WILEY

Different ways of knowing a child and their relations to mother-reported autonomy support

Geneviève A. Mageau¹ | Amanda Sherman² | Joan E. Grusec² | Richard Koestner³ | Julien S. Bureau¹

¹Department of psychology, Université de Montréal, Montréal, Québec, Canada

²Department of psychology, University of Toronto, Toronto, Ontario, Canada

³Department of psychology, McGill University, Montréal, Québec, Canada

Correspondence Geneviève A. Mageau, PhD, Département de psychologie, Université de Montréal, C.P. 6128, Succursale Centre-Ville, Montréal, Québec, Canada, H3C 3J7. Email: g.mageau@umontreal.ca

Funding Information

This research was funded by grants from the Social Sciences and Humanities Research Council of Canada (SSHRC) to the first and third authors.

Abstract

We considered how different forms of child knowledge (i.e., mothers' reports of taking their child's perspective, their accurate knowledge in the form of precise predictions of their child's ratings regarding distress/comforting and compliance/discipline situations, and their knowledge) perceived are differentially associated with mother-reported autonomy support (i.e., providing meaningful rationales, providing choice, and acknowledging feelings; Koestner, Ryan, Bernieri, & Holt, 1984). Mothers and their children (141 dyads, M = 11 years old at Time 1) participated in a two-wave longitudinal study with assessments made two years apart. The only form of knowledge that predicted changes in autonomy support was perspective-taking. Autonomy support, in turn, indirectly predicted changes in distress/comforting accuracy through child-reported selfdisclosure and directly predicted changes in perceived knowledge. These findings underline the importance of differentiating among forms of child knowledge in the study of socialization processes.

KEYWORDS

autonomy support, child disclosure, child knowledge, perspectivetaking

1 | INTRODUCTION

In research on parenting and socialization, parents' knowledge of their children's emotional and behavioral reactions has been deemed essential in facilitating positive behavioral, cognitive, and affective outcomes (e.g., Grusec, Goodnow, & Kuczynski, 2000). Parents' ability to take their children's perspective and, thereby, know how they are reacting to the present situation, their accurate knowledge in the form of precise predictions of their children's thinking about situations involving distress and comforting as well as compliance and discipline, and their perceived child knowledge, that is, their belief that they know their children, have all been implicated in successful childrearing (e.g., Davidov & Grusec, 2006; Soenens, Vansteenkiste, Luyckx, & Goossens, 2006). However, it is far from clear that these different forms of knowledge are manifestations of the same construct, and to treat them as such can only serve to blur

important distinctions. In this paper we distinguish among these various forms of knowledge, using their relations to one form of effective parenting as an anchor. The effective parenting behavior we focus on is autonomy support. We begin with a discussion of autonomy support and then examine how it might be linked to the three forms of knowledge considered here. In demonstrating possible differences in the relations between these forms of knowledge and autonomy support we underline the importance for researchers, parents, and practitioners of differentiating among forms of knowledge and their function in order to achieve a better understanding of the socialization process.

1.1 Autonomy support

According to self-determination theory (Deci & Ryan, 2000), children feel autonomous when they have a sense of agency and ownership of their behaviors, that is, when they are intrinsically motivated and have internalized the values of others as their own (Joussemet, Mageau, & Koestner, 2014; Koestner, Ryan, Bernieri, & Holt, 1984). Typically, parental autonomy support has been operationalized with three behaviors: providing meaningful rationales for limits and demands, giving choice and opportunities for initiative-taking within these limits, and acknowledging children's feelings (Grolnick & Ryan, 1989; Koestner et al., 1984). More generally, autonomy-supportive parents are empathic, descriptive (i.e., informational instead of evaluative), and they provide opportunities for active participation (e.g., in decision-making or problem-solving) instead of being intrusive, dominating, and pressuring (Grolnick & Pomerantz, 2009). Autonomy-supportive behaviors have been shown to predict children's self-determined motivation and mental health, as well as their adjustment and academic achievement over a five-year period (see Joussemet, Landry, & Koestner, 2008, for a review).

There has been considerable attention paid to factors that undermine autonomy-supportive parenting. Overall, results show that mothers who are achievement-oriented (Pomerantz & Eaton, 2001), who hinge their self-esteem on their child's behavior (Grolnick, Price, Beiswenger, & Sauck, 2007), and who are under stress (Gurland & Grolnick, 2005) are less autonomy supportive (that is, more controlling) than mothers without these characteristics. In contrast, there has been less research examining factors that facilitate autonomy support. In one study, Landry et al. (2008) assessed mothers' trust that their children's development proceeds in a natural and healthy way, and found that this belief predicted mothers' autonomy-supportive practices. The present study was designed to add to the list of factors that might promote autonomy support. Specifically, we were interested in how the different forms of knowledge mothers have about their child might differentially affect their autonomy-supportive behaviors. We were also interested in seeing if autonomy-supportive behaviors could facilitate some of these aspects of knowledge. We now turn to these different forms of knowledge.

1.2 Parental perspective-taking and autonomy support

Perspective-taking has been defined as the willingness and ability to take and understand another person's internal frame of reference (Davis, 1983; Long, 1990) and it has been shown to be an important precursor of effective parenting (e.g., Soenens, Duriez, Vansteenkiste, & Goossens, 2007). There is also evidence that a parent's inability to step back and attempt to understand the child's point of view is likely to lead to insensitive parenting and increased parent-child conflict (e.g., Lundell, Grusec, McShane, & Davidov, 2008). Within self-determination theory, perspective-taking ability is viewed as a prerequisite for the adoption of autonomy-supportive behaviors (Grolnick & Pomerantz, 2009; Grolnick & Ryan, 1989). Specifically, it is suggested that to provide a rationale, one must be aware that the reasons underlying a parent request may be unknown to the child. Similarly, to think of giving children choices, parents must understand that their children's preferences may be different from their own. Finally, to actively recognize children's feelings, parents must first be attuned to them. Although central to self-determination theory, the proposed linkage in the present study, using a longitudinal design that would enable the assessment of change in mother-reported autonomy support as a function of level of parental perspective-taking. In addition, given that autonomy support is associated with positive child outcomes (Joussemet et al., 2008), we looked for evidence of reciprocal effects. We

WILEN

speculated that parents who take their child's perspective and become more autonomy-supportive would observe a positive response from their child, which would reinforce their tendency to take their child's perspective.

1.3 Parental accurate knowledge of the child and autonomy support

In addition to testing the link between perspective-taking and autonomy support, we assessed whether less situationspecific, that is, more general accurate knowledge of the child also predicted autonomy support. To assess accurate knowledge, we evaluated mothers' ability to precisely predict their child's ratings of how they would feel and what parenting interventions would work best in two areas of primary importance for socialization: events having to do with distress and comforting and with compliance and discipline. The assumption here was that more knowledgeable mothers are more likely to be accurate in their predictions of their child's ratings. Although accurate knowledge is similar to perspective-taking in that they both target a person's understanding of another's internal frame of reference, they represent two distinct, albeit correlated, concepts (Long, 1990). Theoretically, perspective-taking refers to the process of gathering information by considering the world from the other person's point of view, whereas accurate knowledge of another person refers to one's cognitive schema about this other person that results from information-gathering strategies and past experience (Markus, 1977). As such, perspective-taking concerns gathering knowledge regarding the child's reactions to a present situation, which in turn should contribute to parents' understanding of their child's typical reactions. However, because there are many ways in which parents can gather information (e.g., through the child's disclosure, through observations, from teachers' reports), parents can also be knowledgeable about their child without necessarily engaging in perspective-taking. The correlation between these two forms of knowledge should thus be modest.

Past studies suggest that knowing how children typically feel and what socialization interventions work best in different situations is linked to positive outcomes such as reduced parent-child conflict and better child coping (e.g., Hastings & Grusec, 1997; Kiel & Buss, 2006; Vinik, Almas, & Grusec, 2011). It is generally argued that these positive relations exist because this form of child knowledge increases the ease with which parents can successfully tailor parenting to their child's developmental level and capacities, as well as to the meaning children make of interactions with their parents. A significant body of research also suggests that the effectiveness of any parenting behavior (including but not limited to autonomy support) depends in part on how it will be perceived by children (Grusec & Goodnow, 1994; Soenens, Vansteenkiste, & Van Petegem, 2015). Knowing how children feel and which interventions should work best in different situations should then guide parents toward the most effective parenting strategy for that particular child.

There is reason to speculate, however, that such accurate knowledge is not a consistent predictor of autonomy support. We suggest that perspective-taking is key in knowing when and how to offer choices, rationales, and acknowledgements of feelings because it makes parents sensitive to the child's inner experiences (e.g., desire to choose, misunderstanding of a rule's value, experiencing strong feelings). In contrast, accurate knowledge should orient parents toward interventions that have been successful in the past, and these need not be behaviors that support children's autonomy. For example, short-term goals such as obtaining immediate compliance can be effectively pursued with a less autonomy-supportive approach.

1.3.1 | The role of child disclosure

This is not to say that autonomy support and accurate knowledge are not linked, however. Here we take a lead from a large literature indicating that parents acquire knowledge about their children's whereabouts and activities from their children's willingness to disclose about these activities (Kerr, Stattin, & Burk, 2010). By offering opportunities for verbal exchanges between parent and child, such disclosure would certainly provide information relevant to a variety of features of the child, including information relevant to their emotions and reactions to socialization interventions in distress/comforting and compliance/discipline situations. The link between more supportive parenting practices and child disclosure is also well documented. These practices include warmth and support (Smetana, Metzger, Gettman, & Campione-Barr, 2006), authoritativeness (Darling, Cumsille, Caldwell, & Dowdy, 2006), positive reactions to disclosure

(Tilton-Weaver et al., 2010), and autonomy support (Bureau & Mageau, 2014). Taken together, these results suggest that autonomy support may promote greater disclosure on the part of the child which, in turn, would lead to more accurate predictions of child ratings regarding distress/comforting and compliance/discipline. We investigated this possibility in a mediational model.

1.4 Parental perceived child knowledge and autonomy support

A third form of knowledge is perceived child knowledge, which refers to parents' beliefs that they know their children's typical emotional and behavioral reactions. Little research has addressed this particular form of knowledge. Available evidence shows that the adolescents of parents who believe that they know about their adolescent's school experiences, friends, and whereabouts are less likely to engage in substance abuse and antisocial behavior (Soenens et al., 2006). We suggest that, as is the case with accurate predictions of child ratings, perceived child knowledge is also a form of general knowledge that should orient parents toward interventions that have been successful in the past, and not necessarily toward autonomy-supportive behaviors. Perceived knowledge was thus not expected to be a consistent predictor of autonomy support. In addition, we argued above that disclosure might provide some information about the way children think and feel, in addition to yielding information about activities. In line with this reasoning and given the documented linkage between more supportive parenting and child disclosure (e.g., Bureau & Mageau, 2014), autonomy support should predict greater perceived knowledge through child disclosure. However, perceived knowledge might not always be accurate. Overconfident parents, for example, might believe they know their child but could actually be quite mistaken. Including a measure of perceived child knowledge allowed us to explore how it related to accurate knowledge in the form of precise predictions of child ratings and whether it had the same relation to autonomy support.

2 | THE PRESENT STUDY

In the present longitudinal study, we tested several hypotheses. We expected that (a) perspective-taking would predict autonomy-supportive parenting; (b) autonomy-supportive parenting would predict future perspective-taking; and (c) mothers who reported being more autonomy supportive would have children who disclosed more to them, thereby increasing the accuracy of their predictions regarding their child's ratings in distress/comforting and compliance/ discipline hypothetical situations as well as their perceived child knowledge. We also tested for the possibility that autonomy support might predict change in child knowledge independent of child disclosure because autonomy support might lead to closer observation of the child and therefore more opportunities for acquiring knowledge.

To test these predictions, we used a two-wave longitudinal design with parent and child reports. Assessment times were scheduled to occur two years apart, close to the transition from childhood to adolescence. We chose this age range because children were still young enough to have frequent interactions with their parents, yet, they were also likely to be spending more time away from the family (Larson, Richards, Moneta, Holmbeck, & Duckett, 1996), which might impact the parent-child relationship.

3 | METHODS

3.1 | Participants

Participants were 141 mothers and one of their children (77 boys and 64 girls), living in a large Canadian city. Children were aged 9.8 to 12.5 years (M = 11.00, SD = .69) at Time 1, and their mothers were aged 35 to 60 years (M = 44.46, SD = 4.87). The number of children per family ranged from 1 to 6, including the participating child (M = 2.30, SD = .90). The majority of the mothers (84%) were married or living common-law. Participants were primarily of middle-class socioeconomic status. All but two mothers had completed high school, and 81% of mothers had completed university. Mothers identified their ethnicities as follows: Western European, 53%; Canadian, 16%; Asian, 12%; East European,

633

Μπ έν

7%; African/Caribbean, 4%; other (mixed parentage, White South African, Latin American), 6%. The remaining mothers did not indicate their ethnicity. Sixty-one percent of mothers were employed full-time, 16% part-time, and 12% were unemployed. The remaining mothers did not indicate their employment status.

3.2 Procedure

Families were recruited from a large database of families maintained by the Department of Psychology at one of the city's universities. Mothers were initially contacted at the hospital when they gave birth, at local day care centers, or at summer camps. Mothers and children were invited to the university research laboratory where they were greeted by two interviewers. Interviewers were mostly female undergraduate students. After obtaining informed consent, mothers and children each accompanied one interviewer to one of two separate rooms, where they completed a number of measures including those used in the present study. Using a paper-pencil format, mothers completed a demographic information sheet as well as measures of maternal perspective-taking, autonomy support, and perceived child knowledge. They were then asked to predict how their child would respond to various questions about distressing events and comforting strategies, and about compliance and discipline strategies, which were then used to assess mothers' accurate predictions about their child's thinking in these areas. Children completed a measure of disclosure in addition to answering the questions about distress/comforting and compliance/discipline situations.

Approximately two years later, 105 mothers and their children returned. Those who declined to participate at Time 2 did so because of time constraints or because of the adolescent's lack of interest. All measures were repeated at Time 2, except for the child disclosure measure which was only used at Time 1. At Time 2, data were collected using a computer questionnaire platform.

3.3 | Measures

3.3.1 | Mother-reported autonomy support

Autonomy support was assessed by evaluating the three classic autonomy-supportive behaviors (Grolnick & Ryan, 1989; Koestner et al., 1984) using items from the authoritative subscale of the Parenting Styles and Dimensions Questionnaire (PSDQ; Robinson, Mandleco, Olsen, & Hart, 1995). The original scale, designed for use with parents of young children, was adapted by editing the wording of some items to be more age-appropriate for 10- to 12-year-olds. Mothers rated the extent to which they provided opportunities for making choices about family rules (one item, "I allow my child to give input into family rules."), gave a rationale for rules and demands (three items, sample item: "I give my child reasons why rules should be obeyed.") and acknowledged their child's feelings (three items, sample item: "I show respect for my child's opinions by encouraging my child to express them."), using a 5-point scale ranging from 1 (*never*) to 5 (*always*). The seven items formed a single factor of autonomy support (all loadings above .38) and yielded satisfactory reliability indices. Cronbach's alpha was .71 at Time 1 and .73 at Time 2.

3.3.2 | Maternal perspective-taking

Mothers completed the perspective-taking strategies subscale of the Self-Dyadic Perspective-Taking scale (SDPT; Long, 1990), adapted to the mother-child relationship. This 5-item subscale assesses active perspective-taking by evaluating cognitive endeavors made to understand the point of view of the child. Mothers rated the extent to which they engaged in perspective-taking activities using a 5-point scale ranging from 1 (*does not describe me well*) to 5 (*describes me very well*). A sample item is: "When I'm upset with my son/daughter, I usually try to put myself in his/her shoes for a while." In the present study, Cronbach's alpha was .81 at Time 1 and .78 at Time 2.

3.3.3 | Accurate knowledge of the child

Accurate knowledge of the child was assessed by evaluating mothers' accurate predictions of their child's ratings regarding distress and comforting (distress/comforting accuracy) and compliance and discipline situations (compliance/ discipline accuracy).

634

Distress/comforting accuracy

Children were asked about their likely reactions to distressing events and their preferred comforting strategies. Specifically, they were presented with a list of ten events they might find upsetting (e.g., having a fight with a friend; see Vinik et al., 2011, for the complete list). They were then asked to rate how upsetting they would find each of these events on a 5-point scale ranging from 1 (*not upsetting at all*) to 5 (*very upsetting*). They also imagined themselves in two situations that would require them to deal with a stressful event: preparing for a difficult oral presentation at school and losing a favorite belonging. Each scenario was followed by a description of four possible ways their mother could act: offer assistance, encourage self-reliance, be sympathetic, and suggest a diversion. Children were asked to indicate how effective each of these techniques would be in relieving their distress on a scale from 1 (*would not make me feel better at all*) to 5 (*would make me feel much better*).

In another room, mothers were presented with the same set of questions in written form. They were told that their child was being asked these questions, and they were asked to try to answer them in the way that they thought their child would. Mothers' and children's responses were then compared for the distressing events and for each of the two scenarios in order to create a measure of distress/comforting accuracy. Mothers were considered accurate if they gave the same, or within one point of the same, extreme ratings as their child (highest and lowest scores). They were assigned a score of 3 if they were accurate on at least 5 ratings of distressing events and, in the case of the scenarios, on all their extreme ratings, 2 if they were accurate on half or more (but not all), 1 if accurate on fewer than half (but at least on one), and 0 if none of their extreme ratings matched their child's. (The scoring with respect to events that were distressing ensured that mothers of children who gave extreme ratings to many distressing events (from five to ten events) were not at a disadvantage.) A total score of distress/comforting accuracy of maternal predictions of child ratings regarding distress/comforting situations and scores of 0 represent absence of knowledge in this area.

Compliance/discipline accuracy

The procedure for determining accuracy with respect to compliance and discipline was identical to that for assessment of distress/comforting accuracy. In place of distressing events, children were presented with a list of 10 things they might mind doing (e.g., cleaning up room, homework) and were asked to rate how much they would mind doing these things on a scale from 1 (*would not mind at all*) to 5 (*would really mind doing it*). They also imagined themselves in two situations that would require them to comply with their mother's request: cleaning up their room and getting off the computer. Each scenario was followed by a description of five possible strategies that their mother could use to obtain compliance: acknowledge feelings but would appreciate it if the child would comply, explain the reason behind the request, insist that the child comply, point out the faulty behavior, and threaten to take away privileges. Children were asked to indicate how effective each of these techniques would be in making them comply with their mother's request. Mothers were also asked to try to answer these same questions in the way that they thought their child would. Mothers' and children's responses were then compared and coded using the same procedure as that used to assess distress/comforting accuracy.

3.3.4 | Perceived child knowledge

Perceived child knowledge was assessed with the cognizance subscale of the SDPT (Long, 1990), adapted to the mother-child relationship. This 8-item subscale evaluates a mother's perception of her global understanding and knowledge of her child's thoughts and feelings. A sample item is "I very often know how my child feels." Responses were rated on the same 5-point scale as for the maternal perspective-taking subscale. Factor analyses have shown that the cognizance and perspective-taking strategies subscales of the SDPT form two distinguishable factors (Long, 1990). Cronbach's alpha was .87 at Time 1 and .80 at Time 2.

3.3.5 | Child disclosure

Child disclosure was assessed using the three disclosure items of the Parental Monitoring Scale (Frijns, Keijsers, Branje, & Meeus, 2010; Stattin & Kerr, 2000). The items are: "Do you spontaneously tell your parents about your friends

(e.g., which friends you hang out with and how you think and feel about various things)?", "How often do you want to tell your parents about school (e.g., how each subject is going; relationships with teachers)?", and "Do you like to tell your parents about what you did and where you went during the evening?". Children responded to each statement using a 5-point scale ranging from 1 (*never*) to 5 (*always*). Cronbach's alpha was .61.

4 | RESULTS

636

4.1 | Preliminary analyses

Dyad attrition rate from Time 1 to Time 2 was 25.5% and other missing data were negligible (<0.04%). Attrition rate was moderate but could reduce power or introduce bias. To prevent these problems, full information maximum likelihood (FIML) estimation procedure and multiple imputations (MI) were used. Mothers who did not return for the second assessment were slightly older (M = 45.89 vs. 43.96; t(133) = 2.044, p < .05) and more accurate in their predictions regarding compliance/discipline (M = 2.71 vs. 2.01; t = 9.87, p < .001) than those who were present at both assessments. However, they did not differ on other variables of interest or demographic variables. Demographic variables (mothers' age, ethnicity, education, employment, marital status, and number of children; children's age and gender) were not related to the variables of interest, with three exceptions (out of 88 possible relations). Specifically, older mothers were less likely to report taking their child's perspective at Time 1 (r = .19, p = .03), more educated mothers were more accurate in their predictions regarding compliance/discipline at Time 1 (r = .23, p = .02), and mothers who were married/living common law reported being more autonomy supportive at Time 2 compared to mothers who were either separated, single, divorced or widowed (r = .23, p = .02). However, none of these effects remained significant if probabilities were adjusted for multiple testing. Importantly, adding these covariates to the corresponding main analyses did not alter the obtained results. Demographic variables were thus not included in subsequent analyses.

Table 1 presents the means, standard deviations, and correlations for the variables of interest. Mother-reported autonomy support was strongly related to perspective-taking and perceived knowledge at both assessments and

Dimension	М	SD	2	3	4	5	6	7	8	9	10	11	12	13
Time 1														
1. Child's gender (1 = boys; 2 = girls)			.10	.07	.05	06	.12	.13	.08	.07	.07	.05	.13	04
2. Child's age	11.0	0.69	-	.04	.01	12	01	.09	01	.08	.01	07	14	03
3. Maternal perspective-taking	3.67	0.69		—	.47***	.45***	.09	09	.20*	.65***	.47***	.43***	.07	09
4. Mother-reported autonomy support	4.16	0.47			-	.51***	.25**	03	.22*	.39***	.63***	.46***	.11	.09
5. Perceived child knowledge	4.10	0.56				-	.14	06	.16	.33***	.42***	.61***	.14	03
6. Distress/comforting accuracy	2.18	0.62					-	.16	.22*	01	.09	.15	.24*	06
7. Compliance/discipline accuracy	2.05	0.89						_	.16	21	11	19	07	.00
8. Child disclosure	3.11	0.89							-	.18	.09	.01	.26**	.01
Time 2														
9. Maternal perspective-taking	3.87	0.84								-	.56***	.48***	.04	.13
10. Mother-reported autonomy support	4.22	0.56									-	.59***	05	.16
11. Perceived child knowledge	3.98	0.63										_	.10	.10
12. Distress/comforting accuracy	2.29	0.54											-	.04
13. Compliance/discipline accuracy	2.00	0.74												-

TABLE 1 Means, standard deviations, and intercorrelations with multiple imputations (N = 141)

p* < .05; *p* < .01; ****p* < .001.



FIGURE 1 Recursive effects between perspective-taking and mother-reported autonomy support

across assessments. Autonomy support was also linked to distress/comforting accuracy at Time 1 but not at Time 2. However, it was not correlated with compliance/discipline accuracy at Time 1 or at Time 2. Finally, neither perceived knowledge nor perspective-taking was related to mothers' accurate predictions of child ratings at either time point.

Paired t-tests were performed on the inputted means to evaluate the general pattern of change across time. Results showed that, overall, distress/comforting accuracy (t = 1.98, p < .05) and perspective-taking (t = 3.34, p < .001) tended to increase over time, whereas perceived knowledge decreased slightly (t = 2.48, p < .05). Autonomy support and compliance/discipline accuracy were stable from Time 1 to Time 2 (t = 1.51, p = .13 and t = 0.48, p = .63, respectively).

4.2 | Main analyses

4.2.1 Cross-lagged panel models

Four cross-lagged panel models were tested to evaluate the recursive effects between autonomy support and the different forms of child knowledge (i.e., perspective-taking, distress/comforting accuracy, compliance/discipline accuracy, and perceived knowledge). To increase the validity of autonomy support assessments, we used a latent variable that captures the common variance across the seven autonomy support items. In all models, stability and recursive effects were modeled.¹ Modification indices suggested that the items pertaining to the autonomy-supportive behavior of providing a rationale should be allowed to covary as they captured common variance that is not shared with the other autonomy-supportive behaviors. These covariances were thus added.

Perspective-taking and autonomy support

The model testing the recursive effects between mother-reported perspective-taking and autonomy support had a satis factory fit to the data, χ^2 (df = 87, N = 141) = 119.44, p < .05, χ^2 /df = 1.37, CFI = .94, RMSEA = .05 [.025/.073]. All factor loadings were significant (all ps < .001) and satisfactory in magnitude, ranging from .33 to .71 (M = .52). Predicting change from Time 1 to Time 2, results showed that the more mothers reported taking their child's perspective at Time 1, the more they reported using autonomy-supportive behaviors at Time 2, $\beta = .28$, p < .05. Autonomy support did not seem to have a recursive effect on perspective-taking ($\beta = .14, p = .20$; see Figure 1).

Accurate predictions of child ratings (distress/comforting and compliance/discipline) and autonomy support The model testing the recursive effects between distress/comforting accuracy and mother-reported autonomy support had a reasonable fit to the data, χ^2 (df = 87, N = 141) = 126.47, p < .01, χ^2 /df = 1.45, CFI = .90, RMSEA = .06 [.033/ .078]. However, no recursive effect was observed. Autonomy support did not predict change over time in distress/

⁶³⁸ WILEY-

comforting accuracy (β = .01, *p* = .96) and distress/comforting accuracy did not significantly predict change in autonomy support from Time 1 to Time 2, β = -.13, *p* = .17.

Similar results were obtained for the model testing the recursive effects between compliance/discipline accuracy and autonomy support. Although the model fitted the data (χ^2 [*df* = 87, *N* = 141] = 129.37, *p* < .01, χ^2/df = 1.49, CFI = .90, RMSEA = .06 [.036/.079]), no recursive effect was observed. Autonomy support did not predict change in compliance/discipline accuracy (β = .14, *p* = .22) and compliance/discipline accuracy did not influence mothers' reports of autonomy-supportive behaviors over time, β = .01, *p* = .90.

Perceived knowledge and autonomy support

The model testing the recursive effects between perceived knowledge and autonomy support also had a reasonable fit to the data, χ^2 (*df* = 87, *N* = 141) = 153.28, *p* < .001, χ^2/df = 1.76, CFI = .88, RMSEA = .07 [.054/.093]. Results showed that the more mothers reported being autonomy supportive at Time 1 the more their perceived child knowledge increased from Time 1 to Time 2 (β = .27, *p* < .05; see Figure 2). Perceived knowledge did not predict change in autonomy-supportive behaviors over time, β = .20, *p* = .12.

Conclusion

Overall, these results suggest that perspective-taking, but neither mothers' accurate predictions of child ratings nor their perceived knowledge, is a determinant of autonomy support. Additionally, we found that autonomy support predicted greater perceived knowledge.

4.2.2 | Child disclosure as a mediator between mother-reported autonomy support and accurate knowledge and between mother-reported autonomy support and perceived knowledge

To further understand the relations between autonomy support and accurate and perceived knowledge, we investigated child disclosure as a mediator of the link between autonomy support and the two forms of knowledge. Specifically, we tested a model where mother-reported autonomy support at Time 1 predicted change in distress/comforting accuracy and in perceived knowledge. These effects were modeled to be partially mediated by child reports of disclosure assessed at Time 1. Distress/comforting accuracy was included in the model because, although autonomy support did not directly predict change in distress/comforting accuracy, these measures were related at Time 1, r = .25, p < .01. Importantly, it has been argued that a mediation effect can still occur in situations where no direct effect is originally observed (MacKinnon, Krull, & Lockwood, 2000). In contrast, compliance/discipline accuracy was not included because it did not correlate with other variables of interest. Disturbances between child knowledge measures were allowed to



FIGURE 2 Recursive effects between perceived child knowledge and mother-reported autonomy support



FIGURE 3 Mother-reported autonomy support predicting child knowledge through child disclosure

covary at both assessments. The proposed model, presented in Figure 3, had a reasonable fit to the data, χ^2 (df = 45, N = 141) = 62.04, p < .05, $\chi^2/df = 1.38$, CFI = .94, RMSEA = .05 [.007/.081].

Autonomy support, disclosure, and distress/comforting accuracy

Mothers who reported being more autonomy supportive had children who reported higher levels of disclosure. In turn, child disclosure predicted increases in mothers' distress/comforting accuracy from Time 1 to Time 2, $\beta = .21$, p < .05. Significance of indirect effects was assessed using the bootstrap method with 200 resamples. Results showed that the path from autonomy support to distress/comforting accuracy, through child disclosure, ranged from .02 to .33 across samples and that it was on average significant ($\beta = .13$, p < .05). Disclosure thus mediated the effect from autonomy support to distress/comforting accuracy.

Autonomy support, disclosure, and perceived knowledge

Mothers who reported being more autonomy supportive had children who reported higher levels of disclosure, $\beta = .25$, p < .05. However, contrary to expectation, child disclosure was not related to change in mothers' perceived knowledge, $\beta = -.12$, p = .12. In addition, the direct path from autonomy support to change in perceived knowledge was significant, $\beta = .29$, p < .05. Thus, mothers who reported being more autonomy supportive had children who reported disclosing more. Independent of the disclosure, however, the more mothers reported being autonomy supportive the more they also believed they knew their child well.

5 | DISCUSSION

Parents' knowledge of their children's emotional and behavioral reactions has been assessed in a number of different ways. In the present study we looked at three of those ways: mothers' reports of perspective-taking and, thereby, their knowledge of how their child is reacting to the present situation, their accurate knowledge in the form of accurate predictions of their child's ratings regarding their functioning in two important areas of development (distress/comforting and compliance/discipline situations), and their perceived knowledge. We found that perspective-taking and perceived knowledge were related. However, neither of these mother reports was a predictor of mothers' accurate predictions of their child's ratings regarding distress/comforting and compliance/discipline. We also found that the three forms of knowledge were differentially related to mother-reported autonomy-supportive behaviors. Our findings, then, highlight the importance of taking care when talking about parents' knowledge of their children to be clear about the nature of the knowledge under consideration: each form of knowledge has a unique function in the socialization process.

WILFV^{| 639}

5.1 Perspective-taking, accurate predictions of child ratings, and perceived knowledge

Having general knowledge of a child (accurate or perceived) is different from taking the perspective of that child. Whereas perspective-taking involves gathering information by considering the other person's point of view, accurate or perceived knowledge involves an understanding of another person based on information-gathering strategies and past experience. As one information-gathering strategy, we expected perspective-taking to be at least weakly correlated with accurate or perceived knowledge. This correlation was observed with perceived knowledge but not with either distress/comforting or compliance/discipline accuracy. In addition, perceived knowledge did not correlate with accurate predictions of child ratings of either kind. It thus seems that mothers' belief about whether or not they know their child well is not necessarily based on their actual ability to predict their child's future behaviors (as assessed by children's ratings). Similarly, mother's self-reported tendency to take their child's perspective does not necessarily improve their ability to predict their child's ratings regarding their functioning in central areas of social development.

5.2 Perspective-taking and mother-reported autonomy support

One new and important finding of the present research was that perspective-taking was a significant predictor of change in mother-reported autonomy support. Given that self-reports of autonomy support are correlated with observed autonomy-supportive behaviors (Gurland & Grolnick, 2005), this result suggests that actively taking a child's perspective may be a successful way for agents of socialization to orient themselves toward more autonomy-supportive behaviors. In the course of thinking about their children's present experiences, mothers may be able to evaluate possible choices that their children might find acceptable or to provide missing explanations. Taking children's perspectives may also be a prerequisite for reflecting children's feelings and thoughts adequately, an additional feature of autonomy support. This finding shows, then, that perspective-taking may not only prevent controlling parenting (Soenens et al., 2007) but may also facilitate positive autonomy-supportive behaviors.

Distinguishing between perspective-taking and autonomy-supportive behaviors is also an important addition to understanding the socialization process. It is proposed that perspective-taking is the cognitive ability and willingness to adopt a child-centered focus whereas autonomy support refers to the actual and observable behaviors that communicate that such a child-centered focus has been taken. The fact that perspective-taking (cognitive focus) predicted autonomy support (behaviors) but that autonomy support did not predict perspective-taking suggests that these constructs are not redundant and should not be used interchangeably. In the same way that parental values (e.g., valuing children's autonomy), goals, and other cognitive constructs may not be equated with parental behaviors, the present study suggests that perspective-taking is one of the cognitive prerequisites for adopting autonomy-supportive behaviors. This is not to say, however, that perspective-taking and autonomy support may not be viewed as two distinct components of a more general authoritative parenting style.

5.3 Accurate child knowledge and mother-reported autonomy support

In contrast to perspective-taking, accurate child knowledge did not predict changes in mother-reported autonomy support. Thus, knowing one's child does not seem to increase the probability that one will report engaging in autonomy-supportive behaviors; some mothers may use their knowledge of their child to be more autonomy-supportive whereas others may not, or may not in some circumstances. Perhaps, some parents who know their children well use this knowledge to pressure them more effectively into compliance (e.g., "I will take away your favorite toy if...") or to impose their views about how their children should feel in a given situation (e.g., "I know you will feel this way but..."). Others may react to their children without using child knowledge. Knowing one's child is therefore no guarantee that this knowledge will be used in a way that promotes that child's autonomy.

We also found some indication that autonomy support may play a role, albeit indirect, in the acquisition of accurate knowledge. Mother-reported autonomy support predicted changes in accurate predictions of child ratings regarding distress/comforting, but not compliance/discipline, through child-reported disclosure. This finding suggests that mothers may encourage child disclosure by being more autonomy supportive and that, in turn, more child disclosure may contribute to mothers' increasing knowledge of their child in distress/comforting situations. This indirect effect may be particularly robust given that it was observed over time, using different informants for autonomy support and child disclosure, and with the more objective measure of accurate predictions of child ratings.

641

Μπ έν

Although autonomy support seems to positively influence knowledge about distress/comforting situations by encouraging children to disclose, the direct link between autonomy support and change in distress/comforting accuracy over time was not significant. It is possible that autonomy support also has a negative effect on child knowledge through another mediator, which could on occasion cancel the potentially positive impact of autonomy support through child disclosure. One possible candidate for this suppressing variable could be the nature of maternal behavior when sensitive topics such as distressing events are under consideration. Mauras, Grolnick, and Friendly (2013) found that direct questioning and guidance were preferred by girls when sensitive issues (e.g., sexual activity), as opposed to everyday topics, were under consideration. In this case autonomy-supportive mothers who encourage the exploration of their children's ideas might be less likely to provide conditions that would promote child knowledge. Clearly the relation between autonomy support, direct questioning, child disclosure, and mothers' child knowledge is a complex one.

Further complexity is added by the finding that there was no relation between autonomy support and knowledge concerning compliance/discipline. We do know that accurate predictions of young children's evaluation of different discipline techniques predict mothers' success at gaining their compliance in a cleanup task (Davidov & Grusec, 2006). Such success was achieved through addressing rather than ignoring the children's complaints about having to clean up, which is a manifestation of acknowledging feelings that characterizes autonomy support. It may be the case that accurate predictions of child ratings regarding compliance/discipline situations predict autonomy support but only when autonomy support is assessed in discipline-related situations. Future research is thus needed to investigate the potential link between compliance/discipline accuracy and autonomy support during discipline encounters.

5.4 Perceived child knowledge and mother-reported autonomy support

Finally, the fact that autonomy support predicted changes in mothers' perceived child knowledge suggests that autonomy support may have a direct role to play in making mothers more confident, if not necessarily more accurate, about their beliefs that they know their child well. Unexpectedly, results also showed that mothers who report more autonomy support believe that they know their child well independently of what the child discloses. The fact that perceived knowledge is not linked to child-reported disclosure suggests that this perceived form of knowledge is not always based on accurate knowledge. Some mothers may gather information from other sources (e.g., observations, teachers) without verifying its accuracy with their child. In addition, the way child disclosure was assessed could also explain why increased child disclosure did not necessarily improve perceived knowledge. We specifically asked children whether they disclosed information about events that mothers could not independently observe (e.g., friends, school). Mothers whose child disclosed to a greater extent were then more likely to learn new and sometimes surprising information about their child. This in turn could lead some of these mothers to question whether they really know their child and to provide lower ratings on the perceived knowledge measure. The association between child disclosure and perceived knowledge could thus have been masked by this phenomenon.

5.5 Strengths and limitations

This study has noteworthy methodological strengths. Variables were assessed using different informants and strategies (i.e., mother and child reports, accuracy measure). A longitudinal design was also used which enabled us to test reciprocal effects as well as predict change over a two-year period. Nevertheless, results remain correlational in nature.

Other limitations include the fact that the sample of mothers, although ethnically somewhat diverse, was welleducated. Other groups of mothers might, for cultural or other reasons, be less likely to engage in autonomysupportive behaviors and, therefore, the perception of these behaviors and their impact might be different (Grusec & Goodnow, 1994; Soenens et al., 2015). Findings are also limited to the particular age group used, one where disclosure of information is particularly important. For younger children more direct means of gaining information, including close monitoring, are more acceptable and thus the finding with respect to disclosure might be different. In terms of measurement, the reliability of the disclosure measure was low, suggesting that other ways of assessing disclosure may be preferable. For example, instead of targeting broad life domains (e.g., friends, school), questions regarding disclosure could have focused on more specific areas (e.g., distress/comforting or compliance/discipline situations). In addition, a better correspondence between the questions used to assess child disclosure and accurate predictions of child ratings could have revealed stronger associations between these variables. In the present study, children reported whether they tended to disclose about events that occurred outside of the home. Such disclosures may be less likely to include information pertaining to compliance/discipline situations than to distress/comforting ones. This in turn may have reduced the association between child disclosure and compliance/discipline accuracy. From a developmental perspective, it is important to note that participants' interpretation of the measures may have slightly differed across measurement times. However, past research reveals that autonomy-supportive behaviors are relevant and beneficial at various ages, including in childhood and adolescence (Joussemet et al., 2014; Mageau et al., 2015). Similarly, questions regarding distress/comforting and compliance/discipline situations were worded in such a way that they could be relevant for different age groups. The low stability coefficients for distress/comforting and compliance/discipline accuracy suggest, however, that the ability to predict future behaviors accurately may not be stable over time. Finally, common method biases may have increased the relations among mother-reported forms of knowledge. Yet, the fact that differences between these forms of knowledge emerged suggests that the present results may not be fully explained by common method biases.

5.6 Conclusion

In this longitudinal study, we compared and contrasted three forms of knowledge about children: perspective-taking, mothers' accurate predictions of their children's ratings concerning distress/comforting and compliance/discipline situations, and perceived knowledge. We used mother-reported autonomy support as an anchor in this exercise, as well as investigated the role of child-reported disclosure. Although these forms of knowledge all concern parents' understanding of their child's internal frame of reference, they appear to operate very differently. First, we found that perspective-taking and perceived knowledge were not correlated with accurate predictions of child ratings; mothers who report that they consider how a situation looks from their child's point of view, or who report that they are knowledgeable about their child, are not necessarily truly knowledgeable about significant areas of their child's experience. We also found different relations between forms of knowledge and autonomy support. Perspective-taking predicted changes in autonomy support over time. In contrast, accurate predictions of child ratings and perceived child knowledge seem best conceptualized as outcomes of autonomy support, although with some difference. Specifically, autonomy support predicted enhanced distress/comforting accuracy indirectly through child disclosure whereas it predicted perceived knowledge directly. These different relational patterns, then, underline the importance of identifying the specific role played by different forms of knowledge in the socialization process.

NOTE

REFERENCES

- Bureau, J. S., & Mageau, G. A. (2014). Parental autonomy support and honesty: The mediating role of identification with the honesty value and perceived costs and benefits of honesty. *Journal of Adolescence*, 37, 225–236. doi: 10.1016/j. adolescence.2013.12.007
- Darling, N., Cumsille, P., Caldwell, L., & Dowdy, B. (2006). Predictors of adolescents' disclosure to parents and perceived parental knowledge: Between- and within-person differences. *Journal of Youth and Adolescence*, 35, 659–670. doi: 10.1007/s10964-006-9058-1

642

¹ Following Marsh and Hau (1996)'s recommendations for cross-lag analysis, we also controlled for the possible method/halo effects associated with repeated measures by modeling the correlation between the measurement error of the same indicator at both assessments. Disturbances were also allowed to covary (Marsh & Yeung, 1998).

- Davidov, M., & Grusec, J. E. (2006). Multiple pathways to compliance: Mothers' willingness to cooperate and knowledge of their children's reactions to discipline. *Journal of Family Psychology*, 20, 705–708. doi: 10.1037/0893-3200.20.4.705 17176207
- Davis, M. H. (1983). Measuring individual differences in empathy: Evidence for a multidilomensional approach. Journal of Personality and Social Psychology, 44, 113–126. doi: 10.1037/0022-3514.44.1.113
- Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. Psychological Inquiry, 11, 227–268. doi: 10.1207/S15327965PL1104_01
- Frijns, T., Keijsers, L., Branje, S., & Meeus, W. (2010). What parents don't know and how it may affect their children: Qualifying the disclosure-adjustment link. *Journal of Adolescence*, 33, 261–270. doi: 10.1016/j.adolescence.2009.05. 010
- Grolnick, W. S., & Pomerantz, E. M. (2009). Issues and challenges in studying parental control: Toward a new conceptualization. Child Development Perspectives, 3, 165–170. doi: 10.1111/j.1750-8606.2009.00099.x
- Grolnick, W. S., Price, C. E., Beiswenger, K. L., & Sauck, C. C. (2007). Evaluative pressure in mothers: Effects of situation, maternal, and child characteristics on autonomy supportive versus controlling behavior. *Developmental Psychology*, 43, 991–1002. doi: 10.1037/0012-1649.43.4.991
- Grolnick, W. S., & Ryan, R. M. (1989). Parent styles associated with children's self-regulation and competence in school. Journal of Educational Psychology, 81, 143–154. doi: 10.1037/0022-0663.81.2.143
- Grusec, J. E., & Goodnow, J. J. (1994). Impact of parental discipline methods on the child's internalization of values: A reconceptualization of current points of view. Developmental Psychology, 30, 4–19. doi: 10.1037/0012-1649.30.1.4
- Grusec, J. E., Goodnow, J. J., & Kuczynski, L. (2000). New directions in analyses of parenting contributions to children's acquisition of values. *Child Development*, 71, 205–211. doi: 10.1111/1467-8624.00135
- Gurland, S. T., & Grolnick, W. S. (2005). Perceived threat, controlling parenting, and children's achievement orientations. *Motivation and Emotion*, 29, 103–121. doi: 10.1007/s11031-005-7956-2
- Hastings, P., & Grusec, J. E. (1997). Conflict outcome as a function of parental accuracy in perceiving child cognitions and affect. *Social Development*, *6*, 76–90. doi: 10.1111/j.1467-9507.1997.tb00095.x
- Joussemet, M., Landry, R., & Koestner, R. (2008). A self-determination theory perspective on parenting. Canadian Psychology, 49, 194–200. doi: 10.1037/a0012754
- Joussemet, M., Mageau, G. A., & Koestner, R. (2014). Promoting optimal parenting and children's mental health: A preliminary evaluation of the how-to parenting program. *Journal of Child and Family Studies*, 23, 949–964. doi: 10.1007/ s10826-013-9751-0
- Kerr, M., Stattin, H., & Burk, W. J. (2010). A reinterpretation of parental monitoring in longitudinal perspective. Journal of Research on Adolescence, 20, 39–64. doi: 10.1111/j.1532-7795.2009.00623.x
- Kiel, E. J., & Buss, K. A. (2006). Maternal accuracy in predicting toddlers' behaviors and associations with toddlers' fearful temperament. *Child Development*, 77, 355–370. doi: 10.1111/j.1467-8624.2006.00875.x
- Koestner, R., Ryan, R. M., Bernieri, F., & Holt, K. (1984). Setting limits on children's behavior: The differential effects of controlling vs. informational styles on intrinsic motivation and creativity. *Journal of Personality*, 52, 233–248. doi: 10.1111/j.1467-6494.1984.tb00879.x
- Landry, R., Whipple, N., Mageau, G., Joussemet, M., Koestner, R., DiDio, L., ... Haga, S. M. (2008). Trust in organismic development, autonomy support, and adaptation among mothers and their children. *Motivation and Emotion*, 332, 173–188. doi: 10.1007/s11031-008-9092-2
- Larson, R. W., Richards, M. H., Moneta, G., Holmbeck, G., & Duckett, E. (1996). Changes in adolescents' daily interactions with their families from ages 10 to 18: Disengagement and transformation. *Developmental Psychology*, 32, 744–754. doi: 10.1037/0012-1649.32.4.744
- Long, E. C. (1990). Measuring dyadic perspective-taking: Two scales for assessing perspective-taking in marriage and similar dyads. Educational and Psychological Measurement, 50, 91–103. doi: 10.1177/0013164490501008
- Lundell, L. J., Grusec, J. E., McShane, K. E., & Davidov, M. (2008). Mother-adolescent conflict: Adolescent goals, maternal perspective-taking, and conflict intensity. *Journal of Research on Adolescence*, 18, 555–571. doi: 10.1111/j.1532-7795.2008.00571.x
- MacKinnon, D. P., Krull, J. L., & Lockwood, C. M. (2000). Equivalence of the mediation, confounding and suppression effect. Prevention Science, 1, 173–181. doi: 10.1023/A:1026595011371
- Mageau, G. A., Ranger, F., Joussemet, M., Koestner, R., Moreau, E., & Forest, J. (2015). Validation of the perceived parental autonomy support scale (P-PASS). Canadian Journal of Behavioural Science, 47, 251–262. doi: 10.1037/a0039325
- Markus, H. (1977). Self-schemata and processing information about the self. Journal of Personality and Social Psychology, 35, 63–78. doi: 10.1037/0022-3514.35.2.63

⁶⁴⁴ WILEY-

- Marsh, H. W., & Hau, K. T. (1996). Assessing goodness of fit: Is parsimony always desirable? Journal of Experimental Education, 64, 364–390.
- Marsh, H. W., & Yeung, A. S. (1998). Top-down, bottom-up, and horizontal models: The direction of causality in multidimensional, hierarchical self-concept models. *Journal of Personality and Social Psychology*, 75, 509–527.
- Mauras, C. P., Grolnick, W. S., Friendly, R. W. (2013). Time for "The talk" ... Now what? Autonomy support and structure in mother-daughter conversations about sex. *The Journal of Early Adolescence*, 33, 458–481. doi: 10.1177/ 0272431612449385
- Pomerantz, E. M., & Eaton, M. M. (2001). Maternal intrusive support in the academic context: Transactional socialization processes. *Developmental Psychology*, 37, 174. doi: 10.1037/0012-1649.37.2.174
- Robinson, C. C., Mandleco, B., Olsen, S. F., & Hart, C. H. (1995). Authoritative, authoritarian, and permissive parenting practices: Development of a new measure. *Psychological Reports*, 77, 819–830. doi: 10.2466/pr0.1995.77.3.819
- Smetana, J. G., Metzger, A., Gettman, D. C., & Campione-Barr, N. (2006). Disclosure and secrecy in adolescent-parent relationships. Child Development, 77, 201–217. doi: 10.1111/j.1467-8624.2006.00865.x
- Soenens, B., Duriez, B., Vansteenkiste, M., & Goossens, L. (2007). The intergenerational transmission of empathy-related responding in adolescence: The role of maternal support. *Personality and Social Psychology Bulletin*, 33, 299–311. doi: 10.1177/0146167206296300
- Soenens, B., Vansteenkiste, M., Luyckx, K., & Goossens, L. (2006). Parenting and adolescent problem behavior: An integrated model with adolescent self-disclosure and perceived parental knowledge as intervening variables. *Developmen*tal Psychology, 42, 305–318. doi: 10.1037/0012-1649.42.2.305
- Soenens, B., Vansteenkiste, M., & Van Petegem, S. (2015). Let us not throw out the baby with the bathwater: Applying the principle of universalism without uniformity to autonomy-supportive and controlling parenting. *Child Development Perspectives*, 9, 44–49. doi: 10.1111/cdep.12103
- Stattin, H., & Kerr, M. (2000). Parental monitoring: A reinterpretation. Child Development, 71, 1072–1085. doi: 10.1111/ 1467-8624.00210
- Tilton-Weaver, L., Kerr, M., Pakalniskeine, V., Tokic, A., Salihovic, S., & Stattin, H. (2010). Open up or close down: How do parental reactions affect youth information management? *Journal of Adolescence*, 33, 333–346. doi: 10.1016/j.ado-lescence.2009.07.011
- Vinik, J., Almas, A., & Grusec, J. E. (2011). Mothers' knowledge of what distresses and what comforts their children predicts children's coping, empathy, and prosocial behavior. *Parenting: Science and Practice*, 11, 1–16. doi: 10.1080/ 15295192.2011.539508

How to cite this article: Mageau GA, Sherman A, Grusec JE, Koestner R, Bureau JS. Different ways of knowing a child and their relations to mother-reported autonomy support. *Social Development*. 2017;26:630–644. https://doi.org/10.1111/sode.12212