and barriers receiving most attention (Nimrod 2003). The study of leisure activities is a central theme in research on 'the third age', but has concentrated on the behavioural dimensions of older people's participation in various leisure activities soon after retirement. Several basic features of leisure at this life stage have been established. First, there is a decline in participation with age (Dumazedier 1972; Iso-Ahola, Jackson and Dunn 1994; Katz and Gurevitch 1976; Katz *et al.* 2000; Lefrancois, Leclerc and Poulin 1998). Secondly, there is a transition from physical activities to others that demand less physical effort, and a corresponding shift from outdoor to indoor activities (Gordon 1980; Gordon, Gaitz and Scott 1976; Rapoport and Rapoport 1975; Vail and Berman-Ashcenazi 1976).

In addition, there is evidence of continuity, for the tendency is for the same activities to be pursued in retirement as before, albeit with a change in frequency. Retirees tend not to participate in more activities, but rather to increase their participation in accustomed activities. Cases have been reported in which peripheral or non-satisfying activities are abandoned and more time given to the most enriching activities (Atchley 1989; Dumazedier 1972; Kelly 1983, 1987; Iso-Ahola, Jackson and Dunn 1994; Kremer and Harpaz 1982; Levinson 1986; Long 1987; Nimrod 2005; Parker 1982). Although old age encompasses successive lifecourse stages, they have rarely been differentiated in activities research. In many of the cited studies, for example, no distinction was made between the retirement phase and a later phase with physical disability. Moreover, some have not

differentiated the retired from those still in work, but simply characterised the population of a specified age (e.g. Fernandez-Ballesteros, Zamarron and Ruiz 2001; Kelly 1987; Robinson and Godeby 1997).

Leisure plays a major role in the more general concept of 'life-style', which has been used since the early 20th century in sociology, psychology, cultural studies, social geography and, most enthusiastically, in marketing. A notable feature of the life-style literature is the lack of agreement on the meaning of the term, with at least 30 definitions having been identified (Veal 1991). Veal (1993) argued that the life-style concept had several components: (1) activities – including paid work, domestic practices, consumption patterns and leisure pursuits; (2) values and attitudes; and (3) choice, the level of which varies by individual, group and over time. Leisure-styles research, as an extension of life-style studies, is based on the idea that leisure behaviour comprises several inter-dependent elements (Roberts 1978). Some activities are of course common to most people, such as watching TV, reading for pleasure, or spending time with family and friends. This 'core of activities' is supplemented by others that are more particular to individuals (Kelly 1983: 88).

The earliest users of the term 'leisure-style' in relation to the study of older people's leisure were Havighurst and de Vries (1969). They collected data from eight countries and defined seven retiree leisure-styles: confronting new challenges; instrumental activities (for the family or public good); expressive enjoyment (hedonistic); filling time with undemanding pastimes (e.g. playing cards and walking); expanding domestic routines to fill the time; apathetic inactivity; and lack of free time. Similarly, Dumazedier (1972) classified retirees' leisure-styles into five categories: physical, artistic, practical, intellectual and social. He examined the comparative frequencies of the different styles and found that practical and intellectual activities were the most popular, that social activities were very important, and that physical and artistic activities were the rarest leisure-styles.

The basic proposition that certain activities 'go together' (the economists' 'basket of goods') can be tested by conducting a factor analysis of participation data, and the method has been widely used for the general population and for older people since the 1960s (e.g. Adoni 1995; Katz and Gurevitch 1976; Katz et al. 2000; Kelly 1987; Ritchey, Ritchey and Dietz 2001). Others have employed non-statistical categorisation, according to the various purposes of specific studies (e.g. Litwin 2001; Lomerantz et al. 1988; Mannel 1993). Three sets of associations have been most explored: (1) among the activities themselves; (2) between participation in activities and socio-economic and socio-demographic characteristics; and (3) and between participation in activities and psychosocial outcomes, very often

the psychological benefits of participation. Chiriboga and Pierce (1993) took leisure-styles research one step forward. They carried out a cluster analysis of seven leisure factors that had been identified in an earlier study by (Lowental, Thurnher and Chiriboga 1975) to determine whether groups of the general population that shared similar activity profiles could be identified. Five clusters provided the optimal solution:

- I. Simple pleasure. This activity profile was high in maintenance and passive activities (e.g. watching TV and resting), also in sports (including exercising and spectator sports) and social activities, but low on contemplative, solitary and outdoor activities.
- 2. Socially restricted. This style was low in social, contemplative and maintenance activities, but had average levels of participation in all other activities.
- 3. Creatively engaged. A style that has high participation in solitary, maintenance, contemplative and outdoor activities, and very low participation in passive activities.
- 4. *Socially focused*. Characterised by high participation in social and passive activities, and low participation in all other activities.
- 5. Vigorously engaged. Low in passive activities, high in all other activities.

An examination of the demographic characteristics of each group found that the retired participants were mainly members of the 'socially restricted' group. They were also the majority in the small 'socially focused' group (with only three per cent of the sample).

In putting forward the activity theory, Havighurst (1963) argued that to preserve psychological wellbeing in old age, it is important to maintain a high level of involvement in activities. As he wrote, 'successful aging means the maintenance, as far and as long as possible, of activities and attitudes of middle age', and that people 'should find substitutes for the activities which they had to give up if they were forced to retire, e.g. work, clubs and associations', or to replace 'friends and loved ones whom they had lost by death' (1963: 309). Many subsequent studies supported this theory and demonstrated how elderly people's high level of involvement and activity contributed to their psychological wellbeing (e.g. Chiriboga and Pierce 1993; Fernandez-Ballesteros, Zamarron and Ruiz 2001; Hall and Havens 2002; Iso-Ahola, Jackson and Dunn 1994; Kelly 1987; Kozarevic 1972; Lawton 1994; Mishra 1992; Mobily et al. 1993; Riddick and Stewart 1994; Searle et al. 1995, 1998; Shmanske 1997).

By doing so, they contradicted Cumming and Henry's (1961) disengagement theory, one of the most controversial theories in modern gerontology. Disengagement theory claims that the older a person becomes, the more he or she will withdraw from society, and that this process is universal,

inevitable and mutually accommodating for the individual and society. It argues that disengagement helps the ageing individual to focus on life culmination and internal growth, while enabling their families and friends to separate gradually. Recent evidence does suggest that some level of disengagement might be positive. A refinement was developed by Paul and Margret Baltes and their colleagues as a prescription for successful ageing by means of 'selective optimisation with compensation' (SOC) (Baltes and Baltes 1990; Baltes and Carstensen 1996; Freund and Baltes 2002). The SOC model essentially argued that it is adaptive and healthy to respond to the limiting factors that accompany ageing when individuals experience declines in biological, mental and social reserves. This can be done by being selective about the activities one chooses, abandoning the activities that are less meaningful, and by compensating for losses of meaningful activities in ways that optimise the reduced range of activities that continue. Research has shown that this process is beneficial to older adults. Janke and Davey (2004) showed that reducing involvement in some types of activities while maintaining or even increasing ('optimising') involvement in others associated with a decrease in depressive symptoms. Similarly, Hendricks and Cutler (2004) found that 'socio-emotional selectivity', derived from the SOC model, translated into increased investment in some volunteer activities and reduced involvement in other activities.

Leisure-styles and life satisfaction in Israel

The present study examines the association between different leisure-styles among retirees and retirees' life satisfaction – an indicator of better adaptation to the retirement phase of life. Its design has been based on Chiriboga and Pierce's 1993 study, but focuses on individuals who had recently retired. The research questions were:

- I. What types of leisure-styles exist among recently-retired individuals and what is the frequency of each type?
- 2. Are there background differences between the types related to sociodemographic characteristics, health status and personal history?
- 3. Are there differences between the types in: (a) attitudes concerning work and leisure; and (b) life satisfaction?
- 4. What explains differences in life satisfaction?

The sample design and recruitment

The data are from a survey of 383 independent male and female Jewish retirees aged 50 or more years who had retired during the previous five

years. People who had 'officially' retired but were still working in a full-time job were excluded. Retirees who were still working occasionally or part-time were included, and their economic-activity status was a background characteristic. To represent the general Israeli population, the respondents were recruited using random-digit telephone dialling, and quotas for all geographic areas in Israel and all sizes of cities and settlements were applied (the template from Israel, Central Bureau of Statistics 2000). After screening and consent, an interview appointment was made. About 8,000 people were telephoned and while only one-in-20 contacts matched the desired population characteristics, almost 100 per cent of those agreed to participate.

The survey instrument and measures

Face-to-face, semi-structured interviews were conducted in respondents' homes between May and August 2002. The questionnaire included closed and open-ended questions on: (1) the respondent's present leisure participation; (2) attitudes towards work and leisure; (3) life satisfaction; and (4) background characteristics (socio-demographic attributes, health perceptions, work status and personal history). Interviews were conducted by trained, middle-aged women and lasted 30 to 75 minutes (mean 45 minutes). The interview began by reading to the respondent a list of 41 leisure activities, as used in a previous Israeli study (Katz et al. 2000), and asking for the current frequency of participation in each. The replies were coded on an ordinal scale of 11 categories from 'o' (never) to '10' (more than four-hours-a-day). To ensure that all leisure activities were reported, another question referred to 'additional activities, not mentioned in the list' and asked for the frequency of participation. Less than 10 per cent of the respondents mentioned additional activities, and most of these could be allocated to the presented categories, e.g. 'gardening' to 'physical activity', and 'baby-sitting grandchildren' to 'meeting grandchildren'.

Nine questions about attitudes to work and leisure were asked, including: present satisfaction from leisure and free time; satisfaction with leisure and available free time prior to retirement; perception of and preference for work or leisure; satisfaction with work before retiring; and present motivation for continuing to work. Most of these questions had been used before and had a four-category agreement scale from '1' (very much) to '4' (not at all) (Katz et al. 2000). The level of satisfaction was established with (1) the amount of free time ('too much', 'enough' or 'not enough') and with (2) leisure participation when compared with before retirement ('more satisfied today', 'less satisfied today' and 'the same').

The *Life Satisfaction Index* (LSI) test, developed by Neugarten, Havighurst and Tobin (1961), was used to examine the mean life-satisfaction score of each leisure-style group. The test comprises 20 statements about different aspects of life satisfaction at advanced age, such as: whether life is satisfying and meaningful, and the senses of success in achieving one's life goals, positive self-image, optimism and overall happiness. Respondents were asked to report whether they agreed or disagreed with each statement. The test was translated into Hebrew and validated by Shmotkin (1991). Agreement with each of the 20 items was scored '1', so the possible range of the index is from '0' to '20'.

The last questions were on the background socio-demographic and socio-economic attributes of age, gender, education, marital status, number of children, whether children lived at home, number of household members, household income, spouse's occupation, religious orientation, origin (by place of birth of the respondent and his/her father), residential area (by telephone area codes) and the size of the city or town of residence. Three questions examined health status: (1) health perception with a five-category scale from 'I' (very good) to '5' (very bad); (2) perception of physical ability to participate in various leisure activities, with a five-category scale from 'I' (can take part in any activity) to '5' (can't take part in most activities); and (3) the occurrence of a severe illness during the previous two years (an objective dichotomy). Other questions examined work history (full- or part-time and occupation), present work status, retirement duration, and the timing and circumstances of retirement (early, late or at official age; forced or by respondent's choice). Several more questions checked personal history such as: date of immigration to Israel, personal connection to the Holocaust (survivor or close relative of survivor), and extreme difficulties in the previous two years (e.g. spouse's or other family member's illness, death or divorce).

Characteristics of the respondents

The age range in the achieved sample was from 50 to 85 years. Most (72 %) were aged 60–69 years and the mean age was 64.3 years. Fifty-eight per cent were female, 78 per cent were married, and 70 per cent did not have children living at home. Forty-nine per cent had at least some post-secondary education; 40 per cent had relatively high household incomes (over 8,000 shekels (NIS) a month), and 52 per cent classified themselves as secular. Seventy-one per cent were not born in Israel, but only 10 per cent had immigrated to Israel after 1970, and five per cent were Holocaust survivors.

614 Galit Nimrod and Hanna Adoni

In terms of health, 64 per cent perceived their health as 'good' or 'very good' and 67 per cent as being competent to participate in most (or any) of their desired leisure activities. Fourteen per cent reported a severe illness during the previous two years, and nine per cent said their health was 'bad' or 'dreadful'. Six per cent had coped with their spouse's illness and 10 per cent with the illness of other family members during the previous two years. Two per cent were widowed and 12 per cent lost other family members (mostly parents) during that period. Seventy-four per cent worked full time before retiring; 46 per cent had retired before the official retirement age, half of them by their own choice. Fifteen per cent had retired after the official retirement age, and 20 per cent still worked part-time or occasionally.

Data analysis

The data analysis had five steps, the first being a factor analysis of the leisure participation data using principal components extraction and Quartimax rotation with Kaiser normalisation. The accepted factors had an eigenvalue of at least 1.0, and the constituent activities had factor loadings of at least |0.4|. At the second step, the activities factors were subjected to a cluster analysis, which specified the groups with the same leisure participation patterns (or leisure-styles). The third step was to subject the clusters to discriminant analysis, which provided a graphical representation of each group and enabled a better understanding of the discriminating dimensions.

The fourth step examined each leisure-style group by their background characteristics, attitudes towards work, and leisure and life satisfaction. To identify significant associations between leisure-styles and background characteristics, cross-tabulations and chi-squared tests were employed. The same tools were used to examine the connections between leisurestyles and attitudes concerning work and leisure. Group differences in life satisfaction were tested by one-way Analysis of Variance (ANOVA) and the Least Significant Difference Test (LSD). The last step of the data analysis was to explain differences in life satisfaction between the groups, which was done by examining the association between life satisfaction and all the independent variables. First, differences in life satisfaction between each of the variables' categories were examined with ANOVA and LSD tests, then the variables that showed significant differences in life satisfaction were entered into a step-wise regression of life satisfaction with all the independent variables. A confidence interval of 95 per cent was used in all tests, and only statistically significant findings are presented in this article.

TABLEI. Factors and factor loadings of the leisure activities

Factor (eigenvalue) and activities	Loading	Factor (eigenvalue) and activities	Loading
1. High culture and dolce-vita	5.76)	6. Free outdoor activities (1.64)	
Theatre	0.762	Shopping	0.723
Cinema	0.760	Day trips	0.477
Art exhibitions	0.667	Physical activity	0.452
Classical music concerts	0.603	Recorded TV programmes	0.449
Vacations abroad	0.577	• •	
Restaurants and cafés	0.561	7. Computer (1.57)	
Lectures	0.563	Computer games	0.776
Books	0.419	Internet	0.761
Classes	0.419		
		8. Friends (1.42)	
2. Popular culture (2.59)		Sports events	0.720
Popular music concerts	0.774	Meeting friends	0.439
Entertainment shows	0.674		
Sing-along	0.569	9. Forever young (1.35)	
Dance shows	0.532	Rented films	0.636
		Pubs and clubs	0.609
3. Spirituality and enrichment	(2.08)		
TV	-0.673	10. Origin family (1.25)	
Religious activities	0.593	Parents	0.791
Studies	0.585	Siblings	0.588
Radio	-0.466		
		11. Independent home activitie	s (1.16)
4. Following generation (1.92)		Hobbies	0.758
Children	0.915	Listening to music at home	0.569
Grandchildren	0.914	-	
	0 1	12. Neighbours (1.12)	
5. Newspapers (1.75)		Neighbours	0.742
Local newspapers	0.820	~	, ,
Magazines	0.719	13. Table games (1.08)	
Daily newspapers	0.572	Table games	0.731
		Countryside vacations	0.473

Notes: The eigenvalues are presented in parentheses after the factor label. Only loadings of at least |0.4| are tabulated. 60.3 per cent of the variance was explained by these 13 factors.

Results

The structure of leisure activities

The factor analysis of the leisure participation data identified 13 substantial activity factors that explained 60.3 per cent of the variance (Table 1). All but two of the leisure activities were represented in the factors, the exceptions being volunteering and meeting extended-family relatives, *e.g.* uncles, aunts and cousins. Most of the adopted factor labels derive from the authors interpretation of the salient characteristics of the highly loaded activities, but a few describe the single highest loading activity. Three factors were associated with culture and enrichment: 'High culture and *dolce-vita*', 'Popular culture' and 'Spirituality and enrichment'. The first

had by far the largest eigenvalue, and the most high-loading activities, including: going to the theatre, cinema, art exhibitions, classical music concerts, restaurants and cafés, lectures and classes, reading books and taking vacations abroad. All the activities except for reading were out-of-home, and all were 'structured', *i.e.* had programmed times, places and formats. Out-of-home cultural activities also loaded in the 'Popular culture' factor but were 'lighter' and 'simpler', *e.g.* going to popular music concerts or entertainment shows.

Turning to the third factor, 'Spirituality and enrichment', four activities were strongly loaded, two positively (academic studies and religious activities), and two negatively (watching television and listening to the radio). The latter were the only strong negative loadings that were associated with the 13 factors, and indicate not only that the activities were shunned but also that the respondent was keen that this was recorded (*n.b.* the majority do not go to classical music concerts, but few make it clear that they do not do so). The factor is a strikingly precise specification of a contemporary ascetic 'lifestyle'. It is pertinent that ultra-orthodox Jews in Israel do not watch television or listen to the radio.

Two of the identified factors were familial: socialising with the 'families of origin' of the respondents and their spouses, *i.e.* parents and siblings, and socialising with the respondents' children and grandchildren, the 'following generation'. Two more factors described social contacts, one with 'neighbours', the other with 'friends', which included going to sports events with friends. Three factors were associated with indoor activities: reading national and local 'newspapers' and magazines; using the Internet and playing 'computer' games; and 'independent home activities', which involved hobbies and listening to music.

Three of the four loadings on the 'freeform activities' factor were outdoor activities that rarely have a formal framework, such as shopping and day trips, and included indoor or outdoor and structured or independent physical activities. The fourth strongly loading activity, 'watching recorded TV programmes', by contrast is an indoor activity but, unlike watching broadcast television programmes, is scheduled by the participants not the broadcasters. A marginally significant factor was 'table games', named after the most strongly loading activity, which was also associated with countryside vacations, perhaps reflecting a pattern of playing table-games while on vacation, as on the beach or in hotels. Finally, a factor was labelled 'forever young' because it was associated with young lifestyle activities, such as going to pubs and clubs and watching rented video-films. In Israel, most participants in these activities are under 30 years old, and fewer than five per cent of the retirees were participants.

TABLE 2.	The	four	clusters	of	post-retirement	leisure-styles	ì

	Leisure-style cluster					
Activities factor	I Company seekers	2 Media consumers	3 Culture enthusiasts	4 Sophisticated choosers		
		Clus	ter centres			
1. High culture and dolce-vita	-0.45	-0.56	0.74	0.45		
2. Popular culture	-0.04	-0.24	0.34	-0.04		
3. Spirituality and enrichment	-0.13	-0.32	0.44	0.05		
4. Following generation	-0.08	0.07	-0.03	0.01		
Newspapers	-0.28	0.31	-0.22	0.11		
Freeform outdoor-activities	0.50	-0.56	0.19	0.15		
7. Computer	-0.30	-0.27	-0.49	1.83		
8. Friends	1.08	-0.29	-0.48	0.02		
9. Forever young	-0.02	0.15	-0.27	0.05		
10. Origin family	0.05	-0.05	-0.05	0.12		
11. Independent home-activities	0.40	-0.15	-0.10	-0.01		
12. Neighbours	0.19	-0.29	0.29	-0.13		
13. Table games	-0.02	-0.06	-0.06	0.15		
Sample size	(81)	(130)	(110)	(62)		
Percentage of sample	21	34	29	16		

Four clusters of leisure-styles among the recently retired

The cluster analysis of the 13 factors produced an optimal solution of four leisure activity clusters (Table 2). The first, labelled 'company seekers', had a high frequency of meeting friends (the highest score), freeform activities and independent home-activities, and low frequencies of high-culture activities, reading newspapers and computer use. Overall, the respondents in this group were relatively active and the activities they took part in had two features: they were informal and demanded few special skills. The second cluster, labelled 'media consumers', comprised heavy users of the mass media (radio, television, newspapers and magazines), but they had only average or below-average rates of participation in all other activities.

The third cluster, 'culture enthusiasts' participated, with relatively high frequency, in both high and popular cultural events and in enrichment activities, but reported relatively low frequencies of using the mass media (TV and radio), meeting friends and computer use. Overall, they were very active, and exemplified the retirees who decide to enjoy all the opportunities that increased leisure time allows. The last cluster, 'sophisticated choosers', had relatively high participation in high-culture and computer-based activities (the Internet and games), and an average level of participation in other activities. Unlike the third cluster, who participated

	The function					
Activities factor	ı – Sophistication	2 – Culture	3 – Outdoor			
	Standardised cano	nical discriminant functi	on coefficients			
 High culture and dolce-vita 	0.671	0.755	-0.036			
2. Popular culture	0.136	0.435	0.095			
3. Spirituality and enrichment	0.258	0.546	0.068			
4. Following generation	-0.016	-0.050	-0.107			
Newspapers	-0.026	-0.325	-0.391			
6. Freeform outdoor-activities	0.261	0.267	0.665			
7. Computer-based	0.941	-0.429	-0.028			
8. Friends	-0.128	-0.430	0.849			
Forever young	-0.106	-0.357	-0.072			
10. Origin family	0.104	-0.065	0.072			
11. Independent home-activities	-0.032	-0.094	0.403			
12. Neighbours	0.033	0.399	0.305			
13. Table games	0.105	-0.097	0.033			

TABLE 3. The three axes of the leisure-styles

in a wide range of activities, this group focused on the most sophisticated activities and might be described as the leisure 'elite' of retirees.

The respondents were not equally distributed among the four leisurestyle clusters. The largest group (34%) were the 'media consumers', followed by the 'culture enthusiasts' (29%), 'company seekers' (21%) and 'sophisticated choosers' (16%). A discriminant analysis of the four clusters produced three discriminant functions (Table 3). The first represents the level of complexity or sophistication of the activity; 'computer-based' and 'high-culture and dolce-vita' activities had the highest correlations. The second axis represents the frequency of participation in formal cultural activities ('high-culture and dolce-vita', 'popular culture' and 'spirituality and enrichment'), and the third axis mostly relates to outdoor activities. The territorial map derived from the discriminant analysis is shown in Figure 1. The 'media consumers' were located low on all three axes, and the 'company seekers' higher on the outdoor axis. The 'culture enthusiasts' were highest on the cultural and outdoor axes and midway on the sophistication axis. The 'sophisticated choosers' were high on the sophistication axis, high on the cultural activities axis (but lower than the 'culture enthusiasts'), and low on the outdoor axis (between 'media consumers and 'company seekers').

Background characteristics of the four types

Nine background characteristics were significantly associated with the leisure-style clusters (p < 0.05 in chi-squared tests): gender, education,

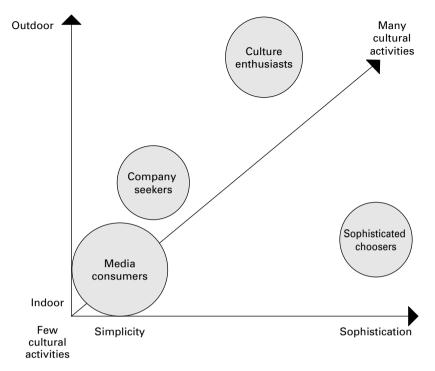


Figure 1. Territorial map of the four leisure-styles clusters (Discriminant Analysis).

household income, occupation before retirement, present work status, retirement pattern, origin, residential area and health status (Table 4). Two of the three measures of health status were significant: subjective health perception and perception of physical competence to participate in various leisure activities. Each of the leisure-style groups had particular covariates. The 'media consumers' were characterised by low education, low income, non-professional pre-retirement occupations, Asian-African origin, residence in peripheral regions of the country, and a relatively high prevalence of reported health problems (associated with a high incidence of early retirement for health reasons).

A similar socio-demographic profile characterised the 'company seekers'. They differed from the 'media consumers', however, in the higher percentage of men and pre-retirement industrial occupations, and average health status and residential area characteristics. The 'culture enthusiasts' over-represented women of high education, high income, those who had been teachers or working in education, those who had taken early retirement by their own choice, those of Israeli or European-American origin,

TABLE 4. Background characteristics of the four leisure-style clusters

Attribute	Category	Company seekers	Media consumers	Culture enthusiasts	Sophisticated choosers	All
				Percentages		
Gender	Women	40.7	62.0	72.7	45.2	57.9
Education	o-11 years	36.8	40.8	14.7	4.8	28.5
	12 years	26.6	25.6	17.4	17.7	22.I
	13+years	26.6	33.6	67.9	77.5	49.4
Household income per month (NIS)	Up to 4,000	28.0	30.4	8.2	9.9	20.4
	4,001–8,000	45.3	40.8	39.2	31.2	39.7
	More than 8,000	26.7	28.8	52.6	59.0	39.9
Occupation pre-retirement	Academic/scientific	6.3	3.9	8.3	16.4	7.7
	Management/leadership	16.3	13.3	21.1	36.1	19.8
	Teaching/education	7.5	11.7	37.6	21.3	19.8
	Clerical work	7.5	16.4	0.11	9.8	11.9
	Commerce	3.8	3.1	0.9	1.6	2.4
	Service	10.0	7.0	6.4	1.6	6.6
	Agriculture	1.3	0.8	0.0	0.0	0.5
	Industry	23.8	14.8	6.4	11.5	13.8
	Non-professional	13.8	16.4	1.8	0.0	9.0
	Other	9.7	12.6	6.5	1.7	8.5
Work status	Not working	85.0	83.2	82.6	62.3	80.0
	Working	15.0	16.8	17.4	37.7	20.0

Retirement pattern	At 'official' age	41.8	39.5	35.5	37.7	38.6
Retirement pattern	Early – respondent's choice	15.2	18.5	30.9	32.9	_
	Early – respondent's choice Early – organisation change	16.5	_			23.7
	, 0		14.0	10.9	9.8 1.6	12.9
	Early – health problems	13.9	15.9	3.6		9.5
	Late	12.6	12.4	19.1	18.0	15.3
Origin	Israel	7.9	6.3	17.0	6.6	9.8
	Asia/Africa	56.7	55.6	23.6	25.5	41.5
	Europe/America	31.5	34.1	53.7	65.6	44.4
	CIS	3.9	3.2	4.7	3.3	3.8
	Other	0.0	0.8	0.9	0.0	0.5
Residential area (telephone area)	02 East (Jerusalem)	6.2	7.0	18.2	17.7	8.11
	o3 Tel Aviv area	37.0	33.3	30.9	43.5	35.1
	04 North	23.5	22.5	27.3	19.4	23.6
	o8 South	22.2	27.9	14.5	6.5	19.4
	og West	II.I	9.3	9.1	12.9	10.1
Health perception	Good – very good	58.2	53.2	72.2	80.7	64.2
	Mediocre	26.6	32.0	25.0	17.7	26.5
	Bad – dreadful	15.2	14.8	2.8	1.6	9.3
Perception that can participate in:	All/most activities	63.3	56.3	77.3	77-4	67.4
	Some activities	25.4	25.4	22.7	19.4	23.6
	Few/no activities	11.4	18.3	0.0	3.2	9.0
Sample size		(81)	(130)	(110)	(62)	(383)

Notes: Origin was classified by respondent's place of birth and by respondent's father's place of birth. The Pearson chi-squared statistics were significant (p < 0.05) for all attribute category cross-tabulations.

those living in and around Jerusalem, and those in 'good' or 'very good' health. The 'sophisticated choosers' had similar socio-demographic backgrounds, but differed from the 'culture enthusiasts' by having relatively high percentages of men, of those formerly in academic or managerial occupations, of those still working and of those resident in the Tel Aviv area.

Differences in attitudes and life satisfaction between the four clusters

Significant associations were found between the leisure-style clusters and four of the nine expressed attitudes about work and leisure (\$\psi < 0.05\$ in chisquared test). All the attitudes referred to concern aspects of leisure satisfaction: general satisfaction with the way free time was presently used, satisfaction with the amount of current free time, satisfaction with the way free time was used prior to retirement, and general satisfaction with the way free time was used in retirement as compared to before. Table 5 presents these attitudes for each group. As the table shows, the 'culture enthusiasts' were more satisfied with their present leisure than all the others, and 50 per cent of them reported a very high level of satisfaction (a much higher percentage than in the other groups). They were also very likely to be satisfied with the amount of their present free time, claiming that it was 'just right'. Moreover, in comparison to their free time before retirement, they enjoyed their present leisure more. The 'sophisticated choosers' were also satisfied with their use of free time, especially as compared to before retirement, but were more likely to be dissatisfied with its amount and to claim that it was not enough. The 'media consumers' and the 'company seekers' were less satisfied with their leisure than the aforementioned groups, both at the present time and in comparison to before retirement. They were also less satisfied than the others with their present amount of free time, arguing that they had too much. In addition, the 'company seekers' indicated the highest satisfaction with their preretirement use of free time.

Regarding general life satisfaction, the scores ranged from 'o' to '20', with a mean of 12.5 (standard deviation (SD) 4.2). A one-way ANOVA revealed significantly different life satisfaction mean scores for the four groups (F=3.63, p=0.013). The differences were examined by an LSD test (Table 6). The results show that the 'culture enthusiasts' and the 'sophisticated choosers' enjoyed the highest life satisfaction (with no significant difference between them). The 'company seekers' were rated second, with a mediocre life satisfaction mean score. The 'media consumers' came last, with significantly lower life satisfaction than the other groups.

TABLE 5. The attitudes towards leisure of the four leisure-style clusters

Attitude and category	Company seekers	Media consumers	Culture enthusiasts	Sophisticated choosers	All
			Percentages		
General satisfaction with current	use of free	time	0		
Very satisfied	27.5	27.6	50.5	38.7	36.0
Satisfied (very + pretty much)	63.8	63.0	91.8	82.2	74.6
Not satisfied	36.2	37.0	8.2	17.8	25.4
Satisfaction with the amount of fr	ee time				
Not satisfied: too much free time	22.8	27.6	5.7	6.6	16.9
Satisfied	46.8	53·5	62.3	50.8	54.2
Not satisfied: not enough free time	30.4	18.9	31.1	42.6	28.7
General satisfaction with use of fi	ee time pro	e-retiremen	t		
Very satisfied	35.8	25.6	22.7	21.3	26.2
Satisfied (very or pretty much)	83.9	71.3	76.3	65.6	74.6
Not satisfied	16.1	28.7	23.7	34.4	25.4
General satisfaction					
More satisfied today	48.8	45.7	75.5	61.7	57.5
Less satisfied today	32.5	31.8	5.5	10.0	20.8
Same satisfaction as pre-retirement	16.3	19.4	17.3	23.3	18.7
Don't know	2.4	3.1	1.7	5.0	3.0
Sample size	(81)	(130)	(110)	(62)	(383)

Note: The Pearson chi-squared statistics were significant (p < 0.05) for all attribute category cross-tabulations.

TABLE 6. Differences in life satisfaction of the four leisure-style clusters

	Sample	Life	satisfaction s	core	Significantly
Leisure style group	size	Mean	SD	SE	different groups
A. Company seekers	81	12.15	4.48	0.50	B, C, D
B. Media consumers	129	10.78	4.61	0.41	A, C, D
C. Culture enthusiasts	110	14.24	2.89	0.28	A, B
D. Sophisticated choosers	62	13.55	3.27	0.42	A, B

Notes: SD standard deviation. SE standard error. Significant differences were p < 0.05.

The explanation of the differences in life satisfaction

Since life satisfaction is influenced by numerous factors, its associations with all other variables were examined in a step-wise regression. All variables that had a significant association with life satisfaction were included. The regression model accepted nine variables as significant: leisure satisfaction, health status, income and six of the activity factors ('high culture and *dolce-vita*', 'freeform activities', 'popular culture', 'spirituality and

T A B L E 7. Step-wise regression analysis of the association between life satisfaction scores and respondents' leisure satisfaction, 'leisure activities factors' and personal attributes

	Un-standardi	Standardised coefficient	
Background variable or leisure-style factor	В	SE B	В
(Constant)	6.270	0.693	
General satisfaction with the current use of free time	1.590	0.199	0.343***
'High culture and dolce-vita'	0.796	0.186	0.190***
'Freeform outdoor activities'	0.665	0.164	0.158***
Health ¹	1.360	0.366	0.154***
'Following generation'	0.520	0.164	0.124**
'Origin family'	0.508	0.163	0.121**
Income	1.004	0.364	0.119**
'Popular culture'	0.463	0.164	0.110**
'Spirituality and enrichment'	0.451	0.165	0.107**
'Reading newspapers'	0.361	0.166	0.086*
'Independent home activity'	0.322	0.162	0.077*

Notes: R-squared = 0.447, F = 27.29. I. Since all health variables significantly associated with life satisfaction, health perception, which showed the highest differentiation, was entered in the analysis. Significance levels: *** b < 0.001. ** b < 0.01. * b < 0.05.

enrichment', 'newspapers' and 'independent home activity'), and it accounted for 44.7 per cent of the variance in life satisfaction (Table 7). The results suggest that differences in *life* satisfaction among the four leisure-style groups were associated, first and foremost, with their levels of participation in and satisfaction with *leisure* activities. More specifically, the high life satisfaction of 'culture enthusiasts' and 'sophisticated choosers' may be explained by their high leisure satisfaction, good health, high income and relatively frequent participation in 'high culture and *dolce-vita*' activities. The relatively high life satisfaction of the 'culture enthusiasts' was partially explained by relatively high participation in 'popular culture' and 'spirituality and enrichment' activities.

The mediocre life satisfaction score of the 'company seekers' were associated with the positive effect of their relatively frequent participation in 'freeform' and 'independent home' activities. This positive effect may have been neutralised by the negative influence of their leisure satisfaction, health perception, low income and low participation in high culture activities and 'newspaper reading', the net effect being an average level of life satisfaction. The low life satisfaction of the 'media consumers' may be explained by their low leisure satisfaction, poor health, low income and low rate of participation in most leisure activities. While frequent 'newspaper reading' might have contributed to their life satisfaction, their

'television and radio consumption' (negative in the 'spirituality and enrichment' factor) may have had a negative influence on their life satisfaction.

Discussion

The presented findings about the associations between recently retired individuals' leisure-styles (i.e. behaviour) and their life satisfaction (i.e. psychological benefit) enable an informed discussion about the contribution of leisure to wellbeing after retirement. The results indicated that there were four differentiated leisure-styles after retirement, each of which has similarities with the styles found in previous studies. For example, the 'media consumers' had similar behaviour to both those identified by Havighurst and De Vries (1969) as 'using time with low levels of activity' and by Chiriboga and Pierce (1993) with 'socially restricted' leisure. The fact that they were the largest group replicates Chiriboga and Pierce's finding. The 'company seekers' had similar behaviour patterns to those identified as 'social' in Dumazedier's (1972) typology, and they exhibited elements of both the 'simple pleasure' and the 'socially focused' groups in Chiriboga and Pierce's typology. Likewise, the 'culture enthusiasts' had similar patterns to both Havighurst and De Vries's 'expressive enjoyment' category and Chiriboga and Pierce's 'vigorously engaged' category. The 'sophisticated choosers' had similarities with Dumazedier's 'intellectual' group and Chiriboga and Pierce's 'creatively engaged'.

While there were many differences between the four leisure-style groups, there were none regarding to leisure with 'family', 'neighbours' and some of the low frequency activities. While the first two can be considered 'core activities' (Kelly 1983), the low participation rates of the others precluded statistically significant differences. Individuals differ, then, by the activities they are engaged in beyond the 'core', but not by low frequency activities. The different groups had unique personal characteristics, some of which may explain their different post-retirement leisure-styles. The 'media consumers' leisure patterns could in large measure be explained by three attributes that implied capability and opportunity limitations: (1) a relatively high percentage resided in peripheral regions that probably offered restricted opportunities; (2) they had the highest percentage of reported health problems; and (3) a high percentage had relatively low income. This group was also characterised by relatively low education and Asian-African origin; thus, it seems that their behaviour patterns were influenced by their cultural and socio-demographic background. A similar socio-demographic profile described the 'company seekers' except that they had physical or health limitations and the restricted opportunities of their residential areas. This might explain why this group was more active, although their activities were still relatively simple. In any case, the regression analysis showed that these factors influenced life satisfaction when other factors were controlled.

The 'culture enthusiasts' and the 'sophisticated choosers' possessed many more of the resources necessary for leisure involvement, including good health, high income, and residence in the central or metropolitan areas (which offer more leisure and cultural opportunities than other areas). The 'sophisticated choosers' had a relatively high percentage of men and of those still in work, which might explain why they were the most selective in their leisure choices. In contemporary Israel, women are less 'technophile' or accustomed to computers than men (probably a passing difference, comparable to the gender difference in driving skills in the early days of motorised transport).

While two of the leisure-style groups, 'sophisticated choosers' and the 'culture enthusiasts', had high life satisfaction, the other two, and especially the 'media consumers', had relatively low life satisfaction. Only two of the group's background characteristics, health and income, explained these differences, but the multiple regression showed that, at this life phase, leisure activities with family involvement may have stronger impact than a person's background characteristics on psychological wellbeing. This is suggested by the high number of activity and family factors included in the regression and by the influence hierarchy. The finding is consistent with previous evidence (e.g. Fernandez-Ballesteros, Zamarron and Ruiz 2001; Kelly 1987) and leads to the conclusion that the higher life satisfaction of the 'culture enthusiasts' and the 'sophisticated choosers' resulted, first and foremost, from their participation in various significant activities and from their satisfaction with the way that they used their free time. These findings confirm the positive association between activity and psychological wellbeing and thus support the Activity Theory (Havighurst 1963). Moreover, the influence hierarchy suggests that leisure has a significant compensating capability; retirees who pursue enriching and fulfilling leisure activities can reach a high level of life satisfaction, even if they are subject to conditions that threaten their wellbeing.

Most previous studies have examined only the behavioural dimensions of post-retirement leisure-styles and have not considered the psychological benefits of the various styles and activities. By examining the psychological benefits, this study has provided a clearer picture of the relationship between leisure-styles and wellbeing, but the findings are rather disturbing. Most retirees belong to one of the groups with the least-developed leisure

repertoires, and the largest group, the 'media consumers', were the most passive. The 'company seekers' differed in being slightly more active, but their leisure repertoire was rather simple. These two groups accounted for more than one-half of the retirees, but for them leisure was a challenge for which they were inadequately prepared. They gravitated towards familiar and simple activities, to 'defaults' like watching television or visiting shopping malls. The fact that these groups had the lowest life satisfaction suggests that a large proportion of the retired population are relatively 'incapacitated' with regard to their quality of life. Do they require assistance in making good use of their leisure time? Developing leisure counselling as part of pre-retirement programmes, on the one hand, and creating more leisure opportunities, on the other, might help them face the challenge of lavish leisure time.

The study of the association between leisure-styles and life satisfaction in retirement may serve as a useful framework for future research on wellbeing in old age. Of particular interest would be a cross-national study, to explore the different leisure-styles in different societies and their relationship to life satisfaction. Moreover, it might be beneficial to explore continuity and change in retirees' leisure-styles over time. A follow-up survey, with the original sample, may provide this information. We may hypothesise that, with age and declining health, retirees tend to become 'media consumers', which if the case, raises further implications about the kinds of intervention programmes that would be effective and beneficial.

Acknowledgements

The research was financially supported by: the Brookdale Institute of Gerontology and Human Development; Eshel, the Association for the Planning and Development of Services for the Aged in Israel; the Department of Communication and Journalism, Hebrew University of Jerusalem; the Harvey L. Silbert Center for Israel studies; Israel's Social Security Institute; the Israeli Local Community Centers Corporation; The Kama Foundation; the Israeli Ministry of Labour and Social Welfare; the Levi Eshkol Institute for Social, Economic and Political Research in Israel; the Shaine Center for Research in Social Sciences; the Smart Family Foundation Communications Institute; and the Strauss Group.

References

Adoni, H. 1995. Literacy and reading in a multimedia environment. *Journal of Communication*, **15**, 2, 152–74.

Atchley, R. 1989. The continuity theory of normal aging. The Gerontologist, 29, 2, 183-90.

- Baltes, P. B. and Baltes M. M. 1990. Psychological perspectives on successful aging: the model of selective optimization with adaptation. In Baltes, P. B. and Baltes, M. M. (eds), Successful Aging: Perspectives from the Behavioural Sciences. Cambridge University Press, New York, 1–34.
- Baltes, M. M. and Carstensen, L. L. 1996. The process of successful aging. Ageing & Society, 16, 4, 397–422.
- Chiriboga, D. A. and Pierce, R. C. 1993. Changing contexts of activity. In Kelly, J. R. (ed.), Activity and Aging: Staying Involved in Later Life. Sage, Thousand Oaks, California, 42–59.
- Cumming, E. M. and Henry, W. 1961. Growing Old: The Process of Disengagement. Basic Books, New York.
- Dumazedier, J. 1972. Cultural mutations in post-industrial societies. In *Leisure and the 3rd Age: International Course of Social Gerontology*. International Center of Social Gerontology, Dubrovnik, Yugoslavia, 11–34.
- Fernandez-Ballesteros, R., Zamarron, M. and Ruiz, M. 2001. The contribution of socio-demographic and psychosocial factors to life satisfaction. *Ageing & Society*, 21, 1, 25–43.
- Freund, A. M. and Baltes, P. B. 2002. Life-management strategies of selection, optimization and compensation: measurement by self-report and construct validity. *Journal of Personality and Social Psychology*, **82**, 4, 642–62.
- Gordon, C. 1980. Development of evaluated role identities. Annual Review of Sociology, 6, 1, 405–33.
- Gordon, C., Gaitz, C. and Scott, J. 1976. Leisure and lives: personal expressivity across the life span. In Binstock, R. and Shanas, E. (eds), *Handbook of Aging and the Social Sciences*. Van Nostrand Reinhold, New York, 310–41.
- Hall, M. and Havens, B. 2002. Aging in Manitoba: Selected Findings. Community Health Science, University of Manitoba, Winnipeg, Canada. Available online at http:// www.umanitoba.ca/faculties/medicine/community_health_sciences/AIM.html [Accessed 12 September 2002].
- Harvard School of Public Health 2004. Reinventing Aging: Baby Boomers and Civic Engagement.

 Report for The Metlife Foundation, Center for Health Communication, Harvard University, Cambridge, Massachusetts.
- Havighurst, R. J. 1963. Successful aging. In Williams, R., Tibbitts, C. and Donahue, W. (eds), *Processes of Aging*. Atherton, New York, 299–320.
- Havighurst, R. J. and de Vries, A. 1969. Life styles and free time activities of retired men. *Human Development*, 12, 1, 34–54.
- Hendricks, J. and Cutler, S. J. 2004. Volunteerism and socio-emotional selectivity in later life. *Journal of Gerontology*, **59B**, 3, 251–7.
- Iso-Ahola, S. E., Jackson, E. and Dunn, E. 1994. Starting, ceasing and replacing leisure activities over the life-span. *Journal of Leisure Research*, **26**, 3, 227–49.
- Israel, Central Bureau of Statistics 2000. *Israel's Statistical Annual Review*. Central Bureau of Statistics, Jerusalem [In Hebrew].
- Janke, M. and Davey, A. 2004. Implications of Selective Optimization on the Physical, Formal and Informal Leisure Patterns of Older Adults. Unpublished manuscript. University of Georgia, Athens, Georgia, USA.
- Katz, E. and Gurevitch, M. 1976. The Secularization of Leisure: Culture and Communication in Israel. Faber and Faber, London.
- Katz, E., Hass, H., Weitz, S., Adoni, H., Gurevitch, M., Schiff, M. and Goldberg-Anabi, D. 2000. Leisure Patterns in Israel: Changes in Cultural Activity 1970–1990. Open University Press, Tel Aviv [in Hebrew].
- Kelly, J. R. 1983. Leisure Identities and Interactions. George Allen and Unwin, London.
- Kelly, J. R. 1987. Peoria Winter, Styles and Resources in Later Life. Lexington Books, Lexington, Massachusetts.

- Kozarevic, D. 1972. Leisure as a preventive therapy. In *Leisure and the 3rd Age, International Course of Social Gerontology*. International Center of Social Gerontology, Dubrovnik, Yugoslavia. 35–48.
- Kremer, Y. and Harpaz, I. 1982. Leisure patterns among retired workers: spillover or compensatory trends? Journal of Vocational Behaviour, 21, 2, 183–95.
- Lawton, M. P. 1994. Personality and affective correlates of leisure activity participation by older people. *Journal of Leisure Research*, 26, 2, 138–57.
- Lefrancois, R., Leclerc, G. and Poulin, N. 1998. Predictors of activity involvement among older adults. *Activity*, *Adaptation and Aging*, 22, 4, 15–29.
- Levinson, S. 1986. Leisure Choices in Retirement: Spillover or Compensatory of Preretirement Activities? M.A. dissertation, Bar-Ilan University, Ramat-Gan, Israel [In Hebrew].
- Litwin, H. 2001. Activity, social network and well-being in old age: an empirical examination. Canadian Journal on Aging, 19, 3, 343–62.
- Lomerantz, J., Bergman, S., Eyal, N. and Shmotkin, D. 1988. Indoor and outdoor activities of aged women and men as related to depression and well-being. *International Journal of Aging and Human Development*, **26**, 4, 303–14.
- Long, J. 1987. Continuity as a basis for change: leisure and male retirement. *Leisure Studies*, **6**, 1, 55–70.
- Lowenthal, M. F., Thurnher, M. and Chiriboga, D. A. 1975. Four Stages of Life. Jossey-Bass, San Francisco.
- Mannel, R. C. 1993. High investment activity and life satisfaction among older adults. In Kelly, J. R. (ed.), Activity and Aging: Staying Involved in Later Life. Sage, Thousand Oaks, California, 125–45.
- Mishra, S. 1992. Leisure activities and life satisfaction in old age: a case study of retired government employees living in urban areas. *Activities, Adaptation and Aging*, **16**, 4, 7–26.
- Mobily, K. E., Lemke, J. H., Ostiguy, L. J., Woodard, R. J., Griffee, T. J. and Pickens, C. C. 1993. Leisure repertoire in the sample of mid-western elderly: the case for exercise. *Journal of Leisure Research*, 25, 1, 84–99.
- Neugarten, B. L., Havighurst, R. J. and Tobin, S. S. 1961. The measurement of life satisfaction. *Journal of Gerontology*, **16**, 134–43.
- Nimrod, G. 2003. Leisure after retirement: research review and mapping. *Gerontology*, **30**, 1–2, 29–46. [In Hebrew].
- Nimrod, G. 2005. Expanding, Reducing, Concentrating and Diffusing: Four Types of Postretirement Leisure Behaviour. Unpublished manuscript. Available from the author.
- Parker, S. 1982. Work and Retirement. George Allen and Unwin, London.
- Rapoport, R. and Rapoport, R. N. 1975. Leisure and the Family Life Cycle. Routledge and Kegan Paul, London.
- Riddick, C. C. and Stewart, D. G. 1994. An examination of the life satisfaction and importance of leisure in the lives of older female retirees: a comparison of blacks to whites. *Journal of Leisure Research*, **26**, 1, 75–87.
- Ritchey, L. H., Ritchey, P. N. and Dietz, B. E. 2001. Clarifying the measurement of activity. *Activity, Adaptation and Aging*, **26**, 1, 1–21.
- Roberts, K. 1978. Contemporary Society and the Growth of Leisure. Longman, London.
- Robinson, J. P. and Godebey, G. 1997. Time for Life: The Surprising Way Americans Use Their Time. Pennsylvania State University Press, University Park, Pennsylvania.
- Searle, M. S., Mahon, M. J., Iso-Ahola, S. E., Sadrolias, H. A. and Van Dyck, J. 1995. Enhancing a sense of independence and psychological well-being among the elderly: a field experiment. *Journal of Leisure Research*, **27**, 2, 107–24.
- Searle, M. S., Mahon, M. J., Iso-Ahola, S. E., Sadrolias, H. A. and Van Dyck, J. 1998. Examining the long term effects of leisure education on a sense of independence and psychological well-being among the elderly. *Journal of Leisure Research*, **30**, 3, 331–40.

630 Galit Nimrod and Hanna Adoni

Shmanske, S. 1997. Life-cycle happiness in a discounted utility model. Kyklos, 50, 3, 383–407.

Shmotkin, D. 1991. The structure of the life satisfaction index A in elderly Israeli adults. *International Journal of Aging and Human Development*, **33**, 2, 131–50.

Vail, H. and Berman-Ashcenazi, A. 1976. Leisure Use of the 70+ Years Old. Brookdale Institute, Jerusalem [In Hebrew].

Veal, A. J. 1991. *Lifestyle and Leisure: A Review and Annotated Bibliography*. Center for Leisure and Tourism Studies, University of Technology, Sydney, Australia.

Veal, A. J. 1993. The concept of lifestyle: a review. Leisure Studies, 12, 4, 233-52.

Accepted 6 January 2006

Address for correspondence:

Galit Nimrod, 13 Veidat Katovitz St., Tel Aviv, Israel, 62304.

E-mail: Galit_n@zahav.net.il