

Preferences and choices in judo. Finding a logic of progression for learning/teaching this activity in a school environment.

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The starting point of our study lies in the observation of a gap between the description of judo as it was made by its founder and that which is made by some authors in the world of Physical Education related to the fact that judo is not practised much in school physical education classes in France .

Historically, at the beginning of the century judo was described as a physical education method aiming at two objectives: on one hand mutual aid and prosperity, and on the other hand on how to use one's energy in an optimal way. Learning it or teaching it should be done keeping three points in mind: the aims, the technics, the fight. Two training methods are recommended: free fighting exercises, with no stakes (randoris) and codified exercises (katas). Three ways of practising judo can be specified:

competition, training (fights without stakes, technics, katas) and self-defence.

In the world of physical education a general agreement exists as to the aims. Judo or combat physical exercises (PCA) lead towards the aims of physical education (security, responsibility solidarity, health, citizenship).

The gap lies within specificity. Obtaining the result (about the victory on the opponent, about the knowledge on how to fight) is for some, too often shown as the unique particular objective. Some abilities are described in the Physical Education programs (1996), (accepting confrontation, expressing oneself in a non-risk fight, applying and taking advantage of the necessary technical elements), for others, some particularities are added (opposition-cooperation, duel-duet). Whatever, PCA are not much practised in Physical Education, 4% of the Physical and Education official school-programs (Barrué 1998) and judo lies at the 15th rank among physical activities organised by physical education teachers (Bourreau 1997).

To try to understand the fact that though judo and PCA are considered educational they are poorly represented in schools we have directed our research on the following points:

Should judo or "knowing-how-to-fight" be taught ? Could a better knowledge of judo facilitate the practice of PCA combat sport activities ?

DATA COLLECTION

We asked different groups of people to classify their preferences about judo. We have given questionnaires to :

groups of judo-experts :

- 106 judo teachers, age (43,16 ± 12,57, dan (4,32 ± 1,15):

groups of learners :

- 73 physical education teachers, age (29,32 ± 8,60)

- 31 judokas in the olympic French team, age ($23,77 \pm 3,25$), dan ($2,4 \pm 1,28$)
- 46 judokas from Amiens excellence training group, age ($17,04 \pm 1,26$), dan ($0,41 \pm 0,59$)

- 139 students from secondary schools, age ($11,37 \pm 0,66$)
- 67 club young judokas, age ($11,07 \pm 1,62$)
- 128 college students, age ($18,82 \pm 2,59$)

Those 608 persons were asked to classify 7 items divided into 3 groups, applying Antoine de Condorcet's mathematical theory on elections:

- one item for the aims
- 5 items for the specific objectives
- one item for the general objectives.

The items of the questionnaire have been selected by differentiating (Famose, 1990) what is realised to win (result objectives) from what is realised to improve one's level (ability objectives).

Each item is opposed to the others and for each choice the questioned has to make a statement. With 7 items there are 21 possible choices. With this method we avoid the mathematical bias brought up by a simple list classification and at the same time it is qualitative (due to the statement of the items) and quantitative (due to the number of comparisons offered). The majority of statement expressed leads to a classification which enables to compare each group questioned.

RESULTS :

		Items						
		Aims	Ability objectives (- opposition)		Result objectives (+ opposition)		General objectives	
Number	Kind	Learning to respect one's opponent	Learning technics, to improve oneself	Obtaining grades (belts)	Learnin g to defend oneself	Winnin g fights	Winning medals	Being fit
106	Judo teachers	1	2	6	4	5	7	3
43	Male Physical education teacher	1	2	6	4	5	7	3
30	Female Physical education teacher	1	2	6	4	4	7	4
18	Male judo French team	5	3	6	6	2	1	4
13	Female judo French team	4	3	7	6	2	1	5
30	Male Amiens judo training group	4	2	7	6	1	4	4
16	Female Amiens judo training group	4	2	7	6	1	5	3
15	Male club beginners, white to yellow belt	2	2	4	1	4	6	7
37	Male club advanced level, orange to green belt	1	2	6	4	5	7	3
15	Female club advanced level, orange to green belt	2	3	4	1	6	7	5
70	Male first grade school	2	3	4	1	5	5	5
69	Female first grade school	3	2	6	1	5	7	4
62	Male sport students, 1 st year	1	2	6	3	5	7	4
30	Female sport students, 1 st year	1	2	5	3	4	7	6
9	Male literature students, 1 st year	2	3	6	1	5	7	4
27	Female literature students, 1 st year	2	3	5	1	6	7	4

Fig. 1 – General results

Reading in column of the picture materializes an evolution of the preferences according to the groups.

RESULTS ANALYSIS

The experts favour the objectives and aims of mastership. "Learning to respect one's opponent" and learning technics to improve oneself are positively preferred to "winning medals" and "winning fights". Judo is an olympic combat sport, but before anything it is an educational activity.

Physical Education teachers have a similar classification. For women P.E. teachers the equality between the items "learning to defend oneself", "winning fights" "being fit" does not call the classification of other items into question. In that group there is no CPA specialist and surprisingly the classification they produce is about the same as that of other judo teachers.

The French team judokas make no error, men and women aim at obtaining medals in great championships. This is not yet the case for the judokas in the Amiens excellence center, they are still in an environment toward selection, aiming at reaching the highest level. They rejoin the position of their elders on the items "learning to defend oneself" and "obtaining grades" (belts)

Club beginners and first grade school children rank "learning to defend oneself" and "learning technics, improving one's level" first. The item "winning medals" is ranked last or before last. After a year and a half of practice (after the orange belt) the order of choices differs. Young judokas have learned the values acknowledged by their judo teachers. Girls remain more sensitive to the choice "learning to defend oneself".

Sport students, future physical education teachers, (there are no CPA specialist in that group), who have not practised these PCA express a classification almost identical to that of their physical education teachers. Students in literature make a classification near to that of school-beginners.

CONCLUSIONS

Judo seems to be a good model for a better understanding of CPA. There exists three ways of practising it : competition, self-defence, and technics (katas being part of it). These different ways of practice make it possible to reach some specific objectives (development and improvement of adapted movements, knowing the rules, working out strategies and tactics). This is not the only model existing, Karate offers the same type of practice.

From the different populations questioned, competitors as one group rank "winning medals" and/or "winning fights" in the first place.

The others who are not engaged in the practice of a high-level competitive sport favour the aims and objectives relating to ability rather than to the other items.

These different classifications also show that different social groups (school, club) pass "references" on, that can be met in the choices. Very rapidly young judokas classify their choices as their teachers do. Same with the students.

Judo, and by extension CPA cannot be reduced to the only fight.

Nevertheless this is often the way it is represented in physical education in France. The teaching of judo (and by extension of Combat Physical Activities) has several dimensions to offer (the aims and at least two specific objectives), during practice as well as during evaluation.

For example:

Objectives/Learning technics, improving and learning to defend oneself.

or

Objectives/Learning techniques, improving oneself and winning fights.

In this manner, judo (and by extension CPA) should be utilised more extensively in physical education classes.

PERSPECTIVES:

Why and how have sport students taken the values of their secondary school physical education teacher over (as young judokas do) when other students have not ? The recent development of a computer application now enables us to do other types of inquiries, implying other activities and other populations (this, on a wider scale) and to compare the results obtained to other investigations.

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APPENDICES

Methodology of the spoliation :

7 items are opposed one by one, we get 21 comparisons thus. This list of 21 comparisons is mixed in an randomized way. The chosen user, for every comparison by pair, one of the two items. In our example (Fig. 2) the chosen item is underlined :

<u>* item 1</u>	* item 2	<u>item 3</u>	item 5	<u>item 6</u>	item 3	item 1	<u>item 3</u>
<u>item 3</u>	item 4	<u>item 6</u>	item 4	<u>item 4</u>	item 2	item 7	<u>item 2</u>
item 5	<u>item 1</u>	<u>item 4</u>	item 7	<u>item 6</u>	item 2	<u>item 1</u>	item 4
item 1	<u>item 6</u>	<u>item 3</u>	item 2	item 5	<u>item 4</u>	<u>item 1</u>	item 7
item 7	<u>item 3</u>	item 5	<u>item 6</u>	item 5	<u>item 7</u>	<u>item 6</u>	item 7
<i>Matrice 1</i>		<i>Matrice 2</i>		<i>Matrice 3</i>		<i>Matrice 4</i>	

Fig. 2 - Questionnaire

* It is necessary to read: in the comparison Item1–Item2, the item1 has been preferred to the item2

To strip the whole of the questionnaires, one reports for every investigation, the choices in a first matrix (Fig. 3), while noting horizontally for every item the value 1 if it has been chosen and the value 0 in the contrary case. One adds in the slots the values gotten in the following investigation.

In the matrix we give below, in fictional example, the results for a college of 5 voters.

Items	Item 1	Item 2	Item 3	Item 4	* Item 5	Item 6	Item 7
* Item 1		5	1	4	* 3	1	3
Item 2	0		2	2	4	2	4
Item 3	4	3		3	4	1	4
Item 4	1	3	2		4	2	3
Item 5	2	1	1	1		1	1
Item 6	4	3	4	3	4		4
Item 7	2	1	1	2	4	1	

Fig. 3 - Results for a college of 5 voters

* It is necessary to read: in the comparison Item1–Item5, the item1 has been preferred 3 times to the item5

Then one makes the matrix of the majorities. If the sum of each case of the first matrix is equal or superior to the majority of the group one reports the value 1 for this case in a second matrix (Fig. 4). The order of the preferences of them investigated is obtained while making the sum of each lines of the matrix below, then while calculating the rank. The absence of equality in these gotten scores, for the group, is sign of consistency in the preferences. It is what we get here :

Items	Item 1	Item 2	Item 3	Item 4	* Item 5	Item 6	Item 7	Sum	Rank
* Item 1		1		1	* 1		1	4	3 rd
Item 2					1		1	2	5 th
Item 3	1	1		1	1		1	5	2 ^d
Item 4		1			1		1	3	4 th
Item 5								0	7 th
Item 6	1	1	1	1	1		1	6	1 st
Item 7					1			1	6 th

Fig. 4 - Matrix of the majorities and preferences orders

* It is necessary to read : In the comparison Item1–Item5, the Item1 having been preferred to the majority to the Item5 (Fig. 3), one marks 1

Questioned having to indicate their choice to all combinations, it is possible to compare the orderings of a population to another.

Questionnaire proposed :

Club :

Date :

For each line, in the four matrix, you had to surround your preferred expression. You have finish to fill the questionnaire when you have surrounded 21 expressions.

To you, judo is rather :

Learning to defend oneself	Winning fights
Learning to respect one's opponent	Winning medals
Being fit	Obtaining grades (belts)
Obtaining grades (belts)	Learning technics, to improve oneself
Winning fights	Winning medals

Matrix 1

Learning technics, to improve oneself	Learning to defend oneself
Obtaining grades (belts)	Learning to respect one's opponent
Winning medals	Learning technics, to improve oneself
Learning to respect one's opponent	Learning technics, to improve oneself
Obtaining grades (belts)	Winning fights

Matrix 2

Winning fights	Learning technics, to improve oneself
Learning to defend oneself	Winning medals
Being fit	Learning to defend oneself
Learning technics, to improve oneself	Being fit
Being fit	Learning to respect one's opponent

Matrix 3

Winning medals	Obtaining grades (belts)
Learning to respect one's opponent	Winning fights
Winning fights	Being fit
Learning to defend oneself	Obtaining grades (belts)
Learning to defend oneself	Learning to respect one's opponent
Being fit	Winning medals

Matrix 4

Are you able to give us some information ?

Name :

First name :

Birth date :

Sexe : F M

What is your belt ?

How long did you practice judo?