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A French classification for physical and sporting activities: 335 disciplines, 34 families, 9 classes

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Session: Classifications

In the "2000 Survey on sport practices", approximately 31 million French people between 15 and 75 years of age indicated that they took part in physical and sporting activities. The many and varied activities reported ranged from highly-specialist disciplines such as hapkido or naginata to very popular sports such as football or petanque. The 90 single-sport federations approved in 2001 by the Ministry for Youth and Sports, which cover approximately 300 recognised sporting disciplines, are further confirmation of this wide range of interests.

In the context of the preparation of economic accounts for sport, for which it is necessary to have a general overview of involvement in sports, all physical and sporting activities have been classified on the basis of demographic and economic data using a statistical method of data analysis. In the same way as the French classification for occupations and socio-professional categories – which divides thousands of professions into a small number of families, used by everyone – the Classification of Physical and Sporting Activities has divided all sporting and physical activities into the following nine classes: "independent leisure activities requiring special equipment", "social and leisure activities",

"highly-organised activities", "individual sports requiring special equipment", "equipment-intensive activities", "individual, mass activities", "motor sport", "semi-professional" and "professional" sports.

The "2000 Survey on sport practices" [1] covering all physical and sporting activities reported by people from 15 to 75 years of age, led to 34 activity families. Only rambling and hunting were considered to be leisure rather than sporting activities. These 34 families were defined so as to be consistent with the fields covered by the single-sports federations, in order to provide a parallel view of sporting activities in general and "institutionalised" sport (*i.e.* registered sport practices). Many of these activities are accessible to everyone, regardless of their age or their physical fitness, and can be practised at different levels. The more accessible the activity, the greater the number of people reporting that they took part in it. On the other hand, certain sports are less widely practised, due to the conditions required for coaching and training, or the special facilities or space required. The size of these families, expressed as the number of activities reported by people between 15 and 75 years of age, is very variable.

The hierarchy between the families, based on these activities, differs from that based on membership of single-sport federations for two main reasons. Firstly, account has not been taken of people under 15 years of age. As a result, the role of "youth" sports has been underestimated. Secondly, the technical constraints of a sporting activity (degree of expertise, training) sometimes require a registered practice. For example, although there were over 500 000 registered members of the judo federation in 2000, the survey reports that just 180 000 people between 15 and 75 years of age practice judo. These apparently contradictory data can be explained by the high proportion of people under 15 involved in this sport and attending training sessions (Table 1).

These 34 families defined are still too many to give the overview of sport required in order to prepare economic accounts [2]. A 9group system has therefore been developed by an interdiscipline working group on the basis of demographic and economic criteria using a data analysis technique - the ascending hierarchical classification. Although the use of such a method does have the advantage of objectivity, the classification is not completely unbiased and depends in particular on the criteria selected: not only do they need to be relevant for analysis purposes, but they must also provide information for each activity family. The selection of criteria for drawing up the classification is therefore dependent on the quality and reliability of statistical sources. Twelve criteria were finally selected (Box 1).

The criterion "TV media coverage" having proven to be the most discriminating, the classes obtained are set out here by order of media coverage. The names for the classes were chosen so as to give a summary, in just a few words, of their main characteristics (Table 2).

The activities included in each class can be described as: "independent leisure activities requiring special equipment", "social and leisure activities", "highly-organised activities", "individual activities requiring special equipment", "equipment-intensive activities", "individual mass-participation activities", "motor sport", "semi-professional" and "professional" sports.

Today, thanks to this classification, any activity, whether or not organised by a sports federation, belongs to one of the 34 families, and can be allocated to one of the nine classes in the classification of physical and sporting activities (Box 2: Definitions). This classification will be used to study changes in sport for at least some years. But it is in fact its use by players in these fields that will confirm both its usefulness and relevance.

The 9 classes in the Classification for Physical and Sporting Activities

Independent leisure activities requiring special equipment

These individual activities, closely related to leisure activities, do require some special equipment. These include fishing, body-building, roller-skating, rock-climbing, potholing, canyoning, mountaineering and bowling. They reflect how activities have adapted to changes in social demand geared towards a natural environment, gliding sensations (limited here to gliding "on the ground") or hedonistic behaviour. The number of registered participants, which is rising steadily, is still low, at around 160 000, as compared to the 9.5 million participants according to the survey. These activities receive little media coverage and the budgets of the federations involved are limited.

Table 1: The 34 families of physical and sporting activities: practices reported and membership of

| Family of physical and sporting activity | Basic names in the "2000 Survey on sport practices", by group | Reported number of participants (1) | No. of registrations and other licences issued in 2000 (2) | |
|--|---|--|--|--------------------------------------|
| | | Thousands | Thousands | Proportion of people under 15 (as %) |
| Swimming – bathing | swimming, diving | 14 548 | 376 | 33 |
| Cycling | cycling, off-road cycling and cycling orienteering | 12 739 | 217 | 13 |
| Track and field events | triathlon, pentathlon, jogging | 7 109 | 204 | 40 |
| Gymnastics | keep-fit, yoga | 6 052 | 223 | 68 |
| Bowls | petanque, boules | 6 026 | 615 | 7 |
| Winter sports | downhill skiing, cross-country skiing, snowboarding | 5 314 | 185 | 26 |
| Football | football, futsal | 4 633 | 2 150 | 47 |
| Tennis | tennis, long court | 3 585 | 1 057 | 36 |
| Fishing | rod fishing, fly fishing, sea fishing | 3 047 | 25 | 12 |
| Body building | body-building, weightlifting | 2 599 | 22 | 8 |
| Table tennis | table tennis | 2 338 | 175 | 38 |
| Rock climbing, | rock climbing, potholing, via ferrata, canyoning, | 1 888 | 67 | 17 |
| mountaineering | mountaineering | | | |
| Roller-skating | roller-skating, skate-boarding | 1 860 | 39 | 50 |
| Badminton | badminton, squash, Basque pelota | 1 645 | 111 | 17 |
| Basketball | Basketball | 1 352 | 437 | 60 |
| Volleyball | volley-ball, beach volley-ball | 1 238 | 96 | 25 |
| Walking | rambling, hiking, trekking, orienteering | 1 210 | 149 | 8 |
| Dancing | acrobatic dancing, hip-hop, tap dancing | 1 057 | 38 | 24 |
| Horse riding | horse-riding, "courses camarguaise et landaise" | 926 | 433 | 52 |
| Sailing | sailing, dinghy sailing, wind-surfing | 886 | 258 | 14 |
| Other team sports | handball, baseball, grass hockey, American football | 666 | 309 | 53 |
| Other martial arts | karate, aïkido, taekwondo | 614 | 296 | 53 |
| Golf | Golf | 602 | 292 | 6 |
| Ice sports | ice-skating, curling, sledging, ice-hockey | 494 | 41 | 57 |
| Combat sports | boxing, kick-boxing, Thai boxing, wrestling | 480 | 85 | 37 |
| Water sports | water-skiing, surfing, sand yachting | 438 | 41 | 24 |
| Rugby | 13-aside, 15-aside rugby | 426 | 290 | 38 |
| Motor sports | motor sports, motorcycling, motocross | 399 | 106 | 35 |
| Rowing, canoeing, | rowing, rafting, canoeing, kayaking, jousting | 358 | 158 | 33 |
| kayaking | | | | |
| Shooting | archery, target shooting, clay-pigeon shooting | 250 (e) | 235 | 13 |
| Judo | Judo | 180 (e) | 530 | 66 |
| Aeronautical sports | planes, gliders, microlights, parachuting | 150 (e) | 166 | 2 |
| Ten pin bowling | ten pin bowling | 80 (e) | 26 | 5 |
| Fencing | Fencing | 50 (e) | 98 | 50 |

Scope of the "2000 Survey on sport practices": population between 15 and 75 years of age
 Results for the approved single-sports federations (annual survey conducted by the Ministry for Youth and Sports)

⁽e) Estimate based on very small samples

Box 1:

The Classification of Physical and Sporting Activities developed through data analysis

The statistical method used to develop the Classification of Physical and Sporting Activities identifies uniform groups (or classes) on the basis of a range of items – in this case the **34 activity families defined** – described through quantitative or qualitative criteria – in this case the **12 socio-economic and demographic criteria** (listed below).

The aim is that each class should include items of a similar nature in terms of the criteria used, and that the classes should be properly differentiated, once again on the basis of these criteria. The method used, ascending hierarchical classification (AHC), works by successively grouping factors and provides a system of interlinked classes defining a breakdown into any number of classes a priori. The number of classes selected (9 in this case) is based both on considerations relating to the objectives of the classification – to have a small number of classes – and on statistical considerations. This method of classification, which is objective as it is based on computer algorithms, is currently used as an assistance for the building of classifications.

The 12 socio-economic and demographic criteria used are as follows:

- the "type of practice": individual, duel, in teams
- the equipment required: none at all to high level
- the number of participants between 15 and 75 years of age
- the proportion of women in the number defined above
- the number of registered participants included
- the average age of participants between 15 and 75 years of age
- the proportion of young people among registered participants
- the number of people involved in this sport at a high level
- the federation budgets
- the budget in the professional sector
- the broadcasting on terrestrial networks expressed as hours of television
- the press coverage in L'Equipe (French main sports newspaper)

These criteria are broken down into 5 parts:

type of sport: equipment required and type of practice,

demography: number of participants, their average age, proportion of female participants, proportion of young people registered,

high performance: professional budget, number of people participating at high level.

degree of organisation: proportion of registered participants, federation budgets,

media coverage: television broadcasting, amount of coverage in L'Equipe.

A document describing the classification is available at the statistical office and on the Ministry of Youth and Sports website (http://www.jeunesse-sports.gouv.fr/).

It provides details of the structure of the classification, and describes each of the classes, highlighting the main common characteristics of the activities included.

Table 2: Classification of physical and sporting activities

| Activities | Families | Main common points | | | |
|---------------------------------|--|---|--|--|--|
| INDEPENDENT LEISURE ACTIVITIES | Fishing, body building, rock climbing, | Few high level participants | | | |
| REQUIRING SPECIAL EQUIPMENT | mountaineering, roller skating, ten pin | Limited media coverage | | | |
| | bowling | | | | |
| SOCIAL AND LEISURE ACTIVITIES | Walking, bowls, table-tennis, badminton, | Many participants | | | |
| | dancing | Limited media coverage | | | |
| HIGHLY-ORGANISED ACTIVITIES | Judo, other martial arts, fencing, | Disciplines requiring proper training | | | |
| | shooting, aeronautical sports | Limited number of participants | | | |
| INDIVIDUAL ACTIVITIES REQUIRING | Ice skating, water skiing, surfing, | Activities requiring special equipment | | | |
| SPECIAL EQUIPMENT | windsurfing, rowing, canoeing, golf | Practised on an individual level | | | |
| EQUIPMENT-INTENSIVE ACTIVITIES | Horse riding, sailing | Activities requiring highly specialised equipment | | | |
| | | Federations well funded | | | |
| INDIVIDUAL MASS-PARTICIPATION | Swimming, cycling, track and field | Very popular activities | | | |
| ACTIVITIES | sports, gymnastics, winter sports | Federations well funded | | | |
| MOTOR SPORT | Motor sports | Activities requiring specialist equipment | | | |
| | | Special identity | | | |
| | | Extensive media coverage | | | |
| SEMI-PROFESSIONAL SPORTS | Tennis, basketball, volleyball, other team | Extensive media coverage | | | |
| | sports, combat sports | Not practised on an individual level | | | |
| | | Significant professional budget | | | |
| PROFESSIONAL SPORTS | Football, rugby | The most extensive media coverage | | | |
| | | Significant professional budget | | | |

Social and leisure activities

Walking, petanque, billiards, badminton, squash, table tennis and dancing are all easily accessible. The federations that organise these sports that are widely-practised, although largely ignored by the media, have limited resources. Sporting aspects aside, these are essentially leisure activities, given that on account of their convivial and social dimension, they are not solitary pastimes. They are frequently reported as holiday activities and often mentioned by older people. Some, such as badminton, billiards, squash and table tennis have witnessed an increase in the number of licences held, whilst in more traditional activities such as "boules" and "pétanque", organised play seems to be declining. The people involved are slightly older, with a greater proportion of women, than for other independent leisure activities requiring equipment. Women account for 37% of all those taking part in "social and leisure activities", but for only half as many of those registered in the single-sport federations concerned.

Highly-organised activities

Martial arts, aeronautical sports, fencing and shooting cannot easily be practised without proper training and supervision. Furthermore, the figures reported for people from 15 to 75 years of age might not reflect the scale of these sports judging from the number of registered participants. However, the organised practise of these sports appears to be stagnating. These sports, practised at professional level to only a limited extent, receive very little media coverage, except during the Olympic Games.

Individual activities requiring special equipment

Golf, ice-skating, water-skiing, rowing and canoeing are individual activities that require special facilities: a lake, a golf course, a beach or a skating rink. Access to these activities is somewhat limited as the cost of the facilities or equipment required is not negligible. The demographic weight of golf is predominant in this class of sporting activities.

Equipment-intensive activities

Requiring even more equipment than the previous class, activities like sailing and horse riding, categorised as "equipment-intensive activities", call for special equipment and skills and can be enjoyed in a natural environment.

Box 2:

Definitions

Activity Families : 34 activity families, which are groups of basic activities, for which the 12 criteria could be taken into consideration and can be updated.

Basic activity: Activity reported in the "2000 Survey on sport practices" which may often be identical to a discipline or which may include several disciplines, but which is not necessarily controlled by a sports federation.

Discipline: Basic sporting discipline. The term "discipline" tends to be used in relation to sports federations which organise and develop disciplines which may in some cases be more detailed than the basic activity.

For example: for the basic activity "fencing", the following disciplines have been identified: foil, sabre and sword.

Criteria: These may be qualitative or quantitative. They define activity families from both a socio-economic and demographic point of view. Information is provided for each activity family, i.e. a numerical value can be given for them.

Mode: For each quantitative criterion, the 34 activity families have been sorted on the basis of values relating to the criterion. This ranking makes it possible to define 4 uniform sections to which a "mode" value has been allocated, generally from 1 to 4. Qualitative criteria have either 3 or 4 modes.

Class: The classification technique groups the 34 activity families into 9 classes. These have the modes of certain criteria in common.

Individual mass-participation activities

Sports such as swimming, cycling, track and field sports, gymnastics and winter sports, often learned as children, are long-standing, universal disciplines enjoyed by many. The millions of people taking part can be divided by level: the "track and field sports" family includes occasional joggers as well as top-class runners. Without a doubt, in many cases, these activities are done for fitness purposes rather than for sporting achievement. Thus the number of registered participants, which in 2000 stood at approximately 1.2 million, mainly young people under 15 years of age, appears to be rather low compared to the number of people reporting that they took part in these activities. At the same time, as these are also Olympic sports, international competitions attract over a quarter of the top-level sportsmen and women registered with the Ministry of Youth and Sports. The federations concerned are relatively well funded.

Motor sport

Motor sports also require special equipment and focus on the use of power-drive equipment and motor vehicles. They have their own special identity, involve a limited number of participants, only a few of whom are female. From a financial point of view, these sports receive considerable media coverage and attract high-level funding.

Semi-professional sports

This class, which includes basketball, handball, volley-ball, baseball, grass hockey, tennis and combat sports, covers team and duel sports. They may be run professionally or are professional sports in the making. They account for a total of just under 2 million registered participants, with a rise of 4% between 1998 and 2000, equal to that in professional sport. However, these activities differ from football and rugby in as much as they receive less media coverage and are enjoyed by a significantly greater proportion of women: women account for 35% of all participants between 15 and 75 years of age and 36% of registered participants.

Professional sports

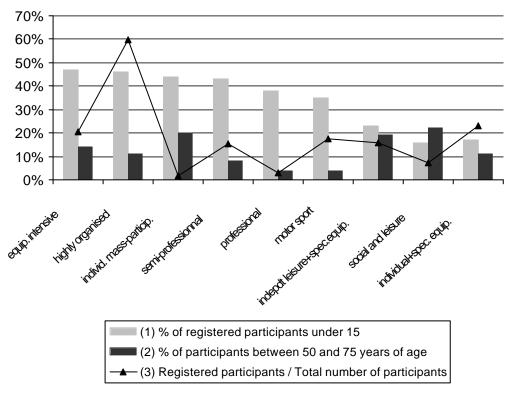
Football and rugby are characterised by the fact that they are very frequently on the television or covered by sports magazines and newspapers. There is no denying of the popularity of these sports, promoted in some cases by the success of national teams. Although played by few women or people over 50 years of age, they are enjoyed by a great many. These sports, particularly football, are extremely popular and attract a high level of revenue. The number of registered players, 44% of whom are under 15 years of age,

rose by over 4% between 1998 and 2000. These two disciplines account for 2.4 million registered players – a quarter of all single-sport registrations.

Activities involving varying degrees of training and supervision depending on the class involved

This breakdown into 9 families aims at defining a framework for economic and demographic accounts for sporting activities. It is illustrated here by a comparison of the extent to which they are practised overall and by registered participants. The level of organised practice for the population between 15 and 75 years of age is illustrated in the following graph, together with two demographic indicators: the proportion of young people registered to participate in these activities, and older participants in the 50 to 75 year old age group.

Graph
Total number of participants and number of registered participants in 2000



- (1) Number of registered participants under 15 (as %) as a proportion of the total number of registered participants.
- (2) Number of participants between 50 and 75 years of age as a proportion of the population between 15 and 75 years of age (as %)
- (3) Registered participants/Total number of participants for population between 15 and 75 years of age (as %) <u>Note on reading the graph</u>: classes are ranked in decreasing order of the proportion of young people who are registered participants.

Thus for class "equipment-intensive activities", 47% of registered participants are under 15, and 14% of all participants between 15 and 75 years of age are over 50.

It is also possible to evaluate the "registered participants/total number of participants" ratio, calculated for the population between 15 and 75 years of age, at approximately 20%.

In individual mass-participation activities, the number of registered participants, which was approximately 1.2 million in 2000, consisting largely of young people under 15 years of age, seems to be low in relation

to the number of people reported as taking part in these sports (Table 3). The general concept of physical and sporting activity in the fields reported (e.g. utilitarian cycling, bathing) results in a very high ratio between overall participation in a sport and the number of licences held by people between 15 and 75 years of age.

Table 3
The 9 classes of physical and sporting activities: number of participants and membership of single-sport federations

| Name and content of the 9 classes | Physical and sporting activities reported in 2000 by people between 15 and 75 years of age | | | No. of registrations and other licences issued by single-sport federations in 2000 | | | |
|--|--|-----------------------|---------------------------------------|--|-----------------------|-----------------------------|------------------------|
| | Number in thousand s | Proportion of women % | Proportion aged 50 or over % | Number in thousands | Proportion of women % | Proportion under 15 % | Change 00/98 (1) |
| Individual mass-participation activities | 45 800 | 49 | 20 | 1 204 | 43 | 44 | -4.6 % |
| Social and leisure activities | 12 300 | 37 | 22 | 1 088 | 18 | 16 | 0.9% |
| Independent leisure activities requiring special equipment | 9 500 | 29 | 19 | 200 | 28 | 23 | 8.7% |
| Semi-professional sport | 5 100 | 35 | 8 | 1 985 | 35 | 43 | 4.4% |
| Professional sport | 7 300 | 8 | 4 | 2 440 | 2 | 38 | 4.3% |
| Individual activities requiring special equipment | 1 900 | 38 | 11 | 531 | 32 | 17 | 5.4% |
| Equipment-intensive activities | 1 800 | 43 | 14 | 691 | 64 | 47 | 8.2% |
| Highly organised activities | 1 200 | 24 | 11 | 1 325 | 20 | 46 | -1.5% |
| Motor sport | 400 | 13 | 4 | 107 | 9 | 35 | Ns |

⁽¹⁾ Scope of federations remaining unchanged

The same is also true for "independent leisure activities requiring special equipment", where the number of young people receiving training or supervision is low. The role of young people in organised sport is also limited in other leisure-related activities, known as "social and leisure activities".

In contrast with these usually individual sports, whose federations generally have a limited budget, "professional" and "semi professional" sports tend to be team sports, enjoyed mainly by young males, with supervised training sessions. These two classes together with motor sports, attract the highest level of funding generated by sport. The ratio between registered participants and total participants for the population between 15 and 75 years of age, is of the same order as the two classes of "equipment-intensive activities" or "individual activities requiring special equipment". The number of registered participants has risen significantly in a two-year period. Almost half of all registered participants are under 15 years of age in equipment-intensive activities as compared to 17% for individual activities requiring special equipment.

The number of registered participants is closest to the total number of participants in the 15 to 75 years age group in "highly-organised" activities, which involve mainly younger people.

- [1] Ministry of Youth and Sports Stat Info n°01-01 "La France sportive", initial results of the "2000 Survey on sport practices", Patrick MIGNON and Guy TRUCHOT
- [2] Ministry of Youth and Sports Stat Info n°01-02 May 2001 "Le poids économique du sport ", Statistical Mission.