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PERCEIVED CONSTRAINTS TO LEISURE-TIME ACTIVITY AMONG THE ELDERLY

Manilall DHURUP
Faculty of Management Sciences, Vaal University of Technology, Vanderbijlpark, Republic of South Africa

ABSTRACT

The elderly are in an important period in their lives as substantial changes occur with regard to leisure and family roles. Changes may be complicated by a variety of factors such as being empty nested, economic adjustments, being responsible for a single-parent household, the changing socio-demographic composition, the lack of an elderly-friendly environment and physical infrastructure necessary for an ageing population. Hence, the purpose of the study was to establish the factors that constrain the elderly from participating in desired leisure activities. A structured questionnaire relating to leisure constraints were administered to 75 respondents within the age category of 60-69 years. An 11-item scale was developed using exploratory factor analysis along three dimensions, namely, time and security, economic and structural, and personal constraints. Time, the ageing process and poor health conditions seem to strongly prohibit the elderly in leisure activity participation. The elderly also vary in their perceptions of constraints in terms of population groups, education levels and gender. Decision-makers in leisure and recreation need to endorse and acknowledge these constraints in order to facilitate effective implementation of policies and strategies in order to mitigate the impact of these constraints.

Key words: Leisure; Constraints; Elderly; Ageing; Health status; Recreation.

INTRODUCTION

Over the last decade, researchers and academics have generated an interest in the use of time among older persons because of the unprecedented rapid ageing of the world population (Su *et al*., 2006). In almost every country the proportion of people aged over 60 years is growing faster than any other age group. Ageing can be seen as a success story for public health policies and for socio-economic development, but it also challenges society to adapt, in order to maximise the health and functional capacity of older people, as well as their social participation and security (Anon., 2009). The proportion of persons aged 60 and over is expected to double in Africa (United Nations Population Division, 2006). The world's population is ageing at an unparalleled rate with the percentage of adults 65 years of age and older expected to more than double from 7.7% in 2010 to 16% in 2050 (United Nations Department of Economic and Social Affairs, 2007). In the United States for example, the number of persons aged 55 to 64 is projected to increase by 15.9 million between 2000 and 2015, while the number of persons 65 years of age and older will amount to 64.6 million in 2030 (Su *et al*., 2006:381). It is projected that Europe will witness the greatest increase with an estimated 12.9% increase from 2000 to 2050, followed by Latin America and the

Caribbean at 12.8%, Asia at 11.6%, Oceania at 9.6%, North America at 8.7% and Africa at 3.4% (Dupuis, 2006).

Ageing population

In South Africa, according to the Census 2001 report, approximately 7.3% of the population was 60 years of age and above and 0.9% of the population was 80 years and above (Statistics South Africa, 2003) in 2001. The United Nations Population Division that completed a modelling process shows that in the year 2050 approximately 12.1% of the population will be over the age of 60 while 2.2% of the population will be over the age of 80 years (Hunter & May, 2003).

Elderly people (60-69 years) are in an important time period in their lives as substantial changes occur with regard to leisure and family roles. Furthermore, changes may be complicated by a variety of factors such as being empty nested, economic changes, single-parent households and transition roles into later life (Warnick, 1987). During this stage one may retire from work; one may become a grandparent and one may find contentment through new activities such as being responsible for an extended family. During this time of their life, emotional adjustments may have to be made in relation to accepting the ageing process. The death of a spouse may become a reality and new health risks and health problems may emerge (Statistics South Africa, 2005). The elderly generation is likely to be affected, inter-alia by the changing socio-demographic composition, the lack of an elderly-friendly environment and physical infrastructure necessary for an ageing population (Wong, 2003).

With a rapid increase in the ageing population, policy makers need to focus their attention on the implications of population ageing on social and economic development (Dupuis, 2006). By acquiring a comprehensive understanding of the variation in the meaning and experience of the ageing across different social, cultural and economic contexts and identifying the determinants of healthy ageing and quality of life, policies and procedures may have to be implemented in order to ensure that older adults have an opportunity to age well. This article focuses on leisure experiences in later life that is, those people who are 60 to 69 years and who are not in full-time employment. This group of the elderly corresponds with the conventional definition of older people and represents a period of reduced earnings, but without necessarily the reduction of health status and strength (Hunter & May, 2003).

Within a South African context, organisations such as Age-in-Action (previously known as 'The South African Council for the Aged') play a pivotal role through the Department of Sport and Recreation in providing some form of leisure and recreation for the elderly (Eckley, 2006). For example, The South African National Games and Leisure Activities (SANGALA) initiated through the efforts of the Department of Sport and Recreation, on taking recreation to the Black communities in the rural and urban areas. The SANGALA gave purpose to hundreds of clubs by providing equipment, exercise programmes and training to remain active and productive (Department of Sport & Recreation, 1997).

Leisure

Leisure is defined in sociology as activities other than work. It includes "free time allowing a release from occupational responsibilities, forms of relaxation such as recreation and hobbies

and various creative pursuits" (Jain, 2007:17). Jackson (2006) aptly summarised Western Europe and North American scholars' view of leisure from one or more of three perspectives. These perspectives are:

- as a measure of time (discretionary time left over after the completion of work and other obligations);
- as a container of activity (what people choose to do in their discretionary time); and
- in terms of the meaning of leisure (how people define, experience and value leisure, the role it plays in their lives and its centrality or otherwise as an expression of quality of life).

In one of the earlier studies, Donald and Havighurst (1959:355) defined the meaning of leisure as "the satisfaction an individual gains from their leisure activities". The researchers collected statements on the meaning from literature and requested respondents to rank the statement in their order of priority. Six pertinent connotations for leisure emerged. These conations were linked to pleasure, change from work, new experiences and contacts with friends, achieving something and passing time. Other researchers have adopted the approach of measuring the characteristics as a measure of leisure (Iso-Ahola, 1979). With the diverse perceptions and meaning of leisure, for the purposes of this study, leisure among the elderly is defined as activities that the elderly undertake in their free time for fun, relaxation and recreation as a means of self-expression, which is not work-related.

Constraints to leisure time activity

Constraints have been defined as "factors that are experienced by individuals to limit the formation of leisure preferences and to inhibit or prohibit participation in leisure activities" (Jackson, 1991:276). According to Chick and Dong (2003:341), constraints appear to stem from:

- the physical environment (for example lack of infrastructure);
- culture (for example, taboo or otherwise prohibited activities for certain groups such as women);
- individual characteristics (for example, the lack of interest, lack of physical ability); and
- social structural factors (for example, race, social class, ethnicity, gender).

It is also widely accepted that constraints are classified into intrapersonal, interpersonal and structural. This categorisation was introduced by Crawford and Godbey (1987) and adopted by the majority of researchers in areas of constraints to leisure participation. **Intrapersonal** constraints are internal in nature, which is related to individual psychological states and attributes. Such constraints may include lack of perceived skill levels, low fitness levels, lack of confidence, stress, anxiety, fatigue, depression, and lack of prior socialisation into specific leisure activities (Crawford & Godbey, 1987). These are constraints sometimes based on emotions and tend to change over time (Goodale & Godbey, 1988). As a consequence of their emotional nature, these types of constraints are perhaps difficult to overcome. Often the barrier is not the result of a belief but rather psychological in nature. For example, an elderly person may experience an undue amount of stress while engaging in an activity that focuses the attention of onlookers. **Interpersonal constraints** are related to lack of social interaction and social isolation. Such constraints may include inability to find partners to participate with

that may arise out of the absence of interaction with others such as, family members, friends, co-workers and neighbours (Chick & Dong, 2003). **Structural constraints** are external to an individual. Structural constraints represent blocks or obstacles to participation, which intervenes between personal preferences and participation (Goodale & Godbey, 1988). These constraints are related to the unavailability or lack of resources to participate in leisure activities. Such constraints may include lack of money, problems related to facilities, service accessibility issues and the cost of the facility usage (Jackson, 2005). Against this background of constraints leisure, a thorough understanding of what keeps the elderly away from leisure is essential for the identification of appropriate points of intervention.

PROBLEM STATEMENT

While leisure constraint is well established as a recognisable sub-field within leisure studies, a serious lack of knowledge of constraints still remains (Jackson, 2005). In addition, several studies were conducted on constraints that focused on residential contexts such as retirement homes (Henderson & Hickerson, 2007). With leisure constraints research being a popular topic and substantially researched in other continents (United Kingdom and United States of America) in the last two decades (Chick & Dong, 2003) leisure and leisure constraints in general within a South African context is limited especially (Goslin, 2003). As a consequence a gap exists in research on leisure constraints among the elderly.

The purpose of the study was to establish the factors that constrain the elderly from participating in desired leisure activities. The secondary purpose of the study was to examine the relationship between respondents' perceptions of constraints and selected demographic characteristics (population groups, level of education and gender). The study focused on leisure experiences in later life that is, those people who are 60 to 69 years and who are not in full-time employment. Investigating leisure constraints among specific age-based category is important as knowledge gained could be used to improve the implementation of leisure services. This group of the elderly corresponds to the conventional definition of older people and represents a period of reduced earnings, but without necessarily the reduction of health status and strength (Hunter & May, 2003).

RESEARCH DESIGN

The data from which this study was derived was from a broad study that examined elderly engagement in leisure and recreational activities in the Vaal Triangle, Southern Gauteng using a quantitative approach.

Sample

A convenience sample of 75 participants from the Vaal Triangle was obtained. Participants were selected on the basis that they resided in one of the two neighbourhoods, namely Vanderbijlpark or Sebokeng. This was necessary in order to obtain a fairly representative sample based on two major population categories. Respondents who officially retired but were still working (Jain, 2007) were excluded from the study, as work commitments can be a barrier on its own (Searle & Jackson, 1984). The screening method was utilised to avoid

contamination of the sample in order to ensure authenticity of respondents included in the study.

Research instrument

A leisure constraints 13-item scale was developed with the underlying leisure constraints drawn primarily from the studies of Crawford *et al*. (1991) and Walker *et al*. (2007). Respondents were asked to evaluate the agreement/disagreement of the 13-item scale as limiting or prohibiting factors for their participation in leisure activities. The responses to the questions were based on a five-point Likert scale, ranging from very often a barrier (5) and certainly not a barrier (1). Three demographic variables were included in the study: population group (African, White), level of education (primary school, Grade 7-11, Degree, Honours, Master's) and gender (male, female).

Data collection

Data was collected by means of a survey using a structured questionnaire in the two communities using a face-to-face interview technique. Fourth year marketing research students who were trained for the fieldwork, conducted the interviews. Three screening (filter) questions were posed to prospective respondents prior to the interview in order to ensure: that they were between 60-69 years of age, resided permanently in Sebokeng or Vanderbijlpark and were not in full-time employment. Where respondents refused to participate, the next eligible respondent was chosen. The data for the study was collected in December/January of 2008/2009. Data was analysed using Statistical Package for Social Sciences (SPSS) (version 16.0 for windows) with descriptive measures, as well as multivariate analysis (factor analysis), analysis of variance (ANOVA) and post-hoc analysis.

ANALYSIS OF RESULTS

The analysis of results comprised three distinct phases namely, an analysis of the demographic profile, the ranking of the constraints in leisure participation and an assessment of the underlying dimensions of the constraints to leisure participation.

Demographic profile

Frequency analysis was first conducted on the respondents' demographic characteristics. Male respondents (n=43; 57%) were more than females (n=32; 43%) in the sample. The sample distributions in terms of population categories were as follows: African (n=45; 60%), Whites (n=23; 31%) and other, which comprised Coloured and Indian (n=7; 9%). The distributions of the sample in terms of the level of education, 28 respondents (37%) were in possession of a university degree or higher degree, 20 respondents (27%) were in possession of a matriculation certificate, 18 respondents (24%) attained an education level below a matriculation certificate and 9 respondents (12%) had no formal education.

Constraints to leisure participation

Constraints to leisure activity among the elderly were ranked in terms of their frequency (expressed in %) reported by respondents. The ranking of the various constraints are reported

in Table 1. Among the barriers, time management, ageing, poor health status, lack of knowledge of leisure activities, fatigue, lack of companionship, transport, safety and security and finance seem to prohibit the elderly in engaging in leisure activities.

TABLE 1: **PERCENTAGE OF AGREEMENT AS A BARRIER**

Rank	Barriers	%
1	Time availability and management	86
2	Ageing	80
3	Poor health	79
4	Lack of knowledge on leisure activities	77
5	Feel tired/lack of energy	75
6	Lack of company	73
7	Transport	72
8	Fearful of crime	71
9	Fear for my safety	71
10	Short of finance	63
11	Family/spouse have different leisure choices	51

In addition to the ranking of constraints, the dimensionality of the constraints to leisure-time activity was established by performing an exploratory factor analysis. An exposition of the analysis and subsequent extraction of factors are discussed below.

Exploratory factor analysis

The Bartlett's test of Sphericity and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was undertaken in order to establish whether factor analysis was suitable for application on the data set. The approximate chi-square was 288.08 (df=55) significant at p=0.000 indicating that factor analysis was suitable for the data. In addition, the KMO measure of sampling adequacy was 0.779, which is considered "meritorious" by Kaiser (1974:35). Exploratory factor analysis (EFA) using the principle components method with varimax rotation was run to determine the number of dimensions underlying the perceived constraints scale.

The primary advantage of EFA is that each component extracted from the data set accounts for the maximum amount of variance among the set of variables under study (Green *et al*., 2006). Rotation on the other hand assists to mathematically redistribute the relationship among the components, without changing the relationships between items and components, which assists in the interpretability of the final solution (Malhotra, 2004). Each of the EFA principle component solutions was evaluated based on four criteria (Comrey & Lee, 1992). First, percentage of variance explained was assessed. Considering the amount of variance accounted for by each component helps to determine if the component is significantly contributing to the factor solution. The second evaluative criterion considered was the occurrence of a simple structure. Items that have cross-loaded (where an item has a strong relationship with more than one component, may cause problems when interpreting the EFA solution) were deleted. Items were considered markers of a component if their loading values were at least 0.50. The third criterion, lower item-to-component correlations, was considered

if items did not associate as highly with any other component. The solution was evaluated for the absence of specific factors and served as the fourth criterion. Specific factors are components consisting of a single item and are often an indication that the data has been over-factored (Gorsuch, 1983).

The initial screen plot suggested three components underlying the factor structure. Three factors accounted to 61.6% of the variance across the 11-item scale. Two items were dropped because they had low inter-item correlations and low factor loadings. There were no dominant components and the rotation converged in 5 iterations. Further the solution had no cross-loading on more than one component. Finally, the three-component solution was interpretable, logical and meaningful in explaining constraints to leisure behaviour among the elderly. The final factors and eigenvalues are reported in Table 2.

TABLE 2: **ROTATED FACTOR LOADING MATRIX**

ITEM	**Factor 1**	**Factor 2**	**Factor 3**
I have a huge problem in managing my time	**0.671**	0.234	0.004
I fear for my safety in the area to engage in leisure activities	**0.876**	0.257	0.102
I am fearful of crime in the area to engage in leisure activities	**0.912**	0.136	0.040
I am short of finance to engage in leisure activities	0.172	**0.658**	0.074
I feel tired with no energy to participate in leisure activities	0.168	**0.659**	0.352
I do not have company to include leisure activities in my daily life	0.210	**0.690**	0.201
I have a lack of knowledge on leisure activities	0.101	**0.688**	0.146
I have transport problems in order to access leisure activities	0.223	**0.596**	0.047
My spouse/family has different leisure choices compared to myself	0.054	0.036	**0.764**
I am ageing so I need to be left alone	0.197	0.169	**0.748**
My poor health does not allow me to participate in leisure activities	0.418	0.157	**0.664**
Eigenvalues	4.031	1.679	1.067
% of variance explained	36.64	15.250	9.690
Cumulative % of variance	36.64	51.910	61.60
Reliability (Cronbach **α**)	**0.795**	**0.748**	**0.617**

DISCUSSION OF RESULTS

The discussion on constraints is explained using the underlying dimensions extracted from the EFA procedure, the ranking of the constraints listed in Table 1, and an analysis of the demographic variables in relation to the extracted factors. The empirical results obtained from prior research on constraints to leisure participation were also used to consolidate the findings.

Exploratory factor analysis and ranked constraints

Factor 1 labelled the **'time and security'** constraint comprised 3 variables and accounted for 36.64% of the variance. The dimensions embrace issues of time, safety and the occurrence of crime in the areas to engage in leisure activities. Respondents ranked time, safety and crime related issues 1st and 8th respectively. This dimension in part encapsulates the structural and interpersonal constraints of the study of Crawford and Godbey (1987). Jackson's (2005) study on constraints also ranked the lack of time as the most common and strongest constraint. The lack of time related constraints were revealed by other studies that investigated constraints on leisure participation (Kay & Jackson, 1991; Alexandris & Carroll, 1997). The fear of crime is not new as the study of Scott and Jackson (1996) also revealed that older people were more likely to be constrained in their park use due to the fear of crime. Perceptions of fear and crime have also been found to be an obstacle for physical activity in a study by Amesty (2003).

Factor 2, labelled the **'economic and structural'** constraint, comprised 5 variables and accounted for 15.25% of the variance. This constraint relates to finance, energy, lack of companionship, lack of knowledge and transport in engaging in leisure activities. Respondents also ranked these aspects 9th, 5th, 6th, 4th and 7th respectively. Studies undertaken by Searle and Jackson (1984) within a Canadian setting, revealed among others, that money, economic barriers such as equipment cost, admission fees and cost of transport, and lack of knowledge about where they could learn about an activity were some of the key barriers to non-participation in leisure activities. It is acknowledged that in every society there are groups of individuals who, for various reasons, do not share the same wealth and social resources and thus are in a position of disadvantage (Jain, 2007:19). Unfortunately, in economic terms such reality cascades into the increasing importance of money in the fulfilment of leisure desires, which may also push the elderly to the periphery. The market is also flooded with leisure activities but they come at a high cost.

Lack of energy may be due to the reduction in their physical activity to participate in leisure activities. The lack of companionship also seems to be prevalent in other studies, which present a barrier that inhibits people from participating in leisure activities (Alexandris & Carroll, 1997). The lack of company may be explained by the generic phenomenon of isolation especially among the elderly and less stable social support (Rhodes *et al*., 1999) compared to the younger generation. Research evidence maintains that the lack of social support is an important determinant of leisure activity and may present a barrier to leisure participation (Orsega-Smith *et al*., 2007). Providers or sources for companionship and social support for older adults usually comprise family members, close friends, casual friends or acquaintances such as community group members. Such associations enable individuals to cope with stressful life events, which mitigate stress-related adverse health impacts (Sasidharan *et al*., 2006). The lack of companionship may be due the changes in the social sphere with respect to family composition and family arrangements (United Nations Department of Economics and Social Affairs, 2007), the fact that households and individuals are experiencing transitions from one family form to another and today's children and adults live in more diverse forms of household than previous generations (Kay, 2006). This results in greater variation in family living arrangements. As a consequence, families have become less stable and the family as a social institution has become less homogenous.

Factor 3 was labelled the **'personal'** constraint comprised 3 variables and accounted for 9.69% of the variance. This constraint encapsulates spouse/family variation in leisure choices, the ageing process and poor health status of the elderly. Respondents ranked these constraints 10th, 2nd and 3rd respectively. Searle and Jackson (1984) also found that an individual's physical status, whilst ranked 15th in their study, was a barrier to some of the respondents. The ageing process and being left alone appears to be associated with withdrawal from leisure activities, based on the disengagement theory. The disengagement theory proponents argue that the older one gets, there is a tendency to withdraw from society, which is inevitable and intrinsic (Nimrod, 2007).

In summary, the 3 factors partially align with constraints model of Crawford and Godbey (1987). However, some of the variables crossed over 3 factors in the current study. Walker *et al*. (2007) also caution that constraints may differ across cultures. Shaw and Henderson (2005:31) asserted, "research involving people of different cultural backgrounds would greatly enhance the constraints literature".

Constraints and demographic variables

An array of research on leisure constraints in different settings has illustrated that non-participation to leisure varies according to demographic variables. Hence, it was necessary to examine whether population groups vary in terms of leisure constraints.

For the purpose of analysis, only Whites and Africans were categorised and analysed as the number of the Indian and Coloured sample was too small to draw any meaningful conclusions. Analysis of variance (ANOVA) was used for this purpose. In ANOVA, the F-test as illustrated in Table 3 is used to statistically evaluate the differences between the group means (Hair *et al*., 2000). In addition to statistical significance, practical significance using Cohen's d statistic (1988) was used.

TABLE 3: **ANALYSIS OF VARIANCE OF CONSTRAINTS AND POPULATION GROUPS**

Constraints		Sum of Squares	df	Mean Square	F-value	Signifi-cance.
Factor 1: (Time and security)	African vs White	14.822	3	4.941	3.450	0.021*
Factor 2 (Economic & structural)	African vs White	13.194	3	4.398	4.737	0.005*
Factor 3 (Personal constraints)	African vs White	4.526	3	1.509	1.249	0.299

* Significance p<0.05

Differences were identified between Factor 1 (time and security constraint) (F=3.450, p=0.021) and Factor 2 (economic and structural constraint) (F=4.737, p=0.005) between the two population groups. The third factor (personal constraints) showed no statistical differences between the population groups. It is as a result of the differences between groups in the first two constraints and population groups, that multiple post-hoc comparisons were

undertaken using Tukey HSD and Bonferroni tests to establish which groups differed significantly.

Multiple post-hoc comparisons are presented in Table 4. For the African respondents living in a semi-urban area, time and security (Mean=2.80) and economic and structural constraints (Mean=2.93) seem to be slightly higher compared to their White counterparts living in urban areas. Practical significant differences (Steyn *et al*., 2004) were found (medium and large effect size) between the African and White population groups with regard to both barriers to leisure participation. This may be due to the socio-economic status of those living in semi-urban areas. Chick and Dong (2003) also found that constraints differ depending on socio-economic status. Lack of essential networks and the social capital environment were also reported in other studies which impede on leisure participation by making the elderly insecure because of the risk of being exposed to crime (Lindström *et al*., 2003).

TABLE 4: **POST HOC MULTIPLE COMPARISONS - CONSTRAINTS AND POPULATION GROUPS**

Dependent variable (constraints)	**(I) Question 3** (African group)	**(J) Question 3** (White group)	**(I-J) Mean Difference**	**Statistical signifi-cance**	**Practical significance**	
					Cohen's d	**Effect size**
Factor 1 (Time & security)	Mean=2.80	Mean=1.87	0.930*	0.017	0.7165**	Medium
Factor 2 (Economic & structural)	Mean=2.93	Mean=2.01	0.920*	0.002	0.9224**	Large

* Statistical significance p<0.05.
** Practical significance with at least a medium size effect

Significant differences between means using ANOVA were also found between Factor 2 (economic and structural constraint) (F=4.737, p=0.005) and levels of education (Table 5).

TABLE 5: **ANALYSIS OF VARIANCE – CONSTRAINTS AND LEVEL OF EDUCATION**

Variables (constraints)		**Sum of Squares**	**df**	**Mean Square**	**F-value**	**Signi-ficance**
Factor 1 (Time & security)	Levels of education	20.687	6	3.448	2.447	0.033*
Factor 2 (Economic & structural)	Levels of education	20.251	6	3.375	3.899	0.002*
Factor 3 (Personal)	Levels of education	16.014	6	2.669	2.443	0.034*

* Significance p<0.05

Post-hoc multiple comparisons in Table 6 revealed that differences were found between respondents in Grades 7-11 (Mean=3.30) and respondents with a honours degree (Mean=1.97); respondents in Grades 7-11 (Mean=3.30) and respondents with a degree (Mean=2.26); respondents with a primary school education (Mean=3.40) and respondents with a Master's degree (Mean=1.40) with regard to Factor 2. Practical significant differences were also found (large effect size) between the African and White population groups with reference to economic and structural barriers.

TABLE 6: **POST HOC MULTIPLE COMPARISONS - CONSTRAINTS AND LEVEL OF EDUCATION**

Dependent variable (constraint)	**(I) Question 5** (Level of education)	**(J) Question 5** (Level of education)	**(I-J) Mean Difference**	**Statistical significance.**	**Practical significance** **Cohen's D**	**Effect size**
Factor 2 (Economic & structural)	Primary school Mean=3.40	Masters Mean=1.40	2.000*	0.050	3.3960**	Large
	Grade 7-11 Mean=3.30	Honours Mean=1.97	1.900*	0.010	1.1489**	Large
	Grade 7-11 Mean=3.30	Degree Mean=2.26	1.044*	0.037	0.9019**	Large

* Statistical significance $p<0.05$

** Practical significance with at least a medium size effect

In all instances those respondents with a lower level of education seem to find the impact of economic and structural constraints greater compared to those respondents with a higher level of education. Previous studies affirm that leisure constraints have also been found to vary in relation to education (Alexandris & Carroll, 1997). People with a higher level of education have been found to experience a lower level of constraints. Lindström *et al*. (2003) also revealed that internal barriers such as lack of motivation, lack of time are common among people in higher education groups, whereas lack of money and transport are common in lower education groups.

Constraints to leisure activities have been reported in previous studies appear to vary in terms of gender. Significant differences using ANOVA were identified between respondents regarding Factor 1 (time and security constraint) ($F=3.066$, $p=0.034$) and Factor 2 (economic and structural constraint) ($F=4.736$, $p=0.005$) and gender were found. These results are shown in Table 7.

TABLE 7: **ANALYSIS OF VARIANCE - CONSTRAINTS AND ETHNIC AND GENDER GROUPS**

Factors (constraints)		**Sum of Squares**	**df**	**Mean Square**	**F-value**	**Signifi-cance.**
Factor 1 (Time & security)	Ethnic & gender	13.695	3	4.565	3.066	0.034*
Factor 2 (Economic & structural)	Ethnic & gender	13.875	3	4.625	4.736	0.005*
Factor 3 (Personal)	Ethnic & gender	4.576	3	1.525	1.166	0.330

* Statistical significance p<0.05

Post-hoc multiple comparisons in Table 8 revealed that differences were found between African males (Mean=2.72) and White males (Mean=1.79); African males (Mean=2.72) and Africa females (Mean=2.88) with regard to Factor 1 (time and security constraint). Differences were also found between African males (Mean=2.87) and White males (Mean=1.87); African females (Mean=2.99) and White males (Mean=1.87) with regard to Factor 2 (economic and structural constraint). In all instances African female respondents seem to be more affected by time, security, economic and structural constraints compared to their African male and White male counterparts. Practical significant differences were found (medium effect size) between African and White males with reference to time and security constraints. Practical significant differences were also found (large effect size) between African and White males, African females and White males with reference to economic and structural constraints.

TABLE 8: **POST HOC MULTIPLE COMPARISONS – CONSTRAINTS AND GENDER AND ETHNIC GROUPS**

Dependent variables (constraints)	**(I) (Ethnic gender)**	**(J) (Ethnic gender)**	**(I-J) Mean difference**	**Statistical Signifi-cance**	**Practical significance**	
					Cohen's D	**Effect size**
Factor 1 (Time & security)	1 (African-male) Mean=2.72	3 (White-male) Mean=1.79	0.9390*	0.027	0.7750**	Medium
	2 (African-female) Mean=2.88	3 (White-male) Mean=1.79	-1.0930*	0.011	0.1130	No effect
Factor 2 (Economic & structural)	1 (African-male) Mean=2.87	3 (White-male) Mean=1.87	1.0124*	0.018	0.9728**	Large
	2 (African-female Mean=2.99	3 (White-male) Mean=1.87	1.1338*	0.007	1.1375**	Large

* Statistical significance p<0.05

** Practical significance with at least a medium size effect

Researchers through the years have also revealed that women face more intense leisure constraints than men, which results from lack of time (Jackson & Henderson, 1995; Alexandris & Carroll, 1997; Jackson, 2005). These authors suggest that a women's place within society, their roles and responsibilities often limit their freedom of choice. Furthermore, women experience the lack of technical skills (driving and financial resources) more intensely than men (Harrington & Dawson, 1995).

Regarding the synthesis of women within the African continent, Hunter and May (2003) identified a range of roles in which older females feature as prominent actors as child-minders for employed family members with children. The authors accentuate that approximately 42% of African households are female headed and that 17% of these are granny households in which the female household head is the grandmother rather than the mother of the children in her care. This arrangement is largely as a result of the increasing incidence of HIV/AIDS pandemic where older persons are filling in the role of carers for those suffering from terminal diseases. Su *et al*. (2006) found that rural elderly residents were more occupied by responsibilities as caregivers, such as attending to children and doing housework during the day. Accordingly, they reported less participation in recreational activities that entertain personal interest.

In summary these are just a few startling developments on the changing face of the South African family, without delving into the poverty status of families. Such burden may therefore impact on the available time for older people to engage in leisure activities (Dhurup, 2008). It seems that this phenomenon of the disintegration of family life as a nucleus has started to replace the traditional norm in which all South Africans have so long cherished. Notwithstanding such developments, challenges and threats are posed in the risk of a wake of a dysfunctional society, which may have far reaching implications for the Government and Non-profit Organisations (NPO's) in terms of the necessary support structures.

Reliability and validity

The standardised Cronbach α was 0.810 for the entire scale and the reliability for the individual factors was 0.79, 0.75 and 0.62 respectively. While the first two factors were above the acceptable levels of 0.70, the third factor was marginally acceptable (Nunnally & Bernstein, 1994; Malhotra, 2004). The Cronbach alpha values are not unusual as other studies on constraints also revealed values between 0.61 and 0.58 when research was undertaken among different cultures (Walker *et al*., 2007) in exploratory studies.

Two types of validity tests were performed namely, content and construct validity. Content validity was ascertained by pre-testing the questionnaire and a review of the questionnaire by the sport management academics and a statistician. In addition, a pilot test was undertaken where changes were made to the questionnaire regarding the deletion of items, addition of items, rewording and rephrasing of questions. Construct validity of the scale was assessed by the computation of the Cronbach alpha coefficient for the scale. In addition, factor analysis was performed on each of the constructs to determine what percentage of variance is explained by the factor. The results indicated that the three factors (time and security, variance explained=36.64%; economic and structural, variance explained=15.25%; personal,

variance explained=9.69%) accounted for approximately 62% of the variance explained thus inferring construct validity.

RECOMMENDATIONS, LIMITATIONS AND CONCLUSION

Three factors were generated from the study that addresses barriers to leisure time activity among the elderly. The three factors, time and security, economic and structural and personal constraints may be able to provide leisure and recreation practitioners with important cues on users and non-users of leisure activities among the elderly. The information may also assist in understanding what attracts people to participate and what keeps the elderly away from participating in leisure activities.

Family and social networks with friends need to be harnessed. Research has been consistent in demonstrating the positive impact of shared leisure experiences on the quality of life of the elderly (Orthner & Mancini, 1991). Leisure is a form of a social network for the development and expression of relationships among family and friends. Positive relationships through social networks can contribute to the well-being of the elderly. Visits by family and friends on a regular basis, being together and sharing auspicious or religious occasions and sending gifts may assist in improving the loneliness of the elderly. The fact that the elderly are ageing and prefer to be left alone was ranked second of the constraints is a cause for concern. Active leisure in various forms is encouraged in resisting stereotypical images of later life, particularly the negative script of ageing (Dupuis, 2006). In the case where the elderly distance themselves from participation and challenge the negative script of later life should use active participation in leisure. Leisure should be pursued as an alternative to what it means to grow old and as a means of redefining new scripts of ageing. Hence, leisure should be used as a social empowerment tool for later life.

It is evident that time, security, economic and structural constraints prevail among South Africans with moderately higher levels of constraints experienced by Africans. Such evidence points to a direction that leisure and recreational endeavour know no boundaries. It is about thought, space and congeniality, and above all, a will to create conducive environments for the elderly to harness their lives in later years. Such evidence, whilst limited in terms of generalisation because of the small sample size, may nevertheless provide fertile grounds for leisure and recreational officials to re-visit their current modes in the provision of leisure activities.

While the SANGALA initiative, since its inception in 1996, provided some relief for many disadvantaged communities, much still remains to be done for the elderly. According to the predictions of the United Nations (Department of Economic and Social Affairs, 2007) at least until 2050, the older population is expected to continue growing faster than the population in other age groups. These implications may have far-reaching economic and social consequences in most countries, including South Africa. Writing a statement for leisure and recreation policy within the government is necessary for sustainable action in leisure activity among the elderly.

Levels of education also appear to influence leisure participation as those respondents with a lower level of education reported lower levels of participation in leisure activity. This

scenario is not uncommon from findings of previous research. Jain (2007:23) appropriately encapsulates the educationally marginalised societies in terms of leisure participation with the following phrase: "as we move from an economy of scarcity to one of abundance, the blow falls heaviest on the uninformed, the untrained and the uneducated in one phrase, the socially disadvantaged". Hence, there is a dire need for leisure and recreational policy makers to integrate the advocacy of leisure in marginalised communities, especially the elderly with low levels of education in order to improve quality of life. Advocacy may take the form of elderly education on issues such as living healthily and the need for basic health and physical activity.

This study is not without its limitations. A larger sample size is necessary to generate results that are applicable to the wider population. A comprehensive effect of cultural constraints, apart from two major population categorisations, namely African and White, may provide revelations in terms of constraints to leisure activity. Further studies including differentiation on the basis of South African diverse language, religious background and cultural practices may provide possibilities for future research. The analysis reported in this study is cross-sectional in nature. A longitudinal study is needed to deepen our understanding of the casual and predictor variables of constraints in leisure participation among the elderly. The study, due to its exploratory nature, examined constraints to leisure activity among the elderly in general. Further research on barriers to physical activity among the elderly will enhance our understanding of constraints.

With the current economic uncertainties gripping the western world, which also impacts on the local economy and local communities, pro-active measures are necessary so that such economic meltdowns cause no further erosion of services to the elderly. The late and erstwhile Minister of Sport and Recreation, Steve Tshwete, viewed older persons as torch bearers of the nation and commented that "if their torches would lose its light, it will become dark for the young" (Eckley, 2006:24). The provision of leisure is not about opulence; it is about providing the basic necessities for nurturing the elderly for their vulnerability to constraints in our fledgling democracy and leaving negative episodes for those yet to enter this chapter of their lives. Perhaps behind every cloud there is a silver lining. It is hoped that the sun will shine for this generation in their golden years ahead.

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Prof. Manilall DHURUP: Vaal University of Technology, Faculty of Management Sciences, Private Bag X021, Vanderbijlpark 1900, Republic of South Africa. Tel.: +27 (0) 16 9505052, E-mail: royd@vut.ac.za

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