

## INFLUENCE OF SOME ASPECTS OF PARENTAL SOCIO-ECONOMIC STATUS ON THE ATTITUDE TOWARDS SPORTS

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### Abstract:

The article is based on a research which covered 2,760 mothers and 2,760 fathers (total of 5,520 subjects), parents of Slovenian primary school children. The objective of the presented article was to investigate the characteristics of the socio-demographic structure of the parents of primary school children in Slovenia with regard to gender and participation in sports activity. This research is the first study of the socio-demographic space in sports and it was done by applying the LISREL (Linear Structural Relations) model in order to explain the direct and the indirect effects of five variables (owning a car, a movable property some real estate, age, education and number of children) on the variables of the quantity of exercising done.

The influence of attitudes towards sports on the actual participation in a sports activity is in mothers slightly smaller than in fathers. Owning a car explains more significantly the participation in a sports activity in fathers than in mothers. The owning of a material property has also a larger causal effect on the sports activities participation of fathers than of mothers. Younger mothers are less actively involved in sports, and older fathers are also less active in sports. The more children the mothers have, the less active they are in sports.

The attitudes of mothers and fathers towards sports are associated with the level of their education, but also with the level of education of the spouse and finally with the economic status of the family. The better the living conditions of an individual, the more positive his or her attitudes are towards sports, which consequently also means a more active/regular participation in sports.

**Keywords:** socio-economic status, sport, parents, LISREL model

### DER EINFLUSS EINIGER ASPEKTE DES SOZIO-ÖKONOMISCHEN STATUS DER ELTERN AUF IHRE STELLUNG ZUM SPORT

#### Zusammenfassung:

Die Arbeit basiert auf einer Untersuchung, die 2760 Mütter und 2760 Väter slowenischer Grundschüler (insgesamt 5520 Befragten) umfasste. Das Ziel der Arbeit war es, die Eigenschaften der sozio-ökonomischen Struktur der Eltern slowenischer Grundschüler bezüglich des Geschlechts und sportlicher Betätigung zu untersuchen. Das ist die erste Untersuchung der sozio-demographischen Sphäre im Sport mittels des LISREL (Linear Structural Relations) Modells, um direkte sowie indirekte Auswirkung von fünf Variablen (Besitz eines Wagens, bewegliche Güter, Alter, Ausbildung und die Zahl der Kinder) auf die Variablen des Übungsumfanges zu erklären. Der Einfluss der Stellung zum Sport auf die tatsächliche sportliche Betätigung ist bei den Müttern etwas kleiner als bei den Vätern. Der Besitz eines Wagens erklärt väterliche sportliche Betätigung bedeutender als die mütterliche. Auch materielle Güter haben einen grösseren Einfluss auf die sportliche Betätigung bei den Vätern als bei den Müttern. Jüngere Mütter sowie ältere Väter sind weniger aktiv am Sport beteiligt. Je mehr Kinder eine Mutter hat, desto weniger sportlich aktiv sie ist. Die Stellungen der Mütter und Väter zum Sport sind mit ihrer eigenen Ausbildung, aber auch mit der Ausbildung ihrer Partner Innen sowie mit dem ökonomischen Status der Familie verbunden. Je besser die Lebensbedingungen, desto positiver die Stellungnahmen eines/einer Einzelnen zum Sport und, als Folge dessen, auch mehr Beteiligung daran.

**Schlüsselwörter:** sozio-ökonomischer Status, Sport, Eltern, LISREL Modell

### Introduction

Positive attitudes of an individual towards sports do not mean, however, that these attitudes are to the same extent reflected in the very sports activity that they are engaged in. In the selected population of parents there is an obvious disagreement between what they

think is good (which is revealed in their attitudes towards sports) and what they really do. Namely, the participation of parents in a particular sports activity, especially mothers, is at a very low level (only 11 % of mothers are regularly active in sports), while their attitudes towards sports are on a substantially higher level (Doupona, 1996). This fact has also led us to the decision to construct a causal model

(LISREL model) for the explanation of the participation of parents of primary school children in sports. First of all, it is necessary to emphasise that for the construction of a more accurate causal model, some of the important variables are still missing owing to the fact that we have been limited to the already collected data within the framework of the project whose objective has actually been to investigate the motor and morphological characteristics in relation to the psychological and social dimensions of primary school children (Strel et al., 1993). As an example of the shortcomings we list the number of cars and the number of children in the family. In our case only the number of cars is known (and even this number is not sufficiently defined); however, we do not have any insight into who actually uses a car. As regards the size of the families, only the number of children is known. Thus, we do not know their age structure, which in fact means that the social status of the parents has not been measured in its full complex nature.

The variable GENDER could not have been included into the causal model because it is a nominal variable (LISREL is based on better measurement scales), therefore we have dealt with GENDER as a conditional variable (Saris and Stronkhorst, 1984) in such a way that we have divided the sample according to gender into two subsamples and evaluated the parameters of each of them.

## Methods

5,520 parents have been included in the sample of subjects measured: from this number 2,760 persons were females and 2,760 persons were males - parents of school-age children living in the Republic of Slovenia. The sample was stratified according to regions (9 places), and selected at random inside those regions. The subjects surveyed were completely randomly selected in all the electoral regions of Slovenia (Ormož 309, Tolmin 291, Izola 200, Jesenice 333, Trebnje 320, Metlika 153, Trbovlje 244, Ljubljana 457, Žalec 453). A large similarity of the composition of the surveyed subjects and the composition of the population of Slovenian citizens enables us, taking into account the statistical limitations, to make a hypothetical assessment of the representative opinion and the attitudes of all the parents of primary school children in Slovenia.

7 variables have been dealt with (Table 1).

The survey was carried out by specially trained students of the Faculty of Sport, University of Ljubljana, who were previously acquainted with the objective of the research and the method of surveying.

The data have been collected at the Department for Computer Processing at the Faculty of Sport. The data have been processed on a personal computer using Windows and DOS environments. The statistical program SPSS for Windows and the LISREL program have been used. LISREL is a computer that performs structural equation modelling (SEM). The use of SEM techniques in social science is rapidly increasing, although

Table 1: Variables and measurement scales

Variable	Label	Scale
SOCLR	Age	RATIO
IZOB	Degree of education (1=not finished primary school 8=Master's degree, Ph.D.)	ORDINAL
SOCOTROK	Number of children	RATIO
AVTO	Owning a car (1= none .. 5=two or more)	ORDINAL
PREMIC	Owning goods of permanent value	ORDINAL
URSPAK1	Number of exercising hours per week	RATIO
MPS	Attitudes toward sport (1=strongly disagree 5= strongly agree)	ORDINAL

there is very little evidence that such analyses dominate literature. One commentator has referred to the advent of SEM techniques as a statistical revolution (Kelloway, 1998).

Using the model of linear structural equations (LISREL) we have examined the causal connections on the indirectly measurable variables. The following have been considered:

$x$  - exogenous variables which we used in the theory as an explanation of power; however, we did not search for common causes, but used them to explain the values of the endogenous variables,

$y$  - endogenous variables are the variables whose values are to be explained,

$\xi$  - disturbance of the endogenous variable (these are all those variables omitted in the equations and important in a given process),

$\phi$  - connection between exogenous variables (correlation coefficient)

$\gamma$  - causal effect of an exogenous variable on an endogenous variable,

$\beta$  - causal effect of an endogenous variable on an exogenous variable,

$\psi$  - connection between disturbances.

### Hypotheses

In the present research, the following hypotheses were tested.

H1: Owning a car directly affects the quantity of exercise hours per week.

H2: Owning a movable property (real estate) directly affects the quantity of exercise hours per week.

H3: Owning various material properties (movable) has direct effect on the attitudes of parents towards sports and on the quantity of exercise hours per week.

H4: Age of an individual has a direct effect on the quantity of exercise hours per week.

H5: Age of an individual has a direct effect on the attitudes of parents towards sport and on the quantity of exercise hours per week.

H6: Education of an individual has a direct effect on the quantity of exercise hours per week.

H7: Education of an individual has a direct effect on the attitudes of parents towards sport and on the quantity of exercise hours per week.

H8: The number of children has a direct

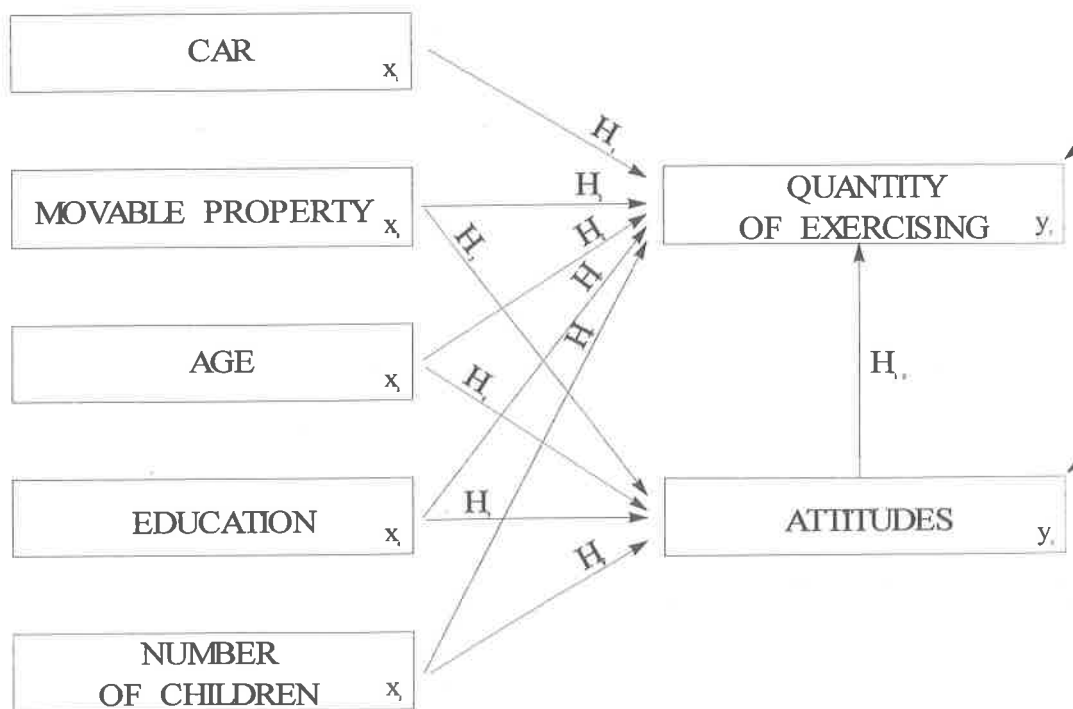


Figure 1: A Conceptual framework - theoretical model (Jöreskog in Sörbom, 1984)

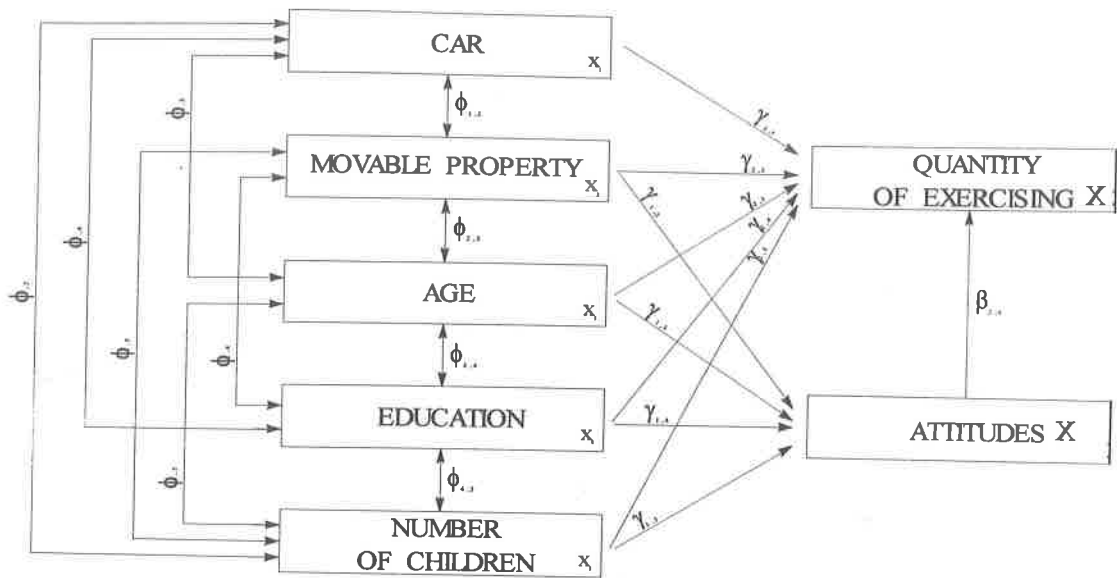


Figure 2: Model in the LISREL language for the explanation of the variable quantity of Exercising with standard designations of the LISREL model (Jöresko and Sörbom, 1984)

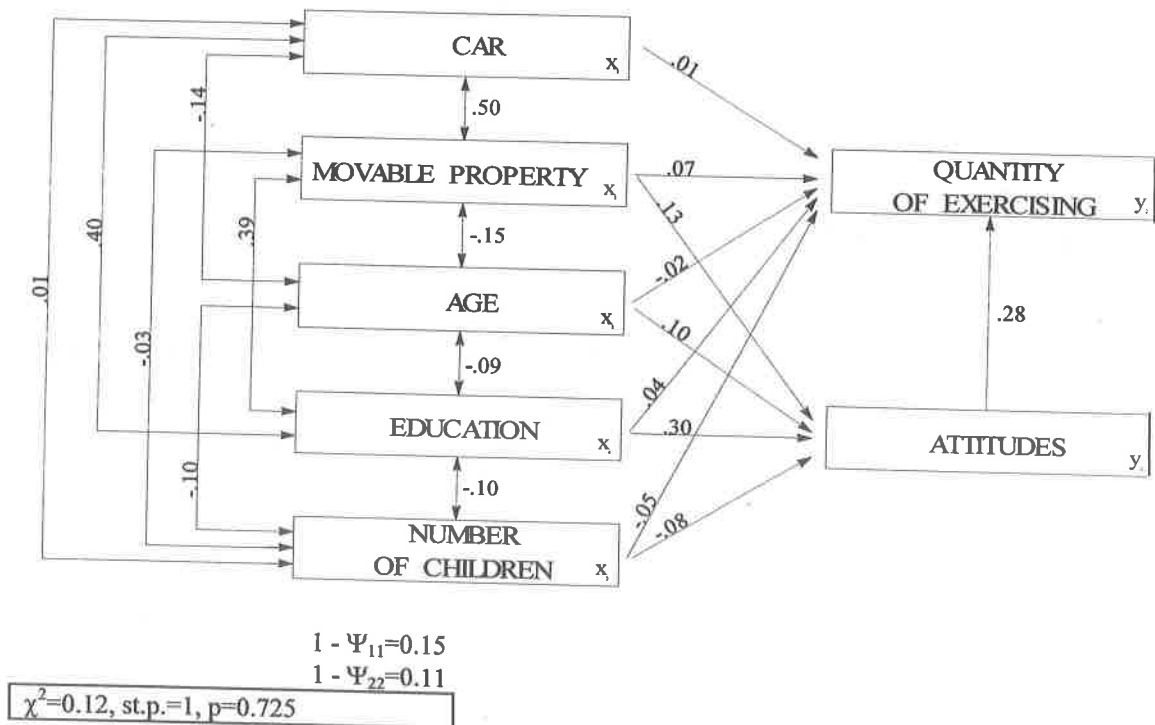


Figure 3: LISREL model for mothers

effect on the number of exercise hours of an individual.

H9: The number of children has a direct effect on the attitudes of parents towards sport and on the number of exercise hours per week.

H10: Attitudes towards sports have a direct effect on the actual number of exercise hours.

In addition to the direct effects of independent variables on the quantity of exercise hours and their indirect effect (over attitudes towards sport) on the quantity of

*Table 2: Standardised evaluations of the parameters of the two causal models, represented in Figures 3 and 4.*

		SE		SE
$\Phi_{12}$	.50	.00	.49	.00
$\Phi_{13}$	-.14	.00	-.12	.00
$\Phi_{14}$	.39	.00	.37	.00
$\Phi_{15}$	.01	.00	.00	.00
$\Phi_{23}$	-.15	.00	-.09	.00
$\Phi_{24}$	.40	.00	.42	.00
$\Phi_{25}$	-.03	.00	-.05	.00
$\Phi_{34}$	-.09	.00	-.10	.00
$\Phi_{35}$	-.10	.00	-.10	.00
$\Phi_{45}$	-.10	.00	-.07	.00
$\gamma_{12}$	.13	.03	.10	.03
$\gamma_{13}$	.10	.02	.11	.02
$\gamma_{14}$	.30	.03	.23	.03
$\gamma_{15}$	-.08	.03	-.11	.02
$\gamma_{21}$	.01	.03	.05	.03
$\gamma_{22}$	.07	.03	.09	.03
$\gamma_{23}$	-.02	.02	.02	.02
$\gamma_{24}$	.04	.03	.00	.03
$\gamma_{25}$	-.05	.03	-.01	.02
$\beta_{21}$	.28	.02	.30	.02
$\Psi_{11}$	.85	.03	.89	0.3
$\Psi_{22}$	.89	.03	.88	0.3

exercising, the mutual effects of independent variables ( $\phi_{12} \dots \phi_{45}$ ) have also been considered in the model.

The parameters have been evaluated by the method of the largest credibility which is incorporated into the LISREL program. Neither of the two models (for mothers and fathers) were rejected. The evaluations of the parameters for standardised variables are given in Table. Standard errors of the parameters are all approximately 0.03.

The percentage of the explained variance of the variable URSPAK1 is relatively small in the model which we did in mothers 11.2% and in fathers 11.8%.

Differences between the sexes can also be noticed in this analysis. The difference lies above all in the explained variance of attitudes towards sports ( $1 - \psi_{11}$ ) which is in fathers twice as much as in mothers. In explaining the actual sports activity participation there exists (although less pronouncedly) an opposite tendency: the variables of movable property,

education and the number of children explain more the attitudes towards sports in mothers than in fathers ( $1 - \psi_{22}$ ). The effect of attitudes on actual sports activity participation is slightly smaller in mothers than in fathers ( $\beta_{21}$ ). Owning a car has a slightly greater causal effect on the actual participation in sports in fathers than in mothers ( $\gamma_{21}$ ).

## Results and discussion

The causal model for mothers shows that among all the four selected independent variables (movable property, age, education, number of children) the education of mothers has the greatest effect on their attitudes towards sports and over these attitudes to their actual sports activity participation. However, the education of mothers alone has only an insignificant direct effect on their participation in sports.

Attitudes have an effect on the mental

preparedness for a certain type of reaction. Therefore, they have an effect on how we perceive and experience certain situations and objects, how we think about them and react to them (Nastran-Ule, 1994, p.77). If mothers have positively formulated their attitudes towards sports, then they also experience a sports activity as a pleasant activity and decide more easily and above all more often to participate in it. Many women consider sports exercises to be a relatively attractive manner of losing weight and they even have a feeling that exercising has a greater effect on the shaping of the body than going on a diet (Doupona, 1996). Hence, the attitudes towards sport "prepare" a woman for the inclusion and participation in physical exercising. Some women even realise later that they actually enjoy a sports activity (a shift from the awareness of the usefulness of physical exercising towards enjoying it).

The age of mothers has also a significant influence, over attitudes, on the quantity of exercise hours. The direct effect of age on sports activity participation shows that the younger the mothers are, the less active they are in sports. In younger women, the wish to have a beautifully shaped body is predominant, while in older women, a well shaped body does not represent a motivation for their participation in sports, as good health and a wish to preserve their mobility (Deem, 1996) are more important to them. However, in their desire for a beautifully shaped body, women are often confronted with prejudices regarding female sports activity participation and over-developed muscle mass. Most often prejudice attempts to discourage women from involvement in sports by pointing out that their muscles will lose tone and become flabby once they stop exercising, and by saying that an exercised female body is not feminine.

Education and the economic status of mothers have, over the attitudes towards sport, the largest effect on their actual sports activity participation. This means that access to cultural values, goods and services of leisure time (in our case sport) is limited due to the fact that the sports activity participation of an individual is determined by the extent of his/her capital. However, this is not only an economic, but also a cultural (e.g., education) aspect.

The analysis has also resulted in the discovery that various social groups have different opportunities in society. This is also reflected in the extent of sports exercises. In addition, women of various social classes have their specific physical habits structured on the basis of the balance between the genders and between the groups.

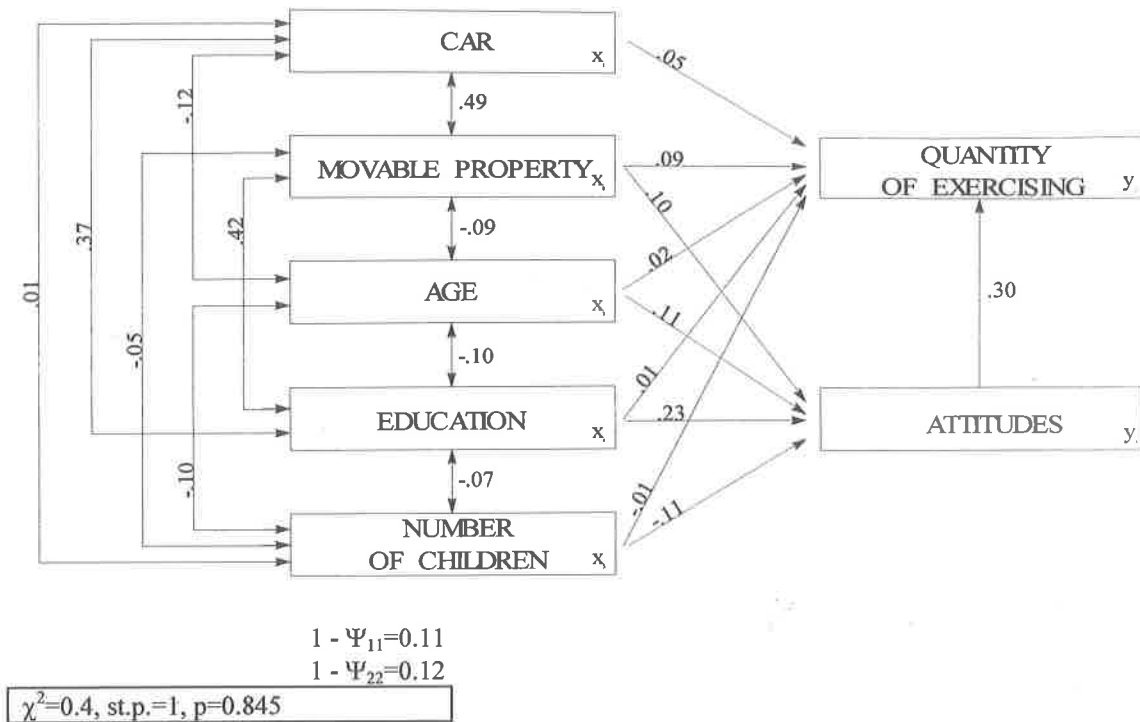
Physical exercising also varies in the life cycle of different social groups. The habits of individual social classes differ also according to the branches of sports in which the individuals or groups are involved. Individual branches of sports have a given status in society. The differences occur also in the types of sports in which women and men are involved (Doupona, 2000).

Among the ten sports with the largest mass participation in Slovenia, men only participate or are interested in football, basketball, tennis and volleyball, while women only participate in morning gymnastics, dancing, aerobics and badminton. Female sport changes more and more as regards its contents (Petrović, et.al, 1999).

Donnelly (1984) calls attention to the fact that sport can be a way of expressing dissatisfaction with the existing society. Subordinate groups use sport to express their opposition or disagreement with the prevalent culture by three types of resistance: political, ethical and subcultural. The last one is associated with the creation of a completely new sport or with radical changes of an existing sport. The changes taking place in female sports can also be viewed from this perspective. "Female sports culture" is what is being dealt with here. This culture can also be understood in an anti-cultural perspective since with its transformation it challenges the traditional male model of sports. However, the question is if the social significance of female sport will confront the orientation of male sport and perhaps even transform it in the future.

Education of parents has, concerning attitudes towards sports, the largest influence on their actual sports activity participation (although this effect is smaller than in mothers). A smaller direct effect of education on a sports activity participation in men can be ascribed to education and training which

Figure 4: LISREL Model for Fathers



takes place at various levels, to a large extent also within the framework of sports.

The development of masculinity as the process of learning power in a patriarchal social structure is gradual and lasts a whole lifetime. In youth, the image of a man's body represents power in society. Sport and masculinity are often the synonyms for competition, courage and power. Hence, to be a man means to be the carrier of masculinity, to have an identity and a social role (Mesner, Sabo, 1994). Many enter the world of sport with an already formed identity on gender which affects their evaluation of a game and sport. The socially built male identity develops and changes with growing-up (by the acceptance of the values of a given society). At a more mature age when physical work is not the embodiment of power anymore, men begin to express their masculinity in other ways. They start to devote themselves to the "substitutes" for the expression of masculinity such as work, training, keeping up-to-date with sports and sports events.

Sport is an activity over which men (boys) and women (girls) learn the differences between the sexes, an activity whereby men take over the role of a "macho man" for which competition is typical. Boys are encouraged

through sport to look upon their body as an object with which they can reach the world of an adult man. Sport is a means of culture over which boys become the bearers of masculinity and patriarchy. Women have no other choice but to adjust to the prevailing rules and assume a subordinate position in society (sport) (Doupona, 2000).

The remaining three variables (real estate, age and number of children) have, concerning attitudes, almost the same effect on the number of exercise hours. In the same way as in mothers, owning the car also has no effect over attitudes on the actual sports activity participation in fathers. However, its direct effect is evident. Fathers owning a car are more involved in sports than those who do not own a car.

It is interesting that the direct effects of the independent variables on the actual sports involvement are less in fathers than in mothers. Thus, in fathers the influence of an economic position, age and size of the family is, above all, significant over their attitudes towards sports. These attitudes are thus those which will decide whether an individual will participate in sports or not.

## Conclusion

By applying the LISREL model on a sample of 5,520 parents of Slovenian primary school children we have tried to explain the direct and indirect effects of five selected indicators of the social status of parents on their participation in sports.

We have reached the following conclusions:

- Both in the direct and indirect effects of the social status on the participation of mothers and fathers in sports it is possible to notice some differences between the sexes.
- The difference lies above all in the explained variance of the attitudes towards sports which is twice as much in fathers than in mothers. However, in explaining the actual participation in sports an opposite tendency is noticed.
- Owning a car and material property

affect slightly more causally the actual participation in sports in fathers than in mothers.

- Younger mothers are less active in sports, older fathers are less active in sports.
- The more children the mothers have, the less active they are in sports.
- The causal model for mothers shows that among all the four selected independent variables (movable property, age, education, number of children) the education of mothers affects the most their attitudes towards sports and over their attitudes to their actual sports activity participation.
- The causal model for fathers also shows that the education of fathers has, over their attitudes towards sport, an extremely large influence on their actual participation in sports (although this influence is smaller than in mothers).

## References

1. Deem, R. (1996). Sport and Physical Activity - how important are they to women's leisure? Women Sport and Health, *European Women and Sport Conference*, Stockholm (unpublished).
2. Donnelly, N. P. Donnelly (1984): *Sport and the Sociological Imagination*. Texas: Texas Christian University Press book.
3. Doupona, M. (1996). *Socio-Demographic Structure of Mothers and Fathers of Children of School Age and their Attitude towards Sports*. (In Slovenian Doctoral thesis), Ljubljana: Faculty of Sport.
4. Doupona M (1995). The Construction of Gender Differences in Sport. *Kinesiologia Slovenica*, pp. 11-16.
5. Doupona, M. (2000): Will orientation of female sport affect male sport culture in the future?. V: Puskala, Pirjo (ur.). *4<sup>th</sup> European Women and Sport Conference*, Helsinki.
6. Kelloway E.K. (1998). *Using LISREL for Structural Equation Modelling*. London: SAGE Publications.
7. Messner, M. A., D. F. Sabo (1994): *Sex, Violence, Power in Sports*. CA: The Crossing Press, Freedom.
8. Nastran-Ule, M. (1994). *Temelji socialne psihologije*. [Fundamentals of social psychology] Ljubljana: Znanstveno in publicistično središče.
9. Petrović, K., Ambrožič, F., Sila, B., Doupona, M. (1999). *Športnorekreativna dejavnost v Sloveniji 1998: (temeljni izsledki)*. [Sports-recreational activity in Slovenia 1998] Ljubljana: Fakulteta za šport, Inštitut za kineziologijo.
10. Saris, E. W., H. Stronkhorst (1984). *Causal Modelling in Nonexperimental Research*. Amsterdam: SRF.



11. Strel, J. et al. (1993). *An analysis of the developmental trends of motor abilities and morphologic characteristics and an analysis of their relations with psychological and sociological dimensions of Slovenian children and youth between the age of 7 and 18 in the period of 1970 - 1983 - 1993.* [In Slovenian] Ljubljana: Fakulteta za šport.

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