Congruence and Incongruence in Father, Mother and Adolescent Reports of Parental Monitoring: Examining the Links with Antisocial Behaviors

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Abstract

This study examined the level of congruence and incongruence between fathers', mothers' and adolescents' perceptions of parental monitoring in relation to the adolescents' antisocial behaviors. A sample of 163 father-mother-adolescent triads (59.5% girls; mean age = 12.35) filled out separate questionnaires assessing the dimensions of parental monitoring (i.e., parental knowledge, adolescent self-disclosure, parental control and parental solicitation), and the adolescents also reported on the frequency of their antisocial behaviors. Polynomial regression analyses revealed that the higher the level of congruence between the father's and/or mother's and adolescent's perceptions, the less the adolescent tended to present antisocial behaviors. Some results differed according to the parents' gender. Incongruence between mothers' and adolescents' perceptions of parental knowledge was associated with higher levels of antisocial behaviors, whereas congruence between fathers' and adolescents' perceptions of parental knowledge showed a non-linear relationship with these behaviors. These results shed light on how parental monitoring contributes to adolescent functioning.

Keywords: parental monitoring, discrepancies, antisocial behavior, polynomial regression

Introduction

Parental monitoring represents an important protective factor during adolescence (Repetti, Taylor & Seeman, 2002). By effectively monitoring their adolescent's whereabouts and activities, parents help the latter stay on a healthy developmental trajectory (Soenens, Vansteenkiste, Luyckx & Goossens, 2006). However, when parents and adolescents are asked about the level of parental monitoring, discrepancies in their answers are often observed (Fleming, Mason, Thomson, Haggerty & Gross, 2016; Rote & Smetana, 2016). These discrepancies raise questions regarding which of these two perspectives is most closely associated with adolescent adjustment, and the extent to which the discrepancies themselves could also be associated with this adjustment. The situation can become even more complex when both the father's and mother's perspectives are taken into account (Gupta, Lausten & Pozzoli, 2018). The current study aimed to examine the links between congruence and incongruence in adolescents' and their fathers', and adolescents' and their mothers' assessments of the various dimensions of parental monitoring, on the one hand, and the adolescents' antisocial behaviors, on the other hand.

Parental Monitoring

Parental monitoring refers to a set of behaviors that involve being attentive to and aware of adolescents' whereabouts at any given time, the activities they are involved in, the peers they spend time with and how well adjusted they are (Dishion & McMahon, 1998). Previous studies have attested to the protective effects of parental monitoring on adolescents's internalizing and externalizing problems (Crouter & Head, 2002; DeVore & Ginsburg, 2005; Fletcher, Steinberg & William-Wheeler, 2004). Monitoring allows parents to be more involved in the selection of their adolescent's peer group (e.g. avoiding deviant peer influence) and reduce their exposition to

risky environment (Pettit, Laird, Dodge, Bates & Criss, 2001; Windle et al., 2008). In early adolescence, research showed that parental monitoring is negatively associated with antisocial behaviors (Marceau et al. 2015; Vazsonyi et al. 2003). Antisocial behaviors have serious implications on early adolescents' health, outcome later in life and society in general (Bartlett, Holditch-Davis, & Belyea, 2007; Dishion & Patterson, 2006; McGue & Iacono, 2005). These behaviors commonly include rule-breaking, disobedience, violence, lying, stealing, and property destruction (Hiatt & Dishion, 2007). When unaddressed, antisocial behaviors can worsen and broaden to include substance use, risky sexual behavior and delinquency (Dishion & Patterson, 2006). Therefore, it is important to study parental monitoring in association to antisocial behaviors to better understand the process by which these behaviors rise.

Almost twenty years ago, Kerr and Stattin (2000) questioned the validity of the tools used to measure parental monitoring, considering them to be inadequate for properly assessing this variable. They argued that these measures usually assess "parental knowledge" (i.e., on where the child is, who he/she is with, what he/she is doing, etc.) rather than actual monitoring behaviors. Kerr and Stattin suggested that parents can gain this knowledge through three means: (1) *adolescent self-disclosure*, that is, when adolescents spontaneously tell their parents what they are doing, where they are going and who they are spending time with; (2) *parental solicitation*, when parents ask questions regarding their adolescents' activities, whereabouts, and peer relationships, etc. and (3) *parental control*, referring to all the rules that parents impose on their adolescents (e.g., a curfew). By setting such rules, parents are more likely to know where their adolescent is, what he/she is doing, etc. These means of monitoring are assessed using a questionnaire, developed by Kerr and Stattin (2000), that can be filled out by the father, mother and/or adolescent.

Studies on the associations between Kerr and Stattin's dimensions of parental monitoring and adolescents' antisocial behaviors have shown that these associations can differ according to whether it is the adolescent or parent who completes the assessment. Adolescent reports of these dimensions appear to be better predictors of their antisocial behaviors than parent reports (Laird, Marrero & Sentse, 2010; Reynolds, MacPherson, Matusiewicz, Schreiber & Lejuez, 2011). Thus, it would appear logical to consider only the perceptions of adolescents when assessing parental monitoring. However, adolescent and parent assessments appear to predict different behaviors (Fleming et al. 2016; Pasch, Stigler, Perry & Komro, 2010) and to focus on different aspects of parental monitoring (Abar, Jackson, Colby & Barnett, 2015). This brings out the importance of considering both of these sources simultaneously when examining parental monitoring.

Discrepancies Between Parent and Adolescent Reports of Parental Monitoring

Relying on different sources when assessing a single construct is a widespread practice in psychology (De Los Reyes & Kazdin, 2008). A meta-analysis conducted by De Los Reyes et al. (2015) showed that discrepancies between different sources are common. These discrepancies have been noted even when the same instrument is used to assess the construct under study (De Los Reyes, 2011). They could be explained by the fact that each informant has access to different information, all of it significant, through exposure to different contexts (Dirks, De Los Reyes, Briggs-Gowan, Cella & Wakschlag, 2012). Historically, discrepancies between informants were considered a methodological flaw (Roberts & Caspi, 2001). However, they are now considered to be potential sources of relevant information on the adolescent's family environment and family dynamics (Korelitz & Garber, 2016). These discrepancies are usually studied on the premise that they may constitute a developmental risk factor for adolescents. Some studies have lent support to this idea in the case of parental monitoring. Thus, incongruence in parents' and

adolescents' assessments of parental monitoring has been found to be positively and concomitantly associated with antisocial behaviors (De Los Reyes & Kazdin, 2008), even three years later (Ksinan & Vazsonyi, 2016).

Limitations of Studies Examining Discrepancies Between Parent and Adolescent Reports

Despite the growing interest in exploring the discrepancies between parent and adolescent reports, some contradictions in the results reported to date limit our understanding of this phenomenon (De Los Reyes, Ohannessian & Laird, 2016). Some studies have found greater discrepancies between parents' and adolescents' perceptions of their family to be associated with more adaptive family and adolescent functioning (Butner et al. 2009; Carlson, Cooper & Spradling, 1991) while other, more recent, studies have found them to be associated with adolescent adjustment problems (Fleming et al. 2016; Leung, Sheik & Lin Li, 2016). Thus, based on the available data, it is impossible to unequivocally assert that these discrepancies constitute a developmental risk factor for adolescents. In some cases, incongruence between parent and adolescent reports could reflect relational difficulties, such as conflict or communication problems (Guion, Mrug & Windle, 2009), which would explain why it is often associated with poorer adolescent adjustment. In other cases, this incongruence could reflect a healthy increase in autonomy and independence among adolescents (Ohannessian, Lerner, Lerner & von Eye, 2000), thus explaining why it is sometimes found to be associated with better adjustment.

These different results regarding incongruence in parent and adolescent reports could also be explained by the analytical strategy used. Indeed, this incongruence is often measured by computing the absolute difference between the standardized scores for adolescent and parent assessments. These absolute differences are then linked to adolescent adjustment (De Los Reyes, Goodman, Kliewer & Reid-Quinones, 2010). However, this approach presents several limitations

(Laird & Weems, 2011). First, the reliability and validity of using difference scores are not known (Furr, 2011). Second, this approach does not consider the direction of the difference between the two informants. For example, it does not take into account the fact that adolescent adjustment could differ according to whether it is the parent or adolescent who reports a lower level of parental monitoring. Lastly, difference scores are statistically redundant, given that they do not really yield additional information beyond that provided by the individual assessments (De Los Reyes & Ohannessian, 2016).

Polynomial regression analyses (Edwards, 2002), combined with response surface analysis (RSA), provide an alternative that addresses the weaknesses of using difference scores (Human, Dirks, DeLongis & Chen, 2016; Laird & De Los Reyes, 2013). Polynomial regression analyses examine the predictive power of each informant, independently and simultaneously, and show whether the level of congruence/incongruence has an effect on the variable(s) of interest. Thus, unlike difference scores, polynomial regressions can disentangle the individual contribution of parent and adolescent assessments to adolescent adjustment, thus avoiding the psychometric property issues associated with calculating the differences in standardized scores. From the polynomial regressions, four RSA coefficients (further explained in the Method section) can be derived. The RSA method provides benefits compared to traditional regression analysis (Shanock, Baran, Gentry, Pattison & Heggestad, 2010). First, traditional regression analysis only produces a two-dimensional view of the relationship between the combination of the two predictor variables and the outcome variable, whereas the RSA method provides a three-dimensional view of this relationship. Second, the RSA method also makes it possible to assess whether the relationship between congruence and the outcome variable is linear or non-linear, which traditional regression cannot do. Third, the RSA method makes it possible to examine how

an increasing degree of incongruence between predictor variables relates to the outcome variable. Therefore, RSA makes it possible to simultaneously assess and visualize the various ways that discrepancies in parent and adolescent reports are linked to adolescent adjustment, in a more nuanced way than with traditional regression analysis (e g., Edwards, 2002).

A final limitation of the current literature is that separate assessments by fathers and mothers are rarely taken into account simultaneously. Yet, fathers also have an important role to play in monitoring their children (Waizenhofer, Buchanan & Jackson-Newsom, 2004). Moreover, fathers and mothers exert different influences on adolescent adjustment (Doumas, Hausheer & Esp, 2015). Thus, it is advisable to take into account both mother-adolescent incongruence and father-adolescent incongruence simultaneously (Ksnian & Vazsonyi, 2016).

The Present Study

This study aimed to examine the links between congruence and incongruence in adolescents' and their fathers', and adolescents' and their mothers' assessments of the dimensions of parental monitoring (i.e., parental knowledge, adolescent self-disclosure, parental control and parental solicitation), on the one hand, and adolescents' antisocial behaviors, on the other hand. These links were examined using polynomial regression analyses and RSA.

The first hypothesis was that adolescent-parent incongruence on all the dimensions of parental monitoring would be positively associated with the adolescents' antisocial behaviors, whereas adolescent-parent congruence would be negatively associated with these behaviors. The second hypothesis was that adolescent-father incongruence would be positively associated with the adolescent's antisocial behaviors, whereas adolescent-mother incongruence would be negatively associated with these behaviors. This hypothesis was exploratory, as only a handful of previous studies have taken father assessments into account. It was based on the idea that

adolescence is a critical period for the development of autonomy, identity and cognitive abilities (Smetana et al. 2006), introducing salient changes into the family system. Indeed, conflict between adolescents and their parents increases during this period (De Los Reyes et al. 2012), which could be explained by adolescents' need to differentiate themselves from their parents. Moreover, studies have shown that mothers are more involved with their children than fathers, regardless of the age of the child (Harris and Morgan, 1991; Pleck and Masciadrelli, 2004), which could explain why adolescents need to distance themselves more from their mothers than from their fathers (Collins & Russell, 1991). Thus, adolescent-mother incongruence could reflect a normal process whereby adolescents develop their autonomy, independence and cognitive abilities (Smetana, 2008), whereas adolescent-father incongruence, being less normative, could be more harmful.

Method

Participants

The participants were part of a longitudinal study initially involving 390 sixth graders (58% girls) from eight elementary schools in the province of Quebec, Canada. In the school system where the study was conducted, after elementary school (Grades 1 to 6), students transition to high school (Grades 7 to 11). Most of the participants (90%) were Caucasian, while the rest were of Haitian (3%), Hispanic (3%), Arab (3%) and Asian (1%) descent. They were French-speaking and came from families that were, for the majority, intact (68%) and had an average annual income of over CAN$50,000. The level of education of mothers and fathers was similar (M = 13.10 years, SD = 2.68 versus 13.20 years, SD = 3.20).

When the participants were in their first year of high school, mothers, fathers and the target adolescent were invited to fill out separate questionnaires on parental monitoring (see procedure

below). Of these, 356 adolescents, 245 mothers and 180 fathers completed the questionnaire. Only families for which data were available from all three sources were included in the current study (n = 163; 59.5% girls; M_{age} = 12.35; SD = 0.42). Compared to the rest of the initial sample (n = 227), this subsample included a larger proportion of intact families (85% versus 58%; χ test = $p < .0001$) but did not differ with regard to gender, the monitoring variables or the adolescents' antisocial behaviors.

Procedure

The adolescents completed the questionnaires (in French) at school under the supervision of trained research assistants. Mothers and fathers received the questionnaire by mail, along with a prepaid self-addressed return envelope. The parents provided written consent for their child's participation. The project was approved by the Institutional Ethics Committee for Research Involving Human Subjects at the authors' university.

Measures

Adolescent reports of parental monitoring.

The youths completed the adolescent version of Kerr and Stattin's (2000) parental monitoring questionnaire. The parental knowledge scale includes nine items assessing the parents' knowledge of their whereabouts, activities and peer relationships (e.g., "Do your parents know what you do during your free time?"; α = .84). Adolescent self-disclosure was measured using five items (e.g., "Do you spontaneously tell your parents about your friends (which friends you hang out with and how they think and feel about various things)?"; α = .75). Five items were used to measure parental control (e.g., "Must you have your parents' permission before you go out during the weeknights?"; α = .83). Four items were used to measure parental solicitation (e.g., "During the past month, how often have your parents initiated a conversation with you

about your free time?"; α = .83). Items were answered on a 5-point Likert scale, ranging from 1 (never) to 5 (often).

Mother and father reports of parental monitoring.

Fathers and mothers, separately, completed the parent version of Kerr and Stattin's (2000) parental monitoring questionnaire. The items were the same as in the adolescent version, with minor changes in wording where necessary. Internal consistency was adequate for parental knowledge (fathers α = .84; mothers α = .83), adolescent self-disclosure (α = .72 and .79), parental control (α = .72 and .66) and parental solicitation (α = .86 and .77).

Antisocial behaviors.

Adolescents were also asked to complete a 16-item scale pertaining to various forms of antisocial behavior. This scale combined both the antisocial behavior scale developed by Metzler, Biglan, Ary and Li (1998) and items from the scale developed by Janosz and Bouthiller (2007), for a more complete assessment of antisocial behaviors. Sample items included: "skipped school without an excuse," "stole or tried to steal things worth $5 or more," and "purposefully damaged or tried to damage property." Items were rated on a 6-point scale ranging from 1 (never) to 6 (more than 10 times). A mean score was computed (α = .81).

Data analysis plan.

Polynomial regression analyses and response surface analysis (RSA) were used to assess the independent and interactive associations between the adolescents' and parents' perceptions of parental monitoring and the adolescents' antisocial behaviors. Specifically, we regressed antisocial behaviors on (1) the adolescents' and fathers' ratings of parental monitoring, (2) the interactions between the adolescents' and fathers' ratings, and (3) the adolescents' and fathers' ratings squared. The same analysis was also conducted using the adolescents' and mothers'

ratings. This model was tested separately for each dimension of parental monitoring (i.e., parental knowledge, adolescent self-disclosure, parental control, parental solicitation), for a total of eight regression models (four dimensions *two parent genders).

The polynomial coefficients informed us on the independent linear and quadratic relationships between the different informants' perspectives and adolescent adjustment. However, to examine the link between the effect of adolescent-parent congruence and incongruence on the adolescents' antisocial behaviors, rather than examining the polynomial regression coefficients directly, we examined the RSA coefficients derived from these polynomial coefficients. As described above, for each model, we examined each of the four RSA coefficients to assess (1) a_1: whether there was a linear additive relationship along the line of congruence between each source, as it related to antisocial behaviors, (2) a_2: whether there was a non-linear slope of the line of perfect congruence, meaning that congruence between the adolescent and parent was related to antisocial behaviors in a non-linear way, (3) a_3: whether the direction of the incongruence in adolescent-parent reports was associated with a higher level of antisocial behaviors, and (4) a_4: whether any incongruence, regardless of direction, was associated with a higher level of antisocial behaviors.

The coefficients from the analysis were used to examine the "response surface pattern" (Edward, 2002; Harris et al. 2008), providing a three-dimensional visual representation of the lines of congruence and incongruence, to aid interpretation. Respectively, each corner of the figure reflects a different combination of parent and adolescent congruence versus incongruence. As Shanock et al. (2010) explain, the line of congruence is depicted by the line from the front to the back of the figure, with the front corner indicating that both adolescents' and parents' ratings were low for a given dimension (e.g., low knowledge reported by both). The line from the left to

the right represents the line of incongruence, with the left corner illustrating that adolescents' ratings were low and parents' ratings were high, and the right corner illustrating that adolescents' ratings were high and parents' ratings were low. A response surface pattern was generated for each of the four monitoring dimensions to provide a visual illustration of the association between adolescent-father congruence/incongruence and antisocial behaviors. The same was done for the mother-adolescent dyads, for a total of eight response surface patterns. We decided to display only the response surface patterns presenting significant RSA coefficients (i.e. knowledge, self-disclosure and solicitation). All analyses were conducted using the RSA package in R (Schönbrodt, 2015), which provides the polynomial and RSA coefficients, as well as three-dimensional graphics of each analysis.

Results

Descriptive Analyses

Table 1 presents the bivariate correlations between all the study variables as well as their means and standard deviations. Upon examination, the means suggest that, on average, the adolescents tended to report less monitoring than both of their parents, except for the dimension of control. The correlations between the adolescents' and fathers' reports on each dimension of monitoring were all positive and varied from small to moderate (.088 to .358), which was also the case for the correlations between the adolescents' and mothers' reports (.170 to .408), and between the fathers' and mothers' reports (.207 to .483). In all cases, the correlation was highest for self-disclosure. Further, the adolescents' reports on each dimension of parental monitoring were negatively associated with their antisocial behaviors. Fathers' reports of parental knowledge and adolescent self-disclosure were negatively associated with the adolescents'

antisocial behaviors. Finally, mothers' reports of parental knowledge, adolescent self-disclosure and parental solicitation were negatively correlated with the adolescents' antisocial behaviors.

Polynomial Regression Analyses

The results of the polynomial regression analyses for adolescents' and fathers' reports of parental monitoring are presented in Table 2, while those for adolescents' and mothers' reports of parental monitoring are presented in Table 3. Adolescents who reported low levels of parental knowledge, adolescent self-disclosure, parental control and parental solicitation reported higher levels of antisocial behaviors (see Tables 2 and 3, B_{adol} coefficients). Fathers' reports of parental knowledge and adolescent self-disclosure were negatively associated with the adolescents' antisocial behaviors whereas their reports of parental control and parental solicitation were not (see Table 2, B_{father} coefficients). Mothers' reports of parental knowledge, adolescent self-disclosure and parental solicitation were negatively associated with the adolescents' antisocial behaviors, whereas their reports of parental control were not (see Table 3, B_{mother} coefficients).

RSA Results Pertaining to Antisocial Behaviors

We next examined the RSA coefficients to verify whether congruence and incongruence in adolescents' and both parents' reports of parental monitoring were associated with antisocial behaviors, over and above the direct associations with adolescents' and parents' reports. The RSA plots are presented in Figures 1 to 6, providing visual illustrations of the significant results for each dimension. The coefficients from each polynomial regression and RSA for the four models pertaining to adolescents' and fathers' perceptions are presented in Table 2. For parental knowledge, the a_1 coefficient was negative and the a_2 coefficient was positive, implying that adolescent-father congruence on this dimension was related to antisocial behaviors in a non-linear way. Specifically, when both adolescents' and fathers' reported less parental knowledge,

the adolescents' antisocial behaviors tended to be higher, up to a certain point (front corners of Fig. 1, panel B). The fact that the a_3 and a_4 coefficients were not significant allows us to say that neither the direction nor overall level of adolescent-father incongruence were linked to antisocial behaviors (Fig.1, panel B). As for parental control, none of the four coefficients were significant, suggesting that neither the direction nor overall level of adolescent-father congruence/incongruence were linked to antisocial behaviors. The results were similar for adolescent self-disclosure and parental solicitation; the a_1 coefficients were negative and the a_2 coefficients were not significant, indicating that adolescent-father congruence on these dimensions was related to antisocial behaviors in a linear way. Specifically, when adolescents and fathers reported less adolescent self-disclosure and/or solicitation, the adolescents' antisocial behaviors tended to be higher (front corners Fig. 2, panel D and front corners Fig. 3, panel F). In other words, the relationship between adolescent-father congruence and the adolescents' antisocial behaviors was represented by a straight line, which was not curved, meaning that the increase or decrease in the outcome was stable. The a_3 and a_4 coefficients were not significant, indicating that neither the direction nor overall level of adolescent-father incongruence, on these two dimensions (disclosure and solicitation), were linked to antisocial behaviors (Fig.2, panel D and Fig.3, panel F).

The results for the four models pertaining to adolescents' and mothers' reports of parental monitoring are presented in Table 3. For parental knowledge, the a_1 coefficient was negative and the a_2 was not significant, indicating that adolescent-mother congruence on this dimension was related to antisocial behaviors in a linear way. Thus, when both adolescents and mothers reported less parental knowledge, antisocial behaviors tended to be higher (front corners Fig.1, panel A). The a_3 coefficient was not significant whereas the a_4 coefficient was significant and positive,

suggesting that the direction of adolescent-mother incongruence was not linked to antisocial behaviors, whereas the overall level of adolescent-mother incongruence was (Fig.1, panel A). In other words, the less congruent the mothers' and adolescents' reports of parental knowledge, the higher the adolescents' antisocial behaviors, regardless of the direction of the incongruence. For parental control, none of the four coefficients were significant, indicating that the level of adolescent-mother congruence/incongruence, on this dimension, was not linked to antisocial behaviors. The results were similar for adolescent self-disclosure and parental solicitation; the a_1 coefficients were negative, indicating that when adolescents and mothers reported less adolescent self-disclosure and/or solicitation, antisocial behaviors tended to be higher (front corners Fig.2, panel C and front corners Fig.3, panel E). The a_2 coefficient were not significant, suggesting that the relationship between adolescent-mother congruence on adolescent self-disclosure/parental solicitation and antisocial behaviors was linear (Fig.2, panel C and Fig.3, panel E). The a_3 and a_4 coefficients were not significant, meaning that neither the direction nor overall level of adolescent-mother incongruence were linked to antisocial behaviors (Fig.2, panel C and Fig.3, panel E).

Discussion

This study aimed to deepen our understanding of the discrepancies in parents' and adolescents' perceptions of parental monitoring, in three ways. First, a more comprehensive conception of parental monitoring was used, simultaneously examining the four dimensions of this construct proposed by Kerr and Stattin (2000). Second, polynomial regression analyses, combined with response surface analysis (RSA), were used to provide a more nuanced picture of the effects of adolescent-parent congruence and incongruence on adolescent adjustment. Third, fathers' and mothers' perceptions were taken into account separately. Overall, the results showed

adolescent-parent congruence to be negatively associated with adolescents' antisocial behaviors, whereas adolescent-parent incongruence was not associated with these behaviors, regardless of the direction or overall level of incongruence. Moreover, the results were not the same for all four dimensions of parental monitoring, and differed according to whether they referred to the father's or mother's perceptions. Each of these points is discussed in detail below.

Were Adolescent-Parent Congruence and Incongruence Associated with the Adolescents' Antisocial Behaviors?

Generally speaking, a low to moderate level of congruence was found between the parents and adolescents on the four dimensions of parental monitoring. This finding is consistent with previous findings (Korelitz & Garber, 2016). Moreover, our results show that adolescent-parent congruence was negatively associated with the adolescents' antisocial behaviors. Specifically, when adolescents and parents both reported a high level of parental monitoring, the adolescents presented lower levels of antisocial behaviors. These results are in line with those of previous studies (Lippold, Greenberg & Feinberg, 2011) and contradict the theoretical propositions suggesting that adolescent-parent congruence could, in some cases, be harmful to development, possibly indicating that adolescents are not becoming sufficiently autonomous and independent from their parents as part of a healthy process of individuation (Carlson et al. 1991). Our results, rather, support the idea that congruence in these different family members' perceptions reflects a healthier family environment and higher quality family relationships (Stuart & Jose, 2012).

Our results brought out incongruence in the adolescents' and parents' assessments of the various dimensions of parental monitoring. We hypothesized that such incongruence would be associated with higher levels of antisocial behaviors among the adolescents (Korelitz & Garber,

2016). However, our results show that neither the direction nor overall level of incongruence between the adolescents and their parents were associated with the adolescents' antisocial behaviors. The only exception found was between mothers' and adolescents' reports on the dimension of knowledge, which will be discussed further bellow. It is possible that the findings of most previous studies showing a link between adolescent-parent incongruence and adolescent adjustment can be explained by the methodology used (i.e., difference scores), which, unlike using RSA coefficients, does not make it possible to distinguish between the effect of congruence and incongruence on the variables of interest. However, caution is called for in interpreting these results. A large number of studies using a variety of methodologies (e.g., difference scores, latent profile analysis) have found parent-adolescent incongruence to be a risk factor in adolescent development (Abar et al. 2015). Therefore, it is also possible that this study is the outlier, and further studies are needed to replicate the current findings. In sum, our results suggest that adolescent-parent congruence, when both informants report a high level of parental monitoring, represents a protective factor, whereas adolescent-parent incongruence appears to act as neither a protective factor nor a risk factor, in this particular study.

A Multi-Dimensional Conception of Parental Monitoring

One of the innovations of this study was to simultaneously consider the four dimensions of parental monitoring proposed by Kerr and Stattin (2000) in examining adolescent-parent congruence and incongruence. Indeed, overall, our findings differed for these various dimensions. Our main hypothesis in this regard was that incongruence would be positively associated with antisocial behaviors. This hypothesis was not fully supported. The most surprising result is that no link was found between adolescent-parent incongruence on self-disclosure and antisocial behaviors. Previous studies have shown that self-disclosure contributes

the most to parental knowledge (Willoughby & Hamza, 2011) and is the most closely associated with antisocial behaviors (Stattin & Kerr, 2000). Therefore, incongruence on this dimension was expected to be associated with antisocial behaviors. There are two possible explanations for this finding. First, it is possible that the effect of adolescent-parent incongruence relating to adolescent self-disclosure was offset by adolescent-parent congruence on other dimensions of parental monitoring, such as parental knowledge or parental solicitation. Thus, the protective effect of adolescent-parent congruence relating to the other dimensions may have cancelled out the negative effect of adolescent-parent incongruence relating to adolescent self-disclosure predicted by our first hypothesis. Second, it is possible that adolescent-parent incongruence on adolescent self-disclosure may not reflect less healthy family dynamics, since the scale used to measure this dimension does not differentiate between voluntary disclosure and the secrets that adolescents might choose to keep (Smetana, Metzger, Gettman & Campione-Barr, 2006). Thus, adolescent-parent incongruence on adolescent self-disclosure may not be a risk factor. However, adolescent-parent incongruence on the level of secrets held could indeed represent a risk factor since adolescents usually conceal their more problematic actions, and this lack of knowledge on the part of parents could affect their capacity to adjust their monitoring behaviors. In fact, Laird and Marrero (2010) reported that adolescents' antisocial behaviors were more strongly associated with high levels of secret keeping than with low levels of self-disclosure.

Furthermore, no effect was found for parental control. Neither congruence nor incongruence on this dimension was associated with antisocial behaviors. This result may appear surprising at first sight. However, it is important to keep in mind that our sample was relatively young in age (M = 13 years). The legitimacy of parental control, according to both parents and adolescents, tends to decrease over the course of adolescence (Smetana, 2010). The young

adolescents involved in the current study may still have perceived their parents' control as legitimate, which would explain why congruence versus incongruence on this dimension was not associated with their antisocial behaviors. As adolescents get older, the issue of parental control may become more salient, as would the impact of adolescent-parent congruence or incongruence relating to this dimension. The parents in our sample may have generally exerted a lower level of control, thus providing less of an opportunity to measure the level of congruence or incongruence on this dimension. Lastly, this lack of effect for parental control is in line with previous studies showing this dimension to be only weakly associated with adolescent adjustment (Willoughby & Hamza, 2011).

Considering Both Fathers' and Mothers' Perspectives Simultaneously

We hypothesized that adolescent-father incongruence would be positively associated with the adolescents' antisocial behaviors, whereas adolescent-mother incongruence would be negatively associated with these behaviors. Our second hypothesis was not supported by our findinds. However, two results should be highlighted here. First, a curvilinear association was found between adolescent-father congruence on parental knowledge and adolescent antisocial behaviors, whereas a linear association was found between adolescent-mother congruence on this dimension and these behaviors. In other words, the greater the extent to which both adolescents and fathers rated parental knowledge as high, the less the adolescents presented antisocial behaviors, up to a certain point, when these behaviors stopped decreasing even if the perceived level of parental knowledge increased. Thus, the protective effect of adolescent-father congruence on parental knowledge appeared to level off at some point, whereas the effect of adolescent-mother congruence on this dimension did not. This may suggest that at any level of parental knowledge reported by mothers, the mothers used this knowledge to adjust their

monitoring, thus explaining the linear association with the adolescents' antisocial behaviors. On the other hand, fathers might use their knowledge to adjust their monitoring until a certain point, past it they don't adjust more, even if their level of parental knowledge is higher. Demuth and Brown (2004) found that while single-parent fathers tended to have higher incomes than single-parent mothers, they exerted less close parental monitoring, leading to higher levels of antisocial behaviors among their adolescents. This could support the results described above, meaning that fathers could focus more on providing an income as a mean of raising their children rather than engaging in more parental monitoring. Further research is needed to confirm this hypothesis.

The second difference that emerged between fathers and mothers pertained to adolescent-parent incongruence. Adolescent-mother incongruence on parental knowledge was positively associated with antisocial behaviors, regardless of the direction of the incongruence, whereas no such association was found for fathers. This result diverges somewhat from the findings of studies showing that the more adolescents reported a negative perception of the family environment compared to their parent, the less well-adjusted they were (De Los Reyes et al. 2010; Guion et al. 2009). Our findings support the idea that overall adolescent-mother incongruence likely reflects a less healthy family dynamic. This claim is also supported by a study showing incongruence between adolescents' and parents' ratings of their relationship to be associated with higher levels of conflict and disagreement between them (Augenstein et al. 2016). Other studies have also shown the overall level of adolescent-parent incongruence to be associated with poorer adjustment among adolescents (Human & al, 2014; Pelton & Forehand, 2001). Moreover, our finding is inconsistent with our hypothesis predicting that adolescent-mother incongruence would be negatively associated with antisocial behaviors. Based on our findings, adolescent-mother incongruence does not appear to reflect a normal process of

individuation. On the contrary, our results suggest that adolescent-mother incongruence may be more harmful to adolescent adjustment than adolescent-father incongruence. Given that adolescents tend to self-disclose more readily to their mothers than their fathers (Smetana et al. 2006), mothers are likely to have a higher level of parental knowledge than fathers. Thus, adolescent-mother incongruence on parental knowledge could reflect a less close adolescent-mother relationship, thus acting as a risk factor.

Strengths, Limitations and Avenues for Future Research

This study presents some strengths worth mentioning. The results stemming from the RSA bring out the importance of using deeper methods of analysis to gain a more detailed understanding of the impact of adolescent-parent congruence and incongruence. Moreover, including all four dimensions of parental monitoring, as per Kerr and Stattin's (2000) model, and examining fathers' and mothers' perceptions separately, provided a more comprehensive and nuanced picture of family dynamics in early adolescence.

Some limitations should also be mentioned. First, the fact that the adolescents reported on both parental monitoring and their antisocial behaviors may have led to some bias in the results. However, other studies examining adolescent-parent incongruence have also used adolescent self-reports to measure adolescent adjustment (e.g., Human et al., 2016; Nelemans et al. 2016). Moreover, by their very nature, some forms of antisocial behavior are only known to the adolescents themselves (Jollife et al. 2003) and, generally speaking, individuals tend to assess their own behaviors accurately (Dekovic et al. 2006). Nevertheless, it may be advisable for future studies to use teacher or peer reports to assess adolescents' antisocial behaviors. Second, the adolescent questionnaire assessing parental monitoring asked about this construct in a global way, without distinguishing between fathers and mothers. Making this distinction would bring

out a more precise portrait of the impact of adolescent-father and adolescent-mother congruence and incongruence on adolescents' antisocial behaviors. Third, we used a cross-sectional design wherein all the variables were assessed at a single time point. Using a longitudinal design including yearly assessments of both parental monitoring and adolescent adjustment would make it possible to 1) disentangle the direction of the relationship between adolescent-parent congruence and incongruence and adolescent adjustment and 2) test developmental hypotheses regarding changes in this relationship. For instance, developmental change has been documented in the dimensions of parental monitoring throughout adolescence, suggesting that changes in adolescent-parent congruence and incongruence and their impact on adjustment might take place as well (Fung & Lau, 2010), especially in the context of adolescents' quest for autonomy and independence.

Conclusion

In this study, the associations between congruence or incongruence in parents' and adolescents' assessments of monitoring and antisocial behaviors varied according to the parents' gender and the dimension of monitoring considered. Our findings emphasize that the combination of adolescents' and parents' perceptions of family functioning could provide an important indicator of adolescent adjustment. Considering that parental control was not linked to antisocial behaviors and that the literature shows parental knowledge to stem mainly from adolescent disclosure (Kerr & Stattin, 2000), parenting programs should focus on improving the communication between parents and adolescents, and fostering adolescent self-disclosure. Finally, our findings support the importance of pursuing and broadening the research on the effect of parent-adolescent congruence and incongruence with regard to other dimensions of parenting and adolescent outcomes.

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