

Antecedents of parental psychological control: A narrative review grounded in Self-Determination Theory perspective

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Self-determination theory has become a consolidated theoretical framework to deepen the psychological control construct. Numerous studies have widely investigated the consequences of the use of this parenting strategy during the life cycle. Although studies focused on the antecedents of parental psychological control are not so numerous, they provide an interesting picture that needs to be systematized and organized. For this reason, this narrative review was aimed at describing the studies on the antecedents of psychological control that used SDT as a theoretical framework. These studies were structured according to three categories: Parental Characteristics (or pressure from within), Child Characteristics (pressure from below), and Family Social Environment Characteristics (pressure from above). The results highlighted a wealth of studies in each category and indicating the need to continue this line of studies in the future through the integration of the different types of antecedents too.

Parole chiave: psychological control; antecedents; Self-Determination Theory; parents; children.

Antecedenti del controllo psicologico genitoriale: una review nell'ottica della Self-Determination Theory. La Self-Determination Theory (SDT) è diventata una consolidata cornice teorica per approfondire il costrutto del controllo psicologico genitoriale. Numerosi studi hanno indagato gli esiti dell'uso di questa strategia di parenting durante il ciclo di vita utilizzando la SDT come teoria di riferimento. Nonostante gli studi che si siano focalizzati sugli antecedenti di questo costrutto risultino meno numerosi, forniscono comunque un

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Perventuto: marzo 2020

Accettato: aprile 2020

quadro interessante che necessita di essere sistematizzato ed organizzato. Per questo motivo questa review ragionata ha l'obiettivo di descrivere gli studi sugli antecedenti del controllo psicologico che hanno utilizzato la SDT come cornice teorica strutturandoli secondo tre categorie: caratteristiche genitoriali (o pressione dall'interno), caratteristiche del figlio (o pressione dal basso) e caratteristiche dell'ambiente socio-familiare (o pressione dall'alto). Gli studi riportati nella rassegna hanno evidenziato una ricchezza di risultati in ciascuna categoria esaminata ed hanno indicato la necessità di continuare in futuro questo filone di studi anche attraverso l'integrazione delle diverse tipologie di antecedenti.

Key words: controllo psicologico; antecedent; Self-Determination Theory; Genitori; Figli.

1. Introduction

Being parents is a real challenge: Their primary task is to help children to adapt to social demands and function effectively, but at the same time, it is important that parents believe in their children's potential and encourage them to pursue attitudes and interests (Soenens, Deci, & Vansteenkiste, 2017). In line with this orientation of parenting, there is a growing tendency to applied Self-Determination Theory (SDT; Ryan & Deci, 2017) as a theoretical framework for understanding parental dynamics (Soenens & Vansteenkiste, 2010). SDT is a meta-theory that showing that all humans have a natural inclination toward psychological growth, well-being, social-integration and flourishing. Such natural human predispositions can only be achieved in a supportive environment, that satisfy the three essential psychological basic needs of autonomy, competence, and relatedness (Ryan & Deci, 2017). Need for autonomy refers to the feeling to implement daily behaviors in a voluntary and self-sufficient manner; when satisfied, people feel their behaviors are chosen personally and consistent with their life values. When frustrated, people feel a sense of pressure and control over their choices and behaviors. Need for competence concerns the efficacy feeling that allows people to deal with daily challenges; when it is satisfied, people feel able to face difficulties and problems effectively. When frustrated, they perceive a sense of inferiority and inadequacy concerning what others are capable of doing. Finally, need for relatedness refers to feelings of love and trust as well as the ability to take care of others and provide affection. When satisfied, people feel they have an affectionate bond with those who care about them; when frustrated, however, people experience social alienation and deep loneliness (Ryan & Deci, 2017). These needs are universal, and they must be satisfied to allow humans functioning and growing effectively in a well-being climate. Conversely, if these needs are frustrated by a non-supportive

environment, humans are more likely to develop problematic behaviours, maladjustment, and psychopathologies (Vansteenkiste & Ryan, 2013).

In line with this reasoning, parents could be considered as a social context that could have a crucial role in the fulfillment of basic needs: need supportive environments provide an experience of need satisfaction but when humans are exposed to controlling, critical, or rejecting parental contexts, they experience a feeling of need frustration (Campbell et al., 2019; Costa et al., 2018; Ryan & Deci, 2017). As many researchers have shown, parental psychological control is a parental practice that actively thwarts psychological basic needs (Costa et al., 2019; Liga et al., 2017; Rodríguez-Meirinhos et al., 2019). This type of manipulative and intrusive control can be considered a parenting need-thwarting dimension because, through it, parents can exercise control over the psychological world of children and adolescents, they can impose their expectations and desires and make them change emotions, thoughts, and opinions by often relying on intrusive techniques, such as guilt induction (Chen et al., 2016), love withdrawal (Assor, Roth & Deci, 2004), and invalidation of feelings (Soenens et al., 2017). Furthermore, it would seem that psychological control may predict maladaptive perfectionism (Costa et al., 2016) and internalizing and externalizing behavioral problems in offspring (Mabbe et al., 2016; Roth, Vansteenkiste & Ryan, 2019). Psychological control can be placed along a continuum at the end of which there is a positive parenting dimension, that is autonomy support (Ryan & Deci, 2017). This parental dimension pushes parents to encourage autonomous and volitive children's behaviors and support self-endorsement. Besides, through it, parents match the imposition of norms and rules with a critical explanation of the same, thereby increasing the possibility that the child internalizes rules and fully approves them (Van Der Kaap-Deeder et al., 2019). Several studies have shown that parental psychological control has a strong and negative impact on developmental outcomes in all the developmental period and for this reason it seems crucial not only to focus on the consequences of this parental practice but also to understand the antecedents: nevertheless, less attention has been dedicated to understanding why parents behave in a controlling manner with their children. Also in SDT perspective parental psychological control researches have abundant focused on the consequences of this practice, neglecting the deepening of the antecedents, but recently there has been a growing interest on this aspect that led to the realization of a series of studies on this topic (e.g. Brenning & Soenens, 2017; Costa et al., 2019; Matosic, Ntoumanis, & Quested, 2016; Van der Kaap-Deeder et al., 2015). However, the reduced number and the fragmentation of these studies do not

allow to grasp the overall contribution of research on this emerging theme. For this reason, it is believed that SDT can offer itself as a theoretical framework within which synthesizing and integrating, in a reasoned manner, the contributions on the antecedents of psychological control. A narrative review about the SDT's antecedents of psychological control could help to extend and organize the knowledge of parental psychological control reversing the perspective from children to parents.

Hence, this work aims to summarize researchers related to the antecedents of parental psychological control that have used SDT as a theoretical framework. A classical approach (Soenens & Vansteenkiste, 2010) to categorize antecedent of parental psychological control in an SDT framework is the distinction provided by Grolnick (2003), that identified three different types of pressure that make parents controlling: pressure from within, pressure from below, and pressure from above. This classification is limited only to pressures but could be easily integrated with the Taraban and Shaw's (2018) revision of the Belsky's (1984) classic process of parenting antecedents' model that provides a strong structure to classify the types of antecedents of parenting in Parent Characteristics (that could be equated with pressure from within), Child Characteristics (that could be equated with pressure from below), and Family Social Environment (that could be equated with pressure from above).

Parent characteristics domain refers to all the variables that come from individual parent functioning, such as developmental history, personality, sexual gender, personal cognitions, and affects. In Child Characteristics categorization are included all the factors that could affect parenting that derived directly from children, such as temperamental characteristics, emotionality, stress responses, genetic inheritance, and emotional regulation. Finally, in Family Social Environment characteristics are included all the processes and factors that derived from the socio-cultural context in a broad sense, such as marital relationship quality, interpersonal bonds, parents' job, and professional experiences, cultural background, socio-economic status, family structure, and social support.

2. Parent Characteristics

Grolnick (2003) underlined that parental internal pressures can represent a significant source of antecedents of controlling behavior, specifically internal pressures to which Grolnick refers to in some of her studies, included ego-involvement. Grolnick, Gurland, De Courcey, and Jacob (2002), but also

Grolnick, Price, Beiswenger, and Sauck (2007) found that mothers strongly ego-involved and goal-oriented behave in a more controlling fashion with their children than less ego-involved mothers. As Plant and Ryan (1985) claimed «by making people's self-esteem contingent upon good performance, ego-involvement represented an internally controlling event that fostered an external perceived locus of causality and decreased intrinsic motivation relative to task involvement» (Plant & Ryan, 1985, pp. 3-4). In their studies, Grolnick, and colleagues (2007) highlighted that some pressures pushing parents to adopt controlling behaviors come from within, such as self-imposed pressure to achieve success and gratifications. When ego-involved persons well behave and achieve expectations and goals they will feel good about themselves and be proud of themselves, vice versa if their behavior does not live up to their expectations, they will experience shame, guilt, and embarrassment. As research has shown, when one (e.g. parent) is involved in the performance of another (e.g. child), that parental involvement might be translated into a psychological control form on the child. Generally, this is in line with the concept of extrinsic goals proposed by SDT that affirmed that when personal «goals have an outward orientation», people tend to focus more on interpersonal comparisons, need external forms of self-worth and contingent approval (Vansteenkiste, Lens & Deci, 2006, pp. 22-23), and Hollmann, Gorges, and Wild (2016) exported this concept in the parental context showing that extrinsic parental goals for children, in addition to parents' dissatisfaction with child's behavior, promote parents' need-thwarting communication (e.g. psychological control). Similarly, Mageau, Bureau, Ranger, Allen and Soenens (2016) focused on parental performance-approach goals as a risk factor for parental control. Parents with performance-approach goals want their children to show higher levels of performance than their peers, and they are oriented to demonstrate their children's skills and abilities through social comparison of their performances with peers (Gonida & Cortina, 2014). To achieve these goals, they seem to use controlling strategies such as guilt-inducing criticisms and performance pressures to intrude towards their children's behaviors to "correct" them. An important factor that could be able to contrast the tendency of parents to compare their child's performance to others' one is having trust in organismic development of children that means serenely accepting the high variability in the children growth. This is the reason for which trust can act as a protective factor compared to parental stress levels (Landry et al., 2008). In an observational study Landry et al. (2008) have shown a negative significant association between trust in organismic development and mothers behaving in

a controlling manner with 1-year-old children. On average, parents appeared more stressed and more likely to behave in a controlling fashion if they have strict expectations about child performance, attribute excessive importance to the age at which the child reaches a developmental goal, and take full responsibility for delays in the developmental pace of their child. Another factor involved in these patterns of study has been parental child-invested contingent self-esteem, whose positive correlation with parental psychological control has been confirmed by Wuyts, Vansteenkiste, Soenens, and Assor's (2015) study. Child-invested contingent self-esteem consists of the tendency of parents to make their self-esteem depending on their child's successes and failures, perceived as an integral part of parental self-esteem. Parents could tend to use psychological controlling tactics as a faster and cheaper way of getting their children to achieve the desired outcomes and maintaining their expected standard on them. This allows parents to keep the wish to have a perfect child maintaining high self-esteem (Wuyts et al., 2015).

These findings are in line with the trend of studies on parental perfectionism as a predictor of parental psychological control showed by Soenens et al. (2005) and Soenens, Vansteenkiste, Duriez, and Goossens (2006). Although in these studies authors don't explicitly refer SDT as a theoretical framework, a subsequent study has integrated these researches in SDT theoretical framework (Soenens & Vansteenkiste, 2010). Perfectionism can be defined as a personality trait characterized by a tendency to set high standards and evaluate always in a critical manner. In this way, perfectionist parents are so concerned with their standards and norms that they lack sensitivity and empathy needed to respond to their children's needs and support their desires, with a greater tendency to use a parenting style based on psychological control. Additionally, Zimmer-Gembeck, Webb, Thomas, and Klag (2015) identified parental low levels of competence, sensitivity and enjoyment as possible antecedents of psychological controlling behaviors. Caregiver's sensitivity is described as the ability to detect, to interpret and to respond effectively to children's needs. Parental competence refers instead to the perception of efficacy that a person may have about his parental role, and parenting enjoyment refers to the pleasure that an individual experience from being a parent and derives from interactions with their children. The mentioned study (Zimmer-Gembeck et al., 2015) found that mothers who perceive themselves as less competent, sensitive and pleased with their parental role are more likely to engage in controlling behaviors towards their children. In this line of studies, Soenens et al. (2006) examined also the role of separation anxiety. It has been theorized as parents' fear about the progressive

estrangement, autonomy, and self-regulation of children. Parents with high levels of separation anxiety perceive any expression of child's autonomous functioning as a threat, which is why they may attempt to maintain proximity by inhibiting child's growing autonomy or they may attempt to psychologically manipulate his inner world by adopting psychological control techniques as guilt-induction and conditional approval.

Several researchers coming from SDT theoretical framework (Costa et al., 2019; Matosic et al., 2016; Soenens & Vansteenkiste, 2010; Stebbings et al., 2012; Taylor, Ntoumanis & Standage, 2008) suggest that basic psychological needs frustration could be an important personal antecedent of controlling behaviors in different contexts, but studies concerning parenting are still limited. Costa et al. (2019), through the use of both adolescent and parent reports, confirmed Soenens and Vansteenkiste's (2010) suggestion demonstrating that parents' perception of psychological need frustration positively correlates with a major engagement in controlling and coercive parenting practices. Therefore, when parents feel their needs frustrated (e.g., due to work stress, couple tensions, external pressures, etc.), parents' odds of intruding into child's life by controlling his behavior, violating his autonomous functioning and imposing their point of view on decisions (Soenens & Vansteenkiste, 2010) increase. Parents who experience high levels of need for competence frustration could feel less competent in their parental role and exercise control over their offspring as a form of personal redemption, obtaining compliance through authority imposition. Finally, those who experience high levels of need for relatedness frustration could develop feelings of fear about abandonment and separation and, therefore, they could use psychological control as a strategy to make children dependent on their affection (Costa, et al., 2019). These associations were confirmed also examining the daily variations in parents' behaviors and the role of psychological basic needs in accounting for those variations (Mabbe et al., 2018; Van Der Kaap-Deeder et al., 2019). Specifically, Mabbe and colleagues (2018) focused only on parents' psychological needs satisfaction/frustration as a potential source on daily fluctuations of psychological control and autonomy support, while Van Der Kaap-Deeder and colleagues (2019) included also psychological availability and stress experienced as mediators in the daily fluctuations between basic needs and psychological control. Specifically, variables of both these studies are closely related. In the first cited study (Mabbe et al., 2018), parents reported they felt more autonomy-supportive in those days when they felt connected with others (satisfaction of need for relatedness), effective in carrying out their daily activities (satisfaction of

need for competence) and free to act on their own interests and values (satisfaction of need for autonomy). On the contrary, need-frustration possibly experienced when they feel actively excluded from others (frustration of need for relatedness), when they experience failures (frustration of need for competence) and when they engage in some activities not conformed to their will (frustration of need for autonomy), it could erode parents' psychological availability and their energy levels, pushing them to become more self-centered and less in synchronicity with what happens in their children lives, and therefore to engage more easily in psychological control practices. In the relation between need satisfaction versus frustration and supportive versus controlling parenting behaviors, Van Der Kaap-Deeder and colleagues (2019) showed that higher levels of need-satisfaction resulted to predict greater parents' psychological availability which feeds their ability to support children's autonomy and reduces the odds of engaging in psychological control practices, on the other side higher levels of need-frustration may invoke stress feeling which hinders parents' ability to support children's autonomy and increases the odds of engaging in psychological controlling strategies. These results were also confirmed by Brenning and Soenens (2017) who showed that general prenatal needs satisfaction and frustration predicted more relationship-specific with the satisfaction and frustration of the new-born needs, that in turn predicted less controlling parenting when the child is 2 years old.

3. Child Characteristics

As mentioned above, a variety of factors can lead parents to control rather than support children's autonomy, and as Grolnick (2003) pointed out these factors also include pressures from below, those that Taraban and Shaw (2018) named "Child characteristics". In the Child characteristics category of parenting antecedents, Taraban and Shaw (2018) explored the mutual influences between characteristics of the parent and child, and also the possible moderators of this association. In this category research reported child temperament, biological and genetics condition of children, children's personality, stress, and emotion regulation (Taraban & Shaw, 2018). Overall, self-determination Theory (Ryan & Deci, 2017) has always supported the idea that children play an active role in their development, and also in parent-child interactions, influencing parents' behaviors, but only a few studies explicitly applied SDT in studies about child characteristics as determinants of parental psychological control.

For example, using SDT as theoretical framework, Harvey, Matte-Gagné, Stack, Serbin, Ledingham, & Schwartzman's (2016) longitudinal study showed that child age – ranged from 1 to 6 years – actually predicted a different use of parenting strategies. Older children (four to six-years-old) elicited greater maternal autonomy-supportive practices in the interference situation compared to younger children, due to the greater request for attention that they normally require. On the contrary, younger children (one to two-years-old) elicited greater maternal controlling strategies both in interference situation and in free-play situation compared to the older counterpart. This suggests that mothers feel the need to direct child's play more when he is younger than when he is older, stressing that child young age can more frequently predict the use of different parental controlling forms. To explore the active role of children in parenting, Mabbe, Soenens, Vansteenkiste, and Van Leeuwen (2016), and Mabbe, Vansteenkiste, Van der Kaap-Deeder, Dieleman, et al., (2018) studied the moderating role of childhood personality in the associations between psychologically control, and maladjustment in adolescents and children. Both studies found a limited number of significant interactions, such that child personality moderating role can be considered modest and confirming that psychologically controlling parenting is universally damaging for children and adolescents. Mabbe and colleagues (2016) found, indeed, that child personality could change the strength of psychologically controlling parenting, but not the direction, such for example children with a high level of Agreeableness tend more to respond to parental psychological control by showing externalizing problems than internalizing problems.

Similarly, Mabbe and colleagues (2018), using a daily approach, showed a modest moderation role of children's personality with the use of parental psychological control that tends to be associated with externalizing problems among children with more under-controlled traits (i.e. low openness to experience and agreeableness). Furthermore, in their study, Mabbe et al. (2018) tried to verify the bidirectional associations between parental psychological control and daily maladjustment, but results did not provide clear support for these reciprocal effects. A possible explanation provided by Mabbe et al. (2018) could be to verify if child maladjustment could promote the use of parental psychological control, which in turn could further increasing children's problem behaviors, this should be tested exploring the fluctuation within the day rather than day-to-day. However, previous studies have already provided pieces of evidence of the bidirectional associations between psychologically controlling parenting and child maladjustment (Janssens et

al., 2017; Pinquart, 2017a, 2017b; Soenens et al., 2008), but not in the light of SDT theoretical framework.

For this reason, Soenens and Vansteenkiste (2010) tried to integrate within SDT theoretical framework studies about child characteristics as antecedents of psychological control that were not explicitly integrated with SDT. Especially, in their longitudinal research, Pettit, Laird, Dodge, Bates, and Criss (2001) investigated the early-childhood antecedents of parental behavioral and psychological control, founding that children with externalizing problems at age 3 predicted mothers' use of psychological control at age 12. Similarly, Barber, Stolz, Olsen, Collins, and Burchinal (2005), and Soenens, Luyckx, Vansteenkiste, Luyten, Duriez, and Goossens (2008) confirmed that parents of adolescents with a high level of maladjustment would be more likely to rely on psychological control strategies, paying particular attention to adolescent depressive symptoms as potential predictors of parental psychological control.

Furthermore, subsequent studies have extended this line of research in the field of disabilities by showing whether the severity of children's disability or of some problematic behaviors could elicit the psychological control of parents. Since the relation between parenting and child adjustment is reciprocal by nature (Collins et al. 2000; Pinquart, 2017) these associations can be interpreted in a bidirectional way: problems associated with children's special needs can act as antecedents of parenting negative dimensions, causing less favorable and more psychologically controlled parenting, which in turn further increase behavioral difficulties in children. De Clercq, Van der Kaap-Deeder, Dieleman, Soenens, Prinzie, and De Pauw's (2019) reported in their study that parents of children with Down syndrome (DS) and cerebral palsy (CP) are less likely to use psychologically controlling educational practices than parents of children without any known disability (NO), and they suggest that the pleasant personality characteristics of children with DS would lead to a lower use of coercion. Furthermore, in line with these studies, Dieleman, Soenens, Vansteenkiste, Prinzie, Laporte, & De Pauw's (2019) have explore in family with a children with autism spectrum disorder (ASD) the associations between the daily variations of children behaviors (externalizing problems and prosocial behaviors), satisfaction/frustration of mothers' needs and autonomy-supportive rather than controlling practices. Results showed that daily variation of child's maladaptive behavior and maternal needs frustration positively correlated with daily variations only in controlling parenting practices. This means that mothers of children with ASD were more inclined to use psychological control strategies on the days when their

baby showed aggressive behavior, and on the days when they perceived their needs for autonomy, relatedness, and competence most frustrated. On the contrary, daily variation in child's prosocial behavior and maternal needs satisfaction is positively associated with daily variation only in autonomy-supportive parenting. Similar results came from Dieleman et al. (2018) showed that adolescent's externalizing problems indirectly impact on parental controlling strategies, through psychological needs frustration. Besides, Dieleman et al. (2018) investigated the role of autism severity in the association with the use of psychological control and autonomy support, but found a negative association only with parental autonomy support, which suggests that parents reduce autonomy-supportive behaviors when the child has high levels of autism symptoms.

Another strand of studies that examined the role of child characteristics in the promotion of parental psychological control refers to the performance of tasks and the scholastic and academic domain. Recently, Wuyts, Vansteenkiste, Mabbe, and Soenens (2017) showed that child failure in an experimental puzzle-solving task may influence parents' behavior, leading them to use more controlling practices. Particularly, child's negative performance had an immediate effect on parents' engagement in a control style. Time pressure (children should have taken a minute to solve a puzzle) and anticipation of child failure were experienced by parents as explicit and acute sources of pressure, prompting them to immediately control the child's execution and take his place in solving tasks, so that performance outcome was positive. This study confirms a previous study of Pomerantz and Eaton (2001) in the academic domain that, although did not use SDT as a theoretical framework, found that children's low achievement in school like tasks encourages mothers' use of intrusive control. Indeed, Grolnick (2003) proposed that when children demonstrate lower competence levels in a given situation, parents are likely to try to compensate for their children's difficulties in that situation, often using control practices, with the ultimate goal to protect them from potential damage. Grolnick's (2002, 2007) studies successively integrated this result in an SDT view.

Specifically, Grolnick, Gurland, DeCoursey, and Jacob (2002) and Grolnick, Price, Beiswenger, and Sauck (2007) highlighted that parents behave in a controlling rather than supportive manner also in reaction to their children's goal-oriented behavior. Grolnick and colleagues (2002) involved parents and children in two schools like tasks – map task and poem task – in conditions of high pressure and low pressure. In the first condition, child

performance standards were assessed in terms of school marks. In low-pressure condition, this was not evaluated and interaction in the task was free. Results showed that parents under high-pressure conditions tend to use more controlling practices over child's performance behavior, feeling compelled to push him or her to achieve success. This claim has been confirmed also by Grolnick et al. (2007), who tested maternal use of psychological control during an experimental social self-presentation task of their children. Results highlighted that mothers who perceived their children as less socially competent showed more controlling attitudes to make sure they were successful in the laboratory situation, confirming the idea that parents are likely to try to compensate for their children's difficulties in that situation, often by using controlling practices.

In the guided learning domain, other scholars who investigated the relation between children task-specific competences and mothers' controlling practices were Robichaud, Bureau, Ranger, and Mageau (2019), showing that children's lack of competence in an unfamiliar task was associated with higher levels of maternal control practices, regardless of mothers' preconceptions about their children's academic skills. During the interaction, controlling mothers tended to interfere with the learning rhythm of their children by pushing them to work faster or solving a problematic passage in their place, to give orders on task execution, to verbally judge the performance of their children, and to invalidate their point of view on the task.

4. Family Social Environment

Grolnick's book (2003) on parental antecedents of psychological control argued that in addition to pressure from within (Parent Characteristics), and pressure from below (Child Characteristics), there is another kind of pressure which can indirectly push parents to be more controlling on children's life, behaviors, and ideas, namely pressure from above. This category is defined by the Taraban and Shaw (2018) revision of Belsky's (1984) classic process of parenting antecedents' model as Family Social Environment characteristics of parenting. It refers to a type of influence that surrounds parents since, as Bronfenbrenner recalls in his ecological theory (1986), children are not raised and educated in a vacuum but their parents' actions fit into a wider context, where sources of daily stress may be present.

In an SDT perspective, Wuyts, Vansteenkiste, Mabbe, and Soenens (2017) recently argued that stress is a powerful factor of influence: putting

parents under pressure, it can induce them to immediately take a more controlling approach on the child, which is implemented automatically, that is in absence of conscious awareness. To demonstrate the causal role of the social context variable as an antecedent of controlling parenting, the authors constructed an experimental study, observing parent-child interactions in a puzzle-solving task. Specifically, results showed that when parents were in a high social pressure condition, they feel forced to raise children who achieve high performance in homework, developing an ego-involved orientation towards their child's performance, and implement controlling behaviors on child's activity. These findings deepen and expand the conclusions of Grolnick, Gurland, DeCoursey & Jacob's (2002), and Grolnick, Price, Beiswenger & Sauck's (2007) studies.

Grolnick and colleagues (2002) examined the effects of induced experimentally social pressure on mothers' control behaviors, during interactions with their children in two tasks (map-task and poem-task). In high-pressure conditions, mothers were told they would be responsible for their child's performance and a child's performance would be assessed at the end of the task. In low-pressure conditions, mothers and children were left free to interact, without any form of evaluation. As the authors expected, the experimental induction of social pressure aroused maternal non-verbal control behavior in map-task, with an increment of psychological control behaviors. Grolnick and colleagues (2007), on the other hand, investigated the role of social pressure on mothers controlling behaviors in a context of social adjustment of their children, who were interacting with peers. Also in this study, social pressure was experimentally manipulated, communicating to mothers that, in high social pressure condition, their child would be evaluated by peers in terms of social acceptance, while in low-pressure conditions, researchers did not mention any forms of assessment on children's social performance. It was observed that, in high social pressure conditions, mothers were more likely to resort to control practices.

An interesting intercultural perspective on social pressures influence on parental controlling behaviors was offered by Miao's (2014) research, which investigated the predictors of parental psychological control in a sample of 182 immigrant Chinese Canadian families, including relevant socio-cultural factors. Especially, some stress acculturation factors were taken into consideration, and results showed that a high perception of racial discrimination and lack of linguistic competence predicted an increase in psychological control behaviors of mothers. Furthermore, low marital satisfaction predicted greater psychological control strategies in Chinese newcomer fathers and

high interpersonal stressors predicted an increase in controlling behaviors in those fathers who had lived in Canada for the longest. Moreover, this intercultural study underlined the negative impact that specific contextual variables may have on the acculturation process and, consequently, on parenting implementation of controlling practices, i.e. low socio-economic status (SES) and low education of immigrant families.

Today's parents are frequently exposed to threatening information about their child's environment and Gurland and Grolnick (2005) discovered that parents' perceptions of threat in their child's environment (worry about the future, scarce resources, and instability) were associated with parental controlling behaviors. Therefore, the more mothers perceive future dangers (economic instability, scarcity of resources, degrading social environments), the more they would lead to engaging in controlling behaviors to prevent these threats from affecting children's well-being. In line with this study, also Robichaud, Roy, Ranger, & Mageau (2020) recently emphasized the impact of environmental threats on controlling parenting. Two conditions were proposed in a sample of mother-children dyads: in experimental condition mothers' perception of environmental threats was manipulated by making them previously listen to a journalistic report describing the transition from childhood to adolescence in the modern society as extremely difficult and pressing, and a control condition in which no manipulation took place; then asking them to help their children complete a task. Results showed that mothers in the threat condition were coded as significantly more psychological controlling than in control condition, confirming the role of environmental threats perceived as possible antecedents of a psychologically controlling parenting.

Furthermore, Landry et al. (2008) focused on the macrosystem surrounding parent-child relationships, emphasizing that contextual stress (low SES and stressful life events) can undermine parents' psychological functioning. It prompts them to adopt control practices on their offspring, recalling Conger, Patterson, and Ge's (1995) and Grolnick, Weiss, McKenzie and Wrighthman's (1996) studies which did not explicitly use SDT as a theoretical framework, but they were described and integrated into the Grolnick's (2003) book about parental control in an SDT view. According to Conger and collaborators (1995), contextual stressors interfere with energies and competencies required by parents in educating adolescent children healthily and positively, while the support provided by social networks can act as a protective factor and increase parenting skills required in the difficult task of child-rearing.

In a large study, Grolnick and collaborators (1996) referred not only to contextual factors but also to marital quality satisfaction, and inter-partner conflicts, hypothesizing and demonstrating that parents with high levels of stress, low levels of social support and low conjugal satisfaction were more likely to be controlling with adolescents, especially mothers. When parents are pressured by negative events in their life, they are more likely to bring pressure and stress into the parent-child relationship, inevitably becoming more punitive and controlling parents. Soenens and Vansteenkiste (2010), on the other hand, in their review, focused on couple-microsystem as a possible antecedent of psychological control, integrating into SDT perspective Krishnakumar, Buehler & Barber's (2003) and Forehand, Thomas, Wierson, Brody & Fauber's (1990) studies. In these studies variables such as low quality of the marital bond, negative emotions, and inter-parental conflicts have shown to have a significant association to more psychologically controlling parenting. Especially, Krishnakumar et al. (2003), comparing a sample of European-American parents and a sample of African-American ones, resulted to be positively associated with maladaptive parenting (including psychological control) and with conflicting parent-child relationships in both ethnic groups. Their results suggest that ethnic norms and specific aspects of culture seem to not prevent the shift of negative emotions from inter-parent subsystem to parent-child subsystem.

Forehand and colleagues (1990) also compared samples from two different populations: 121 young adolescents from intact families and 93 young adolescents from newly divorced families. They aimed in demonstrating that divorce can affect poorer functioning of children and adolescents - in terms of cognitive skills, prosocial skills, externalizing problems, internalizing problems – because of the stress and tension elicited by divorce on parental functioning and skills. Indeed, as Hetherington, Cox, and Cox (1976, 1978) emphasized in their studies, divorced parents show less affection, give more general orders, communicate less effectively, and discipline children with less maturity than married parents, using a destructive parenting style including also psychologically controlling strategies (such as guilt induction, love withdrawal, invalidation of feelings).

The influence of contextual variables on controlling practices has also been studied among so-called high-risk families, such as Harvey et al.'s (2016) longitudinal study, during which factors that promote or hinder parental controlling behaviors during early childhood period within a high-risk sample from a socially and economically disadvantaged metropolitan area,

were investigated. Mother-child interactions were observed within two contexts, one of free-play and other of interference, in which the mother was asked to complete a questionnaire while her child was playing alone. Environmental antecedents such as low socioeconomic status (SES) and high psychosocial stressors (parental stress and poor satisfaction with social support) were assessed, factors that predicted greater use of maternal control only in the interference context. This data is in line with Grolnick's (2002, 2007) studies which states that parenting experiences of stress and pressure lead to a more controlling behavior since autonomy support requires time and psychological availability, both reduced in stress and/or pressure conditions. In conclusion, the more environment in which a child lives is psychosocially disadvantaged in terms of parent's psychosocial resources, contextual resources of stress and support (psychosocial stressors and low SES), the more children are led to experience forms of parenting that do not allow their autonomy to flourish, resulting in more negative outcomes.

5. Discussion

Self-Determination Theory (SDT; Ryan & Deci, 2017) in recent years has increasingly placed itself as a privileged perspective in parenting styles and practices (Campbell et al., 2019; Costa et al., 2018, 2019; Joussemet et al., 2008). It has framed family relationships as a context able to support or thwarting basic psychological needs of both parents and children, resulting in a significant impact on well-being and mental health of the whole microsystem. In this perspective, psychological control has been defined as a parental practice that actively thwarts basic needs, intruding into child's world, denigrating his/her point of view, and changing expectations, desires and thoughts. Negative outcomes that this parenting dimension may elicit in offspring have aroused great interest, but little attention has been paid to the study of why parents become controlling (e.g. Brenning & Soenens, 2017; Costa et al., 2019; Matosic et al., 2016; van der Kaap-Deeder et al., 2015). Therefore, this review aimed to summarize the contributions of literature grounded in SDT, which investigated some characteristics as possible antecedents of parental psychological control. Thus, going to extend and increase scientific knowledge about it shifting focus from the consequences to the antecedents of this parental negative strategy.

The classification of the studies was based on the Taraban, and Shaw (2018) revision of Belsky's (1984) model of parenting antecedents, that is in

line with Grolnick's (2003) organization of psychological control antecedents using an SDT perspective. This model suggests that the antecedents of parenting could be categorized in three main domains: Parent Characteristics (that could be equated with Grolnick's pressure from within), Child Characteristics (that could be equated with pressure from below), and Family Social Environment (that could be equated with pressure from above).

Parent Characteristics' studies about ego-involvement (Grolnick et al., 2002, 2007) and parental child-invested contingent self-esteem (Wuyts et al., 2015) as antecedents of psychological control have shown that when parents consider children's performance as forms of self-evaluation they tend to push and control them without considering children point of view, interests or knowledge. Similarly, parental strict and controlling expectations on child behaviors and performances (Mageau et al., 2016; Landry et al., 2008) could exacerbate the focus on outcomes by ignoring the processes and the consideration of children perspective. Another line of research highlighted the influence exerted by personality traits, such as anxiety and parental perfectionism (Soenens et al., 2005, 2006) showing that parents could use parental psychological control as a consequence of their insecurity and to reach high standards. Finally, large space was occupied by the synthesis of studies, exquisitely grounded on SDT, which identified needs frustration as a possible antecedent of psychological control (Brenning & Soenens, 2017; Costa et al., 2019; Mabbe et al., 2018; Van Der Kaap-Deeder et al., 2019). These studies suggested that feelings of pressure, inadequacy, and abandonment may promote psychological control behavior to make their children comply.

A recent line of studies categorized in the Child Characteristics domain (Mabbe et al., 2016, 2018) has tried to explore the moderating role of childhood personality in the association between psychological control and maladjustments showing modest interactions. Specifically, results demonstrated that although the negative effects of psychological control may differ according to the characteristics of the child (e.g. predominance of internalizing or externalizing behaviors), the research confirms the universally maladjusted vision attributed by SDT to parental psychological control as a form of need-thwarting. Furthermore, several studies (Grolnick et al., 2002, 2007; Mabbe et al., 2018; Wuyts et al., 2017) explored the bidirectional associations between psychologically control and child maladjustment, and negative performances, extending previous studies (Pettit et al., 2001; Barber et al., 2005; Soenens et al., 2008) that did not use SDT as a theoretical framework but that Soenens and Vansteenkiste (2010) integrated. They showed that internalizing and externalizing problems of children and adolescents can trigger

a parental controlling behavior to try to reduce offspring's problematic behaviors. However, such parenting practices can obtain the opposite effect by further increasing negative outcomes and becoming a vicious cycle. Some SDT scholars (De Clercq et al., 2019; Dieleman et al., 2018; Dieleman et al., 2019) emphasized that also the severity of developmental disabilities of children can act as antecedents of parenting negative dimensions, causing less favorable and more psychologically controlled parenting. While in high-risk family domain, Harvey et al. (2016) argued that child young age can represent a potential source of parental controlling strategies, pushing mothers to behave in a controlling way due to the greater needs and attentions required by younger children.

Finally, as regards Family Social Environment, some studies described social variables able to indirectly pushing parents to be more controlling: daily stress (Wuyts et al., 2017), high psychosocial stressors (Grolnick et al., 2002, 2007; Harvey et al., 2016), stress acculturation factors (e.g., racial discrimination and lack of linguistic competence) investigated by Miao (2014) in an intercultural perspective, and parents' perceptions of threat (e.g., economic instability, scarcity of resources, and degrading social environments) (Gurland & Grolnick, 2005, Robichaud et al., 2020). Added to these variables, there are contextual stress ones, which Landry et al. (2008) pinpointed in low SES and stressful life events, and which Grolnick et al. (1996), and Soenens and Vansteenkiste (2010) identified in low marital quality satisfaction, negative emotions, and inter-partner conflicts. Overall, these results show how psychological control creeps into parents who are in particularly stressful and disadvantaged conditions. Psychological control is likely to be the fastest educational method and requires fewer psychological resources to perform than supportive behaviors.

By applying a global vision of the three categories of antecedents, it is possible to make overall evaluations that can help the planning of future studies. First, the number of studies relating to child characteristics is scarce compared to the remaining categories. This means that, to date, greater emphasis has been placed on identifying individual parent and surrounding environment characteristics as possible antecedents of psychological control, although the importance of co-influence among factors is recognized, including child characteristics. It would be therefore desirable to deepen this area which is currently under-studied from an SDT perspective. It could benefit from integration within SDT of classic studies on children's temperament, stress regulation and genetic inheritance, which could allow increasing the scientific knowledge on this field.

Secondly, although Belsky (1984) and Grolnick (2003) underlined the importance of all three categories in influencing, respectively, parenting and parental psychological control, no studies are investigating all three characteristics influence, except for Grolnick and colleagues' (2007) study. Studies grounded in SDT literature, and not only, investigated individual antecedents, or at the most integrated two categories. For example, Grolnick et al. (2002) supplemented and deepened the influence of two antecedents: strongly ego-involved, goal-oriented and with a mindset resistant to changes parents (parent characteristics) and child's performance behavior (child characteristics) in school-like tasks. Wuyts et al. (2017) focused on the combination of experimentally induced social pressures (social environment) and child failure in a puzzle-solving task. Likewise, Harvey et al.'s (2016) study focused on the relation between child's age (child characteristics) and disadvantaged psychosocial environment (social environment) as possible antecedents of controlling parenting behavior. In future researches, it would be appropriate to adopt a multidimensional view of parental antecedents to evaluate the weight that each one has in influencing parental controlling behaviors.

Third, there are sample differences in the revised studies. Most of them took into consideration the entire family unit, made up of mothers, fathers and children; however, some studies only affected mother-child dyads, while others focused on mothers only, neglecting paternal point of view. Specifically, Grolnick et al.'s (2002, 2005, 2007), Dieleman et al.'s (2019), Landry et al.'s (2008), Robichaud et al.'s (2019, 2020), and Zimmer-Gembeck et al.'s (2015) studies recruited mothers and children only; Brenning and Soenens (2017) recruited mothers only. Given increasing importance and involvement of fathers in family dynamics and their children's lives, it would be beneficial to integrate their role and point of view in the measurements to make future research richer and more complete.

A further limitation of this work could be identified in lacking consideration of the plurality of family forms, an element that current western society cannot fail to consider. Indeed, most of the synthesized studies took into consideration nuclear families (spouses and their children made up), while no study investigated the antecedents of psychological control within more complex families, such as single-parent, adoptive, multiethnic, homo-parental families, etc. It would be therefore desirable that future research would open its horizons to the family pluralization phenomenon to guarantee greater knowledge and acceptance about it in increasingly less traditional societies.

Considering the harmful effects of controlling parenting practices on children's development, research aimed at identifying the potential risk factors associated with these practices is crucial to help build parenting interventions that successfully reduce their occurrences. Indeed, the understanding of antecedents of psychological control have strong practical implications and would allow operators to early identify parents most at risk of becoming controlling with their children. The integration of prevention measures within consolidated structures in city districts could provide a solid toolbox to avoid the chronicization of dysfunctional parenting styles not promote supportive parenting behaviors. Furthermore, starting from the knowledge of psychological control antecedents, it would be possible and useful to implement parenting interventions, such as psychoeducation sessions. These ones have the initial intent to inform and teach parents about the risks associated with a psychologically controlling education and then gradually change dysfunctional relational modalities with children. Therefore, it could be implemented more structured interventions, such as parent education and parent training. They aimed at helping parents to become active agents in learning to improve relationships and communications with children and learn more effective educational methods. An even more anticipatory intervention could be conducted with couples who attend childbirth preparation courses, during which operators can help future parents to reflect on the characteristic aspects of a healthy versus unhealthy relationship with their offspring, and learning to early recognize supportive versus controlling parental strategies, through communication and empathic listening techniques.

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