RUNNING HEAD: INFORMANT DISCREPANCIES IN PSYCHOLOGICAL CONTROL

Informant Discrepancies in Parental Psychological Control, Adolescent Autonomy and Relatedness Psychological Needs

Abstract

Disagreements and discrepancies between reporters may provide significant information helping us to understand how the same behavior change in different contexts, as well as to underline some differences in the way in which the different informants observe and interpret the examined behavior. Framed from a conceptual framework based on Self-Determination Theory and Family Systems Theory, the present multi-informant study sought to contribute to a better understanding of the relationships between discrepancies in parents' and adolescents' perceptions of parental psychological control and satisfaction of adolescents' needs for autonomy and relatedness. Participants were 190 Italian co-living family units in which an adolescent was present (M_{age} = 16.47 years, SD_{age} = 1.41). Our findings highlighted that detrimental effects of psychological control on needs satisfaction may be exacerbated by the discrepancies between parents' and children's perceptions of controlling behaviors.

Keywords: informant discrepancies, autonomy and relatedness, self-determination theory, parent-adolescent relationships, psychological control, latent difference score modeling

Informant Discrepancies Between Perceptions of the Parental Psychological Control, Adolescent Autonomy and Relatedness Psychological Needs

Many authors have underlined the necessity to include multiple informants in research on parent-child relationships (e.g., De Los Reyes et al. 2015; Neleman et al, 2016). As these scholars have showed, the points of view of parents and children about the same behavior (e.g., adolescent problem behavior or parenting behavior) are not mutually exclusive and both of them may provide useful information to better understand the examined behavior (de Haan et al., 2018; De Los Reyes et al., 2015). Hence, the use of multiple informants is considered a key component of the best practices of psychological assessment (Hunsley & Mash, 2008).

However, when multiple informants are included in the studies, they may also disagree in their perceptions and their assessment of the variable of interest. For example, research has highlighted moderate levels of agreement between assessment provided by different informants (e.g., mothers, fathers, teachers) of child and adolescent behavioral and emotional problems (Achenbach, McConaughy, & Howell, 1987; De Los Reyes et al., 2015; Duhig, Renk, Epstein, & Phares, 2000). This phenomenon is generally known as “informant discrepancies” (Neleman et al, 2016).

Informant discrepancies have been usually attributed to unreliability or bias in the informants’ reports (De Los Reyes & Kazdin 2005, 2006; De Los Reyes et al., 2011), and conceptualized as measurement error (Neleman et al, 2016). Nevertheless, over the past two decades, scholars have argued that disagreements and discrepancies between reporters may provide significant information (De Los Reyes et al., 2013). In some cases, discrepancies can help us to understand how the same behavior change in different contexts (e.g., school or family or peer group), as well as to underline some differences in the way in which the different

informants observe and interpret the examined behavior (De Los Reyes & Kazdin, 2005; Neleman et al, 2016). Even more, when informants disagree about some behaviors that daily occur in their own life, like parenting behaviors or the quality of parent-child relationships, such discrepancies may have important implications for the interactions between informants as well as for the development of the children (De Los Reyes & Kazdin, 2006; De Los Reyes et al., 2013; Ferdinand, van der Ende, & Verhulst, 2004).

Discrepancies in Parental Psychological Control

The study of informant discrepancies in the family functioning domain has underlined that parents and adolescents often provide discordant reports on parenting behaviors and these discrepancies are important because they may reflect difficulties in parent-child relationships and may be associated with youths' maladjustment (De Los Reyes & Ohannessian, 2016; Korelitz & Garber, 2016; Steinberg & Morris, 2001). For instance, some authors have underscored that different perspectives between parent and children on relevant behaviors acted in the family context (e.g., parenting practices, parental control, parental monitoring) may predict negative outcomes with regard to children's adjustment (for a review see De Los Reyes, 2011). According to Family Systems Theory (Minuchin, 1985; Nelemans et al., 2016; Restifo & Bogels, 2009) these discrepancies underscore the importance to distinguish between the father–adolescent and mother–adolescent relationship, as these relationships "represent distinct subsystems within the family" (Nemelans et al., 2016, p. 2052).

One interesting dimension of parenting behavior to study through this approach is psychological control. According to some authors (Barber & Harmon, 2002; Soenens et al., 2010), psychological control is "characteristic of parents who pressure their children to comply with their own agenda through insidious and manipulative tactics, such as guilt induction,

shaming, and love withdrawal" (Inguglia et al., 2016, p. 419). In the framework of Self-Determination Theory (SDT; Deci & Ryan, 2000), parental psychological control is negatively related to children's fulfillment of needs for autonomy and relatedness (Ahmad, Vansteenkiste, & Soenens., 2013; Inguglia et al., 2018; Liga et al., 2017; Mabbe et al., 2015). In particular, autonomy refers to the need to choose one's own life direction and to feel efficacious and capable of achieving desired outcomes, while relatedness reflects the necessity to establish close relationships with people (Deci & Ryan 2000). Empirical evidence has been already provided that the higher are the levels of perceived parental psychological control, the less the adolescents are autonomous and report good relationship quality (Inguglia et al., 2015, 2018; Koepke & Denissen, 2012).

Parents tend to differ in the ways in which they exert psychological control. Although findings of research investigating differences between adolescents' reports of psychological control of fathers and mothers are controversial (as an example of research showing the opposite pattern, see Mastrotheodoros et al., 2019), scholars have generally found that mothers are perceived by their children as more psychologically controlling than fathers (Barber & Harmon, 2002; Shek, 2007; Soenens et al., 2010; Van Lissa et al., 2017). Moreover, adolescents and their parents have been observed to differ significantly with regard to the perceptions of their relationships and of their parenting behaviors (De Los Reyes, 2011; Korelitz & Garber, 2016; Mastrotheodoros, Van der Graaff, Deković, Meeus, & Branje, 2020). For instance, Korelitz and Garber (2016) performed a meta-analysis on congruence of parents' and children perception of parenting showing that children, on average, reported higher levels of psychological control than their parents did. This is in line with research that showed that parents tend to evaluate their parenting behaviors more favorably than their children (e.g., Ohannessian, Lerner, Lerner, & von

Eye, 2000; Sher-Censor, Parke, & Coltrane, 2011).

According to some scholars (De Los Reyes & Kazdin, 2006; De Los Reyes et al., 2013; Neleman et al, 2016), such discrepancies between parents' and adolescents' perceptions of psychological control may be considered as a risk factor for youths' developmental outcomes during adolescence, also with regard to the satisfaction of needs for autonomy and relatedness. Research has already investigated the relationships between discrepancies in parental psychological control and adolescents' developmental outcomes (e.g., Juang, Syed, & Takagi, 2007; Maurizi, Gershoff, & Aber, 2012; Yaban, Sayıl, & Tepe, 2014), finding that different perceptions of psychological control are associated with the presence of higher difficulties and psychological problems. For instance, Yaban et al. (2014) have observed that parent-child discrepancies in reports of parental psychological control were associated with adolescents' feelings of loneliness and deviant behaviors.

However, to our knowledge no studies have tried to understand how such discrepancies are related to children's satisfaction of both needs for autonomy and relatedness. Therefore, the current study was aimed at investigating how discrepancies in children's and parents' perceptions of parental as psychologically controlling were associated with adolescents' satisfaction of needs for autonomy and relatedness.

Psychological Control and the Satisfaction of needs for Autonomy and Relatedness

Even if there is no research directly investigating how discrepancies in children's and parents' perceptions of parental psychological control are associated with adolescents' satisfaction of needs for autonomy and relatedness, some authors have tried to understand if mothers and fathers' levels of psychological control may be differently related to the satisfaction of needs for autonomy and relatedness of their children. Only a limited number of studies has

investigated this issue (Costa et al., 2016; Inguglia et al., 2018; Soenens & Vansteenkiste, 2005) because the majority of researchers have focused on the relationships between parental psychological control and needs for autonomy and relatedness without differentiating between parents (Costa et al. 2015; Inguglia et al. 2016, 2018; Mabbe et al. 2015) or focusing only on mothers (Ahmad et al. 2013; van der Kaap-Deeder, Vansteenkiste, Soenens, & Mabbe 2017)

Among the studies that have investigated the differential roles of fathers and mothers, Soenens and Vansteenkiste (2005) compared the predictive power of mothers' and fathers' parenting style separately with regard to adolescent's autonomy in terms of self-determined regulation in different life domains (i.e., friendships, school, job-search) among adolescents living in Belgium. They found that fathers' psychological control did not contribute significantly to the adolescents' self-regulation in the domains of friendships and school, while it was negatively associated with job-search self-regulation. Instead, mothers' psychological control was negatively associated with adolescents' self-regulation in the domains of friendships and school, while it did not contribute significantly to job-search self-regulation.

Moreover, Costa and colleagues (2016) have investigated the associations between maternal and paternal psychological control with satisfaction of needs for autonomy and relatedness among Italian adolescents. They found moderate but significant negative correlations between paternal psychological control and both satisfaction of autonomy and relatedness needs, as well as between maternal psychological control and satisfaction of need for autonomy. Maternal psychological control was not significantly associated with satisfaction of need for relatedness. Additionally, Inguglia and colleagues (2018) found that both maternal and paternal psychological control were negatively correlated with satisfaction of both needs for relatedness and autonomy among Italian teens. However, the correlations were very low even if significant,

like in the study of Costa et al. (2016).

However, the differential role of psychological control exerted by mothers and fathers in fulfilling the needs of their children requires to be further investigated by future studies. These studies should also consider the existence of potential discrepancies in the perceptions of parents and children with regard to parental psychological control and how these discrepancies may be associated with the satisfaction of adolescents' needs for autonomy and relatedness.

The Present Study

In light of the previous observations, the present multi-informant study tried to contribute to a better understanding of the relationships between discrepancies in parents' and adolescents' perceptions of parental psychological control and satisfaction of adolescents' needs for autonomy and relatedness. Framed from a conceptual framework based on SDT (Ryan & Deci, 2000) and Family Systems Theory (Minuchin, 1985; Nelemans et al., 2016), the study analyzed the associations between discrepancies in both mother-adolescent and the father-adolescent relationship and satisfaction of teens' needs for autonomy and relatedness.

More specifically, the first aim was to analyze the relations between children's and parents' perceptions of parental psychological control. In particular, the study examined how far mother–adolescent dyads and father–adolescent dyads disagree with regard to parental psychological control, as well as the degree to which mother–adolescent and father–adolescent discrepancies are interrelated (see Figure 1). On the basis of literature, it was hypothesized that adolescents and their parents would differ significantly with regard to the perceptions of the psychological control exerted by parents, with children reporting higher levels of psychological control than parents, especially when they assessed the behavior of their mothers (Korelitz & Garber, 2016). Moreover, it was expected that discrepancies in mother-adolescent dyads would

be similar to those in father-adolescent dyads, even if the former were expected to be more pronounced compared to the latter.

The second goal was to examine how informant discrepancies were associated with the satisfaction of children's needs for autonomy and relatedness (see Figure 2). More precisely, in line with the literature stating that discrepancies between parents' and adolescents' perceptions of parenting behaviors may be considered as a risk factor for youths' developmental outcomes (De Los Reyes & Kazdin, 2006; De Los Reyes et al., 2013; Neleman et al, 2016), it was hypothesized that higher discrepancies would be associated with lower levels of satisfaction of both needs.

- insert Figure 1 about here –

- insert Figure 2 about here –

Method

Participants

Participants were 190 co-living family units composed by mothers (M_{age} = 46.87 years, SD_{age} = 5.02, range 35-59 years), fathers (M_{age} = 50.47 years, SD_{age} = 5.84, range 36-67 years) and adolescents (47% boys, M_{age} = 16.47 years, SD_{age} = 1.41, range 14-19 years). The participants were all Italians, living in southern Italy.

With regard to parents' education, 29% of fathers and 28% of mothers had a high school diploma, 41% of fathers and 52% of mothers had a college degree or higher and 30% of fathers and 20% of mothers had a middle school diploma or less. With regard to adolescents' education, 16% of them attended the 9th grade, 16% the 10th grade, 22% the 11th grade, 22% the 12th grade, and 26% the 13th grade.

Measures

Psychological Control. We used the Italian translation of the Psychological Control Scale (PCS; Barber, 1996) to assess psychological control in the mother–adolescent and father–adolescent relationship as perceived by adolescents, mothers, and fathers. The scale consists of 8 items; a sample item reads "My mother/father is a person who is always trying to change how I feel or think about things" for psychological control perceived by the adolescent in the mother–adolescent and father–adolescent relationship, respectively. In this study, we obtained four reports of psychological control in the relationship with adolescent, specifically, a Mother self-report (MM), a Father self-report (FF), an Adolescent report of Mother (AM), and an Adolescent report of Father (AF). All items were rated on a 3-point Likert scale, ranging from 1 (not like me/her/him) to 3 (a lot like me/her/him). Barber (1996) provided evidence for the validity of the factor structure of this scale.

Autonomy and Relatedness Satisfaction. Adolescents completed two subscales from the Italian version of the Basic Psychological Need Satisfaction and Frustration Scale (BPNSFS; Chen et al., 2015; Costa et al., 2018; Liga et al., 2020), Autonomy satisfaction (4 item; e.g., "I feel a sense of choice and freedom in the things I undertake") and Relatedness satisfaction (4 item; e.g., "I feel that the people I care about also care about me"). Items were rated on a 5-point Likert scale ranging from 1 (*completely disagree*) to 5 (*completely agree*). To test the factorial validity of the scale in the present study, we run a CFA model with two factors (Autonomy satisfaction and Relatedness satisfaction) assessed by four items each; it was analyzed using the MLR estimator. The model showed a good fit to the data, $SB\chi^2$ (19) = 17.33, p = .57, robust CFI = 1.00, RMSEA = 0. The model-based composite reliability was .83 for Autonomy satisfaction and .81 for Relatedness satisfaction.

Procedure

The participants were recruited among graduated trainees in psychology by means of student associations in the local area as well as advertising on social networks and in the university networks. Instruments were administered only to those families whose all members separately (father, mother and adolescent) signed informed consent and checked the availability to participate in the research. In some cases, both parents also provided informed consent documents for their underage son/daughter. Mothers, fathers, and adolescents voluntary completed questionnaires separately in paper-pencil mode under the supervision of a trainee psychology graduate. Privacy and anonymity of their answers were guaranteed and the research obtained the authorization of the local ethics committee. The present study followed the ethical standards of the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

Data Analysis Approach

In order to simplify the models to be tested in face of a small sample size, we decided to specify the factor of psychological control for each Informant using the parcelling procedure; as outlined by Little, Rhemtulla, Gibson, and Schoemann (2013), the benefit of more reliable indicators and fewer parameters to estimate can make the difference between a model converging or not. Firstly, we tested the unidimensionality of the scales assessing psychological control using item-level Confirmatory Factor Analysis (CFA) across Informants. We run four separate models with one latent variable assessed by eight indicators. Taking into account the ordinal level of the items, models were analyzed using the Weighted Least Square Mean and Variance adjusted (WLSMV) estimator. Preliminary analyses suggested the deletion of item 4 (“My Mother (Father) is a person who acts like she (he) knows what I'm thinking or feeling”) since its factor loadings for MM and AF were not significant. The four CFA models with one factor and

seven items had a good fit to the data (supplementary online material, Appendix A). The model-based composite reliability was .65 for MM, .76 for FF, .74 for AM, and .76 for AF.

Secondly, we derived three parcels assessing the factor of psychological control for each Informant; using a balancing approach (Little et al., 2013) and making reference to the scale MM, the item with the highest item-scale correlation was paired with the item that had the lowest item-scale correlation. The next highest and next lowest items were paired in the second parcel. The third highest and third lowest were paired to form the third parcel. The parcels for other scales (FF, AM and AF) were computed making reference to the same set of items.

Thirdly, measurement invariance of the psychological control factor across all four Informants (AM; AF; MM; FF) was assessed by comparing increasingly stringent models, reflecting configural (M0), metric (M1), scalar (M2), and full uniqueness (M3) invariance (Van de Schoot, Lugtig, & Hox, 2012). Models were analyzed using the robust Maximum Likelihood (MLR) estimation. If imposing invariance constraints resulted in a significant increase in the Satorra-Bentler scaled chi-square value and, additionally, in $\Delta CFI \geq -.01$ supplemented by $\Delta RMSEA \geq .015$, the respective constraint was not tenable (Chen, 2007). In all models, residual variances of parallel items across Informants were allowed to correlate (Marsh & Hau, 1996). Results show that the hypothesis of scalar invariance held, it was, however, necessary to freely estimate intercepts of three parcels (supplementary online material, Appendix B).

In order to examine informant discrepancies, we used the approach of Latent Difference Scores (LDS) modelling recently proposed by de Haan, Prinzie, Sentse and Jongerling (2018). This approach was adapted by de Haan and colleaguesfrom similar approaches used in various disciplines (McArdle, 2009; Scalas et al., 2014). As outlined by de Haan and colleagues, “in the case of informant discrepancies, LDS models use second-order latent factors to examine

differences between different informants' perceptions of the same behavior (e.g., self-rating vs. other-rating). First, latent factors representing individual informant reports are created from observed item scores. Then, LDS (Δ) are created as second-order latent factors from the latent factors representing individual informant reports, as

$$Y_{\text{other-rating}} = 1 * Y_{\text{self-rating}} + 1 * \Delta_{\text{self,other}}$$

By constraining the factor loadings of $Y_{\text{self-rating}}$ and $\Delta_{\text{self,other}}$ to be equal to 1, the results of a subtraction are simulated, and the discrepancy score represents "*the part of the score of* $Y_{other\text{-}rating}$ *that is not identical to* $Y_{self\text{-}rating}$" [emphasis added] (adapted from McArdle, 2009, p. 583). As such, the discrepancy score provides information about differences in perceptions within a dyad, while the effect of the self-rating is also taken into account. Discrepancy scores contain means (μ_Δ), variances (σ_Δ^2), and a covariance with the self-rating ($\sigma_{\Delta\text{-self}}$). When specified in this manner, LDS represent directional difference scores; positive LDS means reflect higher other-ratings compared to self-ratings, and negative LDS means reflect lower other-ratings compared to self-ratings" (p. 359).

Both in Model 1 and Model 2, psychological control factors regarding mothers and fathers were included simultaneously. The models were specified to examine the extent to which (a) mother-adolescent and father-adolescent dyads disagree on psychological control, and (b) parent-adolescent discrepancies are associated with parents' self-reported psychological control as well as with the other dyad's perceptions of psychological control (both self-reported psychological control and parent-adolescent discrepancy). For model identification purposes, mean of mothers' self-reported psychological control, and means of child reports of mothers' and fathers' psychological control, were set to zero, and factor loadings of the first observed indicator were set to one for each informant. Moreover, in Model 2, the extent to which parental

psychological control was associated with adolescents' autonomy and relatedness was examined. All analyses were performed using Mplus 7 (Muthén & Muthén, 1998-2012).

Results

Descriptive Statistics and Correlations

Means, standard deviations, skewness, kurtosis, and Pearson correlation coefficients of study variables are presented in Table 1. Analyses performed at parcel (for parental psychological control) and item (for autonomy and relatedness) levels are reported in supplementary online material, Appendix C. Mother and father self-reports of psychological control were positively and significantly related with each other; they were also positively and significantly related with adolescent reports. Mother self-report was negatively and significantly related with both adolescent autonomy and relatedness, while father self-report was negatively and significantly related only with adolescent relatedness; finally, adolescent reports of mother and father psychological control were negatively and significantly related with both adolescent autonomy and relatedness.

- Insert Table 1 about here -

Parent-Adolescent Discrepancies

Goodness of fit indices and parameters (factor means and variances) of Model 1, are shown in Table 2. Comparison of the 95% confidence intervals of the LDS means indicate that on overage, adolescents rated mothers but not fathers higher on psychological control than parents themselves did (positive LDS means). Significant variances of all LDS indicate that there were significant differences between dyads in this sample, regarding how much adolescents and parents differed in their views. A negative and significant correlation between father self-reported psychological control and the corresponding LDS was found (r = -.46, p < .001): the

negative sign of the correlation suggests that adolescents tended to overrate father psychological control less if fathers rated themselves higher on this behavior. The correlation between mother self-reported psychological control and the corresponding LDS was not significant (r = -.09 ns): the not significant correlation (together with the sign of the LDS mean above zero) suggests that adolescents tended to overrate mother psychological control regardless to the self-reported level of this behavior. Furthermore, the correlation between mother and father self-reports of psychological control was positive and significant (r = .57, p < .001): thus, higher levels of mother self-reports were related to higher levels of father self-reports. Finally, the correlation between mother–adolescent and father–adolescent discrepant perceptions was also positive and significant (r = .36, p < .001): thus larger mother-child discrepancies were related to larger father-child discrepancies.

- Insert Table 2 about here -

Parent-Adolescent Discrepancies and Adolescent Autonomy and Relatedness

Model 2, in which mother and father self-reported psychological control and mother–adolescent and father–adolescent discrepancies were related to the satisfaction of adolescents' autonomy and relatedness needs, showed adequate fit to the data. Model fit indices are reported in Table 2; parameter estimates are reported in Table 3.

Mother self-report was negatively and significantly related to autonomy: adolescents whose mothers report higher levels of psychological control tend to report lower levels of autonomy. Mother-adolescent discrepancies were negatively and significantly related to autonomy: stronger mother–adolescent discrepancies of psychological control were related to lower autonomy. Father self-report was negatively and significantly related to relatedness: adolescents whose fathers report higher levels of psychological control tend to report lower

levels of relatedness. Furthermore, father-adolescent discrepancies were negatively and significantly related to relatedness: stronger father–adolescent discrepancies of psychological control were related to lower relatedness.

- Insert Table 2 about here –

- Insert Table 3 about here -

Discussion

In the current study we examined how discrepancies in both mother-adolescent and the father-adolescent relationship with regard to the perception of parental psychological control were associated with satisfaction of teens' needs for autonomy and relatedness, taking also into account how the perceptions of psychological control vary between mothers and fathers. Indeed, during adolescence the fulfillment of children's needs for autonomy and relatedness is strongly affected by the psychological control exerted by parents, that have been shown to be negatively associated with children's needs satisfaction (Ahmad et al., 2013; Costa et al., 2018; Inguglia et al., 2018; Mabbe et al., 2015). However, adolescents and parents often tend to evaluate psychological control quite differently and discrepancies in perceptions of parental psychological control, even more than the perceptions themselves, may constitute a risk for adolescents' fulfillment of needs for autonomy and relatedness.

In particular, the first aim of the study was to examine how far mother–adolescent dyads and father–adolescent dyads disagree about perceptions of parental psychological control. In line with our predictions based on previous research (e.g., Korelitz & Garber, 2016), adolescents generally perceived higher levels of psychological control than their parents. With regard to the relationship with mother, adolescents tended to overrate mothers' psychological control regardless to the self-reported level of this behavior. With regard to the relationship with father,

adolescents tended to overrate fathers' psychological control less if their fathers rated themselves higher on this behavior. Adolescents' tendency to rate mothers' psychological control higher than the mothers themselves reported to be is consistent with studies showing that mothers are perceived by their children as more psychologically controlling than fathers (Barber & Harmon, 2002; Korelitz & Garber, 2016; Shek, 2007; Soenens et al., 2010; Van Lissa, Hawk, Koot, Branje, & Meeus, 2017). According to the ''developmental or generational stake'' hypothesis (Korelitz & Garber, 2016; Welsh, Galliher, & Powers, 1998), these findings can be explained taking into account that parent and children have different developmental stakes during adolescence. Generally, teens try to achieve autonomy and minimize closeness with their parents, whereas parents try to maintain closeness with their children and to provide a nurturing environment for their children's development. As a result of these different stakes, parental psychological control is perceived in different ways by parents and teens, with parents who tend to perceive their psychological control as a positive strategy to nurture their children, and adolescents who see their parental psychological control as an attempt to obstacle their search for autonomy (Leung & Shek, 2014). In line with this hypothesis, we also found that adolescents who overrated psychological control of their mothers tended to overrate the psychological control of their fathers, larger mother-child discrepancies were related to larger father-child discrepancies.

Furthermore, we found a concordance between psychological control self-reported by mothers and father. According to Simons and Conger (2007) this is an important research topic because contrasting approaches to parenting may negatively affect children's development. Although socialization theories suggest that fathers and mothers play different roles in the development of their children, with the former more involved in the promotion of autonomy and

the latter more involved in providing emotional support and care, previous research have shown some similarities between fathers' and mothers' approaches to parenting, including psychological control (Beato et al., 2016; Bogels & Phares, 2008; Fliek et al., 2015; Inguglia et al., 2018). In this line, our findings displayed a certain coherence between the levels of psychological control of the parental couple because within the families in which mothers showed higher levels of psychological control also fathers tended to do the same. In order to explain such similarities, Luo and Klohnen (2005) refer to "assortative mating" stating that partners who are similar in attitudes and behaviors tend to select into relationships with one another. In this way, they may adopt each other's approach to parenting and this may result in better adjustment being more consistent in their responses to their child and less reasons to dispute (Lansford et al., 2014).

The current study contributed to the literature also by exploring how informant discrepancies were associated with the satisfaction of children's needs for autonomy and relatedness. Findings have only partially confirmed our predictions. In particular, the discrepancies between fathers and adolescents in their perceptions of fathers' psychological control were associated with lower levels of satisfaction of need for relatedness, while the discrepancies between mothers and adolescents in their perceptions of mothers' psychological control were associated with lower levels of satisfaction of need for autonomy. Contrary to our hypotheses, discrepancies between fathers' and adolescents' perceptions of psychological control were not significantly associated with satisfaction of need for autonomy, nor discrepancies between mothers' and adolescents' perceptions of psychological control were significantly associated with satisfaction of need for relatedness. Moreover, results showed that father's self-report of psychological control was negatively and significantly related to adolescents' satisfaction of need for relatedness (and not to need for autonomy), whereas mothers' self-report

of psychological control was negatively and significantly related to adolescents' satisfaction of need for autonomy (and not to need for relatedness).

Taken together these findings provide some interesting insights. First, fathers and mothers seem to play different roles in the relationship between psychological control and needs satisfaction, with fathers more involved in the satisfaction of need for relatedness while mothers seem more involved in the satisfaction of need for autonomy. These data are not easy to explain on the basis of previous research considering that a very limited number of studies have investigated the different role of mothers' and fathers' psychological control on satisfaction of basic psychological needs and that these studies have found conflicting results (i.e., Costa et al., 2016; Inguglia et al. 2018). From the point of view of SDT (Deci & Ryan, 2000), no differences between parents would have been expected since this theory points out the detrimental effect of psychological control on children' psychological functioning without differentiating between parents. Instead, our findings are in line with Family Systems Theory (Restifo & Bogels, 2009) that suggests to distinguish between the father–adolescent and mother–adolescent dyads, as these relationships can be considered as distinct subsystems within the family. In our case, the subsystem father-adolescent seems to be focused on the issue of relatedness maybe because fathers are likely to be viewed as authority figures that are mainly devoted towards the management of teens' social relationships and social life (Van Lissa et al., 2019). Hence, when adolescents perceive higher levels of father psychological control they can feel thwarted in establishing socially supportive relations with significant others, especially peers. Thus, the more the fathers are perceived as psychologically controlling the less their children feel satisfied with regard the need for relatedness. Instead, mothers are likely to be prominent figures in the satisfaction of autonomy because, as Attachment Theory (Ainsworth, 1973; Bowlby, 1969)

suggests, they are often the primary caregiver who play an important role in the achievement of balance between the issues of autonomy and exploration. Thus, mothers' psychological control since early childhood may thwart the satisfaction of children's need for autonomy.

These tendencies are also confirmed by findings related to discrepancies between parents' and adolescents' perceptions of psychological control because discrepancies about fathers' psychological control are negatively associated with the satisfaction of need for relatedness, whereas discrepancies about mothers' psychological control are negatively associated with the satisfaction of need for autonomy. Hence, our results partly confirm evidence coming from the studies highlighting that detrimental effects of psychological control may be exacerbated by the discrepancies between parents' and children's perceptions of psychological control (Juang, Syed, & Takagi, 2006; Leung & Shek, 2014; Shek, 2007). Probably, when children perceive that their fathers try to pressure them in a greater extent than their fathers are aware, they may feel limited in establishing positive social contacts with significant others. Additionally, when adolescents feel psychologically controlled by their mothers in a greater extent than their mothers think, they may experience some obstacles in developing a volitional or autonomous functioning. However, our study has an exploratory nature and future studies have to deepen these issues. At the same time, our findings about the direct negative association between parental psychological control and need satisfaction confirm the predictions of the theories stating that psychological control has a detrimental effect on the satisfaction of basic psychological needs, in this case needs for autonomy and relatedness (Barber & Harmon, 2002; Soenens et al., 2010).

The current study should be considered in light of some limitations. First, its cross-sectional nature does not allow us to clearly establish the direction of the associations among the study variables. Thus, future longitudinal studies following the same dyads during adolescence

are needed in order to come to clearer conclusions about the direction of associations between these variables and about the developmental processes involved. Second, for sake of clarity we focused only on the satisfaction of needs, whereas many recent studies have recognized that satisfaction and frustration of basic psychological needs may have a different impact to adolescents' adjustment (Chen et al. 2015; Cordeiro et al. 2016; Inguglia et al. 2018; Vansteenkiste & Ryan, 2013). In this sense, future research needs to disentangle satisfaction from frustration of basic psychological needs in the analysis in order to provide more information about the processes underlying the relationships between psychological control and basic psychological needs. Third, although our study is grounded in SDT, we did not consider the need for competence but we took into account only on the needs for autonomy and relatedness like previous research focusing on the associations between these needs and parental psychological control. Thus, further studies should focus also on need for competence to examine the effects of discrepancies on this variable. Finally, our data showed a substantial variance between the dyads with regard to the agreement rates between parents and children, with some dyads showing higher levels of disagreement than others. Future research should contribute to explain what factors and processes may explain this variance.

Despite the limitations highlighted above, our study contributes meaningfully to the literature on the relationships between psychological control and basic psychological needs because it analyzes the associations between parent-adolescent discrepancies and the satisfaction of need for autonomy and relatedness. To our knowledge it is the first study that investigates this topic by considering self-report of parental psychological control from both mothers and fathers as well as reports of parental psychological control as perceived by children. Moreover, the current study differentiated between mother-adolescent and father-adolescent dyads differently

from previous studies that mainly focused on mother and adolescent report or did not distinguish between mother and fathers among parent-child dyads. The findings of our study provide some empirical support to the predictions of SDT that parental psychological control is negatively related to the satisfaction of needs for autonomy and relatedness, taking also into account parents' self-reports of psychological control and not only adolescents' reports as many studies do. Furthermore, our results support partially the predictions of Family Systems Theory (Restifo & Bogels, 2009) that it is important to distinguish between the mother–adolescent and father–adolescent relationship, as these relationships represent distinct subsystems within the family. In this light, the findings may have practical implication for psychological counselling programs because they suggest that practitioners have to take into account the separate contribution of each parent to adolescents' satisfaction of basic psychological needs. Moreover, such programs in the attempt to lessen parents' pressure to children's lives should deem the possible differences in the perceptions of psychological control between parents and children, trying to mediate between them and reach an optimal balance within the family.

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Figure 1. *Hypothesized bivariate LDS Model for Informant Discrepancies about perception of parental control in mother-adolescent and father-adolescent dyads (Model 1).*

Note. Correlations between residual variances of same parcels across Informants were also estimated, but not shown for clarity of presentation. Constraints are indicated by similar labels for the factor loadings, error intercepts, and residual error variances.

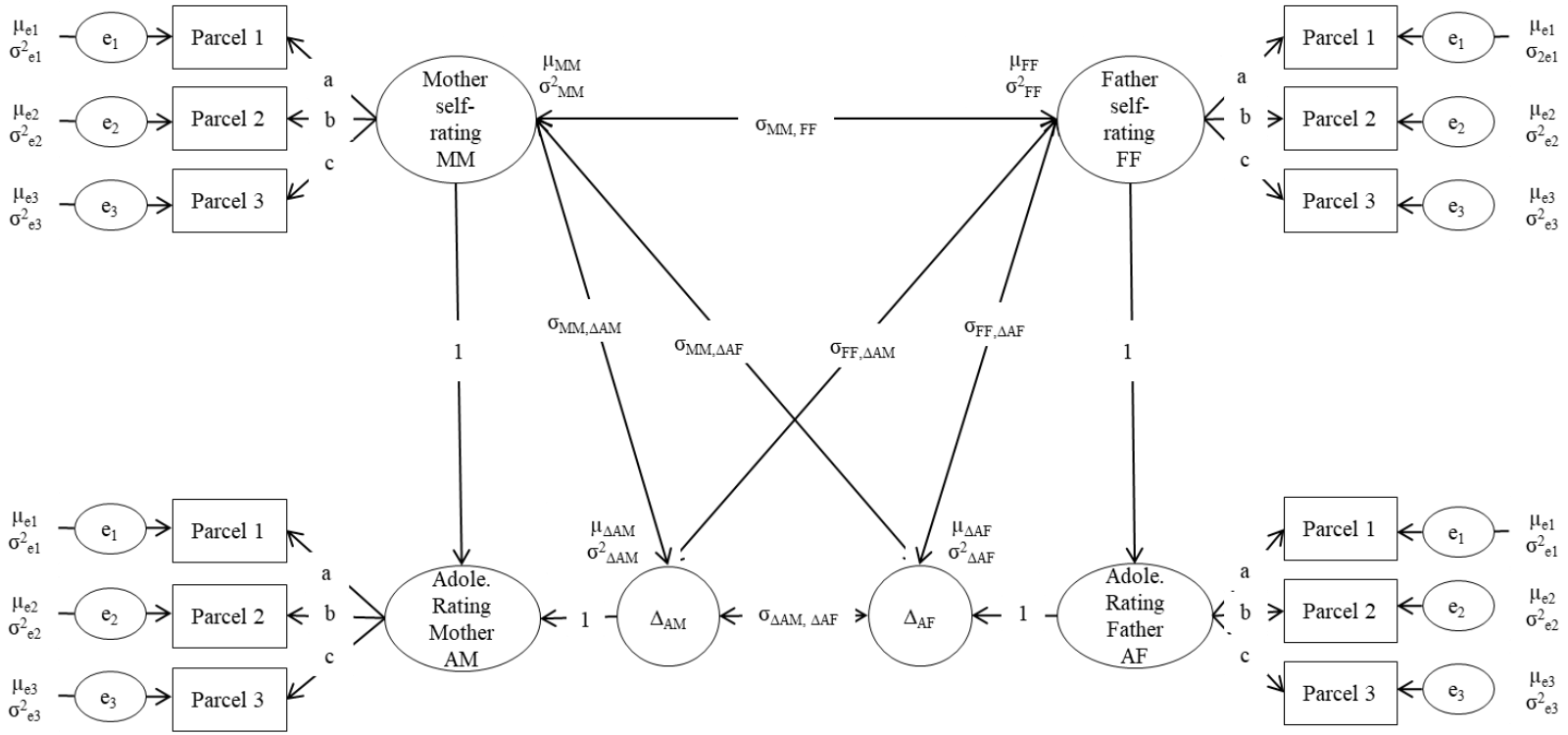

Figure 2. *Hypothesized multivariate LDS Model for Informant Discrepancies about perception of parental control in mother-adolescent and father-adolescent dyads and adolescent's satisfaction of autonomy and relatedness needs (Model 2).*

Note. The specification of the LDS part model is identical to that of Model 1, but not shown for clarity of presentation

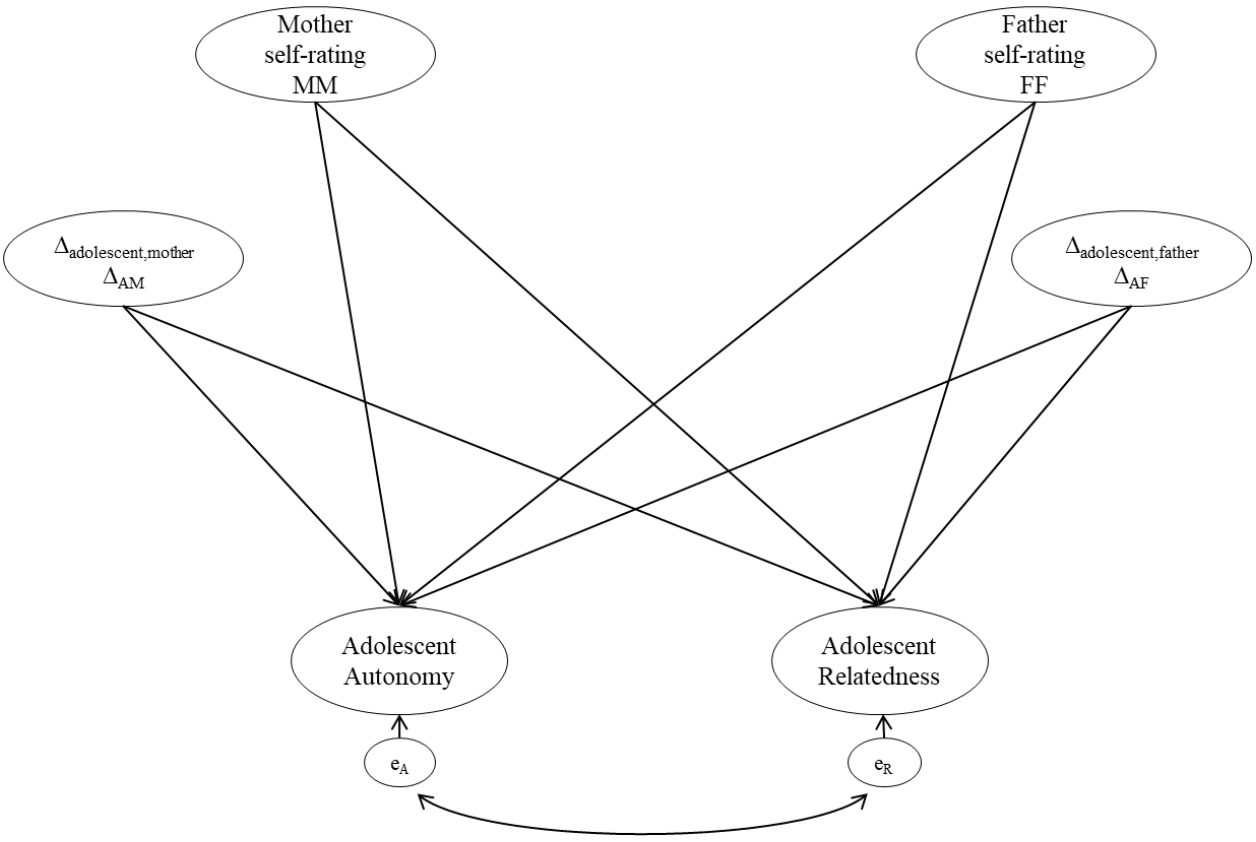

Table 1

Means, standard deviations, skewness, kurtosis, and Pearson correlation coefficients of study variables

	1	2	3	4	5	6
1 Mother self-report psychological control (MM)	1					
2 Father self-report psychological control (FF)	.35***	1				
3 Adolescent report of mother psychological control (AM)	.39***	.30***	1			
4 Adolescent report of father psychological control (AF)	.13	.38***	.49***	1		
5 Adolescent autonomy	-.20**	-.14	-.36***	-.23***	1	
6 Adolescent relatedness	-.18*	-.22**	-.29***	-.38***	.40***	1
Mean	1.54	1.54	1.68	1.56	3.77	4.13
Standard deviation	0.31	0.37	0.39	0.40	0.76	0.70
Skewness	0.44	0.97	0.53	0.99	-0.31	-0.57
Kurtosis	-0.13	1.12	-0.14	0.93	-0.57	-0.59

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

Table 2

Model fit indices, means and variances of mother and father self-reports and parent-child Latent Discrepancy Scores (LDS)

	Model fit indices				Means				Variances			
					Self-Report		LDS		Self-Report		LDS	
	SBχ^2	*df*	CFI	RMSEA	MM	FF	AM	AF	MM	FF	AM	AF
Model 1	89.96	51	.913	.063	0^{a}	$-.01^{a}$	$.15^{b}$	$.04^{a}$	$.04^{***}$	$.07^{***}$	$.06^{***}$	$.10^{***}$
Model 2	235.28	158	.927	.051	0^{a}	$-.01^{a}$	$.15^{b}$	$.04^{a}$	$.04^{***}$	$.08^{***}$	$.06^{***}$	$.10^{***}$

Note. MM mother self-report, FF father self-report, AM adolescent report of mother psychological control, AF adolescent report of father psychological control. Latent mean of mother self-report was set to zero for identification of the model. Different superscripts indicate significant mean-levels, indicated by non-overlapping 95% confidence intervals.

*** $p < .001$.

Table 3

Associations between parents' self-reports, parent–child discrepant views, and adolescent autonomy and relatedness

	Autonomy			Relatedness		
	b	*se*	beta	*b*	*se*	beta
Mother self-report (MM)	-1.10	0.46	-.39**	-0.54	0.51	-.17
Father self-report (FF)	0.18	0.36	.09	-0.83	0.38	-.37*
LDS AM	-0.81	0.36	-.35*	-0.03	0.38	-.01
LDS AF	-0.03	0.25	-.01	-0.90	0.30	-.45**

*$p < .05$; **$p < .01$

Appendix A

Goodness of fit indices of the Confirmatory Factor Analysis Models of psychological control for each Informant separately.

Models	χ^2	df	*p*	CFI	RMSEA
Mother self-report psychological control (MM)	22.48	14	.07	.959	.057
Father self-report psychological control (FF)	23.91	14	.05	.976	.061
Adolescent report of Mother psychological control (AM)	26.13	14	.02	.964	.068
Adolescent report of Father psychological control (AF)	36.28	14	< .001	.949	.092

Appendix B

Goodness of fit indices of the Confirmatory Factor Analysis Models with Configural (M0), Metric (M1), Scalar (M2), and Full Uniqueness (M3) Measurement Invariance across Informants.

	Model fit indices					Model comparisons				
Model	SBχ^2	df	ScF	Robust CFI	RMSEA		$\Delta\chi^2$	df	Δ_{CFI}	Δ_{RMSEA}
M0 Configural	43.27	30	1.04	.971	.048	-	-	-	-	-
M1 Metric	56.30	39	1.09	.962	.048	M1 vs M0	13.02	9	-.013	0
M2Scalar	108.41	48	1.08	.866	.081	M2 vs M1a	53.74***	9	-.088	.033
M2a Partial Scalar	67.20	45	1.08	.951	.051	M2a vs M1a	11.04	6	-.003	**.003**
M3 Full Unique	83.72	51	1.09	.927	.058	M3 vs M2a	16.03*	6	-.029	.007

Note: Letters in bold indicate the model of measurement invariance that was obtained. SB, Satorra-Bentler, ScF, Scaling correction Factor, CFI Comparative Fit Index, RMSEA, Root Mean Square Error of Approximation.

*$p < .05$, ***$p < .001$.

Appendix C

Means (M), standard deviation (SD), skewness (S), kurtosis (K), and Pearson correlation coefficients of study variables.

	MMP1	MMP2	MMP3	AMP1	AMP2	AMP3	FFP1	FFP2	FFP3	AFP1	AFP2	AFP3	AUT1	AUT2	AUT3	AUT4	REL1	REL2	REL3	REL4
MMP1	1.00																			
MMP2	.21	1.00																		
MMP3	.40	.29	1.00																	
AMP1	.35	.11	.16	1.00																
AMP2	.27	.22	.10	.42	1.00															
AMP3	.26	.17	.35	.40	.31	1.00														
FFP1	.21	.04	.24	.19	.12	.22	1.00													
FFP2	.23	.23	.29	.18	.16	.17	.43	1.00												
FFP3	.25	.07	.36	.31	.16	.23	.51	.43	1.00											
AFP1	.14	-.01	.23	.30	.17	.27	.34	.29	.18	1.00										
AFP2	.03	-.01	.07	.27	.49	.23	.15	.30	.21	.38	1.00									
AFP3	.11	.00	.23	.23	.24	.47	.18	.15	.30	.43	.44	1.00								
AUT1	-.19	-.14	-.16	-.26	-.35	-.29	-.07	-.05	-.07	-.15	-.20	-.24	1.00							
AUT2	-.18	-.04	-.10	-.30	-.23	-.23	-.18	-.12	-.08	-.13	-.13	-.10	.55	1.00						
AUT3	-.17	.02	-.09	-.30	-.16	-.17	-.13	-.03	-.03	-.15	-.12	-.02	.48	.68	1.00					
AUT4	-.09	-.11	-.17	-.16	-.15	-.15	-.17	-.03	-.03	-.14	-.20	-.17	.46	.57	.58	1.00				
REL1	-.14	-.01	-.11	-.15	-.20	-.14	-.11	-.12	-.15	-.29	-.22	-.24	.22	.28	.20	.16	1.00			
REL2	-.12	-.19	-.14	-.27	-.24	-.21	-.17	-.16	-.20	-.27	-.25	-.25	.37	.32	.31	.21	.56	1.00		
REL3	-.14	-.01	-.16	-.22	-.19	-.10	-.09	-.04	-.16	-.29	-.24	-.24	.29	.32	.33	.27	.60	.71	1.00	
REL4	-.21	-.02	-.12	-.17	-.03	-.20	-.12	-.16	-.31	-.23	-.13	-.27	.16	.28	.21	.15	.38	.41	.47	1.00
M	1.45	1.78	1.32	1.54	1.88	1.57	1.40	1.83	1.31	1.48	1.76	1.39	3.65	3.75	3.88	3.80	4.05	4.35	4.18	3.94
SD	0.40	0.44	0.42	0.47	0.52	0.57	0.43	0.51	0.47	0.49	0.51	0.54	0.90	0.90	0.94	0.99	0.90	0.85	0.80	0.97
S	0.78	-0.01	1.24	0.82	0.10	0.76	1.09	0.31	1.85	1.21	0.24	1.46	-0.29	-0.33	-0.66	-0.53	-0.54	-1.26	-0.66	-0.64
K	0.51	-0.74	1.04	0.47	-0.81	-0.19	0.90	-0.53	3.34	1.21	-0.76	1.49	-0.01	-0.20	0.16	-0.14	-0.65	1.20	-0.21	-0.23

Note. AUT, Autonomy; REL, Relatedness. Correlation coefficients lower than .16 were significant at $p < .05$.