



Between Rock and a Hard Place: Internal and External Psychological Control and Preschoolers' Social-Emotional Adjustment

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Abstract

Although parental psychological control has been found to be detrimental to children's psychological functioning, less is known about the role of internal and external maternal and paternal psychological control in preschoolers' socio-emotional development. In this cross-sectional, multi-informant study, we rely on the self-determination theory to examine the relations between internal (i.e., guilt induction) and external (i.e., constraining verbal expressions and erratic emotional behavior) mother-reported and father-reported psychological control and preschoolers' ($N = 136$; 51.5% males; $M_{age} = 5.53$, $SD = 0.66$ years) externalizing symptoms, internalizing symptoms, and social competence, as reported by their teachers. Regression analyses revealed unique relations between internal and external psychological control and preschoolers' social-emotional adjustment. While external psychological control related negatively to preschoolers' social competence and positively to anger-aggression, internal psychological control emerged as the unique predictor of anxiety-withdrawal. Importantly, the results indicated that these findings were consistent for both mothers and fathers. Our findings suggest that parental internal and external psychological control differentially relate to children's socio-emotional adjustment in early childhood.

Keywords Guilt induction · Psychological control · Self-determination theory · Child behavior problems · Father

Highlights

- This study distinguished between internal and external parental psychological control and examined their unique relations with preschoolers' socio-emotional adjustment.
- Maternal and paternal internal and external psychological control differed in their relations with children's socio-emotional functioning.
- The present findings add to recent research drawing attention to the need for investigating parental psychological control in a multidimensional fashion.

Abundant research has indicated that parental psychological control, or parents' behaviors aimed at manipulating the child to think, feel, and behave in prescribed ways (Barber, 1996), is detrimental to children's psychological functioning (Barber and Harmon, 2002). Yet, our knowledge within

this domain remains limited in crucial aspects, given that most previous studies have assessed psychological control as a uniform construct (Soenens and Beyers, 2012; Yu et al., 2015). Recent research increasingly highlights the multidimensional nature of psychologically controlling parenting (Cheah et al., 2019; Yu et al., 2015). Differentiating psychological control between internal or covert (e.g., guilt induction) and external or overt (e.g., disrespecting the child by constraining their verbal expressions, or showing hostility toward them) could perhaps better explain the sometimes-inconsistent findings in the literature (Soenens & Vansteenkiste, 2010). This differentiation could also shed light on the distinct and less explored associations between specific types of

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psychological control and child outcomes (Romm et al., 2020) in less heavily investigated cultural settings (see Scharf & Goldner, 2018; Yu et al., 2015). From a universalistic perspective, such parenting practices frustrate children's basic psychological needs and hence are detrimental across all cultures (Soenens & Vansteenkiste, 2010; Deci & Ryan, 2000). From a culture-specific perspective, however, specific psychological control practices, such as guilt induction, are normative and compatible with the cultural values of interdependency and group harmony in collectivistic cultural settings. Therefore, the negative effects of internal psychological control are claimed to be limited to individualistic cultural contexts (Fung & Lau, 2012; Yu et al., 2019). Thus, further research is needed to investigate different psychological control forms in diverse cultural settings.

Moreover, research on psychological control has been conducted mainly among adolescents and has only recently covered earlier ages, such as toddlerhood and the preschool period. Although this limited research has revealed that the adverse effects of psychological control extend to earlier stages of development (Brenning et al., 2020; Olsen et al., 2002; Stone et al., 2013), we know less about how internal and external psychological control - especially internal - relate to certain behavioral patterns in those ages. Lastly, previous research has mainly focused on mothers (Xing et al., 2017; Zarra-Nezhad et al., 2015). The challenges associated with gathering data from fathers, and assuming mothers as the primary caregivers, especially during the early stages of development, may have contributed to this reliance on a single caregiver (Mitchell et al., 2007). However, fathers across many countries are getting increasingly involved in childcare (Gimenez-Nadal & Sevilla-Sanz, 2012; Schober, 2015). Recent research on fathers and young children also points to the unique value of fathers in children's social-emotional outcomes (Havighurst et al., 2019). So, it is important to incorporate fathers while investigating the role of internal and external psychological control in children's adjustment to better understand fathers' evolving role in it (Lamb, 2000).

In our study, we aimed to address these issues by investigating the relations between both mother- and father-reported psychological control and child socio-emotional adjustment. Specifically, we distinguished between internal (i.e., guilt induction) and external (i.e., constraining verbal expressions and erratic emotional behavior) psychological control and examined their relations with three markers of children's socio-emotional adjustment, as rated by their teachers: Social competence, anger-aggression, anxiety-withdrawal. While doing so, we focused on an under-represented developmental period with a sample of preschoolers from an under-investigated cultural context, the Turkish one. By investigating the relations between internal

and external psychologically controlling parenting practices and preschoolers' socio-emotional adjustment, we aimed to inform theory and practice regarding parental preventions and interventions, considering the long-term predictive value of early social-emotional competence, or the lack thereof, in later functioning across diverse life domains (Campbell et al., 2010; Parker et al., 2006).

We focused on social-emotional competence because it is synonymous with successful functioning within social surroundings (Rose-Krasnor & Denham, 2009). On a broader level, social competence reflects children's effectiveness in social interactions and could manifest through social skills, popularity, positive social relationships, and successful pursuit of social goals (Rose-Krasnor, 1997). The extant literature on social competence has shown that inadequate social competence relates to psychopathology among preschoolers (Huber et al., 2019) and that social competence is closely linked with emotional competence (as indexed, among others, through emotional regulation, emotion expressiveness, and emotion knowledge) (Denham et al., 2003; Lemerise & Arsenio, 2000). Therefore, preschoolers' social competence is an important developmental milestone that deserves further attention as it can grossly affect children's subsequent adjustment and functioning (Caprara et al., 2000; Letcher et al., 2009).

Parental Psychological Control and Early Social-Emotional Competence

Parental psychological control refers to intrusive and manipulative parenting practices attempting to control children to think, act, or feel in specific ways (Barber, 1996; Barber & Harmon, 2002). To illustrate, parents might induce feelings of guilt and shame to encourage their children to comply with their requests. Abundant research has shown that parental psychological control is detrimental to children's development as it relates, for instance, to lower self-esteem, decreased academic performance, and psychopathology (see Barber & Harmon, 2002, for a review; see Piquart, 2017a; Piquart, 2017b, for meta-analyses). According to the self-determination theory (SDT; Ryan & Deci, 2017), psychologically controlling parents are more likely to undermine their children's well-being and psychological adjustment because such practices are expected to frustrate children's psychological needs for autonomy (e.g., by pressuring children to think or behave in specific ways), relatedness (e.g., through love withdrawal and conditional regard), and competence (e.g., by providing negative feedback with expressions of disappointment) (Ahmad et al., 2013; Soenens & Vansteenkiste, 2010).

Prior research has provided evidence regarding the debilitating effects of psychologically controlling parenting

on young children's socio-emotional adjustment. For instance, studies with three-year-old boys (Verhoeven et al., 2010), and five- to eight-year-old children (Stone et al., 2013; Xing et al., 2017) reported positive associations between maternal psychological control and children's internalizing (e.g., loneliness) and externalizing (e.g., aggression) problem behaviors. A few studies have further indicated that the relations between maternal psychological control and children's maladjustment may depend on various factors such as children's gender (e.g., mother-daughters dyads; see Casas et al., 2006), negative reactivity (Morris et al., 2002), ethnic or cultural background (Akcinar & Baydar, 2014), and whether maladjustment outcomes refer to internalizing or externalizing behavior problems (Olsen et al., 2002).

Regarding the role of fathers' psychological control, the literature has reported mixed findings. On the one hand, some studies reported that paternal psychological control was not predictive of child outcomes at all (e.g., Aunola & Nurmi, 2005; Hart et al., 1998). Some studies showed that paternal psychological control is related to children's behavioral problems. However, once the maternal effect was controlled for, these relations lost significance (Verhoeven et al., 2010; Xing et al., 2017). Some other studies suggested that paternal psychological control can have predictive value for certain sub-groups of children, such as only for temperamentally difficult children (e.g., Zarra-Nezhad et al., 2015), or for certain relationships, such as father-son dyads (e.g., Nelson et al., 2013). On the other hand, research with adolescents generally provides evidence for the unique predictive power of paternal psychological control cross-sectionally (e.g., Arim & Shapka, 2008), longitudinally (e.g., Lansford et al., 2014), and cross-culturally (e.g., Soenens et al., 2012).

A possible reason for the differentiations in the pattern of the relations between paternal and, to a lesser extent, maternal psychological control and maladjustment may reside in the way psychological control has been conceptualized and assessed (Barber & Xia, 2013). Specifically, whereas psychological control can take more overt forms such as displaying inconsistent emotional behavior toward the child and hostile verbal criticism, it could also manifest in more covert forms, such as guilt induction and love withdrawal (Soenens & Vansteenkiste, 2010).

Internal and External Psychological Control

Building on Schaefer's work (1965), Barber (1996) conceptualized psychological control as consisting of guilt induction, erratic emotional behavior, personal attack, constraining verbal expressions, invalidating feelings, and love withdrawal practices. Researchers interested in psychological

control have widely adopted this conceptualization (Soenens & Beyers, 2012). In light of the SDT (Ryan & Deci, 2017), psychologically controlling parenting could be distinguished into internally and externally controlling forms (Soenens & Vansteenkiste, 2010; Vansteenkiste et al., 2005). Strategies such as guilt induction and love withdrawal map onto internally controlling parenting as they covertly evoke pressure on children to comply with parental demands to avoid guilt, shame, or anxiety. More overt strategies such as invalidating feelings or constraining verbal expressions align with externally controlling parenting as children experience external pressure to conform to the ways approved by their parents. This distinction is important because internally and externally controlling parenting has been noted to have differential effects on children's internalization process (Assor et al., 2004; Soenens & Vansteenkiste, 2010). Externally controlling parenting mostly elicits external regulation in children, rendering them more likely to obey their parents' requests or to defy them whenever this is possible. On the other hand, internally controlling parenting mainly gives rise to partial internalization of parental demands to avoid feelings of guilt, shame, or anxiety they would feel in case they disappoint their parents (Deci & Ryan, 2008). Children of these parents experience an inner conflict and resentment toward parents as their need for autonomy and need for relatedness are pitted against each other. However, at the behavioral level, children with internally controlling parents may show more compliance with parental requests, compared to their peers who experience externally controlling parenting (Assor et al., 2004; Grolnick, 2003; Roth et al., 2009).

Theory and empirical research indicate that although both types of controlling parenting are detrimental to children's psychological well-being, their behavioral correlates may differ (Ryan & Deci, 2017). Specifically, Soenens and Vansteenkiste (2010) theorized that internal psychological control, which includes relational practices like love withdrawal and guilt induction, is more likely to relate to children's internalizing rather than externalizing problems. This specialized relation could be attributed to the inner conflict internal psychological control generates. A partial internalization of parental demands might not manifest in overt behaviors (as reflected through externalizing problems) but may still surreptitiously undermine psychological well-being (as indexed through internalizing problems). Instead, more overt forms of (i.e., external) psychological control such as erratic emotional behavior seem to relate to children's externalizing problems. According to the social learning theory (Bandura, 1973), children of parents with more overt, hostile, threatening practices are more likely to model their parents' behavior and thus exhibit aggressive behavior (Nelson et al., 2013; Soenens and Vansteenkiste, 2010).

Indeed, research has shown that parental use of external coercive practices that include slapping, yelling, and

grabbing predicted children's aggressive behaviors, while internal psychological control did not (Hart et al., 1998). Such coercive parenting practices have been repeatedly related to children's externalizing problems (Joussem et al., 2008; Pinquart, 2017a; Roskam, 2019). In contrast, maternal guilt induction has been associated with children's social withdrawal (Nelson et al., 2006), a finding which has been replicated in a series of longitudinal studies where maternal guilt induction predicted children's increased negative emotions (Aunola et al., 2013; Zarra-Nezhad et al., 2015). Studies conducted with older children have yielded similar results. For instance, parental guilt induction was found to positively relate to adolescents' internalizing problems (Levitt et al., 2020; Rakow et al., 2009), and the same was true for love withdrawal, which, along with guilt induction, longitudinally predicted early adolescents' increased internalizing behavior problems (Xu et al., 2020). Further, an intervention study demonstrated that less use of parental guilt induction lowered subsequent internalizing problems in children (McKee et al., 2014). Taken together, the literature reviewed thus far suggests that internal and external psychological control forms may differentially relate to the types of problems children experience.

Although several studies with samples from non-Western backgrounds have documented positive associations between internal psychological control and children's internalizing problems (e.g., Cheah et al., 2019; Xu et al., 2020), some others failed to do so. For instance, a cross-cultural study involving participants from the US and China demonstrated that external psychological control related to increased internalizing and externalizing problems (even after accounting for parental rejection) only in the American sample. In the Chinese sample, neither internal nor external psychological control showed a significant association with either internalizing or externalizing behavioral problems (Fung & Lau, 2012). Likewise, guilt induction was found to be unrelated to depressive symptoms among Chinese adolescents (Fang et al., 2022) or even to predict less aggressive bullying behaviors among Chinese-American preschoolers (Yu et al., 2019). Most likely, such non-harmful effects of guilt induction in the Chinese milieu could be explained by Chinese adolescents' tendency to perceive internal psychological control as less controlling and less need-frustrating compared to their Western counterparts (Chen et al., 2016). Therefore, how internal and external psychological control is associated with the manifestation of children's behavior problems in non-Western cultural contexts deserves further investigation.

The Present Study

Grounded in the self-determination theory, this study examined the cross-sectional relations between mothers'

and fathers' psychologically controlling parenting and preschoolers' social-emotional functioning as indicated by anger-aggression, anxiety-withdrawal, and social competence. Contrary to the conventional approach of assessing psychological control as a uniform construct (Yu et al., 2019), we aimed to distinguish between internal (i.e., guilt induction) and external (i.e., constraining verbal expressions and erratic emotional behavior) forms in line with the SDT perspective (Soenens & Vansteenkiste, 2010) and to explore their unique relations to children's social-emotional adjustment. Considering the aforementioned debate questioning the universality of internal psychological control, we focused on an under-investigated cultural setting in our study. Although Turkish culture is positioned in the middle of Hofstede's et al. (2010) individualism-collectivism spectrum, it has been considered a collectivistic society due to its strong emphasis on close interpersonal and familial relations (Aycicegi-Dinn & Caldwell-Harris, 2011).

Further, contrary to previous research which has predominantly examined psychologically controlling parenting among adolescents, we focused on the preschool period to contribute to the limited amount of research in the field. Also, we included social-emotional functioning indicators as outcomes in this study since research has consistently shown that early social-emotional competence, or the lack of it, has concurrent and long-term implications for children's functioning (Huber et al., 2019; Stump et al., 2009). Recent research also points to the evolving role of fathers in childcare and emphasizes the need to further include fathers in parenting and child development research (Cabrera et al., 2000). We aimed to address this gap by exploring the relations between psychological control and children's social-emotional functioning in both maternal and paternal contexts.

Importantly, we used different informants to assess internal and external psychological control (by asking parents about the practices they use toward their children) and children's social-emotional adjustment (by asking preschool teachers to rate preschoolers' anger-aggression, anxiety-withdrawal, and social competence). In that way, we were able to contain the problem of mono-method bias which typically inflates the derived relations when the same informants are used (Podsakoff et al., 2012).

In line with assumptions derived from the self-determination theory (Soenens & Vansteenkiste, 2010) and prior empirical research (e.g., Nelson et al., 2006; Stone et al., 2013), we expected external psychological control to mainly relate to teacher-reported externalizing problems, and internal psychological control to relate to internalizing problems. Specifically, we formulated two main hypotheses and one exploratory research question. Based on the social learning theory (Bandura, 1973), we reasoned that the more parents admitted that they used external psychological control, the more their children

would be rated by their teachers to employ these overtly aggressive and controlling practices in their relationships with peers. So, we anticipated external psychological control to relate negatively to children's social competence (Hypothesis 1a), and positively to anger-aggression (Hypothesis 1b). We expected no relation to children's anxiety-withdrawal (Hypothesis 1c), as we anticipated that most of its variance would be mainly explained by internal psychological control (see Hypothesis 2a, below). Drawing from the SDT's notion of introjected regulation (Ryan & Deci, 2017), we reasoned that children whose parents would report more extensive use of internal psychological control would tend to comply with their parents' requests, aiming to avoid guilt, garner parental approval, and maintain a close relationship with their parents, at the expense of suppressing their needs and thus internalizing any likely distress (Soenens & Vansteenkiste, 2010; Xu et al., 2020). Therefore, we expected internal psychological control to relate positively to children's anxiety-withdrawal (Hypothesis 2a), but not to social competence (Hypothesis 2b) or anger-aggression (Hypothesis 2c).

Considering the conflicting findings in the literature involving fathers in early childhood that we reviewed previously, we aimed to explore whether fathers' internal and external psychological control would relate to children's socio-emotional adjustment in the same ways as maternal variables do.

Method

Participants

The sample consisted of 136 preschool children, along with their mothers, fathers (twelve were missing), and their teachers. Preschoolers' age ranged from 48 to 78 months ($M_{age} = 66.32$ months, $SD = 7.97$ months). Twenty-five percent of the children were between 48 and 60 months of age, and 75% of them were between 60 and 78 months of age. Of all children, 51.5% were male. The majority of the families (98.5%) were intact. Most parents completed at least a 2-year college education (67.4% of mothers, 65% of fathers). More than half of the mothers (54.8%) were working mothers, either part- or full-time, while 98.5% of the fathers were employed. The monthly income was more than 3,000 Turkish Liras (the equivalent of about \$528 at the time of data collection) for 89% of the families (the minimum wage in Turkey is 3000 TRY). Forty-two percent of the families had one child, while 40% of the families had two children, and the remaining 15% reported having three or five children.

Procedure

Necessary permissions to conduct the study were obtained from the Ethics Committee for Master and Ph.D. Theses in

Social Sciences and Humanities at Bogazici University and the Ministry of National Education in Turkey. The data collection took place between April 2019 and June 2019. Convenience sampling was used to recruit participants from one public and four private preschools located in Istanbul, Turkey. Questionnaire sets and informed consent forms were delivered to the school principals. They gave these documents to the teachers, who sent them to the parents through their children. The informed consent form provided information about the scope of the study. The parents were assured of confidentiality and explicitly informed that if they agreed to participate in the study, their child's teacher would fill out a questionnaire on the child's social skills. Written informed consent was obtained from the parents.

A total of 157 families were invited to take part in the study. With an acceptance rate of 87%, 136 families (49 families from the public, and 87 families from the private preschools) agreed to participate. Mothers and fathers reported their psychologically controlling parenting with self-report questionnaires. Teachers completed questionnaires assessing the social-emotional competence of children for whom written informed consent had been provided by their parents.

There were a few missing values regarding gender ($n = 2$), father's ($n = 2$) and mother's ($n = 1$) education level, and father-reported internal and external psychological control ($n = 12$). Little's (1988) MCAR test with all the variables involved in the analyses was nonsignificant $\chi^2(33) = 40.60$, $p = 0.17$, suggesting that the missing data did not follow a certain pattern. In light of this finding, we preferred a listwise deletion.

Measures

Internal and External Psychological Control

We selected four items from the guilt induction subscale of the Parental Psychological Control Scale (Olsen et al., 2002), as translated and adapted into Turkish by Harma (2008), to reflect internal psychological control. The four items that were used showed marginally acceptable internal consistency (Cronbach alpha = 0.65; McDonald's $\omega = 0.65$) and were as follows: "I let my child know when s/he has disappointed me."; "I say, if you really care for me, you would not do things that cause me to worry."; "I tell my child that I get embarrassed when s/he does not meet my expectations."; and "I let my child know how disappointed I am when s/he misbehaves."

Six items, taken from the Parental Psychological Control Scale (Olsen et al., 2002), were used to assess parent-reported external psychological control. Two of the items are theorized to tap into constraining child's verbal expression ("I finish my child's sentence whenever he/she

talks.”; and “I interrupt my child when he/she is speaking”) and the other four to gauge maternal or paternal erratic emotional behavior (“I show erratic emotional behavior around my child.”; “I lose temper easily with my child.”; “I show impatience with my child.”; “I go back and forth between being warm and critical toward my child.”). The internal consistency of this six-item subscale in the present study was Cronbach alpha = 0.69; McDonald’s $\omega = 0.70$.

An exploratory factor analysis with principal components correctly classified the mother-reported items into two separate factors with loading >0.40. Both factors had eigenvalues higher than 1.0 (cumulative explained variance 45%). The respective analysis for the father-reported items also correctly classified the items into two separate factors, though two items from the psychological control scale (“I show erratic emotional behavior around my child” and “I show impatience with my child”) had rather low loadings. Yet, the two items were retained to have the two scales comparable across mothers and fathers. Further, a Confirmatory Factor Analysis (CFA) for a two-factor model yielded an acceptable fit for the mothers ($S-B\chi^2$ [34; $N = 130$] = 44.18, $p = 0.11$, CFI = 0.927, SRMR = 0.066, RMSEA = 0.048 [95%-CI: 0.000, 0.082]) and the fathers ($S-B\chi^2$ [34; $N = 118$] = 50.37, $p = 0.11$, CFI = 0.875, SRMR = 0.085, RMSEA = 0.064 [95%-CI: 0.025, 0.096]).

Children’s Social-Emotional Competence and Behavior Evaluation

The Turkish version of the Social Competence and Behavior Evaluation Scale-Short Form (SCBE-30) (LaFreniere & Dumas, 1996), as adapted and validated by Corapci et al. (2010), was used to assess children’s social-emotional competence. The measure consists of three 10-item subscales designed to measure 3- to 6-year-old children’s social competence, anger-aggression and anxiety-withdrawal. The social competence subscale evaluates children’s positive social adaptation through a wide range of skills representing calm, prosocial, socially integrated, joyful, and cooperative behaviors (e.g., “Accepts compromises when reasons are given”; “Comforts, or assists another child in difficulty”). The anger-aggression subscale measures externalizing problems such as oppositional, angry, and aggressive behaviors (e.g., “Screams or yells easily”; “Gets into conflict with other children”). Anxiety-withdrawal subscale measures internalizing problems such as anxious, sad, depressed, and isolated behaviors (e.g., “Remains apart, isolated from the group”; “Goes unnoticed in a group”). Teachers reported preschoolers’ social-emotional competence on a 6-point Likert scale (1 = *never*; 2–3 = *sometimes*; 4–5 = *often*; 6 = *always*). On the social competence, anger-aggression, and anxiety-withdrawal subscales, higher scores were indicative of enhanced social competence, increased anger-aggression, and anxiety-

withdrawal problems, respectively. The internal consistencies of all three scales were deemed acceptable (all Cronbach’s alphas and McDonald’s omegas >0.81).

Plan of Analyses

Preliminary analyses involved examination of the bivariate correlations to determine to what extent the demographic variables – child’s age and gender, and parental education – were associated with children’s prosocial and antisocial behaviors, as rated by their teachers. To examine our hypotheses, we ran two sets of regressions. In the first set, we regressed the three behavioral measures of the child, as assessed by their teacher, on mother-reported external and internal psychological control, after controlling for the child’s gender and maternal education level. In the second set, we regressed the same three behavioral outcomes on father-reported external and internal psychological control, after controlling again for the child’s gender and father’s education level. We tested the two-way interactions between gender and internal (and external) psychological control reported by mothers and fathers. Our results indicated that none of these interactions were significant, hence they are not included in the subsequent reporting. We also tested the interaction between mother-reported (or father-reported) external and internal psychological control¹.

Results

Preliminary Analyses

Table 1 shows the descriptive statistics and bivariate correlations of the variables of the study. As can be noticed, females were rated by their teachers as higher in social competence, and lower in anger-aggression. Also, children’s age correlated positively with their social competence, and negatively with their anger-aggression, and anxiety-withdrawal. Regarding parental education, it was negatively related to external psychological control for both mothers and fathers, positively related to anxiety-withdrawal for mothers, and positively related to anger-aggression for fathers. Considering the significant findings between outcome variables and children’s gender, and parents’ education level, these variables are controlled for in the following analyses. Regarding the relations between psychological control forms and children’s social functioning, results showed significant negative correlations between social competence and mothers’ and fathers’ use of

¹ Given that two dependent variables were skewed, we also analyzed our data through zero-inflated models. The results were virtually the same as the ones reported here.

Table 1 Means, Standard Deviations, and Bivariate Correlations of the Measured Variables of the Study

Variables		<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10
Demographics													
1. Child's gender		0.48	(0.50)	–									
2. Mother's education		2.47	(0.63)	–0.02	–								
3. Father's education		2.47	(0.66)	–0.12	0.56**	–							
Psychological control													
4. Internal psychological control	(M)	1.62	(0.38)	–0.08	–0.16	–0.04	–						
5. Internal psychological control	(F)	1.77	(0.45)	–0.03	–0.16	–0.17	0.47**	–					
6. External psychological control	(M)	1.52	(0.28)	–0.04	–0.30**	–0.11	0.56**	0.40**	–				
7. External psychological control	(F)	1.49	(0.27)	–0.02	–0.22*	–0.13	0.19*	0.55**	0.45**	–			
Behavioral measures													
8. Social competence	(T)	4.96	(0.94)	0.33**	–0.08	–0.09	–0.10	–0.09	–0.20*	–0.18*	–		
9. Anger-aggression	(T)	1.84	(0.87)	–0.21*	0.04	0.17*	0.05	0.04	0.18*	0.16	–0.74**	–	
10. Anxiety-withdrawal	(T)	1.82	(0.74)	–0.09	0.22*	0.14	–0.19*	–0.19*	–0.04	0.00	–0.52**	0.34**	–

Gender was dummy-coded (0 = males; 1 = females)

M mother-reported, *F* father-reported, *T* teacher-reported

* $p < 0.05$, ** $p < 0.01$

external psychological control, but not internal psychological control. Maternal external psychological control is positively related to anger-aggression as well. Further, both maternal and paternal internal psychological control are negatively related to anxiety-withdrawal.

Main Analyses

Social Competence

As shown in Table 2, in support of Hypothesis 1a, mother-reported external psychological control was found to negatively relate to teacher-reported social competence ($\beta = -0.18$, $p < 0.05$). In line with Hypothesis 2b, mother-reported internal psychological control did not significantly relate to children's social competence ($\beta = 0.09$, $p > 0.05$). Also, gender emerged as a statistically significant predictor, a finding which suggests that compared to male children, female children were rated more favorably in social skills by their teachers ($\beta = 0.31$, $p < 0.01$). As shown in the same table, the same pattern was found for the father model as, again, external psychological control was found to negatively predict social competence ($\beta = -0.17$, $p < 0.05$), even after we controlled for child's gender, and fathers' education ($\beta = 0.30$, $p < 0.01$ for child's gender and $\beta = -0.07$, $p > 0.05$ for fathers' education). The two-way interaction between either mother-reported ($\beta = -0.11$, $p > 0.05$) or father-reported ($\beta = -0.15$, $p > 0.05$) internal and external psychological control was statistically nonsignificant.

Anger-Aggression

As shown in Table 2, in support of Hypothesis 1b, and similar to the findings that concern social competence, mother-reported external psychological control positively predicted children's anger-aggression as assessed through teachers' reports ($\beta = 0.18$, $p < 0.05$). The same was true, although the relation was marginal, for father-reported external psychological control ($\beta = 0.17$, $p = 0.05$). Internal psychological control failed to predict anger-aggression ($\beta = -0.15$, $p > 0.05$ for mothers and $\beta = -0.14$, $p > 0.05$ for fathers). Also, teachers reported that female children were less likely to exhibit anger and aggression than male children ($\beta = -0.19$, $p < 0.05$, and $\beta = -0.18$, $p < 0.05$, for mother and father models, respectively). The two-way interaction between internal and external psychological control was nonsignificant, either in the mother ($\beta = 0.06$, $p > 0.05$) or the father model ($\beta = 0.10$, $p > 0.05$).

Anxiety-Withdrawal

Table 2 shows, in line with Hypothesis 1c, that mother-reported external psychological control did not significantly predict children's anxiety-withdrawal ($\beta = 0.07$, $p > 0.05$). The same finding was reported for the father model ($\beta = 0.05$, $p > 0.05$).

Unlike the two models that referred to social competence and anger-aggression, in the model that examined anxiety-withdrawal, internal psychological control (either reported

Table 2 Teacher-Reported Behavioral Outcomes of the Child as Predicted by Maternal (Mother-Model) and Paternal (Father-Model) Internal and External Psychological Control

Predictors	Social competence				Anger-aggression				Anxiety-withdrawal								
	Mother-model		Father-model		Mother-model		Father-model		Mother-model		Father-model						
	B	(SE)	β	(SE)	B	(SE)	β	(SE)	B	(SE)	β	(SE)					
1. Gender	0.58	(0.16)	0.31**	0.16	0.30**	-0.34	(0.15)	-0.19*	-0.32	0.15	-0.18*	-0.12	0.12	-0.08	-0.08	0.13	-0.05
2. Education	-0.15	(0.12)	-0.10	0.12	-0.07	0.07	(0.12)	0.05	0.21	0.11	0.16	0.25	0.10	0.22*	0.18	0.10	0.16
3. Internal PC	0.19	(0.17)	0.09	0.18	0.08	-0.29	(0.17)	-0.15	-0.27	0.17	-0.14	-0.39	0.14	-0.24**	-0.36	0.14	-0.21*
4. External PC	-0.46	(0.21)	-0.18*	0.21	-0.17*	0.42	(0.21)	0.18*	0.39	0.20	0.17†	0.14	0.17	0.07	0.11	0.17	0.05
5. Internal X External PC	-0.52	(0.40)	-0.11	-0.74	0.41	0.28	(0.39)	0.06	0.43	0.39	0.10	0.50	0.32	0.14	0.92	0.33	0.24**
F-statistic	$F(5, 127) = 5.28^{**}$				$F(5, 127) = 2.60^*$				$F(5, 126) = 3.46^*$				$F(5, 126) = 3.58^*$				
Adjusted R ²	0.14				0.06				0.10				0.09				

Gender was dummy-coded (0 = males; 1 = females)

PC psychological control

† $p < 0.05$, * $p < 0.05$, ** $p < 0.01$

by mothers or fathers) was found to negatively predict anxiety-withdrawal, as shown in Table 2 ($\beta = -0.24$, $p < 0.01$ for mothers and $\beta = -0.21$, $p < 0.05$ for fathers). This finding was rather unexpected and is discussed in more detail in the following section. Further, a statistically significant two-way interaction emerged between father-reported internal and external psychological control ($B = 0.92$, $SE = 0.33$, $p < 0.01$, $\beta = 0.24$). A test of simple slopes revealed that the negative relation between internal psychological control and anxiety-withdrawal was statistically significant when father-reported external psychological control was low (i.e., 1 SD below the mean) ($B = -0.70$, $SE = 0.20$, $p < 0.01$) but not when it was high (i.e., 1 SD above the mean) ($B = -0.01$, $SE = 0.18$, $p = 0.95$). This finding is further discussed in the next section.

Discussion

The present study aimed to contribute to the limited, yet uprising, research drawing attention to the multidimensional nature of psychologically controlling parenting, with an understudied sample of preschoolers (Romm et al., 2020; Soenens & Vansteenkiste, 2010). In line with the self-determination theory (Soenens & Vansteenkiste, 2010), internal (i.e., guilt induction) and external (i.e., constraining verbal expressions and erratic emotional behavior) forms of psychologically controlling parenting were uniquely related to children’s teacher-rated social-emotional adjustment in terms of social competence, anger-aggression, and anxiety-withdrawal. As hypothesized, controlling for child gender and parental education, external psychological control was associated with children’s social competence in a negative direction, and anger-aggression in a positive direction. In contrast, the link between external psychological control and children’s anxiety-withdrawal was not significant. Furthermore, in line with our hypotheses, internal psychological control did not show significant associations with children’s social competence or anger-aggression. However, contrary to our expectations, internal psychological control was negatively related to children’s anxiety-withdrawal. Fathers’ internal and external psychologically controlling practices related to children’s social-emotional adjustment in the same way as mothers’ practices did.

According to the self-determination theory (Ryan & Deci, 2017), both external and internal psychological control are detrimental as they undermine children’s need satisfaction, and hence well-being (Chen et al., 2016; Ahmad et al., 2013). However, it seems that external and internal types of parental psychological control may differentially relate to children’s socio-emotional functioning and the expression of behavior problems (Soenens & Vansteenkiste, 2010). The findings of the current study

supported this argument. Therefore, despite the general tendency in the literature to assess psychological control as a uniform construct, keeping apart different dimensions of psychological control could be more informative, and can partly resolve the sometimes-mixed findings reported in the literature (Yu et al., 2015; Soenens & Beyers, 2012).

External, or overt, psychological control reflects coercive parenting practices that limit children's self-expression and convey parental negativity, such as losing one's temper easily with the child or going back and forth between being warm and critical toward the child. From a social learning theory perspective (Bandura, 1973), we expected that children observing their externally controlling parents would model these behaviors and, hence be more likely to display outward-directed problems, rather than internalizing problems. In line with this reasoning, we found in our study that parents who used more external psychological control tactics had children who were rated by their teachers as displaying more anger-aggression, and as less socially skilled. Instead, parents' use of external psychological control was not significantly associated with children's anxiety-withdrawal. These findings are consistent with our hypotheses, the social learning theory (Bandura, 1973), and previous research which identified coercive parenting practices as a risk factor for children's externalizing problems (see Hart et al., 2003, for a review; Joussemet et al., 2008; Scaramella et al., 2008). Further, from a self-determination theory standpoint, individuals cope with need-thwarting contexts with compensatory and defensive reactions (Deci & Ryan, 2000; Vansteenkiste & Ryan, 2013), including oppositional defiance (Vansteenkiste & Ryan, 2013), which in turn may lead to externalizing problems. Previous research has documented the hypothesized mechanism with adolescents (Brenning et al., 2019; Van Petegem et al., 2015), and further investigation is encouraged to replicate these findings with early childhood samples.

Although our hypotheses are grounded primarily in the self-determination theory (Ryan & Deci, 2017), and the social learning theory (Bandura, 1973), alternative theoretical models may also offer explanations for the current relations. For instance, the tripartite model of familial influence (Morris et al., 2007), which is also consistent with SDT's assumption, presumes that parenting practices shape children's development by affecting their emotion regulation (Ryan et al., 2016). According to this line of reasoning, the present positive link between external psychological control and children's anger-aggression may reflect children's impoverished emotion regulation in the face of external psychological control (Cui et al., 2014; Eisenberg et al., 2001; Morris et al., 2007).

The lack of a statistically significant relation between external psychological control and children's anxiety-withdrawal was also in line with our expectations. Based

on the social learning theory, we expected that children would model these behaviors in their relations, and would be more likely to act out, rather than internalize distress. It is also consistent with ample previous research demonstrating the less dominant role that coercive parenting has, compared to over-protective parenting, in children's anxiety-withdrawal (Bayer et al., 2006; see McLeod et al., 2007 for a meta-analysis; Rubin et al., 2009).

Internal psychological control (i.e., guilt induction) represents a more covert and insidious way of pressuring socialization (Soenens & Vansteenkiste, 2010). Drawing on the SDT's behavioral regulation model (Assor et al., 2004; Deci & Ryan, 2000), and inspired by Soenens and Vansteenkiste's reasoning (2010) that internally controlling parenting puts children at a greater risk of developing internalizing problems due to the inner conflict and emotional distress they experience, we anticipated internal psychological control not to relate to children's social competence or anger-aggression. However, we expected a positive relationship with anxiety-withdrawal. As expected, internal psychological control was not associated with children's social competence or anger-aggression. These findings are corroborated by past research conducted with European-American and Chinese children (Fung & Lau, 2012), which indicated that internal psychological control (measured as a combination of love withdrawal, guilt induction, and social comparison) was not significantly associated with children's externalizing problems in either sample, after controlling for parental rejection. Specifically for guilt induction, the bivariate correlations were not significant either. Likewise, in a recent study, Levitt et al. (2020) found that guilt induction did not have a significant link with children's externalizing problems, while externally controlling parenting did.

However, contrary to our hypothesis, the more mothers and fathers admitted using internal psychological control, the less their children were rated on anxiety-withdrawal by their teachers. This finding contrasts the positive relation between guilt induction and preschoolers' anxiety-withdrawal reported by Nelson et al. (2006). One explanation for this counterintuitive association may concern the abovementioned compensatory and defensive reactions in response to need frustration (Vansteenkiste & Ryan, 2013). Children, who feel pressured to conform to parent-promoted behaviors to gain their approval, may increasingly turn to peers as a substitute for the approval they lack from their parents. This behavior may serve as an attempt to alleviate the need for frustration they experience. Perhaps this is the reason why the negative relation between fathers' internal psychological control and anxiety-withdrawal was significant among fathers who reported low but not high external psychological control. If internal psychological control is accompanied by external psychological control,

then perhaps any attempt to compensate for the lack of parental approval is canceled out due to external psychological pressure. Children turning to peers as substitutes is problematic in the sense that it would render them more vulnerable to adverse peer relations. Indeed, Soenens and colleagues (2007) found a positive association between psychologically controlling parenting (albeit as a unidimensional construct) and adolescents' deviant peer affiliations. Another explanation may be that anxious-withdrawn children may elicit less internal psychological control from their parents. Specifically, parents of children who are already highly anxious and withdrawn may feel less urge to use strategies such as guilt induction with them.

On the other hand, this unexpected association between internal psychological control and children's decreased anxiety-withdrawal can be interpreted from a culture-specific perspective as well. According to this perspective, such parenting practices are normative and consistent with the culturally valued socialization goals (e.g., group harmony and relatedness) that prevail in collectivistic cultures (Yu et al., 2019). In these cultures, internal psychological control practices seem to reflect parental care rather than parental negativity (Fung & Lau, 2012). Indeed, Kara and Sumer (2022) found positive correlations between parental internal psychological control and warmth in a Turkish sample, which somehow complements previous findings showing that internal psychological control is more strongly related to external psychological control in individualistic cultures (such as the US) than collectivistic ones (such as India) (Rudy et al., 2014). So, could parental warmth buffer the detrimental effects of internal psychological control in collectivistic cultures? Future research should investigate this possibility with cross-cultural experimental designs.

In the case of fathers, our findings indicated that both internal and external forms of paternal psychological control related to children's social-emotional adjustment, in terms of social competence, anger-aggression, and anxiety-withdrawal, in the same ways as maternal forms did. These findings are parallel with previous research conducted with adolescents (Arim and Shapka, 2008; Lansford et al., 2014), which may imply the increased involvement of fathers with their children. This idea is supported by the fact that the current sample mostly consisted of highly educated parents (Sen et al., 2014). These findings extend previous psychological control research with early childhood samples, which has widely portrayed mothers as the main source of influence in children's parental socialization (e.g., Aunola & Nurmi, 2005; Xing et al., 2017).

Limitations and Implications

The findings of this study are suggestive yet limited in several ways. First of all, the present research is cross-

sectional, so the direction and causality of the observed relations remain unclear. Longitudinal research addressing the directionality of relations between parental psychological control and adolescent outcomes has provided evidence for reciprocal relations (e.g., Janssens et al., 2017; Soenens et al., 2008). Such findings imply that just as parents' use of external psychological control can lead to children being less socially skilled and more prone to anger-aggression, children may also elicit more external psychological control practices from their parents. Future research should aim for longitudinal investigations to clarify the direction of relations between different psychological control forms and children's functioning with young children. Further, considering the low mean scores of parenting variables in this study, a spouse-report method, that is, parents reporting on each other's parenting (Yang et al., 2004), or age-appropriate child-reports of parenting (e.g., Morris et al., 2002) can be recommended for future researchers to tackle social desirability issue. Another consideration is that the present study did not include further dimensions of parenting and did not consider (because of unavailable information) the shared variance of teachers' reports (given that each teacher-rated multiple children). Previous research has demonstrated the moderating roles of other parenting dimensions on the effects of psychological control (Aunola & Nurmi, 2005; Caron et al., 2006). Investigating psychological control while taking other parenting dimensions and any nested effects into consideration can provide a more comprehensive perspective to understand the interplay between parenting practices and child outcomes.

On the other hand, an important strength of the current study is the use of different informants. In this way, response bias (e.g., parents' possible desire to present their child in a specific way), and response sets (e.g., the informants' proneness to rate generally high, or low, on Likert scales) problems, hence associated inflated correlation risk is tackled (Campbell & Fiske, 1959; Podsakoff et al., 2012). Apart from this, teachers are valuable sources to get information about children's social-emotional competence as they have the opportunity to observe children under varying circumstances (LaFreniere & Dumas, 1996; Morris et al., 2002). Notably, the present study included both fathers and mothers while focusing on the preschool period. We found consistent patterns in the significance of the relations between maternal and paternal variables and child outcomes. Our results support previous research involving adolescents (Lansford et al., 2014; Yang et al., 2004) and reinforce the idea of fathers' increased involvement in childcare. This underscores the importance of incorporating fathers in future research and targeting fathers in interventions related to child socio-emotional adjustment.

Another potentially noteworthy aspect of this research is that we distinguished between external and internal

psychological control and explored their unique relations to young children's social-emotional functioning. Our findings provide support for the differential value of psychological control types in predicting child outcomes. This offers implications for research and practice. More specifically, the present findings highlight the complexity of parental psychological control and the need to explore the unique relations between psychological control subtypes and child outcomes. The findings also point to the importance of addressing psychological control forms at an early age to lessen their adverse effects on later development.

In conclusion, our study contributes to the growing body of research on psychologically controlling parenting, particularly in the context of preschool-aged children. By distinguishing between internal and external psychological control, our findings enrich our understanding of the differential relations of these practices with children's social-emotional adjustment. These insights can inform future research and interventions aimed at promoting healthier parent-child relationships.

Data Availability

The data that support the findings of this study are available to the editor, the reviewers, and the audience upon their request.

Author Contributions The order of the authorship has been commonly agreed by the authors. Material preparation, data collection, and writing initial draft were performed by Gulsen Guldeste. All data analyses, reviewing, and editing were performed by Athanasios Mouratidis. Jolene van der Kaap-Deeder contributed to critically revising the manuscript. All authors read and approved the final manuscript.

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Compliance with Ethical Standards

Conflict of Interest The authors declare no competing interests.

Consent to Participate Informed consent was obtained from all individual participants included in the study.

Ethics Approval Necessary permissions to conduct this study were obtained from the Ethics Committee for Master and PhD Theses in Social Sciences and Humanities, Bogazici University, and from the Ministry of National Education in Turkey.

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