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Parental Psychological Control and Autonomy Granting: Distinctions and Associations with Child and Family Functioning

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Abstract

Objective—This study utilized an observational coding scheme to identify parenting behavior reflecting psychological control and autonomy granting and examined relations between these parenting dimensions and indices of child and family functioning.

Design—A community sample of 90 preadolescents (aged 10.5 to 12 years) and both of their parents engaged in a triadic interaction that was coded for parental psychological control and autonomy granting. Participants also completed measures of child adjustment, interparental conflict, and triangulation.

Results—Factor analyses indicated that a two-factor model better fit the data than a one-factor model, suggesting that psychological control and autonomy granting are best conceptualized as independent but related constructs. Parental psychological control and autonomy granting exhibited some shared and some unique correlates with indices of child and family functioning. Hierarchical regressions revealed significant interactions between these dimensions, suggesting that the strength of some associations between parents' use of psychological control and youth adjustment problems depends on the level of autonomy granting exhibited by the parent.

Conclusions—By examining psychological control and autonomy granting simultaneously as unique constructs, this study identifies patterns of psychological control and autonomy granting that undermine youth adjustment. Findings inform targeted intervention efforts for families of preadolescent youth.

INTRODUCTION

Parents who encourage their children to develop and express their own thoughts, interests, and ideas (autonomy) while maintaining positive emotional bonds (acceptance) are more likely to have well-adjusted children who develop a stable sense of self (e.g., Barber, 1996; Eccles, Early, Fraser, Belansky, & McCarthy, 1997; Herman, Dornbusch, Herron, & Herting, 1997; Maccoby & Martin, 1983; Steinberg, 1990). Achieving a balance between independence and closeness with parents is a particularly critical task for children approaching adolescence (Hauser et al., 1984), when establishing a more autonomous sense of self is a key developmental task (Conger, Conger, & Scaramella, 1997; Masten & Coatsworth, 1998). However, this balance can be upset when parents engage in high levels of psychological control. In contrast to behavioral control, which involves parental monitoring and limit setting (Steinberg, 1990), psychological control is marked by attempts to control children's behavior through manipulative or intrusive practices such as expressions of disappointment and shame, invalidating or dismissing children's feelings or ideas, guilt induction, criticism, and threatening to withdraw love (Barber, 1996; Barber & Harmon, 2001; Barber, Olsen, & Shagle, 1994; Schaefer, 1965a, 1965b; Steinberg, 1990).

Such behavior undermines children's growing autonomy by punishing expressions of thoughts, feelings, and behaviors that parents view as unacceptable, and there is considerable evidence that psychologically controlling parenting has adverse consequences for youth psychosocial adjustment (for a review see Barber, Stolz, & Olsen, 2005).

Distinguishing Psychological Control from Autonomy Granting

Although psychologically controlling parenting is hypothesized to interfere with the development of autonomy, the relation between parents' use of psychological control and their efforts to foster independence in their children has been studied rarely. In part, this is due to a failure to distinguish these constructs conceptually and methodologically. In Schaefer's (1965a, 1965b) seminal research, psychological control was conceptualized as the polar opposite of autonomy granting, defined as the promotion of individuation by encouraging individual expression and participation in family decision-making (Allen, Hauser, O'Connor, Bell, & Eickholt, 1996, 1996; Hauser et al., 1984). Similarly, widely utilized measures of parenting behavior (e.g., Children's Reports of Parent Behavior Inventory; Schaefer, 1965a) combine these constructs into a single scale with psychological control items to create a measure of autonomy granting (e.g., Gray & Steinberg, 1990).

Barber and colleagues (e.g., Barber et al., 2002; Barber et al., 2005) have called for a reexamination of the association between psychological control and autonomy granting, arguing that important distinctions between these constructs may be lost if they are combined into a single scale. Conceptualizing these constructs as opposite ends of a continuum assumes that parents who are high on one of the dimensions must be low on the other (Silk et al., 2003). Although parents who frequently engage in psychological control are unlikely to actively promote their children's autonomy (and vice versa), it does not follow that parents who are low in psychological control necessarily encourage independent expression and involvement in family decision making. That is, the absence of psychological control does not imply the presence of autonomy granting. Likewise, parents who are low in autonomy granting do not by definition engage in high levels of psychological control. Rather, parents may discourage independence explicitly by setting and reinforcing established standards for their children's behavior (i.e., behavioral control) instead of using manipulative or coercive methods.

The few empirical studies directly examining the association between psychological control and autonomy granting support the hypothesis that they are distinct but related constructs (Barber et al., 2001; Silk et al., 2003; Soenens, Vansteenkiste, & Sierens, 2009). For example, Silk and colleagues (2003) identified 19 items from Steinberg et al.'s (1992) parenting questionnaire that exemplified psychological control and others that reflected autonomy. Confirmatory factor analyses using data collected from nearly 10,000 adolescents produced a two-factor solution that distinguished between parents' efforts to manipulate their children's thoughts and feelings (psychological control) and their attempts to promote independence in thinking and decision-making (autonomy granting). The two factors were only weakly related, r(9562) = -.18, p < .01, and the 2-factor solution was replicated across child gender and ethnicity.

Soenens et al. (2009) used cluster analysis to examine young adults' reports of parenting behaviors representing psychological control and autonomy granting, and distinguished between two forms of autonomy granting. The first, Promotion of Independence, reflected parental encouragement of independent expression and decision making and was consistent with the measure of autonomy described by Silk and colleagues (2003). The second type of autonomy granting was referred to as Promotion of Volitional Functioning and was defined as parents' efforts to "encourage their children to behave on the basis of self-endorsed

interests" (p. 189) and to help their children make decisions based on carefully considered personal goals and motives rather than on the basis of pressures and demands from others. Cluster analyses showed that psychological control and promotion of volitional functioning clustered together in each group, whereas promotion of independence could co-occur with either low or high levels of psychological control.

Associations with Child and Family Functioning

Understanding the relation between psychological control and autonomy granting also requires determining whether the constructs have unique implications for child and family functioning. Psychologically controlling parenting strategies are thought to undermine adolescents' sense of self-efficacy and increase susceptibility to feelings of anxiety and/or depression, and indices of psychological control (which typically include items reflecting low levels of autonomy granting) have been linked consistently to internalizing problems (Allen, Hauser, Bell, & O'Connor, 1994; Barber et al., 1994; Hauser, Powers, & Noam, 1991; Hauser, Powers, Noam, Jacobson, Weiss, & Follansbee, 1984). The failure to promote autonomy also could increase adolescents' risk for internalizing problems by undermining the development of independence and competence; although autonomy granting is associated with self-esteem, its association with internalizing symptoms has not been established. Even though it is plausible that parents' attempts to control their children or block their desire for increased autonomy will elicit defiance and oppositional behavior, neither parenting dimension has been consistently linked to externalizing symptoms (e.g., Barber, 1996; Holmbeck et al., 2001).

Most of the existing literature has examined these dimensions separately and consequently we know little about their joint effects. Silk et al. (2003) found that the measures of psychological control and autonomy granting that they derived via factor analysis each was uniquely associated with adolescents' self-concept, but that only psychological control predicted internalizing problems and neither dimension predicted delinquency or drug use. Soenens et al. (2009) examined differences in adjustment across the clusters they derived based on late adolescents' reports of their parents' use of psychological control and promotion of independence. They reported that late adolescents whose parents used higher levels of psychological control exhibited more depressive symptoms, lower self-esteem, and poorer academic adjustment regardless of the degree to which their parents promoted independence. However, social adjustment was highest when low levels of psychological control and autonomy granting may be important for some developmental outcomes.

Even less is known about whether psychological control and autonomy granting have different relations with other elements of family functioning. Parenting tends to be influenced by the quality of marital functioning, and parents in discordant marriages are more likely to use psychologically controlling strategies (Fauber, Forehand, Thomas, & Wierson, 1990; Stone, Buehler, & Barber, 2001; Sturge-Apple, Davies, Boker, & Cummings, 2004) and to have trouble providing a secure environment in which the child can feel comfortable exerting autonomy (Allen et al., 1996). Preservation of interpersonal boundaries within the family system can be particularly difficult during times of conflict (Grych, Raynor, & Fosco, 2002; Kerig, 1995), and youth sometimes are drawn into conflict between their parents in an effort to resolve or distract attention from discord in the marital relationship (Buchanan & Waizenhofer, 2001). For children approaching adolescence, triangulation may be especially problematic because becoming involved in their parents' conflict may undermine adolescents' efforts to establish a sense of individuality apart from the family.

Whereas studies of the relation between psychological control and autonomy granting indicate that these constructs are at least somewhat distinct, their joint relation with child adjustment rarely has been explored. Moreover, no studies to date have examined whether they have unique or joint associations with family functioning. Further investigation of this issue with younger populations using methodology that assesses parenting behavior as it occurs in real time is needed to advance our understanding of these complex interrelationships.

The Present Study

The goal of the present study was to examine the unique and joint associations of parents' use of psychologically controlling tactics and the degree to which they encourage autonomy during an interaction with their child with indices of child and family functioning. All of the investigations showing that parental psychological control and autonomy granting are distinct but related constructs were based on youth report measures, one of which was a retrospective report from young adults. Although questionnaires can provide valuable insight into individuals' subjective perceptions, it is important to examine these constructs with multiple methodological approaches. Observation of parent-child interaction may be particularly useful for distinguishing psychological control and autonomy granting. Observational methods limit concerns about social desirability inherent in parent reports of behavior that is viewed negatively by most people. Though parents still may attempt to manage their behavior during an observed interaction (e.g., they are unlikely to tell their children they will not love them if they do not do what the parent wants) they may not be fully aware of or able to control more subtle indicators of psychological control, such as interrupting or speaking for the child. Furthermore, coding behaviors as they occur in real time, rather than relying on retrospective reports from participants, eliminates error resulting from inaccurate recall or a failure to recognize instances of psychological control and autonomy granting.

We examined whether parents' use of psychologically controlling tactics could be distinguished from the degree to which they encourage autonomy and whether the two scales had independent, additive, or interactive associations with child internalizing and externalizing problems, interparental conflict, and children's triangulation into conflict. We expected that psychological control would be correlated with both internalizing and externalizing problems but that low autonomy granting would only be associated with increased internalizing problems among preadolescent youth. Furthermore, we predicted that children of parents who exhibited both greater psychological control and lower levels of autonomy granting would show the highest levels of internalizing and externalizing problems. We also anticipated that parents reporting more conflict and triangulation would exhibit more psychological control and lower levels of autonomy granting. Because of the paucity of research linking autonomy granting with other family processes, we did not make specific predictions regarding associations between this dimension and the two measures of family functioning.

METHOD

Participants

Participants included 90 5th and 6th grade students and their parents. Youth ranged in age from 10.5 to 12 years and included equal numbers of boys and girls (N= 45 females). Families from a variety of ethnic backgrounds agreed to participate in this study, including 69% European American, 15% African American, 7% Latin American, 1% Asian American, 5% biracial, and 3% of families of other ethnicities. Among the participants, 6% had a family income below \$30,000, 13% had a family income ranging from \$30,000 to \$50,000,

22% had a family income ranging from \$50,000 to \$70,000, and 59% had a family income over \$70,000. Eighty-two percent of the mothers and 90% of fathers were employed at the time of the study.

Procedures

Data were collected as part of the second wave of a larger longitudinal study examining interparental conflict and child adjustment. Children and their parents were recruited from schools in a large Midwestern city. Informational letters were first sent home to parents, and those children whose parents completed an informed consent form were given permission to participate in a screening survey. Following initial contact with schools, research assistants contacted parents, described the study in detail, and invited families to participate. At Time 1, 56% of families who were contacted agreed to participate (n = 150). One year later, families were contacted and invited back to the laboratory for a second wave of data collection that included the triadic interaction and questionnaires included in the present study; 90 families (60%) of the families who took part in Wave 1 participated in Wave 2. Compared to those who participated only at Time 1, those who were involved in both sessions were more likely to be European American, χ^2 (6, N = 150) = 27.6, p < .01, and report higher income, χ^2 (10, N=150) = 38.8, p < .01. A lower level of participation at Time 2 by poorer families and families of color likely is due to the more transitory living arrangements of the lowest income families in the sample (which included a greater proportion of nonEuropean American than European American families). When we attempted to schedule their Time 2 visit, we discovered that the phone numbers for some of these families and for individuals that they had identified as contacts were disconnected or changed. Thus, in most cases, attrition was due to an inability to contact families rather than their refusal to participate in the Time 2 assessment.

To be eligible for participation, the children were required to reside in two-parent households in which parents had been living together for at least 2 years. Approximately 94% of children lived with both biological parents, and 6% of children resided with one biological parent and one stepparent or a significant other who had been living in the home for 2 or more years. Due to the amount of reading necessary to fill out the questionnaires, family members were also required to be able to speak and read English fluently. The research staff, when possible, helped individuals who were fluent but required some assistance.

To create a context that is likely to elicit parental responses pertinent to the development of autonomy and use of control, we asked the children and both parents to discuss changes that the youth wanted to make in the family. As children move into adolescence, they generally desire greater independence and new privileges and often challenge established "ground rules" in the family. Parents can actively support their children's emerging autonomy by encouraging them to express themselves and showing a willingness to consider their perspective, or they can attempt to maintain the status quo through either overt behavioral control or psychological control.

The present study used observational data from an interaction in which families were given 10 min to discuss changes requested by the child. Children were first given a list of privileges or changes that youth often desire in early adolescence and were asked to rank the three that were most important to them (i.e., "Have more privacy," "Change hair or look," "Get a cell phone," etc.). Youth were instructed to explain why they wanted to make the specified changes to their parents, and parents were asked to respond as they would at home. Research assistants prompted families to ensure that each participant's (father, mother, and child) viewpoint was made known during the discussion, and informed families that they had 10 min to discuss one issue or all three, if desired. We were particularly interested in

whether parents would respond to the child's requests with statements and behavior that would encourage children to express their opinion even if it differed from that of the parents (i.e., autonomy granting), or statements and behaviors that would discourage verbal expression via interruptions, invalidating comments, harsh criticism, and coercion (i.e., psychological control). Interactions were videorecorded and later coded by the first author and one research assistant. The research assistant obtained 20 hours of training consisting of review of the coding manual, coding recorded family interaction tasks jointly with the first author, and then coding interactions independently and reviewing them with the first author in weekly supervision meetings. Interrater agreement, consisting of two-way mixed intraclass correlations, of 80 was required before coding interactions for the study. Fifteen randomly selected interactions were subsequently coded by the first author whose data were used in the present study.

Measures

Psychological control and autonomy granting—As in the case of self-report measures, there are no existing observational coding systems that yield separate scales for psychological control and autonomy granting. However, there are two coding schemes that assess psychological control and also contain items tapping the degree to which parents support and encourage children's autonomy. Barber (1996) created the Psychological Control Scale-Observer Rating Scale (PCS-OBS) to assess several dimensions of psychological control, including the constraining, invalidating, coercive, and manipulative dimensions of the construct. Holmbeck, Belvedere, Gorey-Ferguson, and Schneider (1995) developed a coding system designed to measure both the intrusive and restrictive features of psychological control and the encouraging and receptive elements of autonomy granting (which were reverse-scored and included in the psychological control scale). Because Barber's (1996) and Holmbeck et al.'s (1995) coding schemes focus specifically on parenting behavior, code macro-level behaviors, and utilize similar rating scales, we selected the items from these coding systems that were consistent with our operational definitions of psychological control ("parental behaviors that are intrusive and manipulative of children's thoughts, feelings, and attachment to parents"; Barber & Harmon, 2002, p. 15) and autonomy granting (parental promotion of independent expression, decision-making, and volitional functioning; Ryan, Deci, Grolnick, & La Guardia, 2006).

These parenting dimensions were assessed with a combination of items developed by Barber (1996) and Holmbeck et al. (1995) and one item created by the authors (Table 1). All but one of the items from the Barber coding scheme and all but two from the Holmbeck et al. scheme were included; the three excluded items assessed constructs that did not clearly reflect fundamental elements of psychological control and/or autonomy granting (e.g., Erratic Emotional Behavior). The final coding system consisted of 10 items, 6 of which were viewed as exemplars of psychological control (Constraining Verbal Expressions, Pressuring Child to Agree, Invalidating Feelings, Personal Attack on Child, Guilt Induction, and Love Withdrawal) and 4 that were viewed as indices of autonomy granting (Encourages Child to Express Individual Views/Opinions, Receptive to Statements Made by the Child, Tolerates Differences and Disagreements, and Encourages Independent Thinking). The code "Encourages Independent Thinking" was created by the authors to capture the degree to which parents encouraged the child to form his/her own conclusions even if they differed from that of the parent. This behavior is not included in either Barber's (1996) or Holmbeck et al.'s (1995) coding systems, but work of Steinberg et al. (1992) and Soenens et al. (2009) suggests that this is a core component of parental autonomy granting. The 5-point rating scale used by Holmbeck and colleagues (1995), which ranged from Almost Always to

Almost Never, was retained for this study, and so Barber's (1996) 4-point scale ranging from 0 (*not true*) to 3 (*very true*) was extended to include a 5th point.

Adequate internal consistency and inter-rater reliability estimates for maternal and paternal behaviors were reported in validation studies for Barber and Holmbeck et al.'s coding methods, and concurrent validity was established through comparisons with child/parent reports of psychological control (Holmbeck et al., 2001). Moreover, these validation studies showed that observed psychological control was associated with reports of child internalizing (Barber, 1996; Holmbeck et al., 2001) and externalizing (Holmbeck et al., 2001). This pattern of results indicates that child and parent perceptions of psychological control and autonomy granting are closely linked with observational assessments of the same constructs and supports the claim that observed psychological control is similar to child or parent reported psychological control. For the current coding system, two-way mixed intraclass correlations were computed to establish inter-rater reliability, and values ranged from .80 to .98 across the 10 codes.

Child adjustment—Both parents and children provided ratings of child adjustment. The Anxious/Depressed and Aggressive Behavior scales from the Youth Self-Report (YSR; Achenbach, 1991) were used to assess children's internalizing and externalizing problems. Children were asked to identify whether the items on this checklist described them over the course of the past 6 months and to respond on a 3-point scale to items such as, "Drinking alcohol without my parents' approval," "Afraid of going to school," and "Gets into many fights." Responses ranged from 0 (*not true*) to 2 (*very true or often true*). Acceptable internal consistency was achieved using this sample, which yielded scores of $\alpha = .80$ for the aggression scale and $\alpha = .85$ for the internalizing scale.

Parents completed items that comprised the Internalizing (comprised of the Anxious/ Depressed and Anxious/Withdrawn subscales) and Externalizing (comprised of the Rule Breaking Behavior and Aggressive Behavior subscales) scales on the Child Behavior Checklist (CBCL; Achenbach, 1991) to assess symptoms of child psychopathology. Items mirror those from the YSR, and internal consistency estimates were acceptable (mother report of child internalizing, $\alpha = .78$, mother report of child externalizing, $\alpha = .88$, father report of the child internalizing, $\alpha = .77$, and father report of the child's externalizing, $\alpha = .$ 83). Mother and father reports of child adjustment were correlated (r(88)=.55, p<.01, for internalizing, r(88)=.67, p<.01, for externalizing) and were combined to provide a parent report of child functioning.

Interparental conflict—Children responded to items that comprise the Conflict Properties scale from the Children's Perception of Interparental Conflict Scale (CPIC; Grych, Seid, & Fincham, 1992). Children answered *true, sort of true*, or *false* to 17 questions reflecting the frequency, intensity, and resolution of their parent's disagreements, such as "I often see my parents arguing," "My parents get really angry when they argue," and "Even after my parents stop arguing, they stay annoyed with each other." Excellent internal consistency was obtained in this sample (α = .90).

Triangulation—Children completed the Triangulation subscale of the CPIC (Grych et al., 1992). Responses on the 7 items reflecting the degree to which children felt caught in the middle of their parent's disagreements and overall child involvement in interparental conflicts ranged from *true, somewhat true*, to *false*. Items included statements such as, "I feel like I have to take sides when my parents have a disagreement," and "When my parents argue I end up getting involved somehow." Internal consistency was adequate in this sample $(\alpha = .79)$.

RESULTS

Distinguishing Psychological Control from Autonomy Granting

We first examined whether the items viewed as exemplars of psychological control and autonomy granting, respectively, held together as measures of each construct. The internal consistency of the 4 items chosen to represent autonomy granting was acceptable (fathers, $\alpha = .88$; mothers, $\alpha = .84$). However, two items from the Psychological Control scale, Guilt Induction and Love Withdrawal, demonstrated poor item-total correlations across mothers and fathers and detracted from the internal consistency of the scale. Moreover, there were very few coded instances of these items (i.e., less than 3) across participating families. Once these items were omitted, acceptable levels of internal consistency were obtained for fathers' ($\alpha = .74$) and mothers' ($\alpha = .77$) use of psychological control.

Patterns of intercorrelations were then examined. As expected, significant associations were found between the psychological control and the autonomy granting scales (r(90) = -.51 for mothers, r(90) = -.61 for fathers). The magnitude of these correlations is similar to that reported by Barber et al. (2001) and indicates that observed measures of behavior reflecting the active promotion of independence and psychological control share 25% of their variance for mothers and 36% of their variance for fathers. Data obtained through observation of triadic behavior thus support the conclusion drawn from questionnaire methods that autonomy granting and psychological control are related but distinct constructs (Tabachnick & Fidell, 2001).

To further evaluate the underlying factor structure of the codes, exploratory factor analyses (EFA) were conducted using the 8 items, collapsed across parents. One- and two-factor models were generated using a generalized least squares extraction method. Prior to completing the EFAs, the Kaiser-Meyer-Olkin measure of sampling adequacy statistic was examined to ensure reasonably sized correlations among the items; the KMO of .81 supported the suitability of the data for factor analysis.

Fit indices differed between the one- and two-factor models. The one-factor EFA revealed a significant chi-square goodness of fit, χ^2 (20, N=90) = 51.22, p < .001, and a chi-square to degrees of freedom ratio higher than 2, suggesting a less acceptable fit. The one-factor model accounted for 47% of the total variance. In contrast, the chi-square goodness of fit test for the two-factor model was nonsignificant, χ^2 (13, N=90) = 20.97, p > .05, and the chi-square to degrees of freedom ratio was less than 2, which provided support for the fit of this model. Furthermore, the two-factor EFA revealed the presence of 2 components with Eigenvalues exceeding 1, explaining a cumulative total of 59% of the variance. Consequently, it was deemed that the two-factor model was a better fit for these data. A nonorthogonal rotation was selected to allow for correlation between the factors, and this rotated solution revealed a clear pattern in which codes presumed to reflect autonomy granting loaded on one factor while the codes presumed to reflect psychological control loaded on the other factor. One code, Tolerates Differences and Disagreements, obtained a loading of above .30 on both factors. However, because the loading on the autonomy granting factor was substantially higher than the loading on the psychological control factor (.74 versus -.32), this item was retained on the autonomy granting scale. Rotated factor loadings are depicted in Table 2. The correlation between the factors was r(88) = -.54, p < .01.

Associations with Child and Family Functioning

We then investigated whether these parenting dimensions have unique, additive, or interactive effects on measures of child and family functioning. To examine gender differences, we assessed mothers and fathers separately.

Greater psychological control exhibited by both parents was correlated with parent reports of increased externalizing problems on the CBCL (father PC, r(88) = .22, p < .01; mother PC, r(88) = .31, p < .01) and fathers' psychological control was associated with youth reports of internalizing on the YSR (r(88) = .24, p < .05). Higher levels of autonomy granting were correlated with fewer externalizing problems on both parent (father AG, r(88) = .28, p < .01; mother AG, r(88) = -.39, p < .01) and youth reports (mother AG, r(88) = -.21, p < .05). To examine whether these parenting dimensions have unique or joint associations with adjustment, we conducted hierarchical regression analyses in which the two parenting scales were entered in the first step, followed by a centered interaction term (Psychological control × Autonomy granting) in the second step. The results of these analyses are presented in Table 3.

One or more significant predictors were found in 6 of the 12 regression analyses. First, parent reports of externalizing problems were uniquely predicted by fathers', b = -.23, p < . 05, and mothers' autonomy granting behaviors, b = -.31, p < .01, but not psychological control. However, the interaction between mother Psychological control and Autonomy granting was significant, b = -.22, p < .05. To aid in interpreting this interaction, we followed Aiken and West's (1991) guidelines, calculating the relation between mothers' psychological control and externalizing problems at high (1 SD above the mean) and low (1 SD below the mean) levels of mothers' autonomy granting. These analyses indicated that psychological control was strongly associated with externalizing problems when mother autonomy granting was low, b = -.85, p < .01, but was not significantly associated with externalizing problems at high levels of autonomy granting, b = -.58, p = .41 (Figure 1).

In regression analyses of youth reports of externalizing problems on the YSR, neither mothers' nor fathers' parenting behavior uniquely predicted aggression, but there was a significant interaction between mothers' expression of psychological control and autonomy granting, b = -.22, p < .05. Consistent with parent reports of externalizing behavior, post-hoc probing of this interaction showed that mothers' use of psychological control predicted greater aggression problems when mothers exhibited low levels of autonomy granting, b = -.86, p < .05, but were not related to aggression when mothers were high in autonomy granting, b = -.59, p = .08 (Figure 2).

The only significant predictor of internalizing problems was found on youth reports of anxiety/depression on the YSR. Specifically, there was a significant interaction between father Psychological control and Autonomy granting, b = -.71, p < .05. Post hoc probing of the interaction indicated that fathers' psychological control was related to greater youth internalizing problems when fathers exhibited low levels of autonomy granting, b = -.70, p < .01, but not when fathers were high in autonomy granting, b = -.47, p = .40 (Figure 3).

Table 4 presents the correlations of the parenting dimensions with interparental conflict and triangulation. Youth reports of the intensity, frequency, and resolution of interparental conflict were significantly associated with low father autonomy granting behavior (r(88) = .24, p < .05), and child triangulation into parental conflict was correlated with low father (r(88) = .23, p < .05) and mother (r(88) = .24, p < .05) autonomy granting. Psychological control was not related to either measure of family functioning.

To examine whether these parenting dimensions have unique or joint associations with family functioning, we conducted additional hierarchical regression analyses (Table 5). Two of the 4 analyses were significant. Mothers' autonomy granting accounted for unique variance in youth reports of triangulation into parental conflict, b = -.25, p < .05, and fathers' autonomy granting accounted for unique variance in the frequency and intensity of

parental conflict perceived by the child, b = -.28, p < .05. None of the interactions was significant.

DISCUSSION

The present study lends support to Barber et al.'s (2002, 2005) conceptualization of psychological control and autonomy granting as distinct but related dimensions of parenting. Consistent with studies using survey methods (e.g., Barber et al., 2001), we found significant correlations between psychologically controlling and autonomy granting behavior, but these associations were not so high as to indicate that they represent opposite ends of the same continuum. Moreover, factor analyses supported the fit of a 2-factor solution, with the items loading cleanly onto factors representing the two constructs. These findings are consistent with factor-analytic data reported by Silk and colleagues (2003) utilizing child reports of parenting. Obtaining consistent results across two different methodological approaches lends greater confidence to the conclusion that two constructs traditionally treated as opposite ends of a single continuum can be distinguished conceptually and empirically.

Psychological control and autonomy granting had unique and interactive associations with indices of child and family functioning. Specifically, psychological control was related to child and parent reports of externalizing problems and child reports of internalizing only when parents also exhibited low levels of autonomy granting behavior; when autonomy granting was high, psychological control was no longer associated with child adjustment. Finding that the link between psychological control and child adjustment problems is moderated by the extent to which parents foster children's autonomy indicates that measuring each independently provides a more sensitive assessment of the nature of parenting in the family than measuring the constructs along one continuum. Further, it underscores the importance of jointly considering the degree of psychological control and autonomy granting parents engage in; the net effect of these parenting dimensions is more important than either dimension on its own.

This is the first investigation to utilize observational methods to separately assess psychological control and autonomy granting among parents of children on the cusp of adolescence. The interaction task was intended to reflect a common experience among families during this developmental period: children seeking greater independence and freedom to make their own decisions. This situation presents parents with an opportunity to foster children's growing independence by listening nondefensively, encouraging children to express their ideas and feelings, and communicating respect for children's opinions even if they disagree with them, or to assert control in a manipulative or intrusive way by dismissing or invalidating their children's feelings, pressuring them to agree with the parent's point of view, or speaking for their child. Although the occurrence of some behaviors implies the nonoccurrence of others at a particular point in time (e.g., listening and interrupting), it is possible for parents to exhibit both types of behavior at different times, and parents who exhibited low levels of psychological control did not necessarily engage in high levels of autonomy granting (and vice versa).

This methodology provides a context for assessing subtle forms of psychological control and autonomy granting that parents or children may not be attuned to or are reluctant to report, and it captures what Barber and Harmon (2002) referred to as higher-order factors of psychological control (e.g., covert attempts to control, intrusiveness) and lower-order behaviors (e.g., stifling the child's verbal expression). However, it was not ideal for assessing other kinds of psychological control. For example, parents very rarely threatened to withdraw their love or attempted to induce guilt in their children. Extreme efforts to

manipulate and coerce may be more effectively assessed with questionnaire methods that cover a longer time frame and assess behaviors occurring in private settings.

The regression analyses provide the best test of whether psychological control and autonomy granting have unique or joint effects. Although both parenting dimensions were correlated with externalizing problems, only autonomy granting behavior by both parents accounted for unique variance in analyses that included both scales; furthermore, for mothers, autonomy granting moderated the association between psychological control and both parent and child reports of externalizing behavior. Hence, for mothers it appears that the combination of high psychological control and low autonomy granting may be more likely to elicit disruptive or aggressive youth behavior. When youth do not perceive support for their growing desire for greater independence, they may be more likely to respond to maternal control by engaging in defiant and noncompliant behavior to exert their autonomy.

Consistent with extant scholarship (Silk et al., 2003), fathers' psychological control was correlated with youth self-reports of internalizing symptoms; yet, in regression analyses that examined the unique and joint effects of the two parenting dimensions, psychological control was associated with greater anxiety and depressive symptoms only when fathers were low in autonomy granting. When fathers encouraged their children to voice their opinions and listened to them nonjudgmentally during the family discussion, psychological control was unrelated to internalizing problems. Thus, while psychological control may undermine the development of self-competence and ultimately lead to poor youth selfefficacy, avoidant coping styles, or symptoms of depression (Allen et al., 1994; Barber & Shagle, 1992; Barber, 1996; Conger et al., 1997; Fauber et al., 1990, Hauser et al., 1984; Holmbeck et al., 2001; Steinberg, 1990), it appears that high autonomy granting may serve to buffer the effects of psychological control on youth internalizing problems. It is less clear why a similar pattern did not emerge for mothers; however, given that mother psychological control and low autonomy granting were not correlated with youth internalizing at the bivariate level, it is plausible that either mothers respond to youth internalizing behavior with different strategies than fathers, or that youth do not perceive mother psychological control as undermining or restrictive.

Parents experiencing high levels of conflict in their relationship were less likely to actively promote autonomy and independence. These results suggest that conflict in the marital dyad is not necessarily associated with a spillover of negativity or hostility into the parent-child dyad (i.e., high psychological control) but, rather, that parents in conflictual marriages may be less attuned to the emotional needs of their children (Katz & Gottman, 1996). As such, important opportunities to promote growth during preadolescence may be inadvertently overlooked when parents are consumed with marital stress. Similarly, this study also found that parents of children who are triangulated into parental conflicts are less likely to exhibit autonomy granting behavior. Drawing children into a marital conflict represents an effort to resolve the disagreement but violates the interpersonal boundary between the marital relationship and the child (Minuchin, 1974); consequently, the child's needs are subordinated to those of the parents. The unique association between triangulation and autonomy granting may indicate that a similar process occurs when children request changes in the way the family functions. Parents who have difficulty subsuming their own needs in favor of their child's needs may be less receptive if they have wishes and ideas that differ from the status quo, whereas those who are sensitive to their child's growing autonomy as they approach adolescence may more actively encourage and support children's emerging independence. Although psychological control also disrupts the boundary between parents and children and so might be expected to account for unique variance in triangulation, it involves direct efforts to subvert children's efforts rather than a failure to encourage them. In a community sample, there may be relatively few parents who consistently engage in

psychological control, or parents may have been able to avoid overt displays of psychological control in a situation where their behavior was being observed.

Finding that autonomy granting predicted more indices of child and family functioning than did psychological control does not appear to be due to differences in the frequency of each behavior or the variability of the scales; the mean level of both parenting dimensions was near the midpoint for fathers and mothers, and the standard deviations were of similar magnitude. Associations among mother and father psychological control and autonomy granting were moderately high, suggesting that mothers and fathers engage in relatively similar parenting behaviors during interactions with their child. This may be due in part to parents' desire to present their children with consistent expectations, but also indicates that parents may be influenced by the behavior of their partner during family interactions.

Limitations and Future Directions

Certain limitations should be taken into consideration when interpreting these results. Because data were obtained from a predominantly European American, middle-class sample of preadolescents, care should be taken in generalizing the findings to single-parent, ethnic minority, low income families, or to older or younger children. Likewise, given the moderate participation rates, it is plausible that there was a self-selection bias inherent in the study sample such that participants may have consisted of higher functioning or more affluent families. Similarly, longitudinal data are required to establish causal associations between psychological control/autonomy granting and family functioning or youth adjustment; moreover, longitudinal data would be needed to confirm the hypothesis that autonomy granting functions as a moderator. Finally, future studies would benefit from the use of multi-informant, multi-method data. Extant scholarship (Holmbeck et al., 2001) suggests that there is consistency between youth report, parent report, and observed psychological control, but no studies to date have compared child, parent, and observational reports of psychological control and autonomy granting as separate indices. Although associations with child and family functioning provided preliminary evidence for the validity of this coding system, utilizing several methods of assessment may enable future work to capture the more extreme manifestations of psychological control, given that social desirability may have limited expressions of psychological control more than expressions of autonomy granting in the laboratory setting.

IMPLICATIONS FOR PRACTICE

These findings suggest that the way that parents respond to children's bids for greater independence have implications for their psychological health in early adolescence. Parents who encourage their children to undertake more responsibility, form independent ideas and opinions, and actively participate in family decision-making have children with fewer behavior problems, and these autonomy granting behaviors appear to offset the impact of psychologically controlling parenting. However, finding ways to promote youth autonomy while still maintaining firm and consistent limits can be challenging for parents of preadolescent youth; hence, it is important that clinicians work closely with parents to support their efforts to achieve this balance. Our findings further suggest that there may be parent-child dynamics that are specific to mothers versus fathers; thus, working with both parent-child communication, and the identification of family factors associated with low autonomy granting (such as interparental conflict or family dynamics that promote a sense of obligation to one parent or the other during parental discord) should be targeted in interventions with families.

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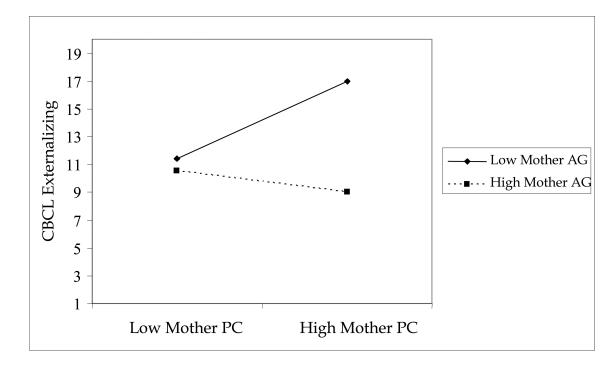


Figure 1.

Interaction between mother psychological control and autonomy granting predicting youth externalizing (CBCL Externalizing: Child Behavior Checklist Externalizing Composite Score; PC: Psychological Control; AG: Autonomy Granting).

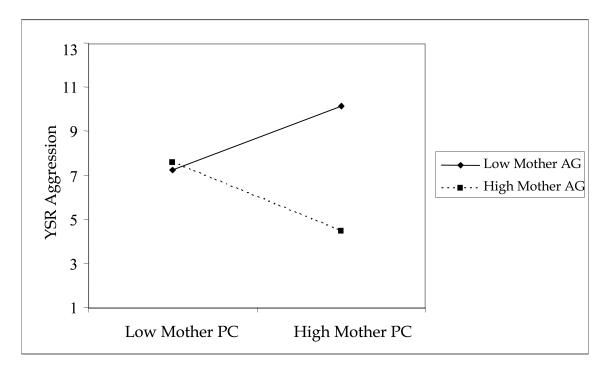


Figure 2.

Interaction between Mother Psychological Control and Autonomy Granting Predicting Youth Aggression (YSR Aggression: Youth Self-Report of externalizing; PC: Psychological Control; AG: Autonomy Granting)

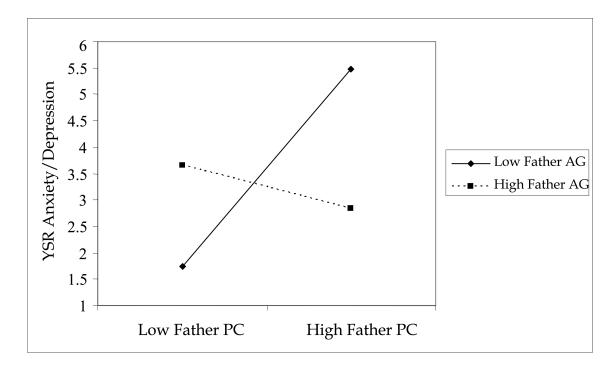


Figure 3.

Interaction between Father Psychological Control and Autonomy Granting Predicting Youth Internalizing (YSR Anxiety/Depression: Youth Self-Report of internalizing; C: Psychological Control; AG: Autonomy Granting).

TABLE 1

Modified Psychological Control and Autonomy Granting Codes

Item	Description			
Psychological Control Scale				
1. Constraining Verbal Expressions *	Degree to which the parent engages in behavior that prevents the child from talking (i.e., interrupting, speaking for the child).			
2. Pressures Child to Agree †	Degree to which the parent attempts to pressure the child to give into their ideas (i.e., by making it uncomfortable not to do so).			
3. Invalidating Feelings *	Degree to which the parent invalidates the feelings of the child (i.e., discounting feelings expressed by the child).			
4. Personal Attack on Child *	Degree to which the parent puts the child down (i.e., attacking the worth of the child).			
5. Guilt Induction	Degree to which the parent conveys that what the child is asking for hurts the parents (i.e., making the parent worry or feel sad).			
6. Love Withdrawal [*]	Degree to which the parent threatens to withdraw their love or attention if the child does not do or say what the parent expects.			
Autonomy Granting Scale				
1. Encourages Child to Express Individual * Views and Opinions	Degree to which the parent solicits the child's Psychological Control and Autonomy Granting 31 opinion even when the response differs from the parent's view.			
2. Receptive to Statements Made by the Child ${^{\dot{\tau}}}$	Degree to which the child "has a say" or has input in decisions (i.e., openness and permeability).			
3. Tolerates Differences and Disagreements †	Degree to which the parent is tolerant of disagreements and willing to engage in discussions about such differences (i.e., reacting non-defensively when the child disagrees).			
4. Encourages Independent Thinking $\stackrel{\not +}{\downarrow}$	Degree to which parents encourage the child to form his/her own conclusions (i.e., parent shares their opinion, but acknowledges that the child should form independent ideas about th world).			

Note.

* Items adapted from Barber (1996).

 $^{\dot{7}}$ Items adapted from Holmbeck, Belvedere, Gorey-Ferguson, and Schneider (1995).

 \ddagger Item created by the authors.

TABLE 2

Rotated Factor Loadings

Item	Factor 1 (Autonomy Granting)	Factor 2 (Psychological Control)
Constraining Verbal Expression	.03	<u>.81</u>
Pressures Child to Agree	.01	<u>.66</u>
Invalidating Feelings	.03	.87
Personal Attack on Child	28	<u>.60</u>
Encourages Child to Express Views	<u>.78</u>	02
Receptive to Statements Made by Child	<u>.84</u>	02
Tolerates Differences and Disagreements	<u>.74</u>	32
Encourages Independent Thinking	<u>.39</u>	.05

Note. Extraction Method: Generalized Least Squares; Rotation: Oblimin with Kaiser Normalization

TABLE 3

Results of Hierarchical Multiple Regression Analyses Predicting Youth and Family Functioning

Dependent Variable	Fathers		Mothers	
	β	R ²	β	R ²
CBCL Internalizing				
Step 1				
Psychological Control	.05		.01	
Autonomy Granting	12	.02	18	.03
Step 2				
$PC \times AG$	14	.04	10	.04
CBCL Externalizing				
Step 1				
Psychological Control	.09		.16	
Autonomy Granting	23*	.08	31*	.17
Step 2				
$PC \times AG$	04	.08	22*	.22
VCD Amiliano (Democrated			22	
YSR Anxious/Depressed				
Step 1	22		02	
Psychological Control		06	.02	.01
Autonomy Granting	12	.06	10	.01
Step 2 PC × AG	*	11	14	02
PC×AG	23*	.11	14	.03
YSR Aggression				
Step 1				
Psychological Control	.12		.02	
Autonomy Granting	09	.04	20	.04
Step 2				
$PC \times AG$	18	.07	22*	.09
Triangulation				
Step 1				
Psychological Control	01		06	
Autonomy Granting	23	.05	25*	.05
Step 2				
$PC \times AG$	11	.06	05	.05
Interparental Conflict				
Step 1				
Psychological Control	07		12	
Autonomy Granting	28*	.06	14	.02
	28			
Step 2	16	00	1.0	0.4
$PC \times AG$	16	.09	16	.04

 $Note. \beta$; Standardized Beta. CBCL Internalizing; Mother/father composite report of youth internalizing. CBCL Externalizing; Mother/father composite report of youth externalizing. YSR Anxious/Depressed; Youth report of internalizing. YSR Aggression; Youth report of aggression. PC/AG; Psychological Control/Autonomy Granting.

**p < .01

p < .05.