Papers on Social Representations
Volume 21, 9.1-9.31 (2012)
Peer Reviewed Online Journal
ISSN 1021-5573

[http://www.psych.lse.ac.uk/psr/]

Analysis of the Semantic Field of Social Representation between Teachers and Parents of the School/Family Relationship.

VÉRONIQUE PELT
University of Luxembourg, Research Unit EMACS

DÉBORA PONCELET
University of Luxembourg, Research Unit EMACS

This study aims to examine whether the school/family relationship (SFR) is organised in a social representation (SR). It also considers the links between the SFR and various factors (such as the pupil's classroom or the ranking of spontaneous words).

Carried out during the school year 2010/2011 on 10 primary teachers and 151 parents, the study highlights the semantic vocabulary used to qualify the relationship. Our initial analyses were based on the verbal association methodology of Flament and Rouquette (2003). We then organised words into associative cards, which enabled us to compare them.

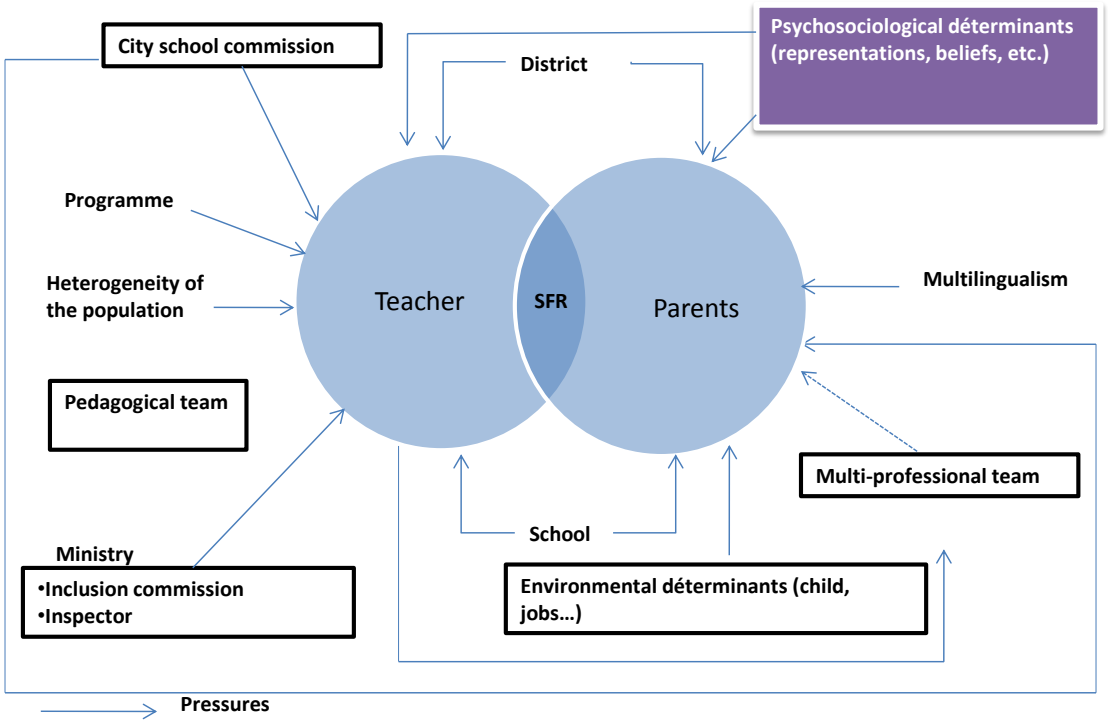
By way of conclusion, we observed that in our sample, teachers and parents were generally satisfied with their relationship. However, the language used to complete the questionnaire tended to influence their point of view.

BACKGROUND

This study sets out to analyse the semantic framework of social representations (SRs) about the school/family relationship (SFR). To analyse communication in this context, we integrated SRs such as socio-cognitive processes, which play a role in the construction of the SFR[1].Such an approach was possible in a contextualised study.

This article focuses on SRs, which can be compared with stereotypes, observed in a non-laboratory environment (Courtial & Kerneur, 1996). To this end, we examined how teachers and parents felt about their relationship. Though not very new, this "concept of representation is becoming increasingly common in studies on language" (Castellotti & Moore 2002, p.7), and it is difficult to circumvent it, especially when we are studying the communication that takes place between parents and teacher(s). This article is also consistent with an overall approach to the school/parents relationship from a communicative point of view. Our hypothesis is that there is a lot of pressure on the interlocutors (Pelt & Poncelet, 2010), some of which can be described as psychological factors (systems of value, norms, ideas, beliefs, etc.) and grouped under the notion of social representation. The study also demonstrates the importance of SR to our understanding of how to work to improve the SFR.

1



We consider this pressure and the role of SR in this article, with a view to integrating it, later on, within our global analysis of the communication between parents and teachers.

Stating the Problem

The main objective of this study is to analyse how teachers and parents who have children in 16 classrooms of primary schools in Luxembourg sharing a common aim (child achievement) can obstruct or support communication, in the former case because their representations of their relationship are different, or in the latter case because they hold those representations in common. Like Ferrara (2009), we wanted to look at both groups involved in SFR, at "multiple voices responding to similar questions" (p.124), in order to see parents and teachers as elements of a system of communication (Pelt & Poncelet, 2010).

The exchanges between parents and teachers will be different according to their representations (Abric 1987, 1991). The aim is not to examine the origins of these representations but to highlight their beliefs, attitudes and specific standpoints which could explain their behaviours. This is important, because parents and teachers "besides the pupils, are the principal actors of the school system" (Räty & Snellman, 1998, p.360).

THE CONTEXT IN LUXEMBOURG

As the study was based in Luxembourg, we will now describe the context in which it took place.

The Grand Duchy of Luxembourg is the European Union's smallest country apart from Malta, with a total area of 2,586 km^2. Lying between Germany, Belgium and France, it has experienced strong demographic growth over the past 30 years due to a high rate of immigration. 41.6% of the population of Luxembourg consists of foreign nationals, the vast majority of them (over 80%) from the European Union. Residents of Portuguese nationality constitute the largest community (14.1% of the resident population, 37% of the foreign population). Apart from the seven largest, no municipality in the country has more than 10,000 inhabitants. Primary school classes therefore have low pupil numbers: 12 pupils per class on average. The standard of living in Luxembourg is double the European average, and the rate of unemployment is 5.8% (figures from Statec, 2009).

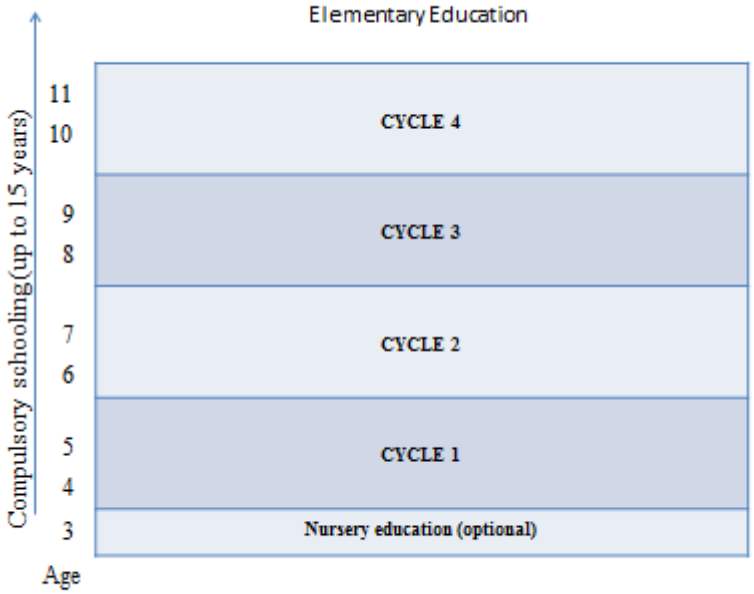
Luxembourg is also a multilingual country, in which three languages have official status: Lëtzebuergesch, German and French. This has a direct effect on school education. Compulsory schooling is divided into two stages:

- Elementary education;

- Post-primary education.

As our study is based on primary or 'elementary' education, we shall confine our description to the cycles of which it is composed (Table 1).

Table 1. Elementary Education



Elementary education consists of nine years, takes children between the ages of three and eleven, and is divided into four learning cycles; the first year is optional. The country's multilingual character is reflected in the curriculum. For instance, while teaching takes place purely in Lëtzebuergesch in Cycle 1, pupils are required to learn German and French from Cycle 2 onwards. The language in which children learn to read is German. Our study focuses on the first year of Cycle 3 (Cycle 3.1.). The pupils are therefore eight years old, unless they have fallen behind, which occurs more commonly in Luxembourg than in other European countries (5% in 2003, compared with 0.45% in Finland or 3.83% in the French Community of Belgium; figures from the National Ministry of Education).

SOCIAL REPRESENTATIONS

Originating about 40 years ago, but relying "primarily on Durkheim's (1898) notion of 'collective representation'" (Augoustinos et al., 2006), the concept of social representation can be seen as a major theoretical perspective within social psychology for explaining social phenomena (Abric, 2003). The associated theory has developed and shown its relevance in

the psycho-sociological field (Doise & Palmonari, 1986). It offers a particular view which makes individual relations, social groups and context more comprehensible. It is a broad, significant concept. As defined by Moscovici (1961), social representations are:

> *"*systems of value, ideas, and practices with a two-fold function; first, to establish an order which will enable individuals to orientate themselves in their material and social world and to master it; secondly, to enable communication to take place among members of a community by providing them with a code for social exchange and a code for naming and classifying unambiguously the various aspects of their world and their individual and group history*."* (Foreword in Herzlich 1973, p.ii)

The definition of the concept has not really changed since then (Lahlou, 1995). It always covers a broad field, presenting "a theory of social cognition, culture and communication that connects knowledge practices, identity and psychology processes, ideology and social change" (PSR, Aims and Scope). Social representations are located in both the social and psychological domains, and this aspect gives them a heuristic value for human sciences (Jodelet, 1991).

As Abric presented it (1996), two components are integrated into the representation: a cognitive and a social one. The cognitive component is a personal appropriation of reality; the social component is a collective process operating in social interactions to elaborate a common representation. The interaction of these components helps individuals to make sense of their social world and to control it. However, a social representation is a dynamic concept, so it evolves and transforms itself over time. To explain this transformation, Abric highlights the structure of the representation in Moscovici's "objectification" and "anchoring" (1961) by identifying the central core and peripheral elements, which "function as an entity, each part having a specific but complementary role towards the other" (Abric, 1993, p.75). Objectivisation "transforms a concept into an image or a figurative core" (Doise & Palmonari, 1986, p. 20); anchorage provides a frame of reference for social representation and constitutes "the process by which the representation and its object become socially embedded" (Jodelet, 1984, p. 371).

- The central core refers to the group, its collective memory and its norms. It is the relatively stable part of representation which does not change and ensures "the continuity and consistency of the representation" (*ibid*.)

- The peripheral elements refer to individual properties (experience and personal history) which make representation flexible.

A SR is a combination of collective memory and personal history. The former "generates the signification of the representation and determines its organization [while the latter] allows adaptation to concrete reality, content differentiation and protects the central system" (*ibid*. p.76).

The elaboration of a representation rests on three psycho-sociological mechanisms identified by Moscovici and explained by Moliner (1996):

- Dispersion of information: the concept/ object which is the object of representation is vague, so there is real difficulty in defining it.
- Focus: there is no global vision of the object. Groups do not share the same vision.
- Pressure to infer: groups try to define the vague concept by making assumptions, arguing, and adhering to the dominant opinions.

We can note that these mechanisms are observable with regard to representations of the SFR. No group can say exactly what this relationship is, how it should be conducted, or how it should be materialised (dispersion of information). Parents and teachers do not share the same vision (focus) about the child/pupil, and they try to define it to prove that their behaviour is right.

To recap, SR is a system which enables individuals to understand reality through interrelations with others. The concept of SR can be seen as a tool for studying the "organisation of common knowledge" (Flament & Rouquette, 2003, p.58) with words as indicators. However, as these authors remind us, this approach is not a linguistic one. SR depends on individuals' membership of a group and on their own history (link to reality). It is a dynamic concept which evolves because of the peripheral elements. In order to find out about a particular representation, we need to approach the central core.

REPRESENTATION IN THE EDUCATIONAL FIELD

In parallel with research into social representations, school/family relationship studies have developed, revealing the benefits for children of such a relationship. Since the 1970s (Salomon & Comeau, 1998), it has been acknowledged that education, and particularly the relationship between school and parents, has an essential role to play in promoting children's achievement. If parental participation begins in kindergarten, children's motivation (Gonzalez-DeHass et al., 2005) and academic achievements (Hill, 2009; Nye, 2006) are

better, even in the teenage years (Jeynes, 2005 & 2007). Family involvement and communication between parents and their children's teacher are precious tools for schools; they have to use them. Studies and experiments have consistently shown the importance of parents' involvement. Governments, teachers, parents and communities all understand the benefit of letting parents go into schools, yet some parents and teachers ignore this policy and remain suspicious of one another (Pelt & Poncelet, 2011).

Some researchers have tried to find the reason for this problem and offer solutions. In this field, social representations and school/family relationships have converged and become the subject of various studies (Deniger et al., 2009; Larose et al., 2009; Paty, 2007; Ecalle, 1998; Larose et al., 1994) and dissertations (Boulanger, in progress; Fontaine, 2007; Minier, 1995). Social representations have increasingly become a basic tool in the analysis of school life, with research highlighting the fact that the misunderstandings observed between teachers and parents are influenced by different values, ideas and practices (in other words, representations). The main results deal with education, which are the reference values shared by parents and teachers (Fontaine, 2007).

In a very interesting review of the literature about representations of teachers and pupils, Ecalle (1998) highlighted through the work of different authors the gap between the representations they have of one another. For a teacher, the representation of the pupils is based on cognitive aspects and attitudes towards work, whereas for the pupil, the representation of the teacher is defined by human, emotional and relational qualities. Ecalle hypothesises that this depends on whether the person's role is to teach or to learn. The pupils' representation showed differences based on gender, environment, class composition and socio-economic status (SES). SES is fundamental to the pupils' valuation of the teacher. The greater the distance between family and school culture, the more important the teacher's role is perceived as being.

Social representations theory directs our attention to the features of everyday discourse about a particular idea, in our case how the SFR is defined. Our research seeks to analyse how teachers and parents feel about their relationship. It also aims to point out the gap between their representations.

THE SPONTANEOUS WORDS METHOD

This method, inspired by the work of Vergès (1992), is referred to by Abric (2003, p.62) "hierarchised evocation". It uses free associations based on a cue word/expression, and takes

account of words' frequencies and rank of appearance. It also makes it possible to ascertain whether the source item is organised as a social representation. Although this approach has had considerable success, its limitation lies in the way it deals with the notion of ranking. According to Abric (*op.cit.*), Vergès had an erroneous conception of the importance of rank of appearance. In Abric's view, the most significant words are those which occur first, whereas for the latter, they will only appear after a "warm-up" phase. To remedy this shortcoming, Abric therefore proposes to replace the notion of rank of appearance with that of rank of importance.

In our own research, we have followed Abric's recommendations (*op.cit.*, p. 62-63), and accordingly proceeded in two phases. It should be noted that Abric practises this technique by means of interviews, whereas we used a questionnaire; however, Flament and Rouquette refer to the possibility of an approach based on written material. As we do not know how much time parents have taken to think before answering, we have therefore taken both the rank of appearance and the rank of importance into account.

This method involves two phases:

- Phase 1. Free association

Using the expression "SFR" (school/family relationship) as our cue, we asked pupils' parents and teachers to write down the first five words that came to mind when this expression was presented to them. According to Flament and Rouquette, the number of words recorded should be between three and five, as this is enough "to provide an effective structural diagnosis" (p.83). It is the spontaneous character of the utterance that facilitates access to the person's encyclopaedia[2] and hence to the semantic field covered by the stimulus expression.

- Phase 2. Hierarchisation

After spontaneously producing five words or expressions, the respondent is invited to take a step back and classify them from the most representative to that which he/she considers least representative of the SFR.

Thus we have a corpus of items that provide us with the content of the representation. Three quantitative indicators are associated with them: 1) the frequency of the word's appearance, 2) the rank of appearance and 3) the rank of importance. By considering the

[2]To use the expression of Sperber and Wilson (1989).

frequency of appearance in combination with the rank of appearance or rank of importance, one gains insight into the hard core of the representation.

In order to gain a more precise picture of this hard core of the representation, in a second phase we then grouped the words together in the form of associative cards. This grouping process was based on two criteria: synonyms (semiotic proximity) and lemmatisation (grammatical proximity). We assigned a valence (positive, neutral or negative) to each occurrence. Two researchers worked independently on assigning valence in this way. Once the corpus had been analysed, we then combined the two researchers' interpretations.

- When the same valence was assigned by both researchers, this was the valence assigned to the word.
- When the valence was different, a discussion took place. If neither researcher's reasoning prevailed, a third researcher stepped in to enable a valence to be assigned to the occurrence.

For example:

- "Commitment to the child": both researchers attributed a positive valence;
- "Parents are not welcome": both researchers attributed a negative valence;
- "Education": one researcher attributed a positive valence; the other researcher attributed a neutral valence. The third researcher stepped to assign a neutral valence.

Finally, we gave titles to the occurrences in order to group them together. Again, the two researchers compared their views. In our example, "Commitment to the child" was assign to the associative card "For the child".

THE STUDY

Sample:

A total of 16 classes agreed to take part in the research project (during the school year 2010/2011). At least 113 volunteers completed the whole questionnaire:

- 8 primary teachers of Cycle 3.1. (±8 years old) and
- 105 parents of pupils in the teachers' classes.

The 16 classes that agreed to complete the questionnaires were spread throughout the territory of the Grand Duchy: 2 were in relatively prosperous districts of Luxembourg, 10 in cities or municipalities in the south, and 4 in the north of the country. In these last 14 classes, there was a certain degree of social mix.

Teachers of Cycle 3.1. were invited by their inspector[3] to participate in the survey by an email which explained the aim of the study. The research team briefed those who agreed to participate in a meeting, where the study was described in more detail. Volunteers received a link to the survey by email.

Parents: The parents' survey was available on paper and in different languages (French, German and Portuguese) because of the particular situation of Luxembourg, with three official languages (Luxembourgian, French and German) and the highest European immigration rate, with 43.7% of the population (Statec, 2009) consisting of foreigners (37% being Portuguese). Teachers were responsible for transmitting the parent survey to their pupils' parents.

Data processing was totally anonymous.

Data collected:

a) *Socio-demographic characteristics*: gender of the respondent (male or female for teachers; person who completed the questionnaire for the parents- father, mother, both of them or someone else) and age group (30 or under, 31-40, 41-50, 51 or over).

b) *SFR social representation*: five spontaneous words were asked for. As explained above, we also asked the respondents to assign a rank of importance (from 1 for the most representative word to 5 for the least), but also took account of the rank of appearance.

   Procedure:

   Open question: The instructions invited participants to perform a multiple (or continuous) free association (Flament & Rouquette, 2003): "What does the expression 'school-family relationship' mean for you? Please record your answer here using a maximum of five words (nouns, adjectives, word groups, expressions, etc.) that come to your mind."

   Ranking: To supplement this information, we asked individuals to rank their associations: "Afterwards, rank them according to the importance that you assign to them (from 1 for the most representative to 5 for the least representative).

c) *Opinion about SFR*: After the open question, individuals were then asked to indicate their opinion about the SFR.

[3] All researches have to be validated by the ministry and its representatives, the inspectors

Procedure:

Closed question: Participants were asked to indicate their opinion about the SFR by answering this question: "How do you judge the current relationship between you and your child's school?" with two possible answers: "satisfactory" or "could be improved".

Statistical analysis:

All the words were translated into French. At first, we followed the Flament and Rouquette procedure. We analysed the properties of the answers: diversity, index of infrequency, entropy and distribution by rank *versus* frequency. The rank in this case was the rank of appearance of the words, without taking account of their rank of importance (this latter being the rank assigned by the parents and teachers themselves to the words they chose).

For diversity, we chose to select the main word in word groups or expressions (e.g. "sort of contact" = "contact"); when two equivalent words appeared we selected both of them (e.g. "collaboration and communication"). Afterwards, we assigned a valence to all occurrences. A valence is an emotional value attributed to words, and we used three classifications: positive, negative or neutral valence.

We then created associative cards by grouping words. We performed analysis of the frequency (using the rank of importance assigned by the respondent) and chi square on the cross table. We also reanalysed the property of entropy and the distribution of the associative cards.

Results

Socio-demographic characteristics:

151 parents (54%) and 10 teachers (62.5%) completed a general questionnaire about their relationship. At least 114 parents and teachers (8 teachers: 80% and 106 parents: 70%) of the participants gave spontaneous words. The distribution of gender was equal for teachers (50% each). For the parents, the questionnaire was mostly completed by the mother (61.2%). The most typical age was 31-40 for parents (40.9% of respondents) and 41-50 for teachers (50% of respondents).

Opinion about SFR:

75.4% of the participants judged the relationships between parents and school "satisfactory". 20.7% thought it "could be improved" (3.9% missing answers). A significant difference

appeared among the opinions according to the respondent's language (p=.009). This explained 14.1% of the variance. In French, the respondents were less satisfied than in other languages (72.9% *vs.* 85.9% in German, 82.3% in Portuguese).

Table 2. Cross table Opinion x Language

Opinion		**Language**			**Total**
		French	German	Portuguese	
Satisfactory	Number	175	110	79	364
	% in language	72.9%	85.9%	82.3%	78.4%
Could be better	Number	65	18	17	100
	% in language	27.1%	14.1%	17.7%	21.6%
Total	Number	240	128	96	464
	% in language	100.0%	100.0%	100.0%	100.0%

Chi-squared tests

	Value	ddl	Asymptotic significance (bilateral)
Pearson's Chi squared	9.429[a]	2	.009
Report of probability	9.676	2	.008
Linear association by linear	4.068	1	.044
Number of validated observations	464		

a. 0 cells (0%) have a theoretical number under 5. The minimum theoretical number is 20.69.

Symmetrical measures

		Value	Approximated significance
Nominal by Nominal	Coefficient of contingency	.141	.009
Number of validated observations		464	

There was also a significant difference among the opinions according to the pupil's classroom (p<.001). This difference explained 36.7% of the variance. This result will be confirmed by the results in the next paragraph.

Table 3. Cross table Opinion x School class

School classes			Opinion		
			Satisfactory	Could be better	Total
		Number	16	4	20
		% in q2	4.4%	4.0%	4.3%
	14	Number	38	5	43
		% in q2	10.4%	5.0%	9.3%
	163	Number	20	16	36
		% in q2	5.5%	16.0%	7.8%
	192	Number	25	5	30
		% in q2	6.9%	5.0%	6.5%
	2401	Number	44	5	49
		% in q2	12.1%	5.0%	10.6%
	243	Number	43	2	45
		% in q2	11.8%	2.0%	9.7%
	263	Number	36	12	48
		% in q2	9.9%	12.0%	10.3%
	276	Number	21	0	21
		% in q2	5.8%	.0%	4.5%
	33	Number	3	0	3
		% in q2	.8%	.0%	.6%
	35	Number	5	0	5
		% in q2	1.4%	.0%	1.1%
	37	Number	10	0	10
		% in q2	2.7%	.0%	2.2%
	4	Number	19	16	35
		% in q2	5.2%	16.0%	7.5%
	42	Number	18	0	18
		% in q2	4.9%	.0%	3.9%
	44	Number	11	12	23
		% in q2	3.0%	12.0%	5.0%
	59	Number	21	13	34
		% in q2	5.8%	13.0%	7.3%
	7	Number	34	10	44
		% in q2	9.3%	10.0%	9.5%
Total		Number	364	100	464

School classes			Opinion		
			Satisfactory	Could be better	Total
		Number	16	4	20
		% in q2	4.4%	4.0%	4.3%
	14	Number	38	5	43
		% in q2	10.4%	5.0%	9.3%
	163	Number	20	16	36
		% in q2	5.5%	16.0%	7.8%
	192	Number	25	5	30
		% in q2	6.9%	5.0%	6.5%
	2401	Number	44	5	49
		% in q2	12.1%	5.0%	10.6%
	243	Number	43	2	45
		% in q2	11.8%	2.0%	9.7%
	263	Number	36	12	48
		% in q2	9.9%	12.0%	10.3%
	276	Number	21	0	21
		% in q2	5.8%	.0%	4.5%
	33	Number	3	0	3
		% in q2	.8%	.0%	.6%
	35	Number	5	0	5
		% in q2	1.4%	.0%	1.1%
	37	Number	10	0	10
		% in q2	2.7%	.0%	2.2%
	4	Number	19	16	35
		% in q2	5.2%	16.0%	7.5%
	42	Number	18	0	18
		% in q2	4.9%	.0%	3.9%
	44	Number	11	12	23
		% in q2	3.0%	12.0%	5.0%
	59	Number	21	13	34
		% in q2	5.8%	13.0%	7.3%
	7	Number	34	10	44
		% in q2	9.3%	10.0%	9.5%
Total		Number	364	100	464
		% in q2	100.0%	100.0%	100.0%

Chi-squared tests

	Value	ddl	Asymptotic significance (bilateral)
Pearson's Chi squared	72.110[a]	15	.000
Report of probability	81.082	15	.000
Number of validated observations	464		

a. 9 cells (28.1%) have a theoretical number under 5. The minimum theoretical number is.65.

Symmetrical measures

		Value	Approximated significance
Nominal by Nominal	Coefficient of contingency	.367	.000
Number of validated observations		464	

SFR social representation:

Flament & Rouquette's procedure. Properties of answers: diversity, index of infrequency, entropy and distribution by rank x frequency.

Diversity: 114 adults gave 483 words (an average of4 words per adult). After choosing the main words (without valence) we obtained, where T=number of different occurrences and N=number of occurrences,

$$T/N= 175/ 483= 0.36$$

Index of infrequency: we counted the "hapax rate". A hapax is a word which occurs just once.

$$\textit{Hapax rate} = 106/175=0.61$$

This index of infrequency was high.

Entropy of the distribution: To analyse the entropy, we have to calculate 'd', which is the relative frequency (f) and the difference from N/T in absolute terms: d=|f-N/T|

$$\textit{Entropy} = \Sigma d/T = 2.34$$

The entropy was high because of the high hapax rate.

Table 4. Rank & frequency of the associative cards

	Weak mean rank						High mean rank					
	Word	**F[4]**	**Mean rank**	**Word**	**F[4]**	**Mean rank**	**Word**	**F[4]**	**Mean rank**	**Word**	**F[4]**	**Mean rank**
High frequency	Communication	38	2.08	Confidence	26	2.19	Information	18	3	Help	10	3.30
	Respect	20	2.65	Education	15	2.27	Interest	9	3.2222	Listening	7	3.43
	Understanding	13	1.80	Cooperation	11	2.91	Working together	7	3.5714	Gathering	6	3.33
	Exchange	10	2.60	Teacher	8	1.38	Collaboration	6	3	To talk	5	3.20
	Contact	8	2.13	Relation	8	2.13	Engagement	5	3	Responsibility	4	3.25
	Duty	8	2.38	Parent	7	2.71	Honesty	4	3	Encouragement	3	3.00
	Learning	6	2.17	Dialogue	5	1.00	Participation	4	3.75	Opening	3	3.00
	Friendship	4	2.75	Preparation	4	2.75	Child	3	3	Wellness	3	3.33
	Transparency	4	2.50	Partnership	3	1.33	To look	3	3	Support	3	3.33
	Mutual aid	3	1.67	Training	3	2.00	Teaching	3	3.3333	Important	3	4.33
	Sharing	3	2.00	Success	3	2.00	Stress	3	3.3333	Meeting	2	3.00
	Good	2	1.00	Interaction	2	1.50	To do his work	3	5	Essential	2	3.50
	Knowing	2	1.50	Equality	2	2.00	Competence	2	3.5	Needed	2	3.50
	Problem identification	2	2.00	Objective	2	2.00	Joy	2	3.5	Motivation	2	4.00
	Activity	2	2.50	To improve	2	2.50	Behaviour	2	4	To resolve	2	4.00
	Security	2	2.50				Obligation	2	4	Supervision	2	4.50
							Holidays	2	4	Pleasure	2	4.50
							Study	2	4.5	Satisfaction	2	5.00
							Regular	2	4.5			

[4] F : Frequency

	Weak mean rank						High mean rank					
	Word	**F[4]**	**Mean rank**	**Word**	**F[4]**	**Mean rank**	**Word**	**F[4]**	**Mean rank**	**Word**	**F[4]**	**Mean rank**
	Class	1	1.00	Collaboration-			Waiting	1	3.00	Attention	1	3.00
	Communicative	1	1.00	communication	1	1.00	Community	1	3.00	Conviviality	1	3.00
	Harmony	1	1.00	Complication	1	1.00	Correction	1	3.00	Creativity	1	3.00
	Balance	1	1.00	Conversation	1	1.00	Disagreement	1	3.00	Discipline	1	3.00
	Peace	1	1.00	Link	1	1.00	Discretion	1	3.00	Availability	1	3.00
	So	1	2.00	To revise	1	1.00	Frankness	1	3.00	Loyalty	1	3.00
	Love	1	2.00	Accompaniment	1	2.00	Multidisciplinary	1	3.00	Novelty	1	3.00
	Auxiliary	1	2.00	Art	1	2.00	Pedagogy	1	3.00	Results	1	3.00
	Cohesion	1	2.00	School report	1	2.00	To mix	1	3.00	Teamwork	1	3.00
	Constructive	1	2.00	Knowledge	1	2.00	Private life	1	3.00	Welcome	1	4.00
Weak	Discover	1	2.00	Constraint	1	2.00	Common aim	1	4.00	Way	1	4.00
frequency	Together	1	2.00	Efficiency	1	2.00	Co-decision	1	4.00	Contradiction	1	4.00
	Explain	1	2.00	Requirement	1	2.00	Clear instructions	1	4.00	Discussion	1	4.00
	Intimate	1	2.0	Different idea	1	2.00	Distance	1	4.00	Right to watch	1	4.00
	Model	1	2.00	To read	1	2.00	Failure	1	4.00	School	1	4.00
	Politeness	1	2.00	More playground	1	2.00	Effort	1	4.00	School unit	1	4.00
	Schooling	1	2.00	monitors			Development	1	4.00	Gymnastics	1	4.00
	Tolerance	1	2.00	Programme	1	2.00	Involvement	1	4.00	Indulgence	1	4.00
				Time	1	2.00	Interactive	1	4.00	Freedom of speech	1	4.00
							Child protection	1	4.00	Question	1	4.00
							Rigour	1	4.00	Manners	1	4.00
							Sociable	1	4.00	Support	1	4.00

							To pass on	1	4.00			
	Weak mean rank						**High mean rank**					
	Word	**F[4]**	**Mean rank**	**Word**	**F[4]**	**Mean rank**	**Word**	**F[4]**	**Mean rank**	**Word**	**F[4]**	**Mean rank**
Weak frequency							View on the child	1	4.00	Values	1	4.00
							Approach	1	5.00	To appreciate	1	5.00
							Good of the child	1	5.00	Basis	1	5.00
							To cultivate	1	5.00	Complementarity	1	5.00
							Destabilising	1	5.00	Culture	1	5.00
							To elaborate	1	5.00	To write	1	5.00
							Excursion	1	5.00	Fulfilment	1	5.00
							Feedback	1	5.00	Familiar	1	5.00
							Happy	1	5.00	Hesitation	1	5.00
							Game	1	5.00	Integrity	1	5.00
							Organisation	1	5.00	‘Maison relais[5]’	1	5.00
							Patience	1	5.00	Educational		
							Without taboo	1	5.00	guidance	1	5.00
										Positive	1	5.00

[5]‘Maison relais’ is the name of an association which takes care of child after school.

Distribution by rank x frequency:

Table 4 shows the distribution of the occurrences. Three principal words seem to compose the SR:

- Communication (f[6]: 38; MR[7]: 2.08)
- Confidence (f: 26; MR: 2.19)
- Understanding (f: 10; MR: 2.30)

We can also add:

- Teacher
- Contact
- Relation
- Duty

These words seem to be stereotyped elements because, apart from 'duty', they can be considered as components of the source item.

To take the analysis further, we examined relations of similitude between the words and attributed a valence to each word (positive, neutral or negative).

Valence & associative cards: To organise the words, we first attributed a valence to all occurrences: 71.2% of them had a positive valence, 21.5 % were neutral and only 7.2 % were negative. We then created 22 associative cards; words with a positive and neutral valence could be grouped almost under the same cards. With the exception of "about school", separate cards had to be created for the words with a negative valence.

There were no significant differences between parents' and teachers' associative cards (p=.062) and between rank given by adults and valence (p=.072) or rank given by adults and associative cards (p=.322). We chose to group the adults' responses together and to analyse them as one sample. However, we did not observe any differences between valence and opinion (p=.255).

[6] f: frequency
[7] MR: mean rank

Table 5. Associative cards with their valence

	%
Associative cards with positive valence	**71.2**
Information/communication	25.6
About school	2.6
Partnership/reciprocity	15.4
Actions	8.1
For the child	8.4
Confidence	7.3
Respect	5.5
Social competences	5.8
Positive evaluation	6.7
Linked to future	3.5
Hard conception	1.5
Affective connotation	1.2
Quality of the relation	3.5
Classless	4.9
Associative cards with neutral valence	**21.5**
Information/communication	1.0
About school	64.4
Partnership/reciprocity	1.9
Actions	7.7
For the child	1.9
Confidence	1.0
Parents' association	7.7
Classless	14.4
Associative cards with negative valence	**7.2**
Feeling of difficulty	14.3
Misunderstanding	14.3
Obligation	11.4
Discomfort	14.3
Intrusion	5.7
Report	20.0
Complaints to school (one parent only)	14.3
About school	5.7

A significant difference (p=.01) appeared among associative cards according to the language chosen to complete the questionnaire, accounting for 16.3% of the variance. We observed the same among associative cards according to language (p=.016). This difference explained 34.2% of the variance. In Portuguese, people gave more neutral words than in the other languages (29.7% *vs.* 18.9% in French, 20.3% in German); in French they gave more negative occurrences than in the other languages (10.6% *vs.* 3.9% in German, 3.0% in Portuguese); positive occurrences were given by more adults in German (75.8% *vs.* 70.5% in French, 67.3% in Portuguese).

Table 6. Cross table Valence x Language

Valence		**Language**			
		French	German	Portuguese	Total
positive	Number	179	97	68	344
	% in language	70.5%	75.8%	67.3%	71.2%
negative	Number	27	5	3	35
	% in language	10.6%	3.9%	3.0%	7.2%
neutral	Number	48	26	30	104
	% in language	18.9%	20.3%	29.7%	21.5%
Total	Number	254	128	101	483
	% in language	100.0%	100.0%	100.0%	100.0%

Chi squared tests

	Value	ddl	Asymptotic significance (bilateral)
Pearson's chi squared	13.180[a]	4	.010
Report of probability	13.508	4	.009
Linear association by linear	1.911	1	.167
Number of validated observations	483		

a. 0 cells (0%) have a theoretical number under 5. The minimum theoretical number is 7.32.

Symmetrical measures

		Value	Approximated significance
Nominal by Nominal	Coefficient of contingency	.163	.010
Number of validated observations		483	

A significant difference (p>.01) appeared among associative cards according to school class, accounting for 38.4% of the variance.

Table 7. Cross table School Class x Valence

		valence			Total
		positive	negative	neutral	
School class		17	2	5	24
	14	28	5	10	43
	163	31	7	3	41
	192	24	0	6	30
	2401	31	1	17	49
	243	31	1	13	45
	263	47	1	5	53
	276	15	0	6	21
	33	3	0	0	3
	35	5	0	0	5
	37	14	0	6	20
	4	24	3	8	35
	42	15	0	3	18
	44	12	2	9	23
	59	14	11	9	34
	7	38	2	4	44
Total		349	35	104	488

Chi squared tests

	Value	ddl	Asymptotic significance (bilateral)
Pearson's chi squared	84.229[a]	30	.000
Report of probability	81.328	30	.000
Number of validated observations	488		

Chi squared tests

	Value	ddl	Asymptotic significance (bilateral)
Pearson's chi squared	84.229[a]	30	.000
Report of probability	81.328	30	.000
Number of validated observations	488		

a. 24 cells (50.0%) have a theoretical number under 5. The minimum theoretical number is .22.

Symmetrical measures

		Value	Approximated significance
Nominal by Nominal	Coefficient of contingency	.384	.000
Number of validated observations		488	

We also observed that two classes totalled more than half of the negative occurrences (school class "59" = 31.4% and school class "163" = 20.0%).

Table 8. Negative Valence by School Class

		Number of cases	Percentage	Validated Percentage	Cumulative Percentage
Validated		2	5.7	5.7	5.7
	14	5	14.3	14.3	20.0
	163	7	20.0	20.0	40.0
	2401	1	2.9	2.9	42.9
	243	1	2.9	2.9	45.7
	263	1	2.9	2.9	48.6
	4	3	8.6	8.6	57.1
	44	2	5.7	5.7	62.9
	59	11	31.4	31.4	94.3
	7	2	5.7	5.7	100.0
	Total	35	100.0	100.0	

SFR social representation: As we saw in the first part of our analysis, three words stood out and seem to be the central core of the SFR-SR. To examine and verify this hypothesis we

performed the same analysis (entropy and rank *vs.* frequency distribution) with the associative cards. We grouped words under 22 cards.

Entropy of the distribution of the associative cards:

$$Entropy = \Sigma d/T = 17.215$$

In this case, entropy was weak, which indicates that the words are organised as an SR. This phenomenon could be explained as being due to the fact that we organised the spontaneous words ourselves.

Rank x frequency distribution: To attribute an MR, we calculated it from the MR of words grouped under the same association. For example:

"Linked to future" included:

- Path to the future (MR=4)
- Development (MR=4)
- Prepare their personal future (MR=3)
- Preparation for the future (MR=2)
- Preparation for life (MR=3)

"Linked to future" had MR=3.2.

For the frequency, we just added up the frequencies of each word.

Table 9. Rank & Frequency of the associative cards

	Weak mean rank			High mean rank		
	Expression	**Frequency**	**Mean rank**	**Expression**	**Frequency**	**Mean rank**
High frequency	Information/communication	89	2.43	Partnership/reciprocity	55	2.87
	About school	78	2.49	Actions	36	3.33
	Confidence	26	2.19	For the child	31	3.03
				Classless	27	3.00
				Positive evaluation	23	2.53
				Social competences	20	2.80
				Respect	19	3.17
Weak frequency	Report	7	2.50	Quality of the relation	17	3.00
				Affective connotation	12	3.20
				Parents' association	8	3.67
				Linked to future	5	2.88
				Feeling of difficulty	5	3.18
				Misunderstanding	5	2.80
				Discomfort	5	3.00
				Complaints to school	5	3.14
				Strong	4	3.19
				Obligation	4	3.20
				Intrusion	2	4.00

Table 9 shows the distribution of the associative cards. The results obtained confirmed what we observed with the spontaneous words: "communication" and "confidence" composed the central core of the SR SFR; "about school" could be considered as a stereotypical element because of its nature.

DISCUSSION AND CONCLUSION

SFR is an essential topic in the field of education. It is even truer in the Luxembourg context, where a new law appeared in 2009 requiring teachers to devote 40 hours per year to SFR. The purpose of this analysis of the SR was to discover how parents and teachers consider the relationship and to establish whether a dissonance could be observed between their representations. The literature often highlights these points, and it was important to know and understand the reality of the SFR in Luxembourg. Examining representations to do with the school/family relationship enables us to gain an understanding of those representations and hence to take action by suggesting means of improving the relationship, as well as to draw attention to difficulties encountered in specific classes.

Initially, the result of the distribution showed that some occurrences were repeated. This meant that there was a shared understanding (stereotype) but not yet a SR. A cognitive structure seemed even more apparent when we considered the proportion of hapaxes. According to Flament and Rouquette, both "the minimisation of diversity (T/N) and the maximisation of infrequency (proportion of hapaxes) reinforce the diagnosis of the existence of a structured SR." The finding for entropy highlighted a poorly differentiated structure. Finally, the distribution and the analysis of the associative cards showed that three words were central: Communication, Confidence and Understanding.

The first result was that SFR was organised into an SR with a central core of two words: Communication and Confidence. These words showed a similarity between teachers and parents, and not a dissonance as supposed. In our sample, adults shared a common understanding. Another associative card entitled "about school" can be considered as a stereotypical element derived from the item source.

In the definition given by Flament and Rouquette (2003, p.13): "A social representation is a way of seeing an aspect of the world, which is translated into judgement and action*."*

We can say that 'communication' is the action, and 'confidence' and 'understanding' are aspects of judgement.

Contrary to Boulanger (2010), who stressed the negative representations of educators about parents' educative competences, and in line with authors such Blin, Larose et al., von Cranach, etc., who recommended intervention programmes which could transform those negative representations into positive ones, our results revealed very positive opinions about the SFR.

In our research, more than half (51.4%) of the words with a negative valence were recorded in only two classes. It seems that within the SFR, the relationship with the teacher is much more significant than the relationship with the school.

On the whole, the parents and teachers of our sample were satisfied with their relationship. This statement was confirmed by the complementary question about their opinion of the SFR, even as far as people who gave words with a negative valence were concerned.

To conclude, our findings stressed the need to reinforce positive attitudes, working with parents and teachers to bring about better genuine communication that will increase feelings of confidence. With this knowledge, we are now able to work with the school and families in this way, responding to their expectations.

Limits of this research

Several limitations inherent to this research should be pointed out. The first relates to the method used. As Miguel, Valentim and Carugati (2010, p.23.7) emphasise, "It is frequently maintained that all methods have specific limitations as well as particular strengths and that the use of methods should be predominantly influenced by substantive research questions". Like these authors, we adopted a mixed procedure combining the qualitative (analysis of the content of spontaneous words and associative cards) with the quantitative (the procedure of Flament and Rouquette). However, this technique is still only partially effective, and suggests the need to interview the participants or extend it to other protagonists such as administrative staff.

We now plan to take this research further by asking all primary school teachers in Luxembourg to complete our questionnaire, operating on a much larger scale. The procedure will be the same. Each school will receive a hyperlink by email that will enable volunteers to answer the questionnaire. This process could at least enable us to make comparisons between teachers and parents and overcome one limitation of our research, namely the small size of our sample of teachers.

Another limitation should now be examined: the importance of the chosen language. In our sample, teachers and parents were generally satisfied with their relationship, but the language chosen to answer tended to influence their point of view. In French, people were more critical than in other languages (Portuguese or German). We can now offer two new hypotheses. Either language has a cultural influence on the answers, or the high value set on German in schools in Luxembourg (the language in which children learn to read) means that the relationship with German-speaking parents is valued correspondingly. In the case of the Portuguese, their neutral position can apparently be attributed to a desire to remain inconspicuous.

Reference

Abric, J.C. (1987). Les représentations sociales. In J.C. Abric (Ed.).*Coopération, compétition et représentations sociales* (pp. 57-80). Fribourg : Del Val.

Abric, J.C. (1991). Experimental study of group creativity: Task representation, group structure and performance. *European Journal of Social Psychology, 1*, 311-326.

Abric, J.C. (1993). Central system, peripheral system: their functions and roles in the dynamics of social representations. *Paper on Social Representations, 2*, 75-78.
http://www.psych.lse.ac.uk/psr/PSR1993/2_1993Abric.pdf. Accessed 13 July 2010.

Abric, J.C. (1996). Specific processes of social representations. *Paper on social representations, 5*, 77-80.

Abric, J.C. (2003). *Méthodes d'étude des représentations sociales*. Ramonville Saint-Agne: érès.

Augoustinos, M., Walker, I. & Donaghue, N. (2006). *Social cognition: an integrated introduction, 2d ed.* London: Sage.

Boulanger, D., Larose, F. & Couturier, Y. (2010). La logique déficitaire en intervention sociale auprès des parents: les pratiques professionnelles et les représentations sociales. *Nouvelles Pratiques Sociales, 23*(1), 152-176.

Castellotti, V. & Moore, D. (2002). *Social representations of languages and teaching*. Strasbourg: Council of Europe, Language Policy Division (DGIV).

Courtial, J.P. & Kerneur, L. (1996). Les représentations de la recherche dans un domaine de la psychologie de l'éducation. *Paper on social representations, 5*, 127-144.
http://www.psych.lse.ac.uk/psr//PSR1996/5_1996Court.pdf. Accessed 13 July 2010.

Deniger, M.A., Abdoulaye, A. Dubé, S. & Goulet, S. (2009). *Les représentations du système scolaire des familles issues de milieux défavorisés.* . Université de Montréal, Faculté des Sciences de l'Education, Département d'administration et fondement de l'Education, Groupe de recherche sur l'éducation en milieu défavorisé. Rapport de Recherche. http://www.crires-oirs.ulaval.ca/webdav/site/oirs/shared/Rapport-Final-03-2010.pdf. Accessed 17 June 2010.

Doise, W. & Palmonari, A. (1986). *L'étude des représentations sociales.* Paris: Delachaux et Niestlé.

Ecalle, J. (1998). L'école : un monde intersubjectif de représentations entrecroisées. *Revue française de pédagogie, 122*, 5-17.

Ferrara, M.M. (2009). Broadening the myopic vision of parent involvement. *The School Community Journal, 19*, 123-142.

Flament, C. & Rouquette, M.L. (2003). *Anatomie des idées ordinaires: comment étudier les représentations sociales* Paris: A. Colin.

Fontaine, S. (2007). Représentation sociale parents et enseignants, l'école Réunion. Dissertation in social psychology. Université de la Réunion, Saint-Denis Messag, France. http://tel.archives-ouvertes.fr/docs/00/46/22/80/PDF/2007lare0025-fontaine.pdf. Accessed 18 June 2010.

Gonzalez-DeHass, A.R., Willems, P.P., & Doan Holbein, M.F. (2005). Examining the relationship between parental involvement and student motivation. *Educational Psychology Review, 17,* 99-123.

Jeynes, WH. (2005). A meta-analysis of the relation of parental involvement to urban elementary school student academic achievement. *Urban Education, 40,* 237-269.

Jeynes, WH. (2007). The relationship between parental involvement and urban secondary school student academic achievement. *Urban Education, 42,* 82-110.

Jodelet, D. (1984). Représentation sociale : phénomènes, concept et théorie. In S. Moscovici (Dir.). *Psychologie sociale* (pp. 357–378). Paris: PUF,.

Jodelet, D. (1991). *Les représentations sociales*. Paris: PUF.

Lahlou, S. (1995). *Penser Manger : les représentations sociales de l'alimentation.* Dissertation in social psychology. Ecole des hautes études en sciences sociales. Paris, France. http://tel.archives-ouvertes.fr/docs/00/16/72/57/PDF/THEDE100a.pdf. Accessed 18 June 2010.

Larose, F., Boulanger, D., Couturier, Y., Bédard, J. & Larivée, S.J. (2009). Les représentations sociales comme analyseur de l'émergence d'une nouvelle profession en éducation : le cas des agents de développement au Québec. [As representaçõessociaiscomoanalisador da emergência de uma nova profissãoemeducação: o caso dos agentes de desenvolvimento no Québec.] *Revista da FAEEBA – Educação e Contemporaneidade, 18,* 1-16.

Larose, F., Lenoir, Y., Bacon, N. & Ponton, M. (1994). Lieu de contrôle, représentations sociales et modèles d'intervention éducative dans une perspective interdisciplinaire : une étude exploratoire auprès d'enseignantes et d'enseignants du primaire au Québec. *Revue des sciences de l'éducation, 20*, 719-740.

Minier, P. (1995). *Les représentations de l'apprentissage : système symbolique médiateur de l'interaction parents-enseignants*. Dissertation in Education. Université du Québec, Montréal et Chicoutoumi, Canada. http://bibvir.uqac.ca/theses/1518107/1518107.pdf. Accessed 11 May 2010.

Moliner, P. (1996). *Images et représentations sociales.* Grenoble: PUG.

Moscovici, S. (1973). Foreword. In C. Herzlich (Ed.), *Health and illness: a social psychological analysis* (pp. ii). London : Academic Press

Moscovici S. (1961). *La psychanalyse, son image et son public*, Paris: PUF

Nye, C., Turner, H., and Schwartz, J. (2006). *Approaches to parent involvement for improving the academic performance of elementary school age children.* London: The Campbell Systematic Reviews. [En ligne] http://www.campbellcollaboration.org/library.php.

Paty, B. (2007). Etude des représentations sociales de la violence chez les élèves et chez les enseignants : contribution à une compréhension des conflits au collège et au lycée. Congrès international AREF 2007 (Actualité de la Recherche et Education et en Formation) http://www.congresintaref.org/actes_pdf/AREF2007_Benjamin_PATY_527.pdf. Accessed 18 June 2010.

Pelt, V. (2011). Les théories de la communication au service de la relation école/famille. *Scientia Paedogigica Encyclopedis. 47*, 3-24.

Pelt, V. & Poncelet, D. (2010). Relation École/Famille : Analyse d'une communication institutionnalisée, *Actes du XIIIe Congrès international de l'Association internationale de formation et de recherche en éducation familiale (AIFREF).* Fortezza Da Basso, Florence, Italie, 17-19 novembre 2010.

PSR-Paper on Social Representations. http://www.psych.lse.ac.uk/psr/. Accessed 13 July 2010.

Räty, H. & Snellman, L. (1998). Social representations of educability. *Social Psychology of Education, 1*, 359-373.

Salomon, A. & Comeau, J. (1998). La participation des parents à l'école primaire trente ans après : un objectif encore à atteindre. *International Review of Education, 44*, 251-267.

Sperber, D. & Wilson, D. (1989). *La pertinence*. Paris : Les Editions de Minuit

Statec. (2009). *Le Luxembourg en chiffre.* Luxembourg: Statec. http://www.statistiques.public.lu/fr/publications/horizontales/luxChiffresFR/luxChiffresFR.pdf.

Vergès, P. (1992). L'analyse des représentations sociales par questionnaires, *Revue française de sociologie, 42*, 537-561.

VÉRONIQUE PELT has been working as a Research Associate at the University of Luxembourg since 2006 among different projects concerning students. Before that, she was working on competencies and lifelong learning as a trainer. She holds a Master 2 in Psychology and has graduated in Mediation. She is a member of the following Research Area Group: Development of schools and school related partners. Her research interests are: Students/pupils; communication; school/Parents relationships; and multilingualism. Email: veronique.pelt@uni.lu

DÉBORA PONCELET (PhD) is an assistant professor in educational science and psychology at the department of language and literature, humanities, arts and education (FLSHASE) at the University of Luxembourg. Her research interests have mainly been focusing on family educational strategies and family-school relationships. She is also a professor in the bachelor degree in educational sciences (BPSE). Debora represents Luxembourg in the association internationale de formation et de recherche en éducation familiale (AIFREF).

She is a member of the following Research Area Group: Development of schools and school related partners and Mathematics and science education. Email: debora.poncelet@uni.lu