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Day-to-day Variation in Autonomy-Supportive and Psychologically Controlling Parenting: The Role of Parents' Daily Experiences of Need Satisfaction and Need Frustration

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SYNOPSIS

Objective. Autonomy-supportive and psychologically controlling parenting have been shown to relate to positive and negative developmental outcomes, respectively. Most research that addresses antecedents of these parenting constructs has focused on the predictive role of between-parent differences (e.g., personality). To gain insight in dynamics of within-parent changes in reported parenting, this study focused on daily fluctuations in reported autonomy-supportive and psychologically controlling parenting and examined the role of parents' need satisfaction and need frustration in accounting for those fluctuations. **Design.** Mothers (M age = 45) and fathers (M age = 47) of 198 adolescents (M age = 15) participated in a 7-day diary study. **Results.** Multilevel modeling provided evidence for significant day-to-day variability in both parenting dimensions. Daily fluctuations in need satisfaction were related to daily fluctuations in reported autonomy-supportive parenting and daily fluctuations in need frustration were related to daily fluctuations in reported psychologically controlling parenting. These associations were not moderated by between-parent differences in those parenting dimensions. **Conclusions.** The findings provide evidence for the role of parents' own needs-related experiences in their daily display of autonomy-supportive and psychologically controlling parenting.

INTRODUCTION

The benefits of autonomy-supportive parenting for children's development are abundant and include improved personal and relational well-being (Grolnick, 2003; Joussemet, Landry, & Koestner, 2008). In contrast, controlling parenting, and psychologically controlling parenting in particular, has been found to relate to problem behavior and even psychopathology (Soenens & Vansteenkiste, 2010). Increasingly, research has begun to unravel the sources of autonomy-supportive and psychologically controlling parenting, thereby examining, for instance, the roles of between-parent differences in personality (e.g., Soenens, Vansteenkiste, Duriez, & Goossens, 2006), perceived threat in the environment (Gurland & Grolnick, 2005), parental achievement goals (Mageau, Bureau, Ranger, Allen, & Soenens, 2016), contingent self-esteem (Ng, Pomerantz, & Deng, 2014), and socialization goals (Wang, Chan, & Lin, 2012). These studies are informative, but they focus on relatively stable between-parent differences, at the expense of more variable sources of influence. This one-sided focus on

between-parent differences is unfortunate because parental behavior varies on a day-to-day basis (Aunola, Tolvanen, Viljaranta, & Nurmi, 2013).

To draw a more complete picture of the antecedents of autonomy-supportive and psychologically controlling parenting, important goals for research are to identify sources of this short-term variation in parenting practices, and more specifically, to examine how such variation may be explained by determinants that are also subject to day-to-day changes. Research that identifies determinants of daily parenting behavior may ultimately help strengthen intervention strategies to promote effective day-to-day parenting behaviors. Inspired by Self-Determination Theory (SDT; Ryan & Deci, 2000; Soenens & Vansteenkiste, 2010), the overall aim of this study was to examine whether daily variation in parents' satisfaction and frustration of the basic psychological needs for autonomy, competence, and relatedness represents such a source of daily variation in reported parenting.

Autonomy-Supportive and Psychologically Controlling Parenting

According to SDT, essential to children's development is the satisfaction of their psychological needs for autonomy (i.e., experiencing ownership), competence (i.e., feeling effective), and relatedness (i.e., experiencing a sense of intimacy). Numerous studies have shown that need satisfaction is associated with more favorable developmental outcomes (Deci & Ryan, 2000). Also, research increasingly shows that frustration of these needs renders individuals vulnerable to ill-being and even psychopathology (Bartholomew, Ntoumanis, Ryan, & Thogersen-Ntoumani, 2011; Vansteenkiste & Ryan, 2013). Such findings have been obtained at the level of between-person differences and at the level of within-individual (daily) variation (Ryan, Bernstein, & Brown, 2010; Verstuyf, Vansteenkiste, Soenens, Boone, & Mouratidis, 2013). Experiences of need satisfaction and need frustration are said to be somewhat distinct (rather than perfectly opposite), as an absence of need satisfaction does not by definition denote the presence of need frustration. To illustrate, individuals who do not feel effective in carrying out an activity may not necessarily feel like a failure. Yet, an experience of need frustration does imply low need satisfaction, indicating that the relation between need satisfaction and need frustration is asymmetrical (Vansteenkiste & Ryan, 2013). Because it is assumed that dynamics of need frustration are to some extent different from the dynamics of need satisfaction, each deserves being studied in its own right.

Autonomy-supportive and controlling parenting represent important developmental antecedents of children's experiences of need satisfaction and need frustration (Joussemet et al., 2008). Within SDT, parental autonomy support refers to parents' encouragement of volitional functioning in children (Grolnick & Pomerantz, 2009; Soenens et al., 2007). Autonomy-supportive parents take the child's frame of reference, provide choice whenever possible, encourage initiative and personal exploration, and provide a meaningful rationale when choice is constrained. According to SDT, autonomy-supportive parenting is beneficial for children's development because it nurtures children's basic psychological needs for autonomy, competence, and relatedness (Grolnick, Deci, & Ryan, 1997).

In SDT, autonomy-supportive parenting is contrasted with controlling parenting, which is characteristic of parents who pressure their children to act, think, and feel in certain ways (Grolnick et al., 1997). Numerous studies have focused on the concept of psychologically controlling parenting, which refers to the use of intrusive and

manipulative strategies such as guilt-induction and shaming (Barber, 1996; Barber & Xia, 2013). According to SDT, psychologically controlling parenting is detrimental to children's development, not simply because it fails to nurture children's basic psychological needs, but because it actively thwarts those needs (Joussemet et al., 2008; Soenens & Vansteenkiste, 2010). Parallel to the recognition that the absence of need satisfaction does not simply equate to the frustration of the psychological needs (Bartholomew et al., 2011), the presence of controlling parenting does not simply involve an absence of autonomy-supportive parenting (Silk, Morris, Kanaya, & Steinberg, 2003). Compared to a mere absence of autonomy-support, controlling parenting has a more active and undermining effect on children's needs, resulting not only in feelings of low need satisfaction but also in feelings of need frustration. Research generally confirms that psychologically controlling parenting is related to a plethora of maladaptive developmental outcomes (including internalizing and externalizing problems; see Barber & Xia, 2013), with need frustration playing an intervening role in these associations (Ahmad, Vansteenkiste, & Soenens, 2013; Mabbe, Soenens, Vansteenkiste, & Van Leeuwen, 2016).

Daily Variations in Autonomy-Supportive and Controlling Parenting

Increasingly, research has begun to examine daily variations in autonomy-supportive and controlling parenting and effects of these daily variations for children's and adolescents' well-being. This research is inspired by dynamic models of family processes, according to which parents' and children's behaviors and experiences are constantly in flux (Dix, 1991; Holden & Miller, 1999; Repetti, Reynolds, & Sears, 2015). On the basis of these models it can be predicted that parenting practices do not only vary between parents but likely also oscillate within the parents themselves. As such, parental behavior may be characterized by considerable ups and downs on a day-to-day basis. Diary studies are ideally suited to capture these short-term fluctuations in family members' behaviors (Laurenceau & Bolger, 2005). Consistent with these models, constructive (e.g., emotionally supportive) parent-child interaction patterns are related to daily positive emotional experiences in children and negative (e.g., conflicted) patterns are related to daily emotional distress (e.g., Chung, Flook, & Fuligni, 2009; Fuligni & Masten, 2010).

Only a handful of diary studies have investigated the adjustment correlates of day-to-day fluctuations in autonomy-supportive and controlling parenting in particular. Ng, Kenney-Benson, and Pomerantz (2004) found that parents' controlling and autonomy-supportive responses to children's failure predicted children's performance at school on a challenging cognitive task the next day. Aunola et al. (2013) found daily fluctuations in psychologically controlling parenting predict daily fluctuations in parental reports of children's negative emotions. Van Der Kaap-Deeder, Vansteenkiste, Soenens, and Mabbe (2017) found that child-perceived daily variation in autonomy-supportive and psychologically controlling parenting was related positively to daily variation in children's well-being and ill-being, respectively.

Sources of Daily Variation in Autonomy-Supportive and Psychologically Controlling Parenting

Although an increasing number of studies has shown quite consistently that daily variations in autonomy-supportive and controlling parenting relate to daily variation in

children's and adolescents' adaptive and maladaptive emotions and behaviors, respectively, few studies have identified sources of this daily variation. This is because most studies of antecedents of autonomy-supportive and psychologically controlling parenting have focused on the role of relatively stable, between-family or between-parent differences. For instance, based on well-established models of antecedents of parenting (Belsky, 1984; Grolnick, 2003) several important antecedents of controlling parenting have been identified, including features of parental personality such as parental perfectionism (Soenens et al., 2006), parents' perception of the social context and the world as threatening (Gurland & Grolnick, 2005), and child characteristics such as difficult temperament (Laukkanen, Ojansuu, Tolvanen, Alatupa, & Aunola, 2014).

Given the observation that autonomy-supportive and controlling parenting vary on a daily basis, there is a need to understand the roots of these daily variations. To date, we are aware of only one study examining antecedents of daily variations in controlling parenting. Aunola, Viljaranta, and Tolvanen (*in press*) showed that parents' negative emotions covaried positively on a daily basis with psychologically controlling parenting practices. Building on this study, we aimed to examine on the basis of SDT whether daily parental experiences of need satisfaction and need frustration play roles in daily variation in parenting.

Daily Parental Needs Experiences and Daily Parenting

Much like the satisfaction and frustration of children's psychological needs play a key role in explaining effects of parenting on children's functioning, these psychological needs may play an important role for parents as well. Given that autonomy-supportive parenting requires considerable psychological availability from parents (Grolnick, Gurland, DeCoursey, & Jacob, 2002), the satisfaction of their three psychological needs is vital for parents to have sufficient psychological resources or "mental space" available to make use of autonomy-supportive practices. That is, autonomy support requires psychological availability, energy, and openness, resources that are fueled by the satisfaction of the psychological needs. On the basis of SDT, we argue that need satisfaction promotes parents' energy level. This argument follows from the overall assumption in SDT that need satisfaction enhances energy available to the self (Ryan & Deci, 2008), an assumption that received empirical support in studies showing positive associations between need satisfaction and experiences of vitality (which involve feelings of energy and liveliness; e.g., Chen et al., 2015; Ryan & Frederick, 1997). In turn, this energy is needed for parents to listen carefully and with attention to what is going on in the child's life, that is to be psychologically available (Mageau, Sherman, Grusec, Koestner, & Bureau, 2016). Conversely, research shows that, when parents lack energy (e.g., because of fatigue), they are less able to be responsive to children's feelings and thoughts (e.g. Cooklin, Giallo, & Rose, 2012; White, Bradley, Nerverve, Stirewalt, & Summers, 2015). Also, being autonomy-supportive means that parents are creative and flexible in finding ways to set rules and organize activities that match the child's interests and preferences (Joussemet et al., 2008). Such creativity and flexibility also require sufficient parental energy.

Along similar lines, active frustration of psychological needs would increase the odds of parents relying on psychologically controlling practices because need frustration engenders a more self-centered parental orientation. Theory and research suggest that when people experience frustration of the psychological needs, they become more

concerned about their self-esteem and engage in attempts to demonstrate their worth as a person (Hodgins, 2008; Hodgins & Knee, 2002). Such attempts can manifest in a tendency to get their own ideas across even if other people do not like them and without much room for negotiation (Weinstein, Hodgins, & Ryan, 2010). Thus, need frustration may elicit tunnel vision where parents bypass the child's perspective and impose their own agenda.

A few studies provide indirect evidence for this hypothesis. A diary study by Danner-Vlaardingerbroek, Kluwer, Van Steenbergen, and Van Der Lippe (2013) showed that mothers of preschoolers were more behaviorally and emotionally withdrawn on days when they experienced more job stressors. Presumably, those job stressors related to less need satisfaction (Van Den Broeck, Vansteenkiste, De Witte, & Lens, 2008), thereby depleting parents' energy required to be receptive for their children's daily whereabouts and activities. Other studies provide a more direct examination of the role of parents' need-based experiences in their parenting behavior, albeit at the level of between-parent differences in parental behavior. De Haan, Soenens, Dekovic, and Prinzie (2013) documented in a long-term longitudinal study evidence for an association between low parental need satisfaction and controlling parenting (overreactive discipline and psychological control). Van Der Kaap-Deeder et al. (2015) showed that a composite score of mothers' need frustration, relative to their need satisfaction, was related positively to child-perceived general autonomy-support, at least in younger siblings. However, these studies examined the role of parental needs at the level of between-parent differences, not at the level of within-parent, daily variation. Also, none of these studies made a clear separation between daily need satisfaction and need frustration as differential predictors of daily parental autonomy support and psychological control.

The Present Study

The general aim of the present study was to examine sources of day-to-day variation in reported autonomy-supportive and controlling parenting, thereby focusing on the role of daily variation in parents' experiences of need satisfaction and need frustration. Because to date only a handful of studies demonstrated variability in autonomy-supportive and psychologically controlling parenting from day-to-day (e.g., Aunola et al., 2013; Mushquash & Sherry, 2013; Ng et al., 2004; Van Der Kaap-Deeder et al., 2017), a preliminary aim was to further document the degree of daily fluctuations in reported autonomy-supportive and psychologically controlling parenting (Aim 1). In doing so, we chose to sample parents of adolescents because adolescence is considered a developmental period characterized by profound and rapid transformations in the parent-child relationship (Steinberg & Silk, 2002). Parents of adolescents are faced with many quickly evolving changes and challenges in the parent-child relationship, including adolescents' tendency to take emotional distance from parents and adolescents' increased tendency to have a say in family decisions. This renegotiation of parent-child relationships is known to give rise to at least temporary increases in conflicts between parents and adolescents (Arnett, 1999). Thus, adolescence was considered a particularly relevant developmental period to examine short-term (daily) variations in parental experiences and reported behaviors.

The central aim of this study was to investigate whether day-to-day variability in need satisfaction and need frustration would account for variability in reported

parenting (Aim 2). We hypothesized that, although parental need satisfaction contributes to parental autonomy support, parental need frustration is related negatively to autonomy support. Need satisfaction would foster energy needed to be autonomy-supportive while need frustration depletes such energy. We also anticipate that need frustration relates more strongly to controlling parenting than (an absence of) need satisfaction. For parents to become controlling and to actively thwart their children's psychological needs, a stronger threat to their needs would be needed than a mere absence of parental need satisfaction (e.g., with parents having experienced few opportunities for personal initiative during the day). Parents' own psychological needs would need to be actively frustrated (e.g., with parents having experienced high levels of pressure during the day) for them to adopt a controlling and need-thwarting style toward the child. This reasoning is consistent with the assumption that need frustration entails more than the experience that one's needs are unmet; need frustration arises from the experience that the psychological needs are actively blocked, an experience that is more threatening and negative than a mere absence of need satisfaction (Vansteenkiste & Ryan, 2013).

An ancillary aim was to examine, in a more exploratory way, whether general individual differences in autonomy-supportive and psychologically controlling parenting (assessed prior to the diary study) would affect the strength of the relation between daily parental need experiences and daily reported parenting (i.e., moderation) (Aim 3). That is, we sought to explore whether autonomy-supportive (or controlling) practices are triggered more easily among parents for whom these practices are more readily available in parents' repertoire of interpersonal behaviors. When experiencing a need satisfying (or need frustrating) day, parents generally high on autonomy support (or control) may more easily display autonomy-supportive (or controlling) behaviors because the behaviors corresponding with these experiences are more accessible to them. An alternative hypothesis would be that parents with a general tendency to act in an autonomy supportive way would be less susceptible to daily experiences of need satisfaction. Because they are used to engage in an autonomy-supportive style, they would not need daily experiences of need satisfaction to a similar extent as parents less inclined to use an autonomy-supportive style. To test this aim, we included more general measures of autonomy-supportive and controlling parenting in addition to the daily measures of parenting.

METHOD

Participants

The sample consisted of 194 families living in the Dutch-speaking part of Belgium. In each family, both the mother (M age = 45 years, SD = 3.20, range 37–53) and the father (M age = 47 years, SD = 3.86, range 39–57) participated. They filled out questionnaires regarding their adolescent child (51% female, M age = 15 years, SD = .88, range 13–17). Regarding marital status, the large majority of the parents (95.4%) were married, and 4.6% were living together without being married. Regarding educational level, 32.3% of the mothers and 35% of the fathers completed secondary school, 48.5% of the mothers and 35% of the fathers had a bachelor's degree, and 19.2% of the mothers and 30% of the fathers attained a master's degree. Parents were relatively highly educated when compared to the general population (Statistics Belgium, 2014). Although initially 198

mothers and fathers participated, 4 fathers and 3 mothers who did not fill out the diary were removed from the dataset.

Procedure

Mothers and fathers filled out questionnaires independently at their homes. About one month later, on a second home visit the researchers explained the diaries that were to be filled out by both parents during 7 consecutive evenings, before going to bed. They took about 5 to 10 min to complete. After the 7 days, the diaries were put in sealed envelopes and picked up by the researcher.

Measures

All instruments were adapted to fit within a diary format. Cronbach's alphas of the scales are reported in Table 1. One alpha for each day was calculated, separately for mothers and fathers. In Table 1 we present the range of alphas across 5 days and across parental gender. Likert scales, ranging from 1 (*completely not true*) to 5 (*completely true*), were used for all scales. With regard to the parenting measures, both in the questionnaires and the diary, parents were asked to report on their autonomy-supportive and psychologically controlling parenting behavior toward one of their (adolescent) children in age range of 14–16 years. When having two children in this age range, parents could decide for themselves about which child they filled out the questionnaires (M number of children = 2.40). In such cases, both parents (mothers and fathers) were asked to report on the same child.

Person-Level Measures

Autonomy-supportive parenting. Mothers and fathers were administered a 5-item version of the Autonomy Support Scale of the Perceptions of Parents Scale (POPS; Grolnick, Ryan, & Deci, 1991; e.g., "I am usually willing to consider things from my child's point of view"). Two items of the original 7-item scale were not included in the analysis, because both items tap into controlling parenting rather than into autonomy-supportive parenting ("I insist to do everything my way." and "I'm not really sensitive to what's important for my son/daughter."). Those two items have to be reverse-scored according to the scoring instructions of the original POPS. There is increasing evidence

TABLE 1
Descriptive Statistics and Internal Consistencies between Dispositional and Daily Variables

	<i>M</i>	<i>SD</i>	<i>α</i>
Daily level measures			
1. Need satisfaction	3.82	.59	.80–.83
2. Need frustration	1.78	.61	.74–.81
3. Autonomy-supportive parenting	3.13	.74	.57–.70
4. Psychologically controlling parenting	1.56	.55	.71–.82
Person level measures			
5. Autonomy-supportive parenting	3.82	.47	.72
6. Psychologically controlling parenting	2.28	.44	.68

for a distinction between a bright pathway (in which autonomy-supportive parenting is related to adaptive outcomes through the satisfaction of the needs) and a dark pathway (in which psychologically controlling parenting is associated with maladaptive outcomes through the frustration of the needs). To clearly differentiate autonomy-supportive from controlling parenting and to study their unique antecedents on a day-to-day basis, we eliminated the items of both the general and daily autonomy support scale that needed to be reverse scored. In this way, we ended up with “pure” measures of autonomy-supportive and controlling parenting.

Psychologically controlling parenting. Both mothers and fathers were administered the well-validated and frequently used Psychological Control Scale - Youth Self-Report (PCS-YSR; Barber, 1996), which includes 8 items (e.g., “I am always trying to change how my child feels or thinks about things.”). Items tapped into several key features of psychologically controlling parenting, including intrusiveness (e.g., “I try to change how my child feels or thinks about things.”), guilt-induction (e.g., “I blame my child for other family members’ problems.”), and love withdrawal (e.g., “I am less friendly with my child when s/he did not see things my way.”).

Daily Diary Measures

Autonomy-supportive parenting. Participants were administered 4 items selected from the Autonomy Support Scale of the POPS (Grolnick et al., 1991). The items were slightly reformulated to fit the format of a daily assessment (e.g., “Today, I allowed my child to decide certain things for himself/herself”). One item from the scale for general autonomy support was not administered (“I allow my son/daughter to choose his/her own direction in life.”). Because this is a more general item about the child’s overall direction in life, it was deemed less relevant in the diary context.

Psychologically controlling parenting. Both mothers and fathers were administered 7 items, based on the items of the PCS-YSR (Barber, 1996). Again, items were reformulated to fit the format of a daily assessment.

Need satisfaction and frustration. Mothers and fathers filled out 12 items tapping into their daily experiences of need satisfaction and need frustration. Items were taken from the Basic Psychological Need Satisfaction and Need Frustration scale (Chen et al., 2015) and slightly adapted to make them amenable to a diary assessment. Although the original scale consists of 24 items, for reasons of brevity, only 12 items were included, with satisfaction and frustration of each of the three needs being measured with 2 items: autonomy satisfaction (e.g., “Today, I felt a sense of choice and freedom in the things I undertook.”) and frustration (e.g., “Today, I felt forced to do many things I wouldn’t choose to do.”), competence satisfaction (e.g., “Today, I felt confident that I could do things well.”) and frustration (e.g., “Today, I felt insecure about my abilities.”), and relatedness satisfaction (e.g., “Today, I felt connected with people who care for me, and for whom I care.”) and frustration (e.g., “Today, I felt excluded from the group I want to belong to.”). A multilevel confirmatory factor analysis was conducted on the items of

need satisfaction and frustration to examine whether the two constructs can be empirically separated. We estimated a 2-factor and 1-factor solution. The chi-square difference test showed that the 2-factor solution better fitted the data, $\Delta\chi^2(2) = 74.35$, $p < .001$.

Plan of Analysis

This diary study consisted of repeated measurements on 7 consecutive days (i.e., Level 1), nested within 195 mothers and fathers (i.e., Level 2), nested within 195 families (i.e., Level 3). To take into account between- and within-person differences, multilevel analyses were conducted with the statistical software package MLwiN 2.32 (Rasbash, Browne, Healy, Cameron, & Charlton, 2015). Predictor variables at Level 1 were group-mean centered (i.e., centered around the person's mean), whereas predictors at Level 2 and 3 were centered around the grand mean. In total, there were 5.1% missing values. By default, these missing values are treated as structural missing values by MLwiN.

To examine whether there was significant variability in reported autonomy-supportive and psychologically controlling parenting from day-to-day (Aim 1), an intercept-only model was estimated. This model does not explain any variance, but decomposes the variance into three components, namely variation at the between-family level, at the between-parents level, and at the between-days level. Intraclass correlations (ICCs) shed light on the proportion of the total variance in the observed variables that is due to variation at the family level, the proportion of the total variance that is due to between-parent variation, and the proportion of the total variance that is due to between-days variation.

Next, daily need satisfaction and need frustration (i.e., Level 1) and general individual differences in autonomy-supportive and psychologically controlling parenting (i.e., Level 2) were entered simultaneously in the models as predictors of, respectively, daily and mean-levels of reported autonomy-supportive and psychologically controlling parenting (Aim 2). With general individual differences in reported parenting we refer to the measures of general autonomy-supportive and controlling style assessed prior to the onset of the diary study. Next, cross-level interactions between need satisfaction and frustration and general individual differences in autonomy-supportive and psychologically controlling parenting were examined (Aim 3). Cross-level interactions were only added when there was significant parent-level variation around the slopes of the individual-level explanatory variables need satisfaction and need frustration (Hox, 2010). Therefore, before investigating potential moderation, the random slopes for need satisfaction and need frustration were investigated simultaneously.

In all the models tested, the following background variables were included (not shown in the tables for reasons of parsimony): number of children in the family; age and gender of the adolescent; age, educational level, and gender of the parent; and a categorical variable representing weekend versus weekdays.

The basic equations for the multilevel analyses are presented below.

Day-level equation:

$$\text{Daily reported autonomy – support/psychological control} = \beta_0 + \beta_1 \text{Daily need satisfaction} + \beta_2 \text{Daily need frustration} + e$$

Parent-level equation:

$$\beta_0 = \gamma_{00} + \gamma_{01} \text{General autonomy support} + \gamma_{02} \text{General psychological control} + u_0$$

$$\beta_1 = \gamma_{10} + \gamma_{11} \text{General autonomy support} + \gamma_{12} \text{General psychological control} + u_1$$

$$\beta_2 = \gamma_{20} + \gamma_{21} \text{General autonomy support} + \gamma_{22} \text{General psychological control} + u_2$$

Family-level equation:

$$\gamma_{00} = \gamma_{00} + v_0$$

$$\gamma_{10} = \gamma_{10} + v_1$$

$$\gamma_{20} = \gamma_{20} + v_2$$

RESULTS

Descriptive Statistics and Preliminary Analyses

Tables 1 and 2 show reliability estimates, correlations, means, and standard deviations of the diary variables and person level variables. Table 2 shows the correlations between the study variables at the between-days, between-parent, and between-family level. To determine whether there were associations between the background variables (gender and age of the adolescent, parental age and gender, educational level and number of children in the family) and the study variables, a multivariate analysis of variance (MANOVA) was conducted with adolescent and parent gender and educational level (the categorical background variables) as fixed factors, with the other (continuous) background variables as covariates, and with all study variables as dependent variables. There were no overall multivariate effects for adolescents' age (Wilks's $\lambda = .99$; $F(6, 357) = .87$; *ns*), parent age (Wilks's $\lambda = .98$; $F(6, 357) = 1.05$; *ns*), adolescents' gender (Wilks's $\lambda = .98$; $F(6, 357) = 1.00$; *ns*), parent gender (Wilks's $\lambda = .97$; $F(6, 357) = 1.67$; *ns*), number of children in the family (Wilks's $\lambda = .99$; $F(6, 357) = .93$; *ns*), and parent educational level (Wilks's $\lambda = .92$; $F(6, 357) = 1.35$; *ns*). Although none of these background variables had a multivariate effect on the study variables, we still controlled for their effects in the main analyses to test our hypotheses as conservatively as possible.

Aim 1: Day-to-Day Variability in Reported Parenting

The ICC reflects the percentage of variance located at Level 2 (i.e., the between-parents level). ICC values indicate that, respectively, 19% and 32% of the variance in reported psychologically controlling and autonomy-supportive parenting reflect between-parent differences. At the between-family level, there is 26% and 15% of the variance in reported psychologically controlling and autonomy-supportive parenting. As a corollary implication, these between-parents and between-family percentages suggest that most of the variance (i.e., more than 50%) is situated at the between-days

level. Specifically, respectively, 55% and 53% of the variance in reported psychologically controlling parenting and autonomy-supportive is situated at the between-days level. It should be noted that this variance at the between-days level also includes error variance. Still, these percentages suggest that a substantial and significant part of the variance in reported parental behavior is situated at the level of daily variation within parents' functioning.

To examine whether the frequency of reported autonomy-supportive and controlling parental behavior differed between weekdays and the weekend, we estimated models including the effect of weekend as a predictor of both types of parental behavior. The variable representing the distinction between week and weekend days positively predicts psychologically controlling parenting ($B = .07$; $SE = .02$; $p < .001$) and autonomy-supportive parenting ($B = .11$; $SE = .02$; $p < .001$), meaning that the occurrence of both types of reported parenting behaviors is elevated during the weekend. This is probably due to the higher frequency and intensity of parent-adolescent interactions during the weekend. Because of this finding, we also included the contrast between weekend and weekdays as a control variable in the main analyses.

Aim 2: Antecedents of Day-to-Day Variability in Parenting

Both in the prediction of reported autonomy-supportive parenting and in the prediction of reported psychologically controlling parenting, we simultaneously included effects of daily parental need satisfaction and need frustration. Table 3 presents the findings for daily reported autonomy-supportive parenting. Only daily need satisfaction (not daily need frustration) was significantly and positively related to daily reported autonomy-supportive parenting (see Model 1 in Table 3). As for the parent-level predictors, there was a marginally significant positive association between general individual differences in autonomy-supportive parenting and daily autonomy-supportive parenting (not shown in Table 3).

Table 4 presents the findings for daily reported psychologically controlling parenting. Regarding the day-level predictors of psychologically controlling parenting (presented in the top half of the tables), daily need frustration was related positively to daily reported psychologically controlling parenting (see Model 1 in Table 4). As for the parent-level predictors (presented in the lower panel of the tables), general individual differences in psychologically controlling parenting positively predicted mean levels of daily reported psychologically controlling parenting (see Model 1 in Table 4).

To perform an even more conservative test of the association between daily needs experiences and daily reported parental behavior, in a next set of analyses we controlled for autonomy-supportive and psychologically controlling parenting the day before. This analysis was performed to examine whether need satisfaction and need frustration in the day would contribute to a change in daily reported parenting not only relative to parents' mean level of parenting but also relative to parents' use of a certain parenting style the day before. These analyses were conducted on a truncated dataset because the first measurement point (i.e., day 1) has no previous day. Daily need satisfaction contributed to daily autonomy-supportive parenting ($B = .16$; $SE = .05$; $p < .01$) when autonomy-supportive parenting of the day before was controlled. Similarly, the association between daily need frustration and daily psychologically controlling parenting

TABLE 3
Daily Autonomy-Supportive Parenting as a Function of Daily Need Satisfaction, Need Frustration, and Interindividual Differences in Parenting

	Null model	Model 1	Model 2	Model 3
Fixed effects				
Intercept	2.99 (.05)**	2.99(.05)**	2.99(.06)**	3.00(.05)**
Day-level predictors				
Daily need satisfaction (NS)		.13(.04)**	.13(.05)**	.16(.05)**
Daily need frustration (NF)		-.07(.04)	-.07(.04)	-.04(.04)
Autonomy support day before				-.01(.02)
Psychological control day before				.04 (.03)
Person-level predictors				
Autonomy support (AS)		.16 (.09)	.17(.09)	
Psychological control (PC)		-.05 (.09)	-.04(.09)	
Day- X person-level interaction				
Daily PC X Need satisfaction			.13(.10)	
Daily AS X Need satisfaction			.09(.11)	
Random effects				
Parent-level variance of				
intercept, u_0	.17 (.02)**	.17 (.02)**	.17 (.02)**	.18 (.02)
need satisfaction slope, u_1		.09 (.05)*	.08 (.05)	.05 (.06)
need frustration slope, u_2		.06 (.05)	.06 (.05)	.01 (.05)
Family-level variance of				
intercept, v_0	.08 (.02)**	.08 (.02)**	.08 (.02)**	.07 (.02)
need satisfaction slope, v_1		.08 (.05)	.09 (.05)	.12 (.05)
need frustration slope, v_2		.03 (.04)	.04 (.04)	.08 (.04)
Level-1 residual e_0	.28 (.01)***	.25 (.01)**	.25 (.01)**	.23 (.01)
-2*loglikelihood	4719.68	4588.76	4586.99	3728.25
$\Delta\chi^2(df)$		130.92(1)**	1.763(1)	

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

held after taking into account psychologically controlling parenting on the previous day ($B = .11$; $SE = .03$; $p < .001$). These models are presented in [Tables 3](#) and [4](#) (Model 3).

Aim 3: General Reported Parenting as a Moderator

To examine whether the daily associations between parents' needs and reported parenting would be more pronounced among parents reporting to have a generally more autonomy-supportive or controlling parenting style, cross-level interactions were inspected. This was done only in cases where there was significant variation around the slopes of the individual-level explanatory variables need satisfaction and frustration (Hox, 2010). In Model 1 (displayed in [Tables 3](#) and [4](#)), the slopes of need satisfaction (u_1) and need frustration (u_2) were included simultaneously to investigate whether there was significant random slope variance. When looking at daily reported autonomy-supportive parenting as the outcome variable, Model 1 in [Table 3](#) shows that only the slope variance around need satisfaction is significant. Therefore, the moderation analyses were only conducted with daily need satisfaction. When looking at daily psychologically controlling parenting as the outcome variable, Model 1 in [Table 4](#) shows that only the slope variance around need frustration is significant. Therefore,

TABLE 4
 Daily Psychologically Controlling Parenting as a Function of Daily Need Satisfaction, Need Frustration, and Interindividual Differences in Parenting

	Null model	Model 1	Model 2	Model 3
Fixed effects				
Intercept	1.55 (.04)***	1.53 (.04)***	1.53 (.04)***	1.54 (.04)***
Day level predictors				
Daily need satisfaction (NS)		-.05 (.03)	-.05 (.03)	-.06 (.03)
Daily need frustration (NF)		.12 (.03)***	.12 (.03)***	.11 (.03)***
Autonomy support day before				-.01 (.02)
Psychological control day before				-.08 (.02)***
Person-level predictors				
Autonomy support (AS)		-.01 (.06)	-.01 (.06)	
Psychological control (PC)		.23 (.05)***	.23 (.05)***	
Day- X person-level interaction				
Daily PC X Need frustration			-.01 (.10)	
Daily AS X Need frustration			.02 (.10)	
Random effects				
Parent-level variance of				
intercept, u_0	.06 (.01)***	.05 (.01)***	.05 (.01)***	.07 (.01)***
need satisfaction slope, u_1		.04 (.03)	.04 (.03)	.00 (.00)
need frustration slope, u_2		.06 (.03)*	.06 (.03)*	.06 (.03)*
Family-level variance of				
intercept, v_0	.08 (.01)***	.08 (.01)***	.08 (.01)***	.07 (.01)***
need satisfaction slope, v_1		.02 (.02)	.02 (.02)	.02 (.02)
need frustration slope, v_2		.02 (.02)	.02 (.02)	.03 (.03)
Level-1 residual e_0	.17 (.01)***	.16 (.01)***	.14 (.01)***	.14 (.01)***
-2*loglikelihood	3364.190	3159.506	3159.456	2642.151
$\Delta\chi^2(df)$		204.684(1)***	.05(1)	

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

the moderation analyses were only conducted with daily need frustration. As shown in Model 2 in both Tables 3 and 4, general levels of parenting did not moderate the daily associations between parental needs and reported parenting behavior. This means that the observed positive association between daily need satisfaction and daily autonomy-supportive parenting, and between daily need frustration and daily psychologically controlling parenting, held regardless of parents' general tendencies to be either autonomy-supportive or psychologically controlling.

Supplementary Analyses

Differences between fathers and mothers. Analyses were conducted with gender of the parent as a possible moderator in the association between the needs and reported parenting by adding two interaction terms in the models, one with parent gender and need frustration and one with parent gender and need satisfaction. In the model with psychologically controlling parenting as an outcome, the interaction terms between need satisfaction and parent gender ($B = .00$; $SE = .06$; $p > .05$) and between need frustration and parent gender ($B = .03$; $SE = .06$; $p > .05$) were not significant. In the

model with autonomy-supportive parenting as an outcome, the interactions between need satisfaction and parent gender ($B = .04$; $SE = .08$; $p > .05$) and between need frustration and parent gender ($B = .06$; $SE = .07$; $p > .05$) were also not significant. Overall, these results suggest that associations between needs experiences and reported parenting are similar for mothers and fathers.

Reversed causality. In addition to need satisfaction/frustration “leading to” reported autonomy-supportive and controlling parenting, it might be the case that parenting “elicits” experiences of need satisfaction/frustration. Research from outside the domain of parenting suggests that giving autonomy support to someone else contributes to experiences of need satisfaction in the person giving autonomy support (Deci, La Guardia, Moller, Scheiner, & Ryan, 2006). Most likely, psychological needs experiences and parental behaviors are related in a reciprocal and mutually reinforcing fashion. Therefore, additional analyses were performed in which need satisfaction and frustration were the dependent variables and reported autonomy-supportive and psychologically controlling parenting were the predictors. Results showed that autonomy-supportive and controlling parenting were significantly associated with need satisfaction ($B = .10$; $SE = .02$; $p < .001$; $B = -.14$; $SE = .03$; $p < .001$) and need frustration ($B = -.11$; $SE = .02$; $p < .001$; $B = .18$; $SE = .03$; $p < .001$). Another set of analyses was performed controlling for need satisfaction and frustration the day before. These analyses were conducted on a truncated dataset because the first measurement point (i.e., day 1) has no previous day. Daily autonomy-supportive parenting and psychologically controlling parenting contributed to daily need satisfaction ($B = .12$; $SE = .02$; $p < .001$; $B = -.15$; $SE = .03$; $p < .001$) when need satisfaction and need frustration of the day before were controlled. Similarly, daily autonomy-supportive parenting and psychologically controlling parenting contributed to daily need frustration ($B = -.10$; $SE = .02$; $p < .001$; $B = .17$; $SE = .03$; $p < .001$) when need satisfaction and need frustration of the day before were controlled. Overall, these findings suggest that the opposite direction of effects is equally plausible as the order of effects assumed in our initial hypothesis. Most likely, psychological needs experiences and parent behaviors are related in a reciprocal and mutually reinforcing fashion.

DISCUSSION

Many studies have provided evidence for the benefits of autonomy-supportive parenting and for the multiple adverse effects of psychologically controlling parenting for children’s development (Grolnick & Pomerantz, 2009; Joussemet et al., 2008; Soenens & Vansteenkiste, 2010). Although various studies provide evidence for the existence of relatively stable between-parent differences in autonomy-supportive and psychologically controlling parenting, most parents would probably testify that on some days they find it easier to take the child’s perspective, to be patient, and to offer choices, but they are lacking the energy to do so on other days because they are fed up with bargaining about various issues or explaining the relevance of their requests. On such days, parents may be more likely to ignore, minimize, or even deny the child’s perspective and to engage in psychologically controlling practices to enforce obedience. However, not

much is known about sources of this daily variation in parent behavior. In this study we examined daily variation in parents' needs experiences as one such potential source.

Day-to-Day Variability in Reported Parenting and Its Sources

The multilevel analyses showed that there is significant variability in parent-reported autonomy-supportive and psychologically controlling parenting from day-to-day, with a substantial part of the variance in reported parenting practices being situated at the between-days level. Although considerable interindividual differences between parents exist and also between families, parents report considerable variability in their ways of interacting with their children around their own average approach. Our findings are consistent with the few previous studies that examined daily variation in autonomy-supportive and controlling parenting (Aunola et al., 2013, *in press*; Van Der Kaap-Deeder et al., 2017).

The present study identified predictors of both the potential to be autonomy-supportive and the vulnerability to engage in psychologically controlling practices. Parental variability in daily need satisfaction was related uniquely to daily reported autonomy support, but daily need frustration was related uniquely to daily reported psychologically controlling parenting. These associations held equally for both mothers and fathers. On days that parents felt related to others, effective in carrying out their daily activities, and free to act on their own interests and values, they reported being more autonomy-supportive. Possibly, the satisfaction of these psychological needs provides essential nutrients and energy to be receptive and curious for what is going on in the life of their children, thereby enabling parents to adopt a more autonomy-supportive approach. This explanation for the association between parent experiences of need satisfaction and autonomy-supportive parenting could be tested in future research.

The absence of daily satisfaction of these needs did not relate to daily reported psychologically controlling parenting. To engage in psychologically controlling parenting, a stronger threat to parents' needs is needed than a mere lack of psychological need satisfaction: parents need to feel actively excluded by others, to experience failure, and to engage in activities against their will. Presumably, such need-frustrating experiences erode parents' psychological availability and energy levels, thereby leading parents to become more self-centered and less attuned to what is going on for their children.

Moderation analyses indicated that the associations between daily needs experiences and daily parenting emerged regardless of individual differences in generally autonomy-supportive and psychologically controlling parenting. The lack of moderation by parents' general style is encouraging because it suggests that even parents who report having fewer autonomy-supportive practices readily available in their parenting repertoire nevertheless report engaging more in autonomy-supportive parenting on days their needs get satisfied. This is promising news for interventions targeting parents' needs on a daily basis. Alternatively, the lack of moderation suggests that a need frustrating day also relates to psychologically controlling parenting among those parents who report at the dispositional level being autonomy-supportive.

Three additional findings need to be mentioned. First, to provide a more conservative test of the association between daily need experiences and parental behavior, we examined whether need experiences would still yield a significant association when controlling for reported parenting on the previous day, which was generally the case. These findings provide a preliminary indication that elevated levels of need satisfaction

on a given day may result in an immediate gain relative to the previous day, with parents being capable of increasing their autonomy-supportive approach compared to the previous day. Similarly, need frustration as experienced on a given day may yield a cost, as indexed by the elevated control compared to the previous day. These findings suggest that need-based experiences relate to fairly quick changes in parenting, a hypothesis that could further be tested in diary studies and experimental work.

Second, surprisingly there was only a moderate association between parents' general parenting style and their daily engagement in corresponding styles. The association between general and daily autonomy support was only marginally significant. Possibly parents' daily behavior is affected quite strongly by situational constraints (e.g., the amount of time available to interact with the child, the degree of difficult behavior displayed by the child, or the style used by one's partner on that day). These constraints may set limits to the expression of parents' more general parenting style in daily situations. Another possibility is that parents' responses to general parenting measures reflect at least partly their attitude toward a certain parenting style rather than their actual engagement in this parenting style. Instead, daily reports of parental behavior may provide a more accurate indication of parents' actual behavior. It should be noted that this is the first study to investigate associations between general and daily parenting. Future research is needed to replicate these findings and to address these possible explanations. It can be interesting in this regard to examine the role of the order in which the questionnaires are presented to parents. Possibly, the order of administering the general parenting behavior scale – that is, either prior to or following the daily assessment – impacts on the strength of the association between the general and daily measures. After rating their daily parenting behavior during several consecutive days, parents may have a better insight in their general parenting style. Such increased awareness, and possibly even reflection about their own parenting behavior, may increase the observed association between daily and general parenting. Alternatively, one could argue that such an increased convergence is merely an artifact of parents' attention being selectively oriented toward their parenting practices of the past few days.

Third, supplementary analyses testing an alternative direction of effects showed that parents' daily parenting behaviors also predicted parents' psychological needs experiences. These findings suggest that psychological needs and parenting likely affect one another in a mutually reinforcing fashion, with satisfaction of the psychological needs not only contributing to more frequent engagement in autonomy-supportive practices but with these practices also giving rise to more experiences of need satisfaction. These findings are in line with emerging evidence that the provision of autonomy support is beneficial to the receiver of autonomy support and to the person who provides autonomy support. Such findings have been reported in the context of friendships (Deci et al., 2006) and in the context of teaching (Cheon, Reeve, Yu, & Jang, 2014). To the best of our knowledge, the present study is among the first to document this phenomenon in the context of parenting. Also, psychological need frustration appears to elicit a more controlling parental stance toward children and to result from parents' engagement in controlling practices. The latter effect is consistent with experimental findings showing that people who were instructed to thwart other people's needs reported increased personal need frustration (Legate, DeHaan, Weinstein, & Ryan, 2013). Similarly, by thwarting their child's psychological needs (through the use of a controlling style), parents seem to suffer themselves in terms of psychological need frustration; they experience more pressure (e.g., because a controlling style often elicits resistance in

children, such that parents feel compelled to further increase their use of a controlling style in an attempt to enforce compliance), more incompetence (e.g., because parents experience that the use of a controlling style is not a very effective way of dealing with problems in the parent-child relationship), and more interpersonal distance (e.g., because parents notice how the use of a controlling style creates alienation in the parent-child relationship). Further research is needed to replicate the bidirectional nature of associations between parental needs experiences and parenting behavior and to test explanations for effects of parenting behavior on needs experiences in particular.

Limitations and Directions for Future Research

The current study was limited by the sole reliance on parent reports. As such, part of the association between parents' need experiences and parenting reported behavior may be due to shared method variance. A recent diary study by Van Der Kaap-Deeder et al. (2017) showed that children also report substantial daily variation in autonomy-supportive and controlling parental behavior. Another important step for future research is to include both parent and child reports in a diary study. Among other things, such research would allow one to examine discrepancy versus convergence in parent-reported and child-reported daily variation in parenting behavior. A few scales in our study also displayed modest reliability. Future research could rely on psychometrically improved versions of these scales. In addition, future diary studies with parents could rely on an electronic format rather than on paper-and-pencil diaries. Although paper-and-pencil diaries have the advantage that they are physically available for the participants, there is no guarantee that the diaries were completed each day. In future research, it would be interesting to work with electronic diary formats, so that the time of completion can be checked more rigorously.

Another limitation is that parents rated their parenting behavior and their needs experiences at the same time in the day. Hence, we do not know whether parents' experiences of need satisfaction and need frustration actually preceded parental behavior. Although supplementary analyses suggested that associations between the psychological needs and parenting are bidirectional in nature, more conclusive evidence regarding direction of effects can be obtained by separating the assessment of the psychological needs and parenting in the day. For example, future diary studies could have parents reporting on their needs immediately after work and reporting on their parenting behavior at the end of the day. Such a design could help to further shed light on the direction of effects and to examine how parental experiences in one context (at work) translate into experiences and behaviors in another context (at home; Repetti, Wang, & Saxbe, 2009). Alternatively, in an experimental study, parents could be asked to select either need-satisfying or neutral activities during the day (see Weinstein, Khabbaz, & Legate, 2016) to examine whether type of assigned activities impacts on their autonomy-supportive and controlling interaction with children.

Further, our sample was rather homogeneous. Probably due to the selection procedure used to recruit participants, parents were relatively highly educated compared to the national population (Statistics Belgium, 2014). Furthermore, only intact families took part in the studies. In future research, it will be important to investigate the daily variability in parenting in more heterogeneous samples, including families with adolescents at risk for problem behavior. There may be more room for daily variations in

parenting behavior as the risk for problem behavior increases. Relatedly, future research could examine these daily dynamics in other cultural contexts. It has been shown for instance that controlling parenting is more prevalent (and perhaps more normative) in collectivist countries such as China (e.g., Wang, Pomerantz, & Chen, 2007). Possibly, when parenting practices are more normative in a given cultural context, they may be used in a more systematic fashion, resulting in decreased daily variation.

An important goal for future research is to unravel the origins of parental needs experiences. We have shown that these experiences are related to parents' daily reported parenting behaviors, but these experiences themselves can be influenced by several factors. In the literature, several theories about variable antecedents of parenting exist (e.g. Belsky, 1984; Dix, 1991; Grolnick et al., 2002) and these models could be applied to research on the antecedents of parental needs experiences. Children's behavior, parental traits, and situational characteristics influence parents' needs in a dynamic fashion. For instance, when parents have had an argument with their partner or another family member, their needs are likely to be frustrated and, in turn, they may engage more readily in controlling behavior that day. Similarly, a child's repeated rule-breaking or daily work-related hassles are likely to affect parenting behavior through experiences of parental need frustration.

Future research can also focus on the processes explaining associations between parental needs experiences and parenting. Parental energy and psychological availability may represent important resources explaining associations between psychological need satisfaction and autonomy-supportive parenting. To better understand the mechanisms behind the association between parental need frustration and controlling parenting, future research could look into the role of parental stress. Theory and research indeed suggest that stress is an important consequence of need frustration (Weinstein & Ryan, 2011) and that stress can affect parenting (Conger, Patterson, & Ge, 1995). In future research, it would also be interesting to demonstrate the unique and additive roles of the needs in parenting above and beyond effects of mood. Mood (e.g., irritation) may play an explanatory role, with need frustration for instance eliciting irritation which, in turn, provokes a more controlling parental approach. It would be interesting to investigate whether needs have a unique effect or whether their effect is carried by mood.

The present findings underscore the fact that parenting is characterized by considerable day-to-day variation. Further, parents' psychological needs experiences appear to play a meaningful role in parents' daily capacity to be autonomy-supportive or inclination to be more controlling. To the extent that parents manage to feel effective in their daily activities (competence), engage in them willingly (autonomy), and are capable of connecting to others (relatedness), they are more attuned to the child's perspective and able to support the child's autonomy. Presumably, experiences of psychological need satisfaction furnish parents with the necessary energy and create the mental space to be truly receptive to the child rather than being self-centered and preoccupied with their own concerns and agenda.

IMPLICATIONS FOR PRACTICE, APPLICATION, THEORY, AND POLICY

Knowledge about the degree of day-to-day variability in parents' rearing style is relevant both theoretically and practically. Theoretically, the observation that parental

behavior changes substantially on a day-to-day basis indicates that parental behavior is in flux and, hence, susceptible to change. As such, our findings are in line with dynamic models of parental behavior (e.g., Laurenceau & Bolger, 2005) emphasizing that parenting style should not be conceived as a stable trait. Parental behaviors are susceptible to change from time to time and from situation to situation (Repetti et al., 2015).

The present findings may also help to inform prevention and intervention efforts about the size and the limits of parents' potential to change their interaction style with children. Indeed, the present findings warrant some optimism because parenting behavior is not "carved in stone" and because there is room for change around parents' own baseline-level. Consistent with this observation, studies have begun to show that parents can be trained to adopt a more autonomy-supportive parenting approach, with resulting benefits for children's motivation and behavioral adjustment (Froiland, 2011; Joussemet, Mageau, & Koestner, 2014). Also at the practical level, the observation of considerable within-person variation in parenting may reduce the possibility of parent blaming in intervention programs or individual counseling. For instance, self-help books on parenting may create the impression that there exist good and bad parents because some of these books highlight inter-individual differences in parenting practices. The recommended parenting practices in such self-help books may elicit guilt among some parents (although the degree to which feelings of guilt are elicited depends also on how recommendations are communicated), with parents blaming themselves for not being effective in their parenting role. The observation of substantial day-to-day variation in parenting practices suggests that it is unwarranted to classify parents as being good or bad, as every parent seems to have the potential to be autonomy-supportive but also the vulnerability to become more controlling.

In addition, the identification of daily need satisfaction and daily need frustration as predictors of daily parenting opens up new possibilities to strengthen intervention and prevention programs for parents. In addition to informing parents about the benefits of autonomy-supportive parenting and the risks of psychologically controlling parenting, parents could be advised to organize their daily life as much as possible around need-satisfying experiences and to be aware of need-frustrating experiences. To the extent that parents are capable of selecting themselves into daily need-satisfying activities (e.g., spending sufficient time on their hobbies; see Weinstein et al., 2016) or to derive greater need satisfaction from ongoing activities, they are more likely to adopt an autonomy-supportive approach toward their children. Of course, this advice is easier said than done. In particular when parents are overburdened with the challenges of work and family, it may be very difficult for them to seek more need satisfaction in life. These parents may require more active coaching or even counseling to change their life. Parents may also become increasingly aware of their daily need frustrating experiences. Increased awareness, which can be achieved through mindfulness approaches (Coatsworth et al., 2015), may be critical to avoid daily need frustrations that can translate into psychologically controlling behaviors toward children. The inclusion of advice regarding parents' own need experiences in intervention and prevention programs is important because changes in parental behavior may be short-lived as long as the sources of parental behavior are not targeted.

ADDRESSES AND AFFILIATIONS

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