Intervention in physical education and sport: trends and developments in a decade of Francophone research
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Summary for practitioners

This paper proposes a systematic inventory of communications presented during six ARIS French-speaking congresses (Association for Research on Intervention in Sport) from 2000 to 2010. More than 800 communications were presented, which reflect the multiple facets of the intervention in physical education and in sport. A quantitative content analysis of scientific programs (n = 836 abstracts) was processed by Sphinx® software (5 analysis dimensions; 22 items). The treatment of the data consisted of univariate and bi-variate analysis. The research field on intervention in sport is characterized in an indisputable way by a beautiful expansion during this decade. The topics studied in PE, coaching and training are very diversified and analysed by complementary approaches. The qualitative and comprehensive researches are particularly well developed. We shall also discuss in this article of the delicate relationship between the practitioners and the researchers.
Abstract

This paper proposes a systematic inventory of communications presented during six ARIS French-speaking congresses (Association for Research on Intervention in Sport) from the years 2000 to 2010. More than 800 communications were presented, which reflect the multiple facets of the intervention in physical education and in sport. This legible inventory of the researches on intervention can help us to identify needs and orientations for futures studies and to position the French-speaking publications with regard to the English-speaking literature. We can consider with Berthelot (2008) that the scientific activity is not a social activity as the others; it presents a certain specificity by trying to produce more and more rational knowledge. Finally, it recovers from a pragmatics (a theory of action) which wants simultaneously social, historic, contextualist but also rationalist. A quantitative content analysis of scientific programs (n = 836 abstracts) was processed by the Sphinx® software toward 5 analysis dimensions: (1) informations relative to the main author, (2) the nature of the communication (research, innovation report, literature review, personal opinion, epistemological reflection); (3) the aim of the research (assess the efficiency of the practices, transform the practices, describe and explain to understand the practices); (4) the methodology and (5) the theme of the research. The treatment of the data consisted of univariate (frequencies, percentages) and bi-variate (chi square statistic) analysis to spot possible significant relations between variables. The results show that the research field on intervention in sport is characterized in an indisputable way by a beautiful expansion during this decade. They bring to light specificities of the French-speaking researches on intervention in sport: they are essentially descriptive and comprehensive, using the qualitative methods. The topics studied in PE, in coaching and in training are very diversified and analyzed by complementary approaches. We see here the sign of an undeniable wealth, the crossing of different theories and methods allowing a better
understanding of the educational phenomena. We shall also discuss in this article of the
delicate relationship between the practitioners and the researchers. We observe a clear
and progressive increase of the researches presented during the congresses (from 55,6%
in 2000 to 91,5% in 2010), whereas the other kinds of communications (literature review,
epistemological reflexion, innovation reports, personal opinion) seem to disappear. If the
distance between researchers and practitioners seems to get bigger, the trainers can play
a decisive role in the articulation between practice and research.
1. Introduction

During the 90s, several congresses on intervention in physical education and in sport were organized in the francophone world. A community of practitioners, trainers, students and researchers interested in the educational practices in sport was progressively constituted: the association for research on intervention in sport (ARIS) was created in 1999. It groups French in the major part, but also Canadians, Belgians, Portuguese, Tunisians, Swiss…

This association puts a lot into the following missions:

- promote and become known the researches concerning the system of the intervention in the field of the physical and sports activities as well as of the human motricity (physical education, training, leisure activities, adapted physical activities…);

- facilitate and develop the relations between all the researchers and the practitioners interested in these researches in the field of the physical and sports activities, by arousing exchanges and by underlining the wealth of the professional experiences;

- assure a help at the level of the definition of programs of research, the distribution and the exploitation of their results;

- develop the relations with the other researchers' communities of physical and sports activities, with the intention to value the researches on intervention in sport.

The notion of intervention gradually stands out as a key notion in the field of the sciences of the motricity, the sport and the teacher training. In the 70s, it is the Canadian researchers who chose to use the operational word of “intervention “ for PE teacher training. They wished to gather three roles still perceived as three different specialities: the planning, the teaching and the assessment. The notion of intervention then widened in a more theoretical reflection about what is the transmission of skills about physical and sports activities in various fields for the benefit of varied public: “ Intervention means any action and individual or collective situation to one or several persons engaged in a sports
and physical activity, and aiming at modifications of this activity. These actions are of
different natures according to the contexts within which they take place, persons whom
they address, intentions of the participants and the nature of the envisaged modifications.
These intentions can be of education, reeducation, coaching and performance, active
lifestyle and leisure, recuperation" (Durand, 1998).

Since 2000, the association for research on intervention in sport organizes biennial events:
more than 800 communications were presented from 2000 to 2010 during six congresses.
They reflect the multiple facets of the intervention in physical education and in sport.
Throughout this decade, the researchers developed programs with diversified approaches.
That’s why the members of the ARIS decided to create in 2007 the observatory of the
researches on intervention in sport (ORIS) to emphasize the wealth of these plural
orientations. French-speaking researchers have already proposed several analyses of the
published papers in physical education pedagogy (Marsenach & Amade-Escot, 1993 ;
David, Bouthier, Marsenach & Durey, 1999 ; Bouthier, 2001 ; Amade-Escot & Amans-
Passaga, 2006). This wider study focused on the the different fields of the intervention (i.e.
PE, coaching, training…) studied by the ARIS association (2000 – 2010).

It was led within this observatory, and provides a multifaceted view of the field, by leaning
on quantitative data. The purpose of the ORIS observatory is to describe and interpret the
evolution of the researches on intervention in sport in varied contexts and to gather the
scientific produced knowledge. This tool of scientific monitoring allows to characterize the
activities of research in emergence, in processing or in obsolescence, with the ambition to
result in the long term on a real and fruitful interaction between practices and researches.
This legible inventory of the field of the intervention can help us to identify needs and
direction for futures study and to position French-speaking publications trends with regard
to the English-speaking literature.
We shall show that the researches on the intervention in sport are interested in varied objects by leaning on a plurality of methodological frames. By comparing the data of this observatory with the American studies (Kulinna & al., 2009 ; Ward & Ko, 2006 ; Silverman & Skonie, 1997 ; Silverman & Manson, 2003 ; MacDonald & al., 2002), we shall bring to light certain specificities of the French-speaking researches.

We can thus wonder if the researches on intervention in sport can be considered as social constructions (Goodson, 1988). The social dimension is certainly essential in the scientific activity. Berthelot (2008) arms itself moreover with a triple point of view to specify the scientific activity as social activity, by combining the contributions of the philosophy and the sociology:

1. The scientific activity is subjected to collective standards, that they are intellectual, institutional or cultural. So, to be recognized as researcher, it is advisable to respect certain rules of scientificity and justifiable models at some point;

2. The scientific activity is integrated into a situation of interaction, direct or indirect, which engenders rules governing the behaviors. Interactions between the participants, since the informal exchanges within a laboratory until the debates during congresses, influence the development of the scientific activity;

3. The scientific activity is turned to others, with an intention. The researches are subjected to others to be assessed, then they are published in scientific reviews and are the object of debates during congresses.

If these three positions send back to different theoretical frameworks, we can however admit that researchers, according to their intentions, weave between them, in the situations where they are, interactions with specific rules, while integrating institutions and organizations, which define collective norms.

Can we assert for all that the science is a "social construction"? If the expression of "social construction" knew in the 1980s and 1990s a considerable development in
domains highly varied since the publication of the founding book The social construction of the reality of Berger and Luckmann in 1966, it is henceforth debated. According to Hacking (2001), the notion of social construction became a vague and indistinct idea, which oscillates enter commonness ("everything is construct, nothing is objective") and radicality ("nothing is false, nothing is true"). This philosopher and sciences historian points out in his book The social construction of what? that this expression is not still used in a relevant way, as we are interested in objects in the broad sense (the persons, the practices) either in the ideas that we are made of these objects (concepts, theories). He proposes then a space where can coexist and articulate reality and social construction. It is thus necessary to wonder about the pertinence of the notion of social construction according to the studied domain. Can we assert that the scientific activity is a social construction, that means a fragile and intersubjective creation, "where everything would replay all the time, when everything would reinvent in every interaction with actors and in singular contexts" (Lahire, 2005)? It is not nevertheless possible to deny the weight of the lived experience and incorporated representations. Indeed, if the programs of research are influenced by the dialogs and debates or the conversation among scholars during congresses and meetings, they depend also on the history of the considered scientific field and on that of the researchers. Can we consider that the science would be in reality only a social construction as the other one, a speech on the reality, reflecting faiths shared and interested in a group given at some point? The scientific constructions base on more reflexivity, of explicitation and of argumentatives and empirical proofs than the other constructions, less demanding from the point of view of the effort of the demonstration (Lahire, 2005). Also, Berthelot (2008) defends that the scientific activity is not a social activity as the others; it presents a certain specificity by trying to produce more and more rational knowledge. Finally, it recovers from a pragmatics (a theory of action) which wants simultaneously social, historic, contextualist but also rationalist. The researchers
recompose gradually programs of researches by integrating recent scientific knowledge with the aim of producing more and more rational knowledge about the intervention in sport.

2. Methodology

The corpus was established from the scientific programs of six ARIS congresses:

1. Congress of Grenoble (Fr) « *The intervention in the field of the physical and sports activities: competence(s) in transformation?* », December 14-15-16th, 2000 : 144 abstracts ;

2. Congress of Rennes (Fr) « *Sports and artistic cultures - Formalization of the professional Knowledges - Practices, Trainings, Researches* », December 12-14th, 2002 : 139 abstracts ;


4. Congress of Besançon (Fr) « *Co-construct the knowledge: the professions by the intervention in the physical, sports and artistic activities* ”, May 9-10-11-12th, 2006: 157 abstracts ;


6. Congress of Sherbrooke (Ca) « *Live active and in health at any age and in all the circles of life* », May 27-30th, 2010: 106 abstracts.
The content analysis (Bardin, 2001; Weill-Barais, 1997) of 836 summaries was realized with the Sphinx software. After several floating readings, 22 items in the form of closed questions (essentially multiple choices) were informed through five dimensions of analysis:

1. General informations about the communication (congress, gender and profession of the main author, institution and country);
2. The nature of the communication (research, innovation report, literature review, personal opinion, epistemological reflection);
3. The aim of the research (assess the efficiency of the practices, transform the practices, describe and/or explain to understand the practices);
4. The methodology of the research (data collection and treatment);
5. The theme of the research, according to the analyzed context (PE, coaching, teacher/trainer training).

The software offers an environment to code the texts according to the preconceived variables and categories. The quantitative treatment of the data consisted of univariate (frequencies, percentages) and bi-variate (chi square statistic) analysis to spot possible significant relations between variables.

### 3. Results

#### 3.1. An international community of research in expansion

If French are widely represented during congresses, we notice a more and more important participation of the other nationalities, in particular the Canadians and the Belgians. All in all, it is 18 nationalities and more than hundred of research laboratories which are represented. International collaborations between several research laboratories (joint-management of thesis, common research project, compared education studies...) are

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fruitful by gathering theoretical and methodological tools. But laboratories specialized in
the field of intervention in sport remain little represented in the research world. We count
about twenty French-speaking research teams on intervention which publish regularly
during each congress (between 15 and 60 communications from 2000 to 2010). So, the
field of the research on education developed well with many international associations of
research, but the researchers have to continue to fight in the universities of the whole
world to defend this still marginalized field (Kirk, Macdonald & O'Sullivan, 2006).

Figure 1

The figure 1 shows that students (essentially PhD students) represent a third of first
authors. This important proportion of young researchers is very promising for the
development of the research on intervention in sport. In fact, the young researchers seem
particularly active both in the French-speaking world and in the English-speaking world.
Macdonald and al. (2002), Kulinna and al. (2009) confirm this increasing
internationalization of research reviews, postgraduate students and employment
opportunities in universities. On the other hand, about 40% of first authors are researchers
(22,7% of assistant professors and 16,9% of professors). Finally, it is the trainers (15%)
and the practitioners (teachers : 4%, coaches : 1%) that are under-represented. Most of the
trainers develop at the same time a double activity of teaching and researching in the
universities (Master's degree, thesis), particularly in the european context of the training
by/for research. There also, this datum is encouraging because the trainers play a decisive
role in the relation between practice and research : they can help the practioners to
analyze the practices toward scientific tools and knowledge. At last, the low percentage of
practicioners shows how much it is difficult for the teachers and trainers to put a lot into
the research. We shall discuss later in this article this low and disturbing participation of the professionals of intervention.

Figure 2

Figure 2 presents the percentage of men and women publishing as first author from 2000 to 2010. On average, only a third of first authors (34%) is feminine. But it is interesting to note the encouraging increase of the percentage of women as first author: from 22.2% in 2002 to 46% in 2010. The comparison of these data with those of Ward and Ko (2006) in the United States brings to light similarity. These authors study the percentages of men and women publishing as first author in the American review JTPE (Journal of Teaching in Physical Education) and observe also that however the distribution between men and women become more and more balanced, women publish less than their male colleagues. The women have entered the academy much later that the men; these spend a higher percentage of time engaged in research activities, whereas women spend more time teaching and providing service activities (NCES, 2000). The inequity relative to women’s opportunity to publish persists in both English-speaking and French-speaking worlds of research on intervention, as moreover in numerous disciplines.

3.2. Evolution of the kinds of communications

Figure 3 shows a clear and progressive increase of the percentage of researches presented during the congresses (from 55.6% in 2000 to 91.5% in 2010). The research field on intervention in sport is characterized in an indisputable way by a beautiful expansion during this decade. Thesis students, researchers and trainers choose to expose their whole research by following the classical model (introduction / methods / results / discussion) to become academically recognized as contributors to scientific knowledge.
But at the same time, the other communications (literature review, epistemological reflexion, innovation reports, personal points of view about teaching, training..) seem to disappear. By comparison, the percentage of researches published in the American Journal of Teaching in Physical Education is less important (68% according to Ward & Ko, 2006). We can wish than the different kinds of communication are presented, because they reflect complementary analyses of the practices. It is not evident to favor the relations between researchers and practitioners ; it’s particularly difficult for practitioners who didn’t develop a research activity to participate to the debates during congresses. That’s why the trainers play a decisive role to spread the scientific knowledge in universities.

Figure 3

3.3. Contexts studied in researches on intervention in sport

Figure 4

Three main contexts of the intervention in sport are studied (figure 4): the PE (more half of the researches), the training (24,9 %) and the coaching (19,2 %). So, the ARIS association gathers numerous researchers who study the PE. This trend can be explained by the fact that most of the researchers on intervention have a professional experience in PE teaching. They turn thus quite naturally to studies on the PE. In certain countries, as in France, the PE teachers intervene exclusively in the second degree, contrary to other countries as Canada where they intervene in the first and second degrees. The researches on the PE in primary school (20 % of the researches on the PE) are thus particularly more developed by the Canadians. As the ARIS wants to gather researches on
sport in various contexts of intervention, we can wish that researches on coaching, physical adapted activities or leisure activities develop in the near future.

3.3.1. Research themes in PE

Figure 5

The data treatment shows a wide range of topics investigated, with 6 themes which represent each more than 10 % of the researches. 40% of studies are centred on the teacher activity, particularly during the interactive phase of the teaching (instruction and classroom management, teaching planning and assessment) and on the teachers knowledge. But the current researches are not any more focused exclusively on the teaching or on the teacher, but also on the student activity (30% with perceptions and learning strategies), the physical content knowledge (16,4%), the gender (10,4%) and the teacher-students interactions. This moving from a focus on teaching toward a focus on teachers and students is also noted in the study of the American Journal of Teaching in Physical Education (Ward & Ko, 2006), but in a less marked way. Kulinna & al. (2009) observe that the dissertations on teaching in PE have focused on teacher effectiveness, but there has been a recent movement to enhance the initial studies on motor skills through studies of student attitude, cognition, decision making and emotion. The evolution of the scientific paradigms (e.g. the process – product paradigm, the teacher thinking paradigm, the mediating process paradigm and the ecological paradigm, according to Cloes & Roy, 2010) allowed to developp the themes of researches and to seize better the complexity of the intervention.

3.3.2. Research themes in coaching
Contrary to the results observed in PE, it is the activity of the participants (athletes) that is more studied than the activity of the educator, with two main research themes:

- the activity of the athletes is firstly studied (34.1%): what are the significant structures of the activity of the athletes? What do they think of their coaches? Which kind of knowledge do they mobilize?

- the second theme "coach intervention" (26%) is essentially centred on the choices, the strategies and the adaptations of the coach during the interactive phase with the sportsmen.

This trend can be explained by the aim of performance in the field of the coaching: the scientific knowledge concerning the perceptions and the strategies of the sportsmen should contribute to improve the results of these.

3.3.3. Research themes in training

Concerning the field of the training, the researchers analyse mainly the pre-service training of PE teachers. The in-service training remains enough little studied (7.5% of researches on training). Nevertheless, the need for professional development of physical education teachers in particular has been highlighted in a number of recent reports (O’ Sullivan, 2008), which noted there is better value to be gained by investing in professional development than in lengthening pre-service preparation.

As the researchers teach in universities, they need to understand how the future teachers begin and perceive their teaching activity. They thus study much more the beginner
teachers activity (about 60%) that the trainer activity (14%). They quite particularly wish to
study the professional development of beginners (36,9%), then the students activity
(strategies, perceptions : 21,3%) and the trainer – students interactions (7,5%). On the
other hand, they try to improve the training (innovating training: 16,9%) by experimenting
several kinds of interactions students-trainer or researcher-trainer.

3.4. The aims of the researches
We leaned on the works of Bru (2002) and Astolfi (1993) to distinguish three aims of the
researches:
(1) to assess the efficiency of the practices;
(2) to transform the practices and to innovate;
(3) to describe / explain to understand the practices.

Concerning the aim “to assess the efficiency of the practices”, the researchers compare
different practices (e.g. constructivist practices / technicist practices) to identify the most
successful. They also estimate the effects of the practices on learning (e.g. impact of the
reflexive activity of students or of tutelage) and measure the effects of innovating programs
(health education) in different contexts (PE, coaching, teacher education …).

When the researchers want to transform the practices, they analyze a professional
problem, propose an innovation and finally observe the effects of the experimentation.
These innovations concern the didactic treatments of various sports activities (reflection
about physical content knowledge, teaching methods, settings, assessment…) and the
teacher education (collaborative researches between teachers and researches, interaction
modalities between the student and the trainer, the help to the novice teachers…).
At last, the researchers describe / explain the practices to better understand the activity of
the professionals (planning, management of the groups, instruction, communication,
assessment, professional development) and different publics as students or sportsmen
(experiences, perceptions, strategies, linguistic interactions). These researches are qualified as heuristics.

Figure 8

Figure 8 shows that 80% of the researches is in aim heuristic. These data do not evolve during the decade. In front of complex, uncertain and autonomous practices, it's difficult for the researchers to prescribe intervention strategies to the practitioners, because the generalization of results obtained in a singular context remains very problematic. That is why they turn more and more to descriptive/explanatory and comprehensive researches, anchored in authentic contexts. They wish to seize the complexity of the human practices and to describe very finely, by case studies, the activity of the individuals in natural context. This type of research is major in the field of the intervention in sport, because the activity partially shapes in relation with the specificities of the contexts. The impossibility to check numerous variables in unpredictable environment explains why the other types of researches are thus rarer. Indeed, it is not because a teaching method is effective in a class that it will be it for all that in another class. It is the same problem for an innovation, that could give variables effects according to the considered public. This important proportion of researches heuristics can also be explained by the necessity of better understanding at first the system of the intervention before proposing transformations. Nevertheless, we can wonder so more balance between the two aims of the researches “to understand the practives” and “to transform the practices” would not be desirable in the longer term. If the researches heuristics can constitute relevant resources to question the practices of intervention and thus eventually transform them, they remain little known by the trainers and all the more the practitioners. The researches with transformative aim, by taking into account the results of comprehensive researches, elaborate and estimate various modalities of intervention or training in several APSA, or still invite the practitioners
to collaborate throughout the process of research. Through these propositions or reflections, most of the professionals can certainly conceive more easily than the researches may present a social utility.

This orientation of the French-speaking studies towards the descriptive and comprehensive researches contrasts sharply with the American researches. Indeed, Silverman and Manson (2003) analyze more than 500 theses in PE from 1985 till 1999. They underline the ascendancy of researches centred on the efficiency of the teacher (92.5 %), among which 42.8 % of researches centred on the comparison of various teaching methods and 23.4 % of descriptive researches, while 4 % of the researches concern the cognition of the teacher and 3.5 % the development of tools for the intervention. To note that another study of Silverman and Skonie (1997) analysing 179 articles of research in PE published between 1980 and 1994 ends in similar trends.

The difference of studied periods cannot explain completely the important variation about the aims of the researches: the French scholars produce essentially descriptive and comprehensive researches while the Americans focus on the efficiency of the teaching.

We can put the hypothesis that the research practices are historically and culturally situated. Every field of research has its own trajectory (Kirk, Macdonald and O’ Sullivan, 2006) and develop certain paradigms and theoretical frameworks according to the political, cultural, historic and social context of the country.

3.5. A crossing of research methodologies

Figure 9 illustrates the methods of data collection implemented in the researches. Two techniques are widely spread with a significant difference: the interview (56.4 %) and the observation (54.2 %). Questionnaires, written tracks (documents, programs, articles) and tests are much less used (respectively 22.6 %, 14.6 % and 7.2 %). These stabilized
results, from 2000 till 2010, show that the majority of the researchers cross the
observations and the verbalizations to analyze the intervention in sport.

So, the researchers try to approach in closer the complexity of the practices. They
integrated that the observation of the behaviour is not any more enough for understanding
the practices. In fact, the researchers cross two different techniques, sometimes 3 or even
more. 39 % of the researches combine the observation with the interview (mostly the
observation in authentic context with an interview of auto-confrontation or a semi-directive
interview). Other forms of methods crossing are less often used: interview and analysis of
documents (14,6 %) ; interview and questionnaire (13,9 %) or observation and analysis of
documents (12,2 %).

This "triangulation" of data extracted from different sources represents a relevant strategy
of validation in qualitative research (Huberman and Miles, 1991 ; Van Der Maren, 1995).
"The triangulation consists in redrawing the most causal possible chain (...) by trying to
obtain more than a type of measure from more than a source for every link of the chain "
(Huberman and Miles, 1991, p. 427). It is supposed to confirm a result by showing that the
independent measures that we made it go to the same sense, or at least do not contradict
themselves and allows to estimate better the credibility of the results.

The French-speaking researches in the field of the intervention are more qualitative than
quantitative. Indeed, at least a quarter of the researches are dedicated to case studies and
another quarter is interested in small samples, lower than 30 individuals. This trend is
inverted in the US even if the qualitative researches tend to develop recently. The use of
the quantitative methods doubtless dominate the researches in PE (approximately 18 % of
We can suppose that more and more researches on intervention will cross quantitative and qualitative methods to benefit from the complementarity of these two types of methodologies.

4. Conclusion

The purpose of this article was to present an inventory of the communications produced during the first six ARIS congresses from 2000 till 2010. The results show that the scientific activity in the field on the intervention in sport is in expansion and they bring to light specificities of the French-speaking researches: they are essentially descriptive and comprehensive, using the qualitative methods. The topics studied are very diversified and the same topics can be analyzed by different and complementary approaches. We see here the sign of an undeniable wealth, the crossing of different theories and methods allowing a better understanding of the educational phenomena.

On the other hand, the professionals seem less and less present during the congresses. Nevertheless, the second mission of the association ARIS consists in facilitating and in developing the relations between all the researchers and the practitioners interested in the researches in the field of the physical and sports activities. It thus seems today inescapable to facilitate the exchanges between professionals and practitioners. But it is not easy to become known these results of researches with the practitioners. These difficulties can be explained by the fact that the professionals and the researchers do not exercise the same job and thus do not pursue the same purposes. The professionals have to resolve everyday and in the urgency various problems. A minority of them participate in congresses and train in research. The research often appears as remote from the reality, without utility for the practice. As for the researchers, little publish in the professional reviews, not recognized in the university context. They rarely have the opportunity to address specially the professionals to present and discuss their works. Nevertheless, it is
not possible to conceive the training without taking into account the numerous and current researches on the intervention. Certainly, the results of researches cannot be considered as prescriptions or ready-made solutions because of the specificities of each context of intervention. The professional knowledge is not a linear translation of scientific knowledge which would be simplified. It results from a complex process of transformation and its appropriation passes by an interbreeding with faiths, personal conceptions and a dialectic perms with the experience (Collinet, 2006). Better to know and to understand the practices, to investigate the possible can help the professionals of the intervention to question their activity and to shape tools to analyze finely the practices.

This first inventory of the researches presented during ARIS congresses deserves to be completed by a reflection on the mobilized theoretical frames. This following project has just been realized by the members of the ORIS, who gathered in the book " sciences of the intervention in PE and in sport: results of researches and theoretical foundations" (Musard, Loquet and Carlier, 2010) 10 complementary theoretical approaches: 1) the ecological paradigm (Cloes & Roy), 2) the psycho-sociological approaches of teaching (Dupont, Delens, Tessier & Cogérino), 3) the cognitive anthropology (Gal, Sève, Cizeron & Adé), 4) the clinic of activity (Lémonie & Robin), 5) the semiotic approach (Alin & Wallian), 6) the clinic didactic of PE (Terrisse, Carnus & Loizon), 7) the socio-didactic approach (Poggi, Verscheure, Musard & Lenzen), 8) the cultural anthropology (Léziart), 9) the technological approach (Mouchet, Amans-Passaga & Gréhaigne) and 10) the didactic in PE and in physical and sport activities (Amade-Escot & Loquet). We consider with Eid & Diener (2006) that those multiple paradigms to investigate research questions are very promising by providing complementary perspectives and data.

Références


