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# The differential contribution of maternal and paternal values to social competence of preschoolers

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# The differential contribution of maternal and paternal values to social competence of preschoolers

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Multivariate analyses were conducted to clarify the nature of the influences of parental values on social behaviours of kindergarteners in the context of socio-demographic variables and sex of participants. This study included 217 mothers and 172 fathers from the same families, who completed a socio-demographic questionnaire and a new Q-sort that assesses parental values on Individualism (IND)/Collectivism (COL) and Horizontal (HOR)/Vertical (VER) continuums. To test the hypothesis of an association between parental values and children's behaviours, teachers also provided information about each child's social competence, anger-aggression, and anxiety-withdrawal in kindergarten using the Social Competence and Behavior Scale. Parents shared a greater proportion of IND/COL than VER values and mothers were more likely to emphasise IND and COL values than fathers. Mothers within IND and COL groups had more socially competent kindergartners as reported by teachers. Considering the mixed results found in the literature regarding sex differences in parenting and behaviours of children, the present results suggested that examining more closely the system of parental values might offer valuable avenues for future research on early childhood socialisation.

**Keywords:** child-rearing practices; parental values; disruptive behaviours; social competence; preschool age



The preschool age is a critical stage for learning and manifesting social behaviours such as aggression (associated with anger), withdrawal (associated with anxiety), or socially valued behaviours such as cooperation (usually associated with joyfulness). Previous studies have found the largest decline in physical aggression in the preschool period (e.g. Nagin & Tremblay, 1999), accompanied by a striking increase in social competence (e.g. LaFreniere et al., 2002) between the ages of 2 and 6. Researchers have concluded that social behaviours in preschoolers are particularly sensitive to environmental factors, and as the family is likely to be the main source of influence during this developmental period, parenting is seen as a key determinant of competencies and difficulties. Such studies have contributed to major advances in the development of a parental

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guidance program which has a unique and positive impact on ameliorating children's social difficulties (Webster-Stratton & Reid, 2010).

Scientific progress in the area of children's socialisation has been impressive; however, important questions remain. For example, while studies consistently show that girls develop more adapted social behaviours than boys, and do so earlier than boys according to adults' reports (LaFreniere et al., 2002), they have failed to reveal the socialisation processes (e.g. parenting processes) involved in these observed sex differences. On the one hand, a meta-analysis conducted by Lytton and Rommey (1991) concluded that North American parents do not socialise their boys and girls differently, except with respect to incentives for stereotyped activities. On the other hand, research with both mothers and fathers suggests that, compared with women, men spend less time providing direct care of their child, but are involved more than women in interactive activities such as physical play and homework (e.g. Hall, Walker, & Acock,1995; Hawkins, Amato, & King, 2006). Nevertheless, the explanation of a possible sex effect of such parenting on the social behaviour of the child remains obscure. The lack of consensual explanation of the sex discrepancy in socialisation processes might explain why researchers rarely consider the sex of children or parents as pertinent in programming for early intervention. Interestingly, some researchers found that boys are likely to be targeted for their low levels of social competencies; however, girls are more likely to benefit from their participation in preventive interventions (e.g. Poulin et al., in press). We argue in the present study that a deeper understanding of the socialisation process of boys and girls should include the investigation of parenting values.

Unlike parental attitudes and behaviours, which are considered somewhat unstable as a function of context (Holden & Miller, 1999), parental values are conceived of as a set of highly stable social cognitions that guide parents when they act as representatives of their community in developing internalised standards and customs in their children (Grusec, 1997). Thus, parenting values are likely to provide an important key to understanding the child's social behaviour while also considering parent and child sex, child age, or social contexts, because values might regulate parenting in the context of socialisation pressures from the macrosystem (culture and religion), the mesosystem (school and neighbourhood), and the microsystem (family) to produce proximal and enduring social influences within parent–child dyads (Alwin, 2001). Prior studies have identified diversity in parental values across cultures (e.g. Suizzo, 2007), associations between values and parental behaviours (e.g. Alwin, 2001), and associations between values and children's self-esteem and social cognitions (e.g. Rudy, & Grusec, 2006). However, no research to date has shed light on the nature and magnitude of associations between parental values and social behaviours in children. In addition, while notable differences in mother and father behaviour have been observed, no studies have examined the similarities and differences in mother and father social values and their resulting influences on their child's social development. Thus, this study contributes to the research literature by explicitly testing the hypothesis of an association between specific parental values and the most common social behaviours expected for preschoolers, as well as the possible moderating effect of the sex of child and parent. In doing so, important conceptual and methodological issues were considered.

First, parenting values or 'assessments of what parents find desirable for their children' are the focus of competing theories using diverse labels and concepts such as attitude, attribute, belief, or goal, and the variation in the use of these concepts as a proxy for parental values is likely to contribute to confusing results. We choose to use here the

concept of *values* to serve as a prototype for the construction of attitudes that guide behaviour in a given social situation (Homer & Kahle, 1988). Thus, the value 'My child should feel free' will influence the attitude 'I agree that my child decides for himself to watch TV', and consequently, the parental behaviour of *laisser-faire* in this situation. This theoretical decision in favour of the hierarchy: value → attitude → parental practice has several advantages. In terms of methodology, measurement of parental values is expected to be more reliable than the measurement of parental attitudes or practices through direct observation, because values are not subject to: (1) the vagaries of the observation of parenting in the context in which the child's behaviours are not controlled; (2) the reactivity of the parent when observed in a laboratory situation or at home; and (3) the challenges of establishing ecological validity (e.g. Gardner, 2000). Furthermore, questionnaires about parental behaviours or attitudes also have their share of problems, particularly with regard to the reliability of parents seeking to recall what they do with their child in different contexts (see Holden & Edwards, 1989). In contrast, as the system of values can be viewed as an organisation of persistent social cognitions and the basis of personality (Rokeach, 1973), the measurement of parental values would have greater potential to detect direct or indirect influences of parents on children.

Second, researchers have found it difficult to construct measures that reflect the complexity of parental views on socialisation (Sigel, 1992). However, recent progress has been made in the fields of social psychology, sociology, and anthropology (e.g. Oyserman, Coon, & Kemmelmeier, 2002), which allow, for example, researchers to categorise societies based on a spectrum of social values from collectivistic (COL) to individualistic (IND) and on a complementary spectrum from vertical (VER) to horizontal (HOR), where people share more values associated with assertiveness (IND), respect for authority (VER), or equal opportunities (HOR). Results have shown that peers in societies that value COL, compared with IND, experienced less aggression (reviewed by Bergeron & Schneider, 2005). Unfortunately, we do not yet know whether proximal processes found in the family would link, for example, the IND values of parents with children's propensity toward aggression. We have identified only two studies (Rudy & Grusec, 2006; Wang & Tamis-Lemonda, 2003) that concluded that parents share IND/COL values according to their ethnic origins; however no link is made with children's behaviours.

Third, normative approaches that involve factorialisation of values in orthogonal scales (e.g. autonomy (AUT) *vs.* dependence (DEP) of the child) do not allow researchers to estimate the relative importance that parents place on values pertaining to different scales. Tamis-Lemonda et al. (2008) note that parents may hold values pertaining to different concepts such as 'children do things by themselves (AUT)' and 'ask for help when needed (DEP)'. It is clear that analysing the total results derived from orthogonal scales can hardly account for polythetic constructs.

## *Study purpose*

### *Objective 1*

The first objective of this study was to describe groups of parents who share similar values about socialisation of preschoolers. Parental values have been an important focus of research for over 50 years, but a conceptualisation of values on the continuums IND/COL and HOR/VER and a new measurement approach based on the

Q-methodology could pave the way for original and fruitful results about early socialisation. The first step in this direction is thus to describe the values of a representative sample of parents to see if they come together around IND, COL, HOR, and VER values or a mixture of these clusters of values.

*Objective 2*

The second objective of this study was to clarify the nature of influences from parental values to preschoolers' social competence. In order to detect the contribution of parenting values, we compared groups of parents who share socialisation values with respect to their sex, the sex of the child, and the three forms of social behaviours most frequently studied in the preschool period, namely social competence, anger–aggression, and anxiety–withdrawal.



## Method

### *Participants*

The sample was comprised of 217 two-parent families with a kindergarten child (mean child age = 68.02 months, SD = 7.94). While both mothers and fathers were invited to participate, 217 mothers and 172 fathers agreed to answer a socio-demographic questionnaire and to complete the Q-sort at home, describing their parental values. In addition, each child's kindergarten teacher was asked to provide information about the child's behaviour at school; 151 teachers agreed to participate. Families and teachers were Francophones from the regions of Montreal and Sherbrooke in Quebec. The majority of parents (80%) were born in Quebec. According to standards of *Ressources humaines et développement des compétences Canada* (HRSDC, 2008), 15.3% of the families had low incomes (annual family incomes less than $30,000) and 30% of parents had a low education level (high-school diploma or less). These demographics are comparable to the characteristics of the population of major cities in Quebec.

### *Measures*

*Q-Sort of parental values (Q-PV)*

For this study, a Q-Sort was created that invites the parent to sort 70 cards containing socialisation values equally distributed on the continuum conceptualised as individualism/collectivism (IND/COL). Along this continuum, individualism is defined as a parental value emphasising that children should (summarised by Tamis-Lemonda et al., 2008): (1) do things for themselves; (2) act according to their needs; (3) believe in their abilities; and (4) be optimistic and persistent to get what they want. Collectivism is defined as a parental value system in which children should: (1) relate to family members, (2) relate to larger groups, (3) share and cooperate, and (4) be attentive to the needs of others. Although the IND/COL constructs have been useful in understanding shared values within and across cultures, some researchers (e.g. Singelis, Triandis, Bhawuk, & Gelfand, 1995) have proposed complementary constructs called vertical and horizontal (VER/HOR). These four constructs (IND/COL and VER/HOR) can be considered together to better understand parental values systems. On the one hand, parents may hold both IND and VER values for their child emphasising hierarchy

(VER) in which the child must distinguish themselves from others in competing for status (IND), or COL and VER emphasising equality in which the child will conform to adult's will (VER) for the sake of the family members or other in-groups (COL). On the other hand, parents may hold IND and HOR values encouraging the child to be self-reliant (IND), however, not different from others (HOR), or COL and HOR emphasising equality and common goals for the child (COL), but not easily submitted to authority (HOR).

The Q-sort has several advantages from both a methodological and an analytical standpoint (see, for example, qmethod.org). First, as the subjects are forced to sort a limited number of items to represent their point of view, the problems of subjective anchorage and social desirability found in questionnaires are greatly reduced. Second, the subject is the only one who directs the array of cards representing their views: the researchers do not categorise in orthogonal scales and weighed items *a priori*, as in most questionnaires. This allows for combinations of point of views that may go beyond the expectation of the researcher. The Q-PV is the result of extensive literature review and proposals made by experts from various communities (Brazil's south and north, French and English Canada) and research areas such as psychiatry, pediatrics, psychology, and anthropology.



### *Social Competence and Behaviours Evaluation, short form (SCBE-SF)*

This questionnaire, completed by the teacher, measured the social behaviours of the child in three orthogonal factors: (1) social competence, (2) anger–aggression, and (3) anxiety–withdrawal (LaFreniere, Dumas, Capuano, & Dubeau, 1992). The original SCBE is predictive of academic achievement, convergent with the teacher form of the *Achenbach System of Empirically Based Assessment* (Achenbach & Rescorla, 2001) and direct observation and is reliable among teachers (from 0.78 to 0.91 across four samples) and stable (0.63 to 0.86 for three samples). The short form consists of 30 items and conserves the psychometric properties of the original instrument (LaFreniere & Dumas, 1996).

## Results

The first objective of this study was to describe the socialisation values most often shared between parents of preschoolers. To this end, an exploratory factor analysis was conducted. The Q methodology provides an analytical approach for grouping point of views by inverting subjects and variables in the data matrix such that subjects are placed in columns and variables in rows. While maintaining the assumption of the linearity of variables, it is therefore possible to perform correlations and factor analysis among subjects (for details, see McKeown & Thomas, 1988). An exploratory factor analysis (VARIMAX rotation) resulted in three interpretable factors, called *a posteriori:* 1, individualism (IND); 2, collectivism (COL); and 3, verticalism (VER). When factor loadings less than 0.50 are disregarded, it is possible to classify parents in the IND group for 43% of cases, while the group COL and VER account, respectively, for 32% and 28% of parents. It should be noted, however, that many subjects are found in more than one group, indicating that most parents share values of mixed type. Table 1 shows the associations among the three factors, as well as associations among rotated factor scores and socio-demographic indicators. There were small, negative, but statistically significant associations between verticalism and individualism,

Table 1. Correlations between rotated factor scores and socio-demographic characteristics of the sample.

| Measures | Individualism | Collectivism | Verticalism |
|---|---|---|---|
| Individualism | – | | |
| Collectivism | 0.00 | – | |
| Verticalism | −0.29** | −0.11* | – |
| Family income | 0.11* | 0.16* | −0.17** |
| Maternal education | −0.16** | 0.21*** | −0.27*** |

*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$.



and verticalism and collectivism. All associations between socio-demographic indicators and rotated factor scores were small and statistically significant. Family income was positively related to individualism and collectivism, but negatively related to verticalism. Maternal education was positively related to collectivism, but negatively related to individualism and verticalism.

Based on the scores obtained from the rotation of factor loadings, it is possible to specify which items best discriminate groups of parents. Tables 2 and 3 show the parental values that are extremely typical ($n = 10$) and extremely atypical ($n = 10$) for parents of IND, COL, and VER groups. For example, parents belonging to IND tend to sort items such as (Q39, Table 2) 'My child should do things for himself/herself first' as extremely typical of what is desirable for their preschooler, while in the same group, parents would also tend to sort items such as (Q53, Table 3) 'Winning is what should be most important to my child' as very atypical of their views.

To meet the second objective of our study, links between parental values and child behaviours were examined. First, sex differences in children were tested by comparing the average of individual scores on the SCBE-SF for boys and girls. As expected, girls manifested more social competence ($t = 3.31$ (143), $p = .001$) and less anger-aggressive behaviours ($t = -2.25$ (149), $p = .03$) than boys according to teacher's report, but there was no difference in anxiety–withdrawal based on the sex of the child. Next, multivariate analysis of covariance (MANCOVA, Tables 4 and 5) was performed to estimate the main effect and interactions of the sex of the parent and the sex of the child on parents' IND, COL, or VER values. This analysis revealed that more mothers were included in the IND and COL groups than fathers, but there were no differences for the VER grouping. There were no statistically significant differences based on the sex of the child, and interaction effects were also not significant.

In order to test theoretical implications of findings suggesting that IND/COL continuum might be combined with HOR/VER to provide a better understanding of values systems (e.g. Triandis & Gelfand, 1998), two new groups of parents were created in order to contrast parents emphasising COL or VER values (Table 6). This new classification is derived from the observations that the sample of the present study is mostly composed of parents that shared IND or IND+COL values and that VER is negatively related to IND and COL. The *t*-test showed that mothers emphasising VER (found in the VER or VER + IND groups) tend to have less socially competent children in kindergarten compared with mothers emphasising COL values (found in the COL or COL + IND groups). No such association was observed for fathers.

Table 2. List of 10 most important items of the Q-PV that discriminate groups of parents according to factor analysis ($N = 389$).

| Individualism | Collectivism | Verticalism |
|---|---|---|
| Q39. My child should do things for himself/herself first | Q62. My child must be curious | Q61. My child must be able to obey |
| Q16. My child should not stop doing what he/she likes because it does not please others | Q3. My child must be able to compromise to resolve conflicts with others | Q26. My child must respect those in authority |
| Q28. My child must feel free | Q25. My child needs to develop its full potential throughout his/her life | Q31. It is prudent that my child is wary of strangers |
| Q47. My child must assert his/her opinions | Q27. My child must cooperate with others | Q40. My child needs to understand that politeness is very important in relations with others |
| Q67. My child must learn to know himself/herself | Q4. Well-being of others must be important for my child | Q2. My child must learn to follow social rules |
| Q66. My child needs to feel unique, he/she must know he/she is different and not like others | Q19. If a child was in trouble, I want mine to help according to his/her ability | Q57. My child should not attack others |
| Q9. My child must enforces his/her rights | Q69. My child must persevere in a challenging task | Q56. My child must be respectful for others |
| Q11. My child must express his or her feelings | Q48. My child should be proud of work well done | Q14. My child must feel that he has obligations with respect to his family, school, etc. |
| Q6. My child has to act according to its own needs | Q41. My child must enjoy spending time with others | Q30. Relationships with others are important, but my child should move away from harmful child |
| Q1. My child must rely on itself rather than other | Q56. My child must be respectful for others | Q8. Social rules are essential to the well being of my child |



## Discussion

In our study, boys were reported by teachers to be more anger-aggressive and less socially competent than girls. These results conform to three decades of previous studies about sex differences in social behaviours during the preschool years (see LaFreniere et al., 2002 for a review); however, the question remains whether these differences can be accounted for by parents' values. Although the results of our study showed comparable parental values regardless of the sex of their child, some results suggest sex difference between parents, specifically (1) mothers were observed more frequently in groups of parents sharing IND and COL values and (2) combinations of IND and COL values were associated with greater social competence of kindergartners for mothers only.

Results showed that most parents shared some individualistic values (IND). About 43% of parents in this sample valued children's ability to rely primarily on themselves, satisfy their needs first, find intrinsic motivation, act without excessive constraints

Table 3. List of 10 least important items of the Q-PV that discriminate groups of parents according to factor analysis ($N = 389$).

| Individualism | Collectivism | Verticalism |
|---|---|---|
| Q50. My child must understand that he/she depends on others and that others depend on him/her | Q39. My child should do things for himself/herself first | Q62. My child must be curious |
| Q22. Well-being of my child depends on his/her ability to assume obligations towards others | Q20. My child needs to understand that he/she is solely responsible for what happens to him/her | Q66. My child needs to feel unique, he/she must know he/she is different and not like others |
| Q33. The happiness of my child depends on the happiness of those around him/her | Q1. My child should rely on himself/herself rather than on others | Q43. My child should enjoy moments of solitude |
| Q35. My child has to be modest about his/her qualities especially in the presence of others | Q6. My child has to act according to its own needs | Q28. My child must feel free |
| Q68. I prefer that my child practice of sports team rather than individual | Q31. It is prudent that my child is wary of strangers | Q59. My child must be critical of himself/herself |
| Q12. My child should prefer team work rather than working alone | Q53. Winning is what should be most important to my child | Q50. My child must understand that he/she depends on others and that others depend on him/her |
| Q51. My child should enjoy being the first | Q30. Relationships with others are important, but my child should move away from harmful child | Q58. My child should enjoy to have influence over others |
| Q53. Winning is what should be most important to my child | Q65. My child must have fun in the first place | Q44. It bothers me when another child is doing better than mine |
| Q18. My child should enjoy working in situations where competing with others | Q45. It is the duty of my child to take care of his family, even to sacrifice what he/she wants | Q68. I prefer that my child practice of sports team rather than individual |
| Q36. It is important to me that my child do better than others | Q51. My child should enjoy being the first | Q53. Winning is what should be most important to my child |



imposed upon them, and persist to get what they want; parents also valued children's self-awareness and ability to express their uniqueness. These values correspond to what some researchers also call individualism (e.g. Tamis-Lemonda et al., 2008) of which autonomy, self-awareness, and assertiveness are viewed as highly desirable in children. These results are consistent with the work of some sociologists (e.g. Alwin, 2001) who note a marked evolution of Western societies, especially in North America, towards more individualistic values in general, which are increasingly prevalent in child-rearing values. Interestingly, the IND group in this study did not value competition. In this sample, parents valued autonomous children that can assert their individuality, however, not in competition with others; parents did not feel it would be necessary to be

Table 4. Means and standard deviation of rotated factorial scores in function of sex of the child and the parent.

| | Rotated factorial score | | | | | |
|---|---|---|---|---|---|---|
| | Individualism | | Collectivism | | Verticalism | |
| | *M* | SD | *M* | SD | *M* | SD |
| Sex of the child | | | | | | |
| Boy | 0.36 | 0.20 | 0.39 | 0.17 | 0.35 | 0.15 |
| Girl | 0.40 | 0.22 | 0.39 | 0.19 | 0.33 | 0.17 |
| Sex of the parent | | | | | | |
| Father | 0.34 | 0.22 | 0.37 | 0.18 | 0.33 | 0.17 |
| Mother | 0.43 | 0.18 | 0.41 | 0.17 | 0.34 | 0.15 |

Table 5. MANCOVA of rotated factorial scores as a function of the sex of the child and the parent, controlling for socio-demographic contexts.

| | Multivariate | | Univariate (sum of squares) | | |
|---|---|---|---|---|---|
| Source | df | *F* (Pillai) | Individualism | Collectivism | Verticalism |
| Covariates | | | | | |
| Family income | 1 | 0.06*** | 0.62*** | 0.16* | 0.02 |
| Level of education | 1 | 0.17*** | 0.85*** | 0.27** | 0.45*** |
| Main effects | | | | | |
| Sex of the child (SC) | 3 | 0.01 | 0.13$^{t}$ | 0.00 | 0.04 |
| Sex of the parent (SP) | 3 | 0.10*** | 0.82*** | 0.13* | 0.03 |
| Interaction | | | | | |
| SC × SP | 3 | 0.00 | 0.00 | 0.00 | 0.00 |

$^{t}p = 0.06$; $^{*}p < 0.05$; $^{**}p < 0.01$; $^{***}p < 0.001$.

positioned against others by being the first or the best. This is surprising considering that individualistic values and inter-individual competition are often conceptually amalgamated (e.g. Triandis & Gelfand, 1998). Remarkably, these aspects of competition were devalued by all three groups of parents in this study.

Consistent with other studies of social values (e.g. Oyserman et al., 2002), a second factor was identified and named collectivist (COL). Approximately 32% of parents were included in this group, who valued children's ability to relate with family members or larger groups, act cooperatively, resolve conflicts, act respectfully, show awareness of the needs of others, and focus on effort and overcoming challenges rather than focusing on fun. This system of collectivist values is almost as common among parents in our sample as the individualistic system, but ideologically the two groups are opposed, because the COL group focuses mainly on interdependence and the needs of others, while the IND group focuses mainly on autonomy and personal goals. In previous studies, COL often included subjugation to group norms rather than promotion of personal priorities (Triandis & Gelfand, 1998), but in this study that was not the case. Conformity to social rules was not seen as important within the COL group in the present study.

Table 6. Means and standard deviation of SCBE-SF for children of parents from collectivism and verticalism mixed groups.

| SCBE-SF | Collectivism[a] | Verticalism[b] | *t*-value |
|---|---|---|---|
| | Mothers values ($n = 143$) | | |
| Social competence | 3.78 (0.93) | 3.39 (0.71) | 2.71** |
| Anxiety–withdrawal | 2.05 (0.75) | 2.03 (0.70) | 0.13 |
| Anger–aggression | 2.28 (0.05) | 2.40 (0.97) | 0.64 |
| | Fathers values ($n = 99$) | | |
| Social competence | 3.71 (0.91) | 3.75 (0.80) | 0.13 |
| Anxiety–withdrawal | 2.02 (0.91) | 2.00 (0.72) | 0.09 |
| Anger–aggression | 2.23 (0.97) | 2.27 (0.98) | 0.18 |

Notes: [a]Collectivism: combining parents that loaded on factors COL+IND or COL only (rotated factorial factors > 50).

[b]Verticalism: combining parents that loaded on factors VER+IND or VER only (rotated factorial factors > 50).

**$p = 0.01$.

A third group of parents (28%) called verticalist (VER), in reference to the work of Singelis et al. (1995), valued children's learning and observance of rules, in which children must obey and be polite and respectful towards authority in the family or school. This factor also includes parental values of interdependence, relatedness, and equality among children, but wariness of strangers and other disruptive children. Note that the latter set of values is reminiscent of the notion of COL where in-group instead of out-group relatedness is emphasised.

In summary, the parents in this sample shared to a large extent values that favor autonomy and self-assertion (IND) for preschoolers, while almost as large a proportion favoured the values of interdependence and sociability (COL), and a lesser proportion favoured compliance with social rules and authority (VER). Some clarifications are needed here. As one might expect from factor analysis performed elsewhere (e.g. Singelis et al. 1995), a horizontal (HOR) factor did not emerge from the continuum HOR/VER. However, the devaluation of competition in both the IND and COL groups suggests that these groups are rather HOR in their value orientations. In this sense, the values shared by parents of the IND group could be labelled IND+HOR, where parents valued that children should be equal in the search for the satisfaction of their needs and the affirmation of uniqueness (Triandis & Gelfand, 1998). Similarly, the second factor could be called COL+HOR because values such as the respect for authority or the imposition of collective rules are absent even when parents value children's ability to relate to others and act cooperatively. It is also interesting to observe that even the group VER devalued competition. We speculate that, in the context of the socialisation of preschoolers, a significant proportion of parents might value respect for rules and adult authority; however, most of the parents devalue the hierarchy among peers.

It should also be noted that parents in this sample typically belonged to more than one group. These results support the hypothesis of researchers such as Tamis-Lamonda et al. (2008) or Holden and Miller (1999) who posit that the parental cognition system is multidimensional and that the layout of the theoretical dimensions such as IND or COL is likely to be function of the characteristics of parents, children, and extra-familial environment. For example, in the socio-economic context of the families in this

study, where the distribution of wealth is more egalitarian than in most other states of North and South America (GINI coefficient is 0.30 in Quebec: CIRANO, 2009), it is not surprising that parents found it desirable for their children to be assertive (IND), while still respecting others (COL) and not competing for resources. Interestingly, more educated mothers tend to be less IND and VER emphasising more COL. Numerous studies have found an association between low socioeconomic status, harsh parenting, and children's social maladjustments (e.g. Slopen, Fitzmaurice, Williams, & Gilman, 2010). Our results suggest that greater access to resources may positively impact children's social competencies through the influence of parental values and practices that emphasise autonomy of children without emphasising competition for status in children's peer hierarchies because more wealthy and educated parents are likely to perceive their environment to be gratifying and egalitarian.

Results of this study also showed sex differences in parental values, with mothers in this sample valuing IND and COL more than fathers did. What is striking in this study is that mothers emphasise IND more than fathers, for example, 'My child should do things for himself/herself first', 'My child must rely on himself/herself rather than others', and 'My child must assert his/her opinions'. These values might be conceptualised by researchers as typical of paternal values (e.g. Paquette, 2004). The results suggest that perhaps mothers and fathers combine social cognitions differently (such as IND and COL or VER values) to produce specific parental and socialisation outcomes. Indeed, our results showed that the combination IND and COL parental values is more favourable for social competency in children, but for mothers only. This may suggest that mothers' cognition and behaviours are more coherently combined to diminish the likelihood that assertiveness (IND) of children leads to conflicts with peers (COL) or teachers (VER), which is considered by researchers and practitioners as optimal social behaviours for five-year-old children to prepare for school entry (reviewed by Ladd, Herald, & Kochel, 2006).

Significant differences in children's teacher-rated social competencies by maternal values might be influenced by the fact that data were reported by same-sex informants and by the conceptualisation of social competencies in this study. In the present study, social competencies might be conceived (e.g. Eagly, 2009; Spence & Buckner, 2000) as communal or feminine (friendly, unselfish, concerned with others, and emotionally expressive) rather than agentic or masculine (masterful, assertive, competitive, and dominant). Furthermore, as the frequency of communal behaviours such as 'Sensitive to another's problem', 'Negotiates solutions to conflicts with other children', or 'Takes other children and their point of view into account' were rated by female teachers, we speculate that the study of the influence of father's values on children's social competencies might have a different story to tell where agentic behaviours, such leadership, helping strangers, or support to collectives are rated by teachers or other informants.

Our results do not show different patterns of parental values as a function of the sex of the child. This topic remains puzzling because of the very consistent conclusion in previous studies that social behaviours are remarkably different in boys *vs.* girls (e.g. LaFreniere et al. 2002). It is possible that parental values and practices interact to produce specific socialisation processes based on multiple characteristics of children, including sex, or social contexts such as poverty. Because our sample is normative, future studies should examine parental values and children's behaviours in more diverse samples of boys and girls with disruptive behaviours. Considering that the observation of parental behaviours could hardly account for fundamental parental influences that take place across contexts of locus, time, and social partners, we believe that

the study of parental values has, in this sense, great potential if researchers can overcome important conceptual and methodological challenges.

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