

# An Investigation of Perceived Value of Physical Exercise In Aging Baby Boomers: Marketing Implications in the Sporting Goods Context at a Store Level

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## ⟨Abstract⟩

The linear regression method was used to model the relationship among a set of perceptions regarding to the importance of physical exercise and the perceived value of physical exercise (as a leisure activity) for aging baby boomers. In terms of a pilot study, we developed two alternative models tested at two different convenience samples. The first sample consisted of 82 aging baby boomers aged 55-65 (sample 1) and the second one consisted of 458 citizens aged 18-45 (sample 2). Through this research approach, we intended to lead to a better understanding of perceived value of physical exercise in the sporting goods marketing context for aging baby boomers. We addressed the core research themes of our study using a convenience survey. Data was collected by means of face-to-face interviews during the seven-week period. The research results showed that the "model 2" better predicts perceived value of physical exercise as a leisure activity for aging baby boomers. We believe that the final findings of our research try can recognize the differences in buying behaviors between aging baby boomers and other target markets and advance marketers of sporting goods strategic tries regarding to consumer strategy management at a store level.

Key Words: Perceived Value, Physical Exercise, Baby Boomers, Sporting Goods, Empowerment of Marketing Strategy

## 1. Introduction

According to the 2006 International Council on Active Aging, there are 77 million baby boomers in the United States alone, with \$2 trillion in spending power. On a global scale, the health and well-being of all nations' aging populations does a hot topic for governments need to control care costs.

Aging baby boomers seems to be a powerful market. Add wellness programs and physical activity to the list of product categories and services that boomers are influencing. Despite the statistics about the overall national reluctance to exercise, psychographics compiled in the newly-released research report, "Active Aging in America, Residential and Commercial Fitness, United States," boomers understand

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the value of physical activity and are seeking residential communities, programs and facilities to find it.

"The baby boomers are aware that exercise is important, which makes it easier for architects, developers, seniors center management, fitness facilities and equipment designers. They don't have to sell boomers on the idea that exercise is good, they only need to provide the opportunities," explains Colin Milner, CEO of the International Council on Active Aging (ICAA). "Plus, the boomers are influencing their parents, which are another large market for services, particularly housing."

Wellness programs? Using ICAA's "active aging" definition, these programs include fitness facilities, outdoor trails, pools, tennis and golf all activities that can be accessed by those 50+ who move on wheels or who play a competitive game. Staying active includes computer use, brainteasers and book clubs, cooking and photography classes and the like. Whatever keeps a person engaged in life as fully as possible is active aging, and can be part of a wellness program.

In fact, 95% of organizations reaching older adults said that a fitness/wellness center or physical activity program

attracted new housing residents or club members. Another survey found that 88% of adults 44 to 56 years interested in active adult communities would be happier in retirement if they remained physically active (a key point, considering that the fastest growing segment of the housing industry is the 50+ market). Moreover, adults ages 55 and older are the fastest growing membership segment in health clubs.

### **The Contribution of Examining Perceived Value of Physical Exercise**

Physical activity is generally recognized as contributing to enhanced physical and mental health as well as prevention of a number of diseases and other problems later in life (Powell and Blair, 1994; Blair et al., 1989; Stephens, 1988; Haskell et al., 1985). Furthermore, concern about greater numbers of overweight and obese children, and the question of whether this pattern will continue into later adolescence, also suggests the benefits of physical activity among children and youth (Sallis et al., 2000; Dishman et al., 1985). The normal pattern during adolescence, based largely on cross-sectional studies in North America and other settings, indicates a

decrease in activity with increasing age (or grade), compounded by consistently lower levels of activity among females compared to males (Trost et al., 2002; Allison and Adlaf, 1997; Tappe et al., 1989). Because of the health and other benefits of physical activity, these lower levels of physical activity among older adolescents are of concern.

One explanation for the decreasing levels of physical activity during the mid-teenage years is the number of barriers that make it difficult to participate. Barriers refer to the obstacles individuals face in undertaking, maintaining, or increasing physical activity. Much of the existing empirical work examining barriers and other factors influencing activity consists of quantitative studies and reviews of the correlates and predictors of physical activity, exercise, and sport (Tergerson and King, 2002; Higgins et al., 2003; Allison et al., 1999; Frankish et al., 1998; Sherwood and Jeffrey, 2000; Tappe et al., 1989). These factors have been categorized and analyzed as individual and environmental characteristics (Sherwood and Jeffrey, 2000) or internal and external barriers (Allison et al., 1999).

### **The Contribution of Examining Perceived**

### **Value of Physical Exercise in Aging Baby Boomers to the Empowerment of Marketing Strategies for Sporting Goods**

The populations of all the developed economies are growing older as longevity increases. Managing the consequences of population ageing is a major contemporary concern. For public policy, pensions and healthcare are of particular relevance. Less appreciated are the implications for consumption.

Until fairly recently, older people were generally seen as amongst the poorer members of society, having the ability to acquire only the more basic goods and services. They were not therefore viewed as an attractive consumer market. There have been considerable changes in recent years in the financial position of older people, however, as incomes from occupational and private pensions have increased and as the earnings related component of the state pension has built up. In consequence, the rate of poverty among pensioners is now no greater than among no pensioner groups (Goodman et al., 2003). The purchasing power of older people thus becomes more salient, both as the main means they have to satisfy their wants and needs, and because of the

opportunities, this offers to those that can supply appropriate goods and services.

Interest in the role of older people as consumers is growing on the part of market research practitioners and academics, as well as social scientists (Stroud 2005; Metz and Underwood 2005; Szmigin and Carrigan 2001; Gilleard and Higgs 2000). However, the over 50s continue to be the least well-understood demographic market segment (Lazer 1986), and are neglected in the standard marketing texts (for example McDonald and Dunbar 1998; Kotler 2003).

'Older people' comprise a very diverse group. Indeed, there is no agreement on when old age begins. There is a tendency to consider the 'over 50s' as a group, since people in their fifties will be considering the prospects for retirement and later life, while those in later decades will be experiencing this — hence the possibility of common attitudes and expectations. However, in Britain there are 20 million people currently over the age of 50 at present, a figure projected to grow to 25 million by 2020 when this group will comprise half the adult population (Government Actuary's Department 2005). In terms of sporting goods market characteristics, it makes little sense to think of this large age group as a whole.

Rather, it is necessary to segment the over 50s into manageable sub groups if their wants and needs are to be addressed effectively, and if marketing messages with high resonance are to be directed via the most effective media.

### **The Research Aim and Contribution of This Study**

Through the study results, we aim to lead to a better understanding of perceived value of physical exercise in the sporting goods marketing context for aging baby boomers. We aim through the research results of our study provide empirical evidence regarding to the perceptions influence the perceived value of physical exercise (as a leisure activity) in terms of a consumer behavior analysis of a very attractive market of the aging baby boomers with implications in the sporting goods marketing context at a store level.

### **The Alternative Models**

We adopt the following definition for *perceived value of physical exercise (as a leisure activity)*: "The citizen's overall appraisal of the net worth of the physical exercise (as a leisure activity), based on

the citizen's assessment of what is received (benefits provided by the physical exercise), and what is given (costs or sacrifice incorporating physical exercise in citizen's way of living)."

Model 1:

$$A=f(B, D)$$

where:

A = Perceived value of physical exercise as a leisure activity

B = Perceived value of leisure time for recreation

D = Perceived value of non physical exercise in leisure time

**Research Hypothesis 1 (H<sub>1</sub>):** Perceived value of physical exercise (as a leisure activity) for aging baby boomers is better predicted by model 1.

Model 2:

$$A = f(B, D, E, F, G, H, I)$$

where:

A = Perceived value of physical exercise as a leisure activity

B = Perceived value of leisure time for recreation

D = Perceived value of non physical exercise in leisure time

E = Perceived value of movement in leisure time

F = Perceived value of physical exercise in recreation time

G = Perceived necessity of the physical exercise as a leisure activity

H = Perceived net worth of the physical exercise as a leisure activity

I = Perceived contribution of physical exercise in body shape

**Research Hypothesis 2 (H<sub>2</sub>):** Perceived value of physical exercise (as a leisure activity) for aging baby boomers is better predicted by model 2.

**Research Hypothesis 3 (H<sub>3</sub>):** Perceived value of physical exercise (as a leisure activity) for citizens aged 18-45 is better predicted by model 1.

**Research Hypothesis 4 (H<sub>4</sub>):** Perceived value of physical exercise (as a leisure activity) for citizens aged 18-45 is better predicted by model 2.

## 2. Research Method

We address the core research themes of our study using a convenience survey. In terms of this pilot study, we developed two (2) alternative models tested at two different convenience samples. The

research hypotheses aim to test citizens' attitudes regarding to perceived value of physical exercise, as a leisure activity, in order to lead us to a better understanding of perceived value of physical exercise in the sporting goods marketing context for aging baby boomers.

### **Participants, Procedure & Data Collection**

The convenience sample 1 included 82 aging baby boomers aged 55-65 and convenience sample 2 included 458 citizens aged 18-45. Data was collected by means of face-to-face interviews during the seven-week period.

### **Measures**

Based on a series of empirical works from marketing and social science literature [Stroud (2005); Metz and Underwood (2005); Higgins et al. (2003); Tergerson and King (2002); Szmigin and Carrigan (2001); Gilleard and Higgs (2000); Sherwood and Jeffery (2000); Allison et al. (1999); Frankish et al. (1998); Tappe et al. (1989)] the new construct of *perceived value of physical exercise*, (as a leisure activity) in the

sporting goods marketing literature was measured using multiple items. All items were measured using a five-point Likert-type scale (ranging from 1=none importance to 5=very important), in order to measure students' attitudes.

With establishing content validity, the questionnaire was refined through rigorous pre testing. The pre-testing was focused on instrument clarity, question wording and validity. During the pre-testing, six students (of University of Peloponnese) were invited to comment on the questions and wordings. The comments of these six (6) individuals then provided a basis for revisions to the measures.

### **Testing the Items**

The test of the validity of the items was based on a focus group methodology using the serial moderating technique (SMT).

In order to test the process, we advocate several moderators in succession over two classes of the Sport Management Dept. of University of Peloponnese, using moderately scheduled interviews. For the opening of the interviews, we have stated the purpose.

For this pilot test, 3 moderator teams has been employed for time intervals that

Table 1 The Items for "Perceived Value of Physical Exercise as a Leisure Activity"

<i>Construct</i>	<i>Item</i>	<i>Definition</i>	<i>Reference</i>	<i>Variable</i>
<b>1. perceived value of physical exercise as a leisure activity</b> (A)	Perceived value of leisure time for recreation (B)	"The citizen's overall appraisal of the net worth of the leisure time for recreation based on the citizen's assessment of what is received (benefits provided by the leisure time for recreation and what is given (costs or sacrifice incorporating leisure time for recreation in citizen's way of living)."	Reichert et al., 2007;	(1) = Independent variable
	Perceived value of physical exercise in leisure time [C]	"The citizen's overall appraisal of the net worth of the physical exercise in leisure time based on the citizen's assessment of what is received (benefits provided by the physical exercise in leisure time and what is given (costs or sacrifice incorporating physical exercise in leisure time in citizen's way of living)."	Reichert et al., 2007; Chen et al., 2004	(2) = <b>Dependent variable</b>
	Perceived value of non-physical exercise in leisure time (D)	"The citizen's overall appraisal of the net worth of the non-physical exercise in leisure time based on the citizen's assessment of what is received (benefits provided by the non-physical exercise in leisure time and what is given (costs or sacrifice incorporating non-physical exercise in leisure time in citizen's way of living)."	Reichert et al., 2007; Chen et al., 2004	(3) = Independent variable
	Perceived value of movement in leisure time (E)	"The citizen's overall appraisal of the net worth of the movement in leisure time based on the citizen's assessment of what is received (benefits provided by the movement in leisure time and what is given (costs or sacrifice incorporating movement in leisure time in citizen's way of living)."	Reichert et al., 2007	(4) = Independent variable

	<p>Perceived value of physical exercise in recreation time (F)</p>	<p>"The citizen's overall appraisal of the net worth of the physical exercise in recreation time based on the citizen's assessment of what is received (benefits provided by the physical exercise in recreation time and what is given (costs or sacrifice incorporating physical exercise in recreation time in citizen's way of living)."</p>	<p>Chen et al., 2004</p>	<p>(5) = Independent variable</p>
	<p>Perceived necessity of the physical exercise (as a leisure activity) (G)</p>	<p>"The citizen's overall appraisal of the net worth of the necessity of physical exercise (as a leisure activity) based on the citizen's assessment of what is received (benefits provided by the necessity of the physical exercise (as a leisure activity) and what is given (costs or sacrifice incorporating physical exercise, as a leisure activity, in citizen's way of living)."</p>	<p>Chen et al., 2004</p>	<p>(6) = Independent variable</p>
	<p>Perceived net worth of the physical exercise (as a leisure activity) (H)</p>	<p>"The citizen's overall appraisal of the net worth of the physical exercise (as a leisure activity) based on the citizen's assessment of what is received (benefits provided by the net worth of the physical exercise (as a leisure activity) and what is given (costs or sacrifice incorporating physical exercise, as a leisure activity, in citizen's way of living)."</p>	<p>Chen et al., 2004</p>	<p>(7) = Independent variable</p>
	<p>Perceived contribution of physical exercise in body shape (I)</p>	<p>"The citizen's overall appraisal of the net worth of the contribution of physical exercise in body shape based on the citizen's assessment of what is received (benefits provided by the contribution of physical exercise in body shape and what is given (costs or sacrifice incorporating physical exercise for the empowerment of body shape, in citizen's way of living)."</p>	<p>Segar et al., 2006</p>	<p>(8) = Independent variable</p>



has been ranged from 10-20 minutes. This overall guide was the joint product of all participating moderators.

The above process was prerequisite, in order to secure the success of the set of interviews with students.

### 3. Analyses

**Mean and standard deviation:** Descriptive statistics will allow describing the basic features of the data in our study. The mean or average is probably the most commonly used method of describing central tendency. The standard deviation is a more accurate and detailed estimate of dispersion because an outlier can greatly exaggerate the range. The standard deviation will allow showing the relation that set of scores has to the mean of the sample.

**Speaman Rho's correlation analysis:** The research hypotheses were initially tested carrying out correlation analysis among the variables.

**Independent Kruskal Wallis and Mann-Whitney tests:** The research hypothesis is validated by independent Kruskal Wallis

and Mann Whitney tests. These non-parametric tests are done because the measured items aren't normally distributed.

**Multiple Regression analysis based on Durbin-Watson statistic and multiple R<sup>2</sup> coefficient:** Path analysis is the most commonly used methodology to examine the relationships among variables in the form of linear causal models. In general, the value of the path coefficient (R<sup>2</sup>) associated with each path represents the strength of each linear influence. The Durbin-Watson statistic examines the degree of auto-correlation and multicollinearity was checked through correlation analysis among dependent variables.

### 4. Research Results

#### Sample Characteristics

The response rate was 87%. The participants in the first sample (sample 1) were 82 aging baby boomers aged 55-65 and the participants in the second sample (sample 2) were 458 citizens aged 18-45.

Regarding to sample 1 about sixty-seven (67.1%) were men and about twenty-six (25.6%) were women. About fifteen

(14.6%) were working in the public administration, about twenty (19.5%) were working as employees in private organizations, about sixteen (15.9%) were entrepreneurs, about forty (40.2%) were farmers and about two (2.4%) were workers. About one (1.2%) were singles and about nineteen six (96.3%) were married. About thirty-seven (36.6%) live in big urban centers, about thirty one (30.5%) live in small urban centers and about thirty (29.3%) live in agricultural regions.

Regarding to sample 2 forty-five (45.0%) were men and about fifty-three (53.3%) were women. About twenty-six (25.5%) were working in the public administration, about thirty-four (33.6%) were working as employees in private organizations, about twenty one (21.2%)

were entrepreneurs, about eight (7.9%) were farmers and about four (4.4%) were workers. About forty-three (42.8%) were singles and fifty-five (55.0) were married. About fifty-three (53.3%) live in big urban centers, about twenty-seven (26.9) live in small urban centers and about seventeen (16.6%) live in agricultural regions.

### Descriptive Statistics

Characteristics of the distributions of the answers were obtained by calculating means and standard deviations (see Table 2 and Table 3) for each item. For sample 1 the largest standard deviations (1.30 and 1.27) were found in relation to items 6 and 4. These items deal with citizen's appraisal of the necessity of the physical exercise (as a leisure activity) and citizen's

Table 2 Descriptive Statistics for Sample 1

	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std Deviation</b>
question1	82	1.00	5.00	2.6098	1.19418
question2	82	1.00	5.00	2.0488	1.14291
question3	82	1.00	5.00	2.3415	1.18862
question4	82	1.00	5.00	2.1341	1.27427
question5	82	1.00	5.00	2.8171	1.13451
question6	81	1.00	5.00	2.5062	1.30502
question7	82	1.00	5.00	3.3171	1.20573
question8	82	1.00	5.00	3.0366	1.05929
valid N(listwise)	81				

Table 3 Descriptive Statistics for Sample 2

	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std Deviation</b>
question1	453	1.00	5.00	2.6071	.93607
question2	456	1.00	5.00	2.5154	1.14824
question3	456	1.00	5.00	2.7632	1.13527
question4	457	1.00	5.00	2.2254	.94333
question5	453	1.00	5.00	2.3245	1.01460
question6	456	1.00	5.00	2.2325	1.18541
question7	456	1.00	5.00	3.3158	1.20121
question8	456	1.00	5.00	2.9978	.98449
valid N(listwise)	444				

assessment of benefits provided by physical exercise. For sample 2 the largest standard deviations (1.20 and 1.18) were found in relation to items 7 and 6. These items deal with citizen's overall appraisal of the net worth of the physical exercise (as a leisure activity) and citizen's appraisal of the necessity of the physical exercise (as a leisure activity)

### **Comparisons Among the Independent Groups**

Regarding to sample 1, results based on Mann-Witney U test, show us that there are statistical no differences between men and women and between singles and married.

Results based on Kruskal-Wallis test, show us that there are no statistical

differences among respondents, which live in different places with different educational background.

Regarding to sample 2, results based on Mann-Witney U test, show us that there no statistical differences between men and women but there are statistical differences for the first three questions (1, 2, 3).

Results based on Kruskal-Wallis test, show us that there are statistical differences among respondents from different age groups for questions 1, 2, 3, 4 and 7 but there significant statistical differences in the answers of the respondents with different educational background.

### **Findings of the Survey**

The measured items are presented in Table 4.

Table 4

		How important is recreation in your leisure time?					Total
		none importance	not so important	important	quiet important	very important	
age	18-28	3	51	78	43	8	183
	29-39	16	62	33	10	1	122
	40-45	23	72	34	16	2	147
	55-65 (aging baby boomers)	17	24	20	16	5	82
	Total	59	209	165	85	16	534
		How important is physical exercise in your leisure time?					Total
		none importance	not so important	important	quiet important	very important	
age	18-28	15	59	49	48	12	183
	29-39	32	40	30	19	4	125
	40-45	48	57	21	15	6	147
	55-65 (aging baby boomers)	33	27	10	9	3	82
	Total	128	183	110	91	25	537
		How important is non-physical exercise in your leisure time?					Total
		none importance	not so important	important	quiet important	very important	
age	18-28	26	73	42	26	16	183
	29-39	20	40	34	25	6	125
	40-45	7	48	46	28	18	147
	55-65 (aging baby boomers)	7	12	24	24	15	82
	Total	60	173	146	103	55	537
		How important is movement in leisure time?					Total
		none importance	not so important	important	quiet important	very important	
age	18-28	32	86	49	16	1	184
	29-39	26	49	32	15	3	125
	40-45	47	60	29	9	2	147
	55-65 (aging baby boomers)	32	29	6	8	7	82
	Total	137	224	116	48	13	538
		How important is physical exercise in recreation time?					Total
		none importance	not so important	important	quiet important	very important	
age	18-28	4	35	60	63	22	184
	29-39	6	17	40	49	11	123

40-45	9	23	49	46	18	145
55-65 (aging baby boomers)	8	28	26	11	9	82
Total	27	103	175	169	60	534
How important is physical exercise as a leisure activity?						Total
	none importance	not so important	important	quiet important	very important	
age 18-28	75	51	24	26	7	183
29-39	34	38	31	15	7	125
40-45	53	36	32	22	4	147
55-65 (aging baby boomers)	26	15	18	17	5	81
Total	188	140	105	80	23	536
Does it worth to exercise physically in your leisure time?						Total
	none importance	not so important	important	quiet important	very important	
age 18-28	18	20	52	59	35	184
29-39	12	23	35	37	18	125
40-45	16	18	45	40	27	146
55-65 (aging baby boomers)	9	13	13	37	10	82
Total	55	74	145	173	90	537
How important is physical exercise in body shape?						Total
	none importance	not so important	important	quiet important	very important	
age 18-28	11	41	79	36	16	183
29-39	6	25	55	33	6	125
40-45	14	33	58	36	6	147
55-65 (aging baby boomers)	9	13	30	26	4	82
Total	40	112	222	131	32	537

### Interpretation of the Questionnaire Results

Based on the comparisons between the two samples, it seems that the aging baby boomers is a homogenized group of consumers, where perceptions are not differed by the place they live, their marital status their educational background.

Not surprisingly the sample 2 because of the big range of different age groups (see 18-45) there are significant differences, regarding to the perceptions, among the age groups and the educational background.

Not surprisingly, according to the findings of the comparisons among the independent groups, there are no statistical

differences between the perceptions of the value of physical exercise of the men and the women. Women's sport has made great progress in recent decades. We observe, for example, that women are increasingly being admitted to types of sports that have traditionally been perceived as masculine sports. Thus the argument that sports and physical activity in general have been considered a male domain and that the participation of women in sports as "... a woman in man's territory" might seem to be rather outdated today.

A general examination of the frequencies show that a common characteristic of both groups seem be the significant differences in their perceptions about the necessity of the physical exercise as a leisure activity. Quiet interesting seems to be the finding regarding to the perceptions of aging baby boomers about the benefits provided by physical exercise. Also interesting seems to be the finding from the second sample (sample 2) where there are some significant differences regarding to the overall appraisal of the net worth of the physical exercise as a leisure activity.

The frequencies in question 6 (see also the high prices of standard deviation in both samples) are a finding that can be

interpreted. It probably reveals, (what existed theory state), the potential psychological barriers to physical exercise. Analytically, while the stages of change model emphasize motivation as the key to exercise uptake, theory suggests that evaluations of the psychological barriers to exercise uptake may also provide valuable insight into patterns of exercise adoption. Anderson's (1995) behavioral model of health services use suggests that one of the key factors determining utilization of health services (such as gyms) is the psychological enabling/impeding factors unique to that individual. In a similar vein, the health belief model postulates that the decision to undertake a given health behavior is dependent upon several variables relating to the perceived barriers to health services use, such as psychological factors (Conner and Norman, 1994). Both models of healthcare utilisation highlight the role perceived psychological barriers might play in exercise adoption.

### **Correlations and Path Analyses**

The Spearman's Rho correlation coefficients among the variables indicate that all variables are significantly correlated.

Table 5 Correlation Analyses (Sample 1: N = 82 Baby Boomers)

			1	2	3	4	5	6	7	8
Spearman's rho	question 1	Correlation	1.000	.458**	.039	.138	.230*	.191	-.225*	-.031
		Coefficient	.	.000	.726	.215	.037	.088	.042	.782
		Sig.(2-tailed) N	82	82	82	82	82	81	82	82
	question 2	Correlation	.458**	1.000	-.380**	.430**	.559**	.062	-.360**	.223*
		Coefficient	.000	.	.000	.000	.000	.581	.001	.044
		Sig.(2-tailed) N	82	82	82	82	82	81	82	82
	question 3	Correlation	.039	-.380**	1.000	-.278*	-.352**	.000	.073	.048
		Coefficient	.726	.000	.	.011	.001	.997	.514	.666
		Sig.(2-tailed) N	82	82	82	82	82	81	82	82
	question 4	Correlation	.138	.430**	-.278*	1.000	.446**	.140	-.291**	.233*
		Coefficient	.215	.000	.011	.	.000	.183	.008	.035
		Sig.(2-tailed) N	82	82	82	82	82	81	82	82
	question 5	Correlation	.230*	.559**	-.352**	.446**	1.000	-.291**	-.129	.221*
		Coefficient	.037	.000	.001	.000	.	.008	.248	.046
		Sig.(2-tailed) N	82	82	82	82	81	81	82	82
	question 6	Correlation	.191	.062	.000	.149	-.291**	1.000	-.057	.246*
		Coefficient	.088	.581	.997	.183	.008	.	.612	.027
		Sig.(2-tailed) N	81	81	81	81	81	81	81	81
	question 7	Correlation	-.225*	-.360**	.073	-.291**	-.129	-.057	1.000	-.120
		Coefficient	.042	.001	.514	.008	.248	.612	.	.281
		Sig.(2-tailed) N	82	82	82	82	82	81	82	82
	question 8	Correlation	-.031	.223*	.046	.233*	.221*	.246*	-.120	1.000
		Coefficient	.782	.044	.666	.035	.046	.027	.281	.
		Sig.(2-tailed) N	82	82	82	82	82	81	82	82

\*\* .Correlation is Significant at the 0.01 Level (2-tailed)

\* .Correlation is Significant at the 0.05 Level (2-tailed)

Table 6 Correlation Analyses (Sample 2: N = 458)

			1	2	3	4	5	6	7	8
Spearman's rho	question 1	Correlation	1.000	.466**	-.026	.130**	.157**	-.089	-.050*	.007
		Coefficient	.	.000	.586	.005	.001	.059	.291	.885
		Sig.(2-tailed) N	453	452	452	453	449	452	452	452
	question 2	Correlation	.466**	1.000	-.412**	.350**	.405**	-.090	-.061**	-.037
		Coefficient	.000	.	.000	.000	.000	.056	.196	.437
		Sig.(2-tailed) N	452	456	455	456	452	455	455	455
	question 3	Correlation	-.026	-.412**	1.000	-.178*	-.285**	.128**	.095*	.046
		Coefficient	.586	.000	.	.000	.000	.006	.042	.332
		Sig.(2-tailed) N	452	455	456	456	452	455	455	455
	question 4	Correlation	.130**	.350**	-.178**	1.000	.300**	.045	.019	.023
		Coefficient	.005	.000	.000	.	.000	.337	.682	.631
		Sig.(2-tailed) N	453.	456	456	457	453	456	456	456
	question 5	Correlation	.157**	.405**	-.285**	.300**	1.000	-.166**	.065	.102*
		Coefficient	.001	.000	.000	.000	.	.008	.171	.030
		Sig.(2-tailed) N	449	452	452	453	453	452	452	452
	question 6	Correlation	-.089	-.090	.128**	.045	-.166**	1.000	.089	.080
		Coefficient	.059	.056	.006	.337	.000	.	.058	.087
		Sig.(2-tailed) N	452	455	455	456	452	456	455	455
	question 7	Correlation	-.050	-.061**	.095*	.019	.065	.089	1.000	.093*
		Coefficient	.291	.196	.042	.682	.171	.058	.	.048
		Sig.(2-tailed) N	452	455	455	456	452	455	456	455
	question 8	Correlation	.007	-.037	.046	.023	.102*	.080	.093*	1.000
		Coefficient	.885	.437	.332	.631	.030	.087	.048	.
		Sig.(2-tailed) N	452	455	455	456	452	455	455	456

\*\*\_Correlation is Significant at the 0,01 Level (2-tailed)

\*\_Correlation is Significant at the 0,05 Level (2-tailed)



Table 7 Regression Results of Predicted Path Relationships (Sample 1: N= 82)

	Dependent variable	Independent variables	t	$\beta$	Durbin-Watson	R <sup>2</sup>	P	Comment (support)
<b>MODEL 1</b>								
H <sub>1</sub> :	2	1	3.257	.884	1.483	.218	.002	medium
	2	3	10.389	3.519	1.538	.210	.000	medium
	2	All above	6.768	2.367	1.702	.442	.000	strong
<b>MODEL 2</b>								
H <sub>2</sub> :	2	1	3.257	.884	1.483	.218	.002	medium
	2	3	10.389	3.519	1.538	.210	.000	medium
	2	4	5.420	1.214	1.711	.190	.000	medium
	2	5	1.462	.408	1.692	.334	.148	-
	2	6	6.681	1.851	1.384	.009	.000	very low
	2	7	8.905	3.127	1.539	.118	.000	very low
	2	8	3.971	1.519	1.481	.026	.000	very low
	2	All above	1.946	1.123	1.844	.608	.050	very strong

Table 8 Regression Results of Predicted Path Relationships (Sample 2: N= 458)

	Dependent variable	Independent variables	t	$\beta$	Durbin-Watson	R <sup>2</sup>	P	Comment (support)
<b>MODEL 1</b>								
H <sub>3</sub> :	2	1	7.209	1.013	1.794	.220	.000	medium
	2	3	28.094	3.656	1.886	.165	.000	low
	2	All above	13.081	2.173	1.696	.381	.000	medium
<b>MODEL 2</b>								
H <sub>4</sub> :	2	1	7.209	1.013	1.794	.220	.000	medium
	2	3	28.094	3.656	1.886	.165	.000	low
	2	4	12.223	1.583	1.872	.119	.000	low
	2	5	5.849	.992	1.915	.165	.000	low
	2	6	23.649	2.705	1.905	.008	.000	very low
	2	7	17.287	2.727	1.892	.004	.000	very low
	2	8	15.093	2.608	1.912	.001	.000	very low
	2	All above	3.592	.967	1.747	.463	.000	strong

Table 9 Research Results

Hypothesis		Support
H <sub>1</sub>	H <sub>1</sub> =Perceived value of physical exercise (as a leisure activity) for aging baby boomers is better predicted by model 1	supported strongly
H <sub>2</sub>	H <sub>2</sub> =Perceived value of physical exercise (as a leisure activity) for aging baby boomers is better predicted by model 2	supported very strongly
H <sub>3</sub>	H <sub>3</sub> =Perceived value of physical exercise (as a leisure activity) for citizens aged 18-45 is better predicted by model 1	medium support
H <sub>4</sub>	H <sub>4</sub> =Perceived value of physical exercise (as a leisure activity) for citizens aged 18-45 is better predicted by model 2	supported strongly

## Discussion

Consumer behavior literature in the sporting goods marketing context has largely focused on: a. socio-cultural perspective of physical appearance (Lee 2003; Kim, 2002; Burton and Netemeyer, 1995; Jackson 1992; Striegel-Moore et al., 1986); b. gender differences regarding to style, comfort and brand name of sporting goods (Park 2002; Taylor and Cosenza, 2002; Solomon and Schopler, 1982); c. gender differences regarding to the symbolic implications of a sporting good (Belk, 2003; Park, 2002).

Based on a series of empirical works from marketing and social science literature [Stroud (2005); Metz and Underwood (2005); Higgins et al. (2003); Tergerson and King (2002); Szmigin and Carrigan (2001); Gilleard and Higgs

(2000); Sherwood and Jeffery (2000); Allison et al. (1999); Frankish et al. (1998); Tappe et al. (1989)], we have tried to investigate a new construct entitled as *perceived value of physical exercise*, (as a leisure activity) in the sporting goods marketing context.

The results of our study provide empirical evidence regarding to the perceptions influence the perceived value of physical exercise (as a leisure activity) in terms of a consumer behavior analysis of a very attractive market of the aging baby boomers with implications in the sporting goods marketing context at a store level.

## **Managerial Implications**

Based on the comparisons among the two samples, it seems that the aging baby boomers is an homogenized group of consumers, where perceptions are not differed by where they live, their marital status their educational background. Not surprisingly the sample 2 because of the big range of different age groups (see 18-45) there are significant differences, regarding to the perceptions, among the age groups and the educational background.

A general examination of the findings show that a common characteristic of both groups seem be the significant differences in their perceptions about the necessity of the physical exercise as a leisure activity. Quiet interesting seems to be the finding regarding to the perceptions of aging baby boomers about the benefits provided by physical exercise. Also interesting seems to be the finding from the second sample (sample 2) where there are some significant differences regarding to the overall appraisal of the net worth of the physical exercise as a leisure activity.

Baby boomers seem to be a very powerful market. Add wellness programs and physical activity to the list of product

categories and services that boomers are influencing. Despite the statistics about the overall national reluctance to exercise, psychographics compiled in the newly released research report, "Active Aging in America, Residential and Commercial Fitness, United States," boomers understand the value of physical activity and are seeking residential communities, programs and facilities to find it.

While the diversity of baby boomers grows increasingly apparent as they age – given an 18-year generational span and they still stand together in some ways, with clearly defined preferences and opinions that distinguish them from other consumers. These generalized characteristics include:

- They are more likely than either younger or older adults to have dependent children at home.
- Despite delayed marriage and high divorce rates, nearly two-thirds are currently married.
- Baby boomers are already in their peak labor force participation years, and in some cases in their top earning years (which are from ages 45 to 54) as well.
- They are less likely than younger adults to change their marital status

through divorce or remarriage, and are less likely to change jobs or move.

- Baby boomers, born after World War II, tend to be much more individualistic.
- They are less happy than other adults with the status quo, and are marked by their skepticism and rejection of authority.
- They are notorious for their willingness to buy on credit and forego saving money.
- Baby boomers have less leisure time than other adults, and claim to feel stressed more often.
- When listing their priorities, baby boomers are more likely than others to focus on education.

The youngest baby boomers now are 55 and will be 65 by the year 2007. It seems that they will be the single most important factor in sporting goods for the next years. As they age, baby boomers will want to stay active in order to stay healthy.

They will want to keep their weight down to look and feel better and live longer. By the turn of the century, one out of three adults will exercise regularly,

up from one in four in 1992 and one out of five in 1987. In their mid life phase, baby boomers will be more active than previous generations were, predicts Tom Doyle, head of research for the National Sporting Goods Association.

By the year 2007, those who fail to exercise will be considered social pariahs on a par with those who do not brush their teeth.

Baby boomers will still want to ski and play tennis-but with a twist. Such activities will have more of a social component and be less combative.

In deference to creaking joints, aging boomers will seek less strenuous activities, such as biking, hiking, backpacking and camping.

Family activities, such as camping, will grow as the importance of family time becomes paramount. Time pressed parents will have to think about family activities, rather than the luxury of going off by themselves.

The recreational aspects of biking, as well as the fitness element, will become more important, witness the growth in sales of bicycles built for two.

Boomers will become bored with walking, which women dominate, and will seek an extra component, say, bird

watching during hiking or backpacking jaunts. Given the interest in the environment, any activity, such as mountain biking, that combines, fitness with the outdoors will be assured of a good future.

Exercise will continue its growth, either aerobic or with equipment at home or in commercial gyms. Younger people will be particularly interested in weight lifting in order to improve their appearance.

Licensed apparel will remain strong along with exercise. Boomers will want to identify with professional athletes and at least look like a jock.

Participants in team sports will still grow in absolute numbers. But they will have dipped as a percentage of the whole because of the "baby bust" that followed the boom.

Aging boomers also will be seeking "safe adventure" to indulge their fantasies, without danger or undue exertion, predicts Jo-Ann Robotti, vice president of Brain Reserve, the trend tracking and marketing firm that was founded by Faith Popcorn.

A sporting goods store could operate a "virtual reality" room that lets a customer hike the Himalayas through the magic of computer simulation. Or it could operate a diving tank that lets swimmers explore a simulated Great Barrier Reef environment

in safety.

Fantasy adventures can make retailing fun again. The watchword will be healthy rather than thin. Jeans makers have recognized expanding waistlines with looser jeans, like Lee's "relaxed fit."

The sporting goods store that caters to time pressed consumers with personalized and customized service will be the winners. By the year 2010, most of the consumers could be shopping on interactive video for such staples and tennis balls and sweatsocks, saving their time for visits to sports boutiques, she predicts.

Nostalgia activities that carry aging boomers back to their childhood in the '50s and '60s will become increasingly popular. Interest in boxing as a fitness activity, for example, is up, even for women. In recognition that women are engaging in boxing moves and pummeling punching bags, if not each other, Everlast is making smaller shorts and gloves to fit women.

Regarding to the domination of the megastores, it seems that will dominate the category in primary and secondary markets of at least 500,000, although niche market opportunities will still abound in smaller markets and specialized

categories.

Athletic footwear, which enjoyed a tremendous boom in the '80s when consumers substituted sneakers for casual footwear, now is a mature market, and sports apparel could represent the next boom.

In merchandising, retailers will employ a total sports concept, with sporting goods equipment displayed along with the associated apparel and footwear.

To make sure of custom fit, purchasers of skis and ski boots could try them out before buying in "virtual reality" rooms. Or buyers of other equipment could try them out on in store practice facilities.

For regular exercise, sporting goods stores could be operating their own tennis clubs or gyms associated with their stores. Personal trainers would help them get the most out of the experience without hurting themselves.

To complete the health picture, sporting goods stores will diversify into nutrition, now an embryonic trend.

### **Limitations**

This study has the following important limitation. The present study involves the use of convenience

samples. It would be desirable for future researchers to use samples that are more representative, this is probably not as serious a limitation as it may appear.

### **Conclusion**

Aging baby boomers seems to be a powerful market. Add wellness programs and physical activity to the list of product categories and services that boomers are influencing.

According to the research results, we accept the second research hypothesis (H2), which means that Model 2 better predicts perceived value of physical exercise (as a leisure activity) for aging baby boomers. This practically means that marketers of sporting goods targeting aging baby boomers should seriously consider as of high importance the set perceptions regarding to perceived value of physical exercise (a. their's appraisal of the necessity of the physical exercise and b. their's overall

appraisal of the net worth of the physical exercise).

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