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ORIGINAL PAPER

Helicopter Parenting and Perceived Overcontrol by Emerging Adults: A Family-Level Profile Analysis

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Abstract

Helicopter parenting (HP) is associated with poorer adjustment and worse relationships with parents among emerging adults, but these associations may depend on interpretations of HP and the family context in which it occurs. This study examined within-family patterns of mothers' and fathers' HP behavior and youth felt overcontrol, and their associated adjustment, relational, and demographic correlates. Participants were 282 U.S. college undergraduates (Mage = 19.87 years, SD = 1.27, 71% female, 52% White, 25% Asian). Using surveys from a single time-point, students reported on HP and felt overcontrol by mothers and fathers and their own adjustment and relationship quality with each parent. Latent profile analysis revealed four profiles: Autonomous (low HP, low felt overcontrol—71%), Mother Overcontrol (high mother HP and felt overcontrol—11%), Father Overcontrol (high father HP and felt overcontrol—6%), and HP Acceptors (high HP, low felt overcontrol—12%). Internalizing problems and relationships with parents were worst among students in the overcontrolled profiles. HP Acceptors were highest in parental warmth and intimate disclosure with parents but no better than overcontrolled students on internalizing symptoms. Academic performance did not differ among profiles, but academic motivation was highest among the Mother Overcontrol group. Results show that families differ in relative levels of HP among mothers and fathers and that these patterns may impact emerging adults' interpretations of HP. In turn, emerging adults' interpretations of HP as overcontrol have important implications for their relationships with parents but less so for psychological adjustment.

Highlights

- There are distinct profiles of helicopter parenting by mothers and fathers and young adult's felt overcontrol.
- If only one parent engages in helicopter parenting, it is more often mothers, and accompanied by felt overcontrol.
- Some young adults experience helicopter parenting from both parents but do not feel overcontrolled.
- Felt overcontrol, not HP, differentiates profiles with worse parent-child relationships.
- Youth who experience and feel overcontrolled by HP show the worst adjustment; youth who experience neither are best adjusted.

Helicopter parenting (HP) is defined as excessive and overinvolved parenting that is considered age-inappropriate (Padilla-Walker and Nelson 2012; Segrin et al. 2012). It is generally characterized by parents limiting their child's autonomy, overly seeking information about their child's life, and direct intervention in any problems the child is having (Luebbe et al. 2018; Padilla-Walker and Nelson 2012). HP routinely shows negative associations with young adults' psychological adjustment, including lower self-worth and self-efficacy, greater depression and anxiety (Bradley-Geist and Olson-Buchannan 2014; Nelson et al. 2015; Luebbe et al. 2018), and poorer academic adjustment and motivation (Darlow et al. 2017; Luebbe et al. 2018; Schiffrin and Liss 2017). Such adjustment problems are believed to occur in part because HP reduces young adults' abilities to act autonomously and develop a sense of

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competence (Schiffrin et al. 2014). HP is also associated with poorer parent–child relationship quality and family functioning, including greater conditional regard (i.e., affection contingent on good behavior; Segrin et al. 2015) and more conflict with parents (Burke et al. 2018). These negative links with family relationships appear to stem from reduced feelings of relatedness among young adults exposed to HP (Schiffrin et al. 2014). The psychological needs of autonomy and relatedness have particular relevance during emerging adulthood. Both are key for successful identity development (Koepke and Denissen 2012), and optimally, must be in balance as youth gain legal and often, physical independence from direct parental oversight while maintaining dependence upon them for many elements of life (Arnett 2015).

Not all HP occurs in family environments that are critical or insensitive, however. Padilla-Walker and colleagues (Nelson et al. 2015; Padilla-Walker and Nelson 2012; Padilla-Walker et al. 2019) have shown that HP varies in its associations with parental warmth and psychological control and that adjustment correlates depend on these contextual factors. Specifically, unlike psychological control, which is a parental behavior inherently low in warmth and high in criticism (Barber 1996), HP can occur within warm or critical family contexts, and is linked with more depression, delinquency, and school problems mainly when warmth is low or psychological control is high (Nelson et al. 2015; Padilla-Walker et al. 2019). Further, young adults vary in whether they view highly involved parenting as problematic (Bradley-Geist and Olson-Buchannan 2014; Burke et al. 2018) and such interpretations may moderate the effects of HP on adjustment and family relationships. Youth interpretations of helicopter parenting behaviors may be particularly important in emerging adulthood, as parent–child relationships typically become more egalitarian during this time period. Youth may become better able to integrate autonomy and relatedness with parents (Koepke and Denissen 2012; Inguglia et al. 2015) and thus may be more likely to differentiate appropriate from overcontrolling parental assistance.

Despite such evidence, research on HP typically focuses on overt HP behaviors without considering children's interpretations of their parents' actions (e.g., Luebbe et al. 2018; Schiffrin et al. 2014; Segrin et al. 2012) or confounds objective parenting behaviors with subjective feelings of overcontrol when measuring HP (e.g., LeMoyne and Buchannan 2011; Schiffrin et al. 2019). Further, no research has examined patterns of both mothers' and fathers' HP together when examining children's interpretations of the behavior or its links with adjustment. Building upon Self-Determination Theory (Deci and Ryan 2012) and Family Systems Theory (Cox and Paley 1997), the current study therefore examined within-family patterns of mothers' and fathers' HP behavior and emerging adults' feelings of being overcontrolled and whether these patterns were associated with child adjustment and parent–child relationships.

The Role of Perception

It is well-established that youth perceptions of parenting practices regulate their impact on child behavior and adjustment. Parenting practices are most effective when children perceive them to be appropriate, are motivated to comply with parental wishes, and feel that resulting behaviors were not imposed, but rather self-generated (Grusec and Goodnow 1994). This has been observed to some extent with HP as well. Outcomes become more positive when young adults perceive HP as appropriate or it occurs in the context of parental warmth (Fingerman et al. 2012; Nelson et al. 2015; Padilla-Walker et al. 2019). Likewise, the negative associations between HP and adjustment appear to function in part through youth's feelings of being overcontrolled (Kerr and Stattin 2000; Rote et al. 2018; Winner and Nicholson 2018). Consistent with these findings, researchers working from a self-determination theory perspective (e.g., Deci and Ryan 2012) have argued that HP is problematic because it is a form of *controlling* rather than *autonomy supportive* parental involvement (Pomerantz et al. 2007; Schiffrin et al. 2014; Segrin et al. 2015).

Not all young adults are likely to interpret HP as equally over-controlling, however. For instance, Bradley-Geist and Olson-Buchannan (2014) separately assessed college students' ratings of the level of parental involvement in their lives and whether they felt that their parents were *overly*-involved. These variables were positively correlated but only at a relatively low level ($r = 0.16$), indicating potential variability in the degree to which parental involvement is perceived as excessive. Likewise, Burke et al. (2018) found only marginal associations ($\beta s = 0.10$–0.13) between parent-reported overparenting and their young adult children's perceptions of parental facilitation versus interference in their lives—again indicating the likelihood of interindividual variability in interpretations of HP. Indeed, Segrin et al. (2015) note that overparenting may be in the "eye of the beholder" (p. 478) and suggest that some emerging adults may not even be aware of parents' HP behaviors.

Knowing whether a young adult interprets HP as overcontrolling may therefore be particularly important for determining if and how HP will have negative associations with their adjustment and relationships with parents. Involvement can be a positive thing (Fingerman et al. 2012; Bradley-Geist and Olson-Buchannan 2014), but perceived overparenting and felt overcontrol have negative links with adjustment, including low social and general self-efficacy,

high norm-breaking, and low family closeness (Bradley-Geist and Olson-Buchannan 2014; Day and Padilla-Walker 2009; Lee and Kang 2018). Self-determination theory suggests that HP will be particularly detrimental when it undermines young adult's sense of autonomy or competence as well as their sense of relatedness (Segrin et al. 2015)—that is, when youth report both experiencing objective HP behaviors (which should reduce opportunities to develop feelings of competence and autonomy; Schiffrin et al. 2014) and feeling overcontrolled (which should reduce a sense of relatedness with parents; Segrin et al. 2012; 2015). Empirical findings support this: Kerr and Stattin (2000) found that parental solicitation and control are associated with negative adjustment and more family discord because adolescents interpret these behaviors as overcontrolling. When felt overcontrol was statistically controlled, parental solicitation and control was positively associated with adjustment and relationships. Likewise, HP appears associated with lower family functioning and emerging adult adjustment partially because young adults perceive parents as less facilitating of their goals (Burke et al. 2018), more psychologically controlling (Rousseau and Scharf 2015), or more overcontrolling (Rote et al. 2018).

The Family System

Most research on HP focuses on "parents" in general (e.g., Lowe et al. 2015; Padilla-Walker and Nelson 2012) or just mothers (e.g., Reed et al. 2016; Schiffrin et al. 2014). When both parents are assessed, they tend to be considered separately (e.g., Nelson et al. 2015; Padilla-Walker et al. 2019), or their responses are combined for primary analyses (e.g., Padilla-Walker and Nelson 2012). These studies have shown some differences in maternal and paternal HP. For instance, compared to fathers, mothers often exhibit more HP (McGinley 2018; Padilla-Walker and Nelson 2012; Padilla-Walker et al. 2019; Rousseau and Scharf 2015), and associations between their HP behavior and young adult adjustment appear more subject to moderation (by perceived warmth, Nelson et al. 2015; by psychological control, Rousseau and Scharf 2015). However, research drawing on family systems theory (Cox and Paley 1997) and the co-parenting literature (McHale et al. 2019) demonstrates that parenting behaviors must be understood within the broader family context. Each parent's behavior may impact the other's and combine to create a family environment with distinct effects from either dyadic parent–child relationship (Cox and Paley 1997; McHale et al. 2019). Youth often show the most benefit when parents collaborate and support one another in their parenting strategies (Teubert and Pinquart 2010). Specifically, co-parenting consistency, or the extent to which parents cooperate in their parenting behaviors and parent in non-contradictory and predictable ways (Roskam and Meunier 2009) predicts child adjustment over and above individual parenting behaviors (Chen et al. 2017, 2010), and conflict over parenting behaviors predicts increased parental negativity and antisocial behavior in adolescence (Feinberg et al. 2007).

Further, from a family systems perspective, families operate as organized systems with self-stabilizing features. These patterns are maintained through feedback cycles that regulate the roles each family member fills and how they should interact, but are open to reorganization at points of transition, such as when adolescents move into adulthood (Cox and Paley 1997). Families in which only one parent engages in HP inherently exhibit less coparenting consistency. As such, these families may be less cohesive and stable (Chen et al. 2017), HP may occur in a more negative family context (Feinberg et al. 2007), and youth in these families may be more apt to recognize and resent HP as inappropriate during developmental transitions. In contrast, families in which both parents engage in HP at similar levels may be more cohesive and experience less coparenting conflict. In turn, this may result in better family relationships but also a tendency for emerging adults to resist a reorganization of the family system at a conceptual level—by not viewing HP as inappropriate or overcontrolling.

Research has not directly examined these questions. However, there is limited evidence that youth may more positively interpret and respond to HP when parents consistently engage in the behavior. Berkien et al. (2012) found that youth who perceived greater dissimilarity in their mothers' and fathers' overprotective behaviors displayed more internalizing and externalizing problems, controlling for overall levels of parental overprotection experienced. More broadly, youth tend to view parenting behaviors more positively when they consider them more normative (Gershoff et al. 2010) and a similar process may occur within the family system: the more that children are exposed to a parenting behavior, the more likely they are to view that behavior positively (Barnett et al. 1996).

A Person-Centered Approach

Person-centered analytic approaches are ideally suited to answering questions about the family system. They identify common patterns of variables within a person or family and then treat that person (or family) as the variable of interest (Lanza and Cooper 2016). This process can more fully capture the complex dynamics (including high level interactions and non-linear relationships) present at the system level and their associations with outcomes of interest

(Bauer and Shanahan 2007). In contrast, variable-centered approaches such as regression or structural equation modeling focus on the unique effect of one variable, controlling for or in interaction with one or more other variables, and may not represent common configurations of variables in the population (Bauer and Shanahan 2007). When considering HP at the family level, latent profile analysis allows researchers to identify distinct groups of emerging adults who show similar patterns in the extent to which they experience HP from one or both parents and the extent to which they perceive each parent as overcontrolling. Although LPA does not identify all potential interactions, it allows researchers to identify key patterns of values across variables that are likely to meaningfully differ in their associations (Lanza and Cooper 2016). These patterns, or "profiles," can then be examined for conceptual meaning and for significant differences in correlates of interest (such as demographic characteristics or adjustment; Lanza et al. 2013). Indeed, Padilla-Walker et al. (2019) has recently used such an approach to identify distinct typologies of HP (e.g., controlling versus supportive) within young adults' relationships with mothers and fathers.

The Current Study

The purpose of the current study was to (a) derive profiles of families that vary in emerging adults' reports of mothers' and fathers' HP and felt overcontrol, and (b) examine associations between these profiles and emerging adults' adjustment, relationships with parents, and demographic features. As this is a novel approach to examining HP, these analyses were mainly exploratory. However, based on the overall frequency of maternal and paternal HP (Rousseau and Scharf 2015; Padilla-Walker and Nelson 2012; Padilla-Walker et al. 2019), evidence that youth respond more positively when mothers and fathers are similar in their level of overprotective behavior (Berkien et al. 2012), and the advantages of coparenting consistency (Chen et al. 2017), we expected to find four profiles. Specifically, we expected profiles where only mothers were high in HP and perceived as overcontrolling, only fathers were high in HP and perceived as overcontrolling, both parents were high in HP and felt overcontrol was low, and neither parent was high in HP and felt overcontrol was low. It was possible that additional profiles might emerge in which both parents were high in HP and perceived as overcontrolling, or only one parent was high in HP but neither was perceived as overcontrolling. However, we viewed these profiles as less likely, as we expected emerging adults' lower felt overcontrol in the face of HP to stem from greater coparenting consistency in dual HP families and the consequent increases in family cohesion and normalization of HP.

Evidence for demographic differences in HP is inconsistent, with often conflicting findings for levels of parental involvement and interpretations of such involvement as overparenting. For instance, studies have shown no association between college student age and HP (Nelson et al. 2015), a negative association (Kouros et al. 2017), and that older college students report less parental involvement but not fewer feelings of *being* overparented (Bradley-Geist and Olson-Buchanan 2014). Likewise, some research shows that Asian-American youth may perceive parental involvement as more overcontrolling and Hispanic students may be less likely to experience HP (Bradley-Geist and Olson-Buchanan 2014), but other research indicates that Caucasian youth may be less likely to experience HP than minority adolescents (Lowe et al. 2015) or that there is no association between HP and race or ethnicity (Kouros et al. 2017). There is also relatively little evidence that HP levels differ by child gender (e.g., Kouros et al. 2017; LeMoyne and Buchanan 2011; Scharf and Rousseau 2017; but see Luebbe et al. 2018). It is possible, though, that male and female emerging adults interpret such parenting somewhat differently. Kouros et al. (2017) found that psychological adjustment was less related to HP for male than female emerging adults, and Bradley-Geist and Olson-Buchanan (2014) found that female college students reported more parental involvement than did males, but interpreted it as less indicative of over-parenting, We therefore examined age, ethnic, and gender correlates of the emergent family HP profiles to better understand potential demographic differences in family HP patterns, but made no specific hypotheses.

We examined internalizing symptoms and academic adjustment (motivation and performance) as potential adjustment correlates of family HP profiles. We examined parental warmth, parent-student discord, and intimate disclosure to parents as potential relationship correlates of family HP profiles. As perceived overcontrol is a key mechanism through which HP negatively affects relationships and youth adjustment (Burke et al. 2018; Kerr and Stattin 2000; Rote et al. 2018; Rousseau and Sharf 2015), we expected that emerging adults' relationships with parents and psychological adjustment would be better when they perceived less parental overcontrol, regardless of reported levels of HP. We expected links between felt overcontrol and relationship quality with parents to be parent-specific (for instance, greater felt maternal overcontrol would be mainly linked with worse relationships with *mothers*), but we hypothesized that links between felt overcontrol and adjustment would be related to amount of felt overcontrol experienced more broadly (as these associations function through general feelings of reduced competence and autonomy; Schiffrin et al. 2014). We also expected that higher levels of HP would be associated with

less academic motivation and achievement regardless of felt overcontrol, as HP reduces emerging adults' opportunity to develop competence regardless of whether they perceive it as overcontrolling.

Methods

Participants

Three hundred college undergraduates from a private liberal arts university in [City and State blinded for review] participated in the study. Of these, 18 participants failed to meet cutoff criteria on the Attentive Responding Scale (ARS-18; Maniaci and Rogge 2014) and were removed from the data set. The final sample consisted of 282 college undergraduates (*M*age = 19.87 years, *SD* = 1.27, range 18–24 years) and were relatively evenly divided among freshmen (27%), sophomores (34%), juniors (20%) and seniors (19%). Students were primarily female (71%) and mainly identified as White (57%), Asian (25%), or Black (6%); 11% reported being Latinx. Approximately 90% of students lived on campus, with most others living off campus but away from parents.

Students participated in the study through the university's research participant pool (SONA) in exchange for extra credit in a psychology course. After agreeing to informed consent procedures, as approved by the university's Institutional Review Board (RSRB00046771), students completed a brief online survey directly through the SONA questionnaire platform; no identifying information was linked with their data. Students reported on all parenting measures separately for mothers (or "the woman who has most acted as a mother in your life") and fathers (or "the man who has most acted as a father in your life") and only if they indicated that they had a relevant mother/father figure in their lives. All students reported on mothers (99% of whom were biological or adoptive mothers); 14 students (5%) did not report on fathers. Results did not meaningfully differ with these 14 participants removed, and thus all participants were retained in the final dataset to maximize power. Missing father data was estimated using robust maximum likelihood methods. Of the students reporting on fathers, 97% reported on biological or adoptive fathers.

Measures

Helicopter parenting

Students rated their mother's and father's HP behavior using Padilla-Walker and Nelson's (2012) five-item HP scale. Students answered questions on a five-point scale ranging from 1 (*not at all like him/her*) to 5 (*a lot like him/her*). Sample items include "My mother/father intervenes in solving problems with my employers or professors" and "My mother/father makes important decisions for me (e.g., where I live, where I work, what classes I take)." Higher scores represent greater HP behavior. The scale was reliable for reports of mothers (α = 0.71) and fathers (α = 0.72).

Parental overcontrol

Students reported on felt maternal and paternal overcontrol using Kerr and Stattin's (2000) five-item felt parental overcontrol measure, reworded for separate reports on mothers and fathers. Items included, "I feel as though my mother/father controls everything in my life" and "My mother/father interferes too much in my free time activities." Items were rated on a scale of 1 (*never or almost never*) to 5 (*always or almost always*). The scale demonstrated good reliability for reports of mothers (α = 0.88) and fathers (α = 0.84).

Parent–child discord

Discordant interactions between college students and their parents were assessed using the Networks of Relationships Inventory - Social Provisions Version (NRI-SPV; Furman and Buhrmester 1985). Students reported on three items assessing conflict (e.g., "How much do you and your mother/father argue with each other?") and three assessing antagonism (e.g., "How much do you and your mother/father get on each other's nerves?") separately for interactions with mothers and fathers on a scale from 1 (*never or hardly at all*) to 5 (*always or extremely much*). These six items were averaged to create an overall "discord" score, which demonstrated excellent reliability for reports of both mothers (α = 0.94) and fathers (α = 0.95).

Parental warmth

Students reported on maternal and paternal warmth using the 6-item warmth subscale of the Perceptions of Parents Scale (Grolnick et al. 1991). Example items included "my mother/father finds time to talk with me" and "my mother makes me feel very special." Student rated items on a scale of 1 (*not at all*) to 7 (*very true*). Reliability was excellent for reports of both mothers (α = 0.90) and fathers (α = 0.90).

Intimate disclosure

Students reported on their intimate disclosure to mothers and fathers using the intimate disclosure subscale of the Networks of Relationships Inventory—Social Provisions Version (NRI-SPV; Furman and Buhrmester 1985). The three scale items were: "how often do you tell your mother/

father things that you don't want others to know?" "how often do you tell your mother/father everything that you are going through?" and "how often do you share secrets and private feelings with your mother/father?." Students rated each item on a scale from 1 (*never or hardly at all*) to 5 (*always or extremely much*). The composite (average) scale score demonstrated excellent reliability for reports of both mothers ($\alpha = 0.93$) and fathers ($\alpha = 0.92$).

Internalizing symptoms

Internalizing symptoms were assessed using the 21-item Depression, Anxiety, and Stress Scale (DASS-21; Lovibond and Lovibond 1995). The DASS-21 and has been extensively validated in clinical and non-clinical samples of adults (e.g., Brown et al. 1997; Sinclair et al. 2012) and adolescents (e.g., Moore et al. 2017). This scale assesses three subscales measuring depressive symptoms (e.g., "I couldn't seem to experience any positive feeling at all"), anxiety (e.g., "I felt I was close to panic"), and stress (I found it difficult to relax"). Items were rated on a scale from 1 (*did not apply to me at all*) to 4 (*applied to me very much or most of the time*) and were averaged to create an overall "internalizing symptoms" scale, which demonstrated excellent reliability ($\alpha = 0.91$).

Academic motivation

Academic motivation was assessed using the six items forming the "motivation" cluster of the academic adjustment subscale of the Student Adaptation to College Questionnaire (SACQ; Baker and Siryk 1999). Example items included "I am definite about my reasons for being in college" and "I consider a college degree important." Participants rated items on a 1 (*not true for me)* to 4 (*really true for me)* scale. Scale reliability was acceptable ($\alpha = 0.77$).

Academic achievement

Academic achievement was assessed by students' self-reported current grade point average (GPA), which could range from 0.0 (all F's) to 4.0 (all A's).

Analytic Plan

Students' ratings of HP and feeling overcontrolled by mothers and fathers were examined using latent profile analysis in Mplus 8.3 (Muthén and Muthén 1998–2017). Maximum likelihood estimation with robust standard errors (MLR) was used to account for non-normality within the data and to estimate missing values, which accounted for 3% of the data and were missing completely at random (Little's MCAR test χ^2 (8) = 6.48, $p = 0.59$). In accordance with current guidelines (e.g., Collins and Lanza 2010; Geiser 2012; Nylund et al. 2007), we selected the number of profiles to retain based on the solution with the lowest SABIC value (or a low SABIC value and small change in SABIC thereafter), a significant BLRT value (a bootstrapped log-likihood difference test indicating a significantly better fit for the current profile solution compared to the solution with N-1 profiles), a smallest class size greater than 5% of the sample, and profiles that each showed distinct patterns, rather than just mean level differences (e.g., high, medium, and low on variables across the board). After determining the number of profiles to retain, profiles were examined for differences in demographic predictors, emerging adult adjustment, and relationship quality with parents. Demographic predictors (age, gender, race, ethnicity) of profile membership were examined using the R3step procedure in Mplus, in which latent profile membership is regressed on each predictor. Predictors were examined independently, so as not to suppress results and to maximize the number of cases included in each analysis (MPlus applies listwise deletion to cases with missing exogenous [predictor] variables in regression-type analyses). As there was very little missing data on these predictor variables (less than 2.5% of cases for race and ethnicity variables; less than 1% of cases for age and gender variables) and the data were MCAR, listwise deletion should not bias results (Graham 2009). Next the automated Mplus BCH procedure was used to compare profiles on distal outcomes (adjustment and relationship quality variables; Asparouhov and Muthén 2018). This procedure involves performing a weighted ANOVA that compares the mean level of an outcome across profiles (including pairwise follow-up comparisons), with weights based on profile classification error probabilities, thus incorporating the probabilistic nature of profile membership as well as measurement error of the latent class variable (Bakk and Vermunt 2016). To determine whether controlling for significant demographic correlates impacted class differences in distal outcomes, we verified results using a manual 3-step BCH procedure (Asparouhov and Muthén 2018), in which we manually regressed profiles and outcomes on demographic variables during the mean comparison process. Class differences in distal outcomes did not change when demographic covariates were controlled; thus, results are presented without covariates (using the automated Mplus BCH procedure) to render the mean values on distal outcomes more meaningful.

Results

Descriptive statistics and correlations for all main study variables are presented in Table 1. Notably, HP and felt

Table 1 Descriptive statistics and intercorrelations of relevant measures

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. M HP Beh															
2. M Ovctrl	0.49**														
3. M Discord	0.35**	0.65**													
4. M Warmth	−0.04	−0.37**	−0.65**												
5. M Discl	0.19**	−0.09	−0.26**	0.46**											
6. F HP Beh	0.44**	0.14*	0.04	0.08	0.16**										
7. F Ovctrl	0.32**	0.32**	0.16**	−0.16**	0.03	0.40**									
8. F Discord	0.26**	0.16*	0.22**	−0.15*	−0.06	0.31**	0.59**								
9. F Warmth	−0.09	−0.18**	−0.24**	0.46**	0.20**	0.09	−0.35**	−0.49**							
10. F Discl	0.022	0.05	0.01	0.15*	0.36**	0.32**	0.03	−0.15*	0.39**						
11. Intern	0.25**	0.22**	0.28**	−0.29**	−0.03	0.12	0.22**	0.29**	−0.36**	−0.09					
12. Ac Motiv	0.04	0.03	0.03	0.12*	0.15*	−0.04	−0.01	0.03	0.13*	0.13*	−0.19**				
13. GPA	0.12	0.02	0.03	0.03	0.02	−0.01	−0.02	0.07	0.01	−0.12	0.03	0.18**			
14. Age	0.16**	−0.07	−0.03	−0.06	−0.06	−0.15*	0.03	−0.11	0.03	0.05	−0.19**	0.05	0.02		
15. Gender	−0.04	0.06	0.11	−0.14*	0.04	−0.15*	−0.11	0.02	−0.04	−0.12	0.09	0.11	0.01	−0.09	
Mean	1.78	1.98	2.02	5.97	2.39	1.61	1.55	1.85	5.61	1.79	1.66	3.55	3.41	19.87	0.72
SD	0.66	0.83	0.74	1.12	1.19	0.62	0.67	0.69	1.28	0.94	0.46	0.53	0.41	1.27	0.45

Gender (0 = male, 1= female)

M mother, *F* father, *HP* Helicopter Parenting, *Beh* behavior, *Ovrctrl* overcontrol, *Discl* disclosure, *Intern* internalizing, *Ac Motiv* academic motivation

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

overcontrol were moderately correlated with one another and between mothers and fathers. As others have found (e.g., Padilla-Walker et al. 2012; 2019), HP was not significantly associated with warmth for either parent. However, felt overcontrol *was* negatively associated with warmth for both parents and showed a stronger association with discord than did HP (especially within-parent). HP was associated with more intimate disclosure (within-parent) but felt overcontrol was not. Internalizing symptoms were significantly associated with more HP and felt overcontrol from mothers but only with more felt overcontrol from fathers. Finally, as observed by Bradley-Geist and Olson-Buchanan (2014), increased age was associated with less reported HP but not less felt overcontrol.

Emergent Profiles

A final solution consisting of four profiles (see Table 2) was selected based on the criteria described previously. Entropy was low and latent class probabilities (Table 3) were high for each class, indicating a high degree of confidence in sample membership in appropriate profiles. Although the smallest class in the 5-profile solution was not much smaller than that of the 4-profile solution and the BLRT showed a continued increase in fit when this profile was added, examination of the profiles themselves showed that the fifth profile merely replicated the pattern of an already existing profile (the autonomous group) at slightly higher overall mean level of each variable. In contrast, the fourth profile was conceptually meaningful (a novel pattern, distinct from any other profile) and consisted of over 10% of the sample.

Profiles are depicted in Fig. 1. The largest profile (termed *"Autonomous"*) comprised 71% of the sample and consisted of emerging adults reporting low HP and felt overcontrol for both parents. The second profile (termed *"Mother Overcontrol"*) comprised 11% of the sample and consisted of emerging adults reporting that their mothers, but not their fathers, were relatively high in HP and felt overcontrol. The third profile (termed *"Father Overcontrol"*) comprised 6% of the sample and was essentially the inverse of the *Mother Overcontrol* group. Here, fathers rather than mothers were the ones higher than average on HP behavior and felt overcontrol, although mothers' levels of HP and felt overcontrol were not as low in this group as father's levels were in the *Mother Overcontrol* group. The final profile (termed *"HP Acceptors"*) comprised 12% of the sample and consisted of emerging adults who reported relatively high levels of mother and father HP behaviors (equal to that of the *Mother Overcontrol* and *Father Overcontrol* groups) but relatively low felt overcontrol by either parent.

Table 2 Fit indeces for profile solutions

	SABIC	BLRT	Entropy	Smallest profile N
1 profile	2310.14	–	–	–
2 profiles	2100.69	221.801***	0.85	79 (28%)
3 profiles	2007.87	105.169***	0.89	20 (7%)
4 profiles	**1962.93**	**57.30*****	**0.90**	**17 (6%)**
5 profiles	1944.49	30.80***	0.91	14 (5%)
6 profiles	1922.81	34.03***	0.91	6 (2%)

BLRT = 2 times the loglikelihood difference, df = 5

Selected profile in bold. ***$p < 0.001$

Table 3 Average latent class probabilities for most likely latent profile membership (Row) by latent profile (Column)

	1	2	3	4
1 (Autonomous)	**0.970**	0.009	0.002	0.018
2 (M Overcontrol)	0.030	**0.915**	0.003	0.052
3 (F Overcontrol)	0.014	0.004	**0.920**	0.062
4 (HP Accepters)	0.054	0.042	0.025	**0.879**

Bold cells indicate the probability for each profile that the identified latent profile matches the most likely latent profile. *M* mother, *F* father

Profile Correlates

The following significant differences emerged. Values and significance of distal outcomes comparisons are presented in Table 4.

Older students were more likely to be in the *Autonomous* than in the *Father Overcontrol* profile, log odds = 0.35, SE = 0.17, $p = 0.041$. Girls were more likely than boys to be in the *Mother Overcontrol* profile, log odds = 1.40, SE = 0.71, $p = 0.048$, and marginally, in the *Autonomous* profile, log odds = 0.87, SE = 0.45, $p = 0.053$ than the in the *HP Acceptors* profile. Hispanic participants were less likely to be in the *Father Overcontrol* profile than in any other profile, log odds = −17.73, −17.44, −17.46, SEs = 0.31, 0.73, 0.71, $ps < 0.001$. Race did not significantly predict profile membership.

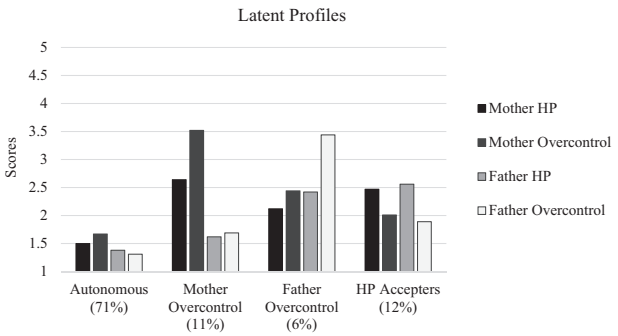

Fig. 1 Emergent profiles of family-wide helicopter parenting and felt overcontrol

Table 4 Profile differences in adjustment and relationships with parents

Variable	Autonomous (71%, $n = 199$)	Mother Overcontrol (11%, $n = 32$)	Father Overcontrol (6%; $n = 17$)	HP Accepters (12%, $n = 34$)	Overall χ^2 test ($df = 3$)
Discord (Mother)	1.84 (0.60)^{a}	3.16 (0.64)^{c}	2.30 (0.78)^{b}	1.87 (0.52)^{a,b}	76.72, $p < 0.001$
Warmth (Mother)	6.06 (1.05)^{a}	5.14 (1.22)^{b}	5.42 (1.32)^{a,b}	6.47 (0.72)^{c}	20.44, $p < 0.001$
Intimate Disclosure (Mother)	2.29 (1.15)^{a}	2.27 (1.16)^{a}	2.23 (1.18)^{a}	3.23 (1.11)^{b}	13.66, $p = 0.003$
Discord (Father)	1.68 (0.54)^{a}	1.96 (0.50)^{b}	3.06 (1.11)^{c}	2.11 (0.53)^{b}	37.46, $p < 0.001$
Warmth (Father)	5.72 (1.23)^{a}	5.39 (1.19)^{a}	4.35 (1.58)^{b}	5.86 (1.03)^{a}	11.31, $p = 0.010$
Intimate Disclosure (Father)	1.70 (0.89)^{a}	1.63 (0.62)^{a}	1.88 (1.12)^{a,b}	2.40 (1.07)^{b}	9.56, $p = 0.023$
Internalizing	1.60 (0.43)^{b}	1.82 (0.41)^{a}	1.98 (0.57)^{a}	1.72 (0.48)^{a,b}	11.17, $p = 0.011$
Academic Motivation	3.55 (0.54)^{a}	3.77 (0.24)^{b}	3.57 (0.58)^{a,b}	3.38 (0.53)^{a}	13.25, $p = 0.004$
GPA	3.43 (0.41)^{a,b}	3.49 (0.32)^{a}	3.43 (0.33)^{a,b}	3.24 (0.45)^{b}	4.11, $p = 0.249$

Values represent mean levels (and standard deviation) for each variable in each profile. GPA was measured on a 0–4 scale, Internalizing and Academic Motivation on a 1–4 scale, Discord and Intimate Disclosure on a 1–5 scale, and Warmth on a 1–7 scale. Overall χ^2 test represents the omnibus comparison of profile differences on variable in question. Values within a row that share a superscript letter (e.g., "a") are not significantly different at $p < 0.05$; values within a row with no overlap in superscript letters (e.g., "a" vs "b") significantly differ. Effect size (Cohen's d) for mean comparisons can be calculated by taking the difference of two means divided by their pooled standard deviations

Tests of overall group differences were significant for reports of discord with mothers, intimate disclosure to mothers, and maternal warmth. Students in the *Mother Overcontrol* profile reported more discord with mothers than students in any other profile, followed by students in the *Father Overcontrol* profile, and then the two other profiles. *HP Acceptors* reported more intimate disclosure to mothers and maternal warmth than any other group. Maternal warmth was significantly lower in the *Mother Overcontrol* profile than in the *Autonomous* group, although warmth was still relatively high (above a 5 on a 7-point scale) in both profiles.

Likewise, reports of discord with fathers, intimate disclosure to fathers, and paternal warmth showed significant overall group differences, with the results for fathers paralleling those for mothers. Students in the *Father Overcontrol* profile reported the most discord with fathers, followed by students in the *Mother Overcontrol* and *HP Acceptors* profiles, and then the *Autonomous* group. *HP Acceptors* reported more intimate disclosure to fathers than did students in the *Autonomous* or *Mother Overcontrol* profiles. Paternal warmth was lower in the *Father Overcontrol* group than any other profile.

There were significant overall group differences in reports of internalizing symptoms and academic motivation but not GPA. *Autonomous* students reported significantly fewer internalizing symptoms than did students in the *Mother Overcontrol* or *Father Overcontrol* groups. *HP Acceptors* did not differ from any of the other groups on internalizing symptoms. Surprisingly, students in the *Mother Overcontrol* group reported more academic motivation than did *Autonomous* students or *HP Acceptors*.

Discussion

Previous research has been limited in its focus on HP in mothers (e.g., Reed et al. 2016; Schiffrin et al. 2014), on "parents", considered globally (e.g., Lowe et al. 2015; Padilla-Walker and Nelson 2012), and on reports of mothers and fathers either analyzed separately (e.g., Nelson et al. 2015; Padilla-Walker et al. 2019), or combined (e.g., Padilla-Walker and Nelson 2012). Thus, the present study made a novel contribution to the literature by drawing on family systems perspectives and employing person-centered analyses to examine combined patterns of mothers' and fathers' HP behavior within families. We derived profiles of families varying in youth's reports of mothers' and fathers' HP and felt overcontrol and also examined their links with emerging adults' psychosocial adjustment and relationships with parents. Consistent with our expectations, four family profiles of HP behaviors emerged from the data: a *Mother Overcontrol* profile, where mothers were high in HP and felt

overcontrol, a *Father Overcontrol* group, where fathers were high in HP and felt overcontrol, *HP Acceptors*, where both parents were seen as high in HP and lower in felt overcontrol, and an *Autonomous* group, where neither parent was rated high in HP or felt overcontrol. Among three of these profiles, felt overcontrol mirrored reported HP behavior; youth perceived greater parental overcontrol when they reported higher HP by a given parent. However, the *HP Acceptors* profile, where both parents demonstrated relatively high levels of HP, did not follow this pattern. These youth reported high HP but low felt overcontrol from both parents. Profiles differed in youth demographics, youth adjustment, and parent–child relationship quality. Broadly, higher HP was associated with generally worse outcomes; however, relationships with parents (but not adjustment) were only worse when youth experienced higher HP in combination with feeling overcontrolled (as compared to without such perceptions). Specific differences in profile correlates and their implications are discussed below.

General Distribution of Profiles

Consistent with the relatively low frequency of HP observed in other U.S. college samples (e.g., Padilla-Walker and Nelson 2012; Schiffrin et al. 2014), the *Autonomous* profile accounted for the majority of emerging adults in the present study. Nevertheless, approximately 29% of youth reported one or both parents engaging in relatively higher levels of HP compared to the sample average (although, as found by Padilla-Walker et al. (2019), the level of HP behavior was only moderate even in these profiles). Importantly, of the 29% of students in our sample experiencing higher HP, a little under half (12%) did not perceive this behavior to be overcontrolling. As expected, these students were from families in which they perceived both parents as engaging in HP. This is consistent with cross-cultural research demonstrating that parenting practices may appear more acceptable when they are perceived as normative (Gershoff et al. 2010), but extends these findings to the family system. The results also support the notion that students may have differing perceptions on what parenting practices are considered intrusive versus thoughtful (Bradley-Geist and Olson-Buchanan 2014; Segrin et al. 2015).

Consistent with evidence that mothers more commonly engage in HP than fathers (McGinley 2018; Padilla-Walker and Nelson 2012; Padilla-Walker et al. 2019; Rousseau and Scharf 2015), the *Father Overcontrol* profile was about half the size of the *Mother Overcontrol* profile. Youth also reported that mothers engaged in more HP in the *Father Overcontrol* profile than fathers did in the *Mother Overcontrol* profile. Nevertheless, among profiles with relatively higher HP, reported levels of HP for mothers and fathers were about equal. Thus the frequency of HP behavior may differ among mothers and fathers but the extent to which they engage in the behavior, when they choose to do so, appears relatively equivalent.

Demographic differences were relatively infrequent between profiles. Consistent with findings that older emerging adults report less HP (Kouros et al. 2017), age was associated with an increased likelihood of being in the *Autonomous* profile relative to the *Father Overcontrol* profile. However, the lack of age differences in membership in the *Mother Overcontrol* and *HP Acceptors* profiles also highlights that some students continue to experience higher levels of overparenting, especially by mothers, as they progress through emerging adulthood, and vary in their feelings about it. Likewise, girls were more likely than boys to be in the *Mother Overcontrol* profile, but only in comparison to the *HP Acceptors* profile. This finding conflicts with Bradley-Geist and Olson-Buchanan (2014)'s evidence that female college students interpret HP as less indicative of over-parenting than do males, but might explain why Kouros et al. (2017) found that HP was less related to psychological adjustment for male than female emerging adults. The most consistent demographic difference was that Hispanic participants were less likely to be in the *Father Overcontrol* profile than in any other profile. This finding aligns well with research showing that protective parenting (involving high warmth and control but low autonomy granting) and high paternal involvement may be particularly normative in Latinx families (Cabrera and Bradley 2012; Domenech Rodriguez et al. 2009), and thus that Hispanic emerging adults may be less likely to recognize or perceive fathers' HP as overcontrol. Cultural diversity in emerging adults' recognition of and reactions to HP may even explain some of the inconsistent findings regarding racial or ethnic differences in HP. As such, it highlights the importance of examining the equivalence of the HP construct across ethnic groups. However, as Hispanic participants were not less likely to be in the *Mother Overcontrol* profile nor more likely to be in the *HP Acceptors* profile, it may also be that fathers were just less highly involved in the lives of Hispanic emerging adults. Little research has examined ethnic differences in the parenting practices of mothers and fathers towards emerging adults, thus this explanation needs additional investigation.

Relationship Correlates of Profile Membership

We expected that emerging adults would report more positive relationships with parents when they perceived less parental overcontrol, regardless of the extent of HP reported. We also expected that links between profile membership and parent-emerging adult relationships would be specific to the parent engaging in the HP behavior. The results were consistent with these expectations: We found

that profiles with lower perceived *maternal* overcontrol (i.e., *Autonomous, HP Acceptors; Father Overcontrol*) reported less discord with mothers and higher maternal warmth than the profile where felt mother overcontrol was high. Likewise, profiles with lower perceived *paternal* overcontrol (i.e., *Autonomous, HP Acceptors; Mother Overcontrol*) reported less discord with fathers and greater paternal warmth than when father overcontrol was high. These findings are consistent with process models showing that negative links between HP and adjustment operate through felt overcontrol (Rote et al. 2018) and that parental involvement promotes young adult adjustment when they interpret it as facilitating rather than interfering with their goals (Burke et al. 2018). It also implies that the parent–child relationship problems often associated with HP likely occur through disrupting specific parent–child connections (interpreted as feeling overcontrolled) rather than undermining relational processes in general or disrupting family patterns of interaction.

Importantly, although reports of mother and father warmth were almost 1.5 points lower (on a 7-point scale) in each respective overcontrolling profile compared with the autonomous profile, overall warmth levels (especially for mothers) were still quite high in the sample. The lowest reported maternal warmth was above 5 on a 7-point scale, and the lowest reported paternal warmth was above 4 on the same scale. These findings align with the typically higher levels of warmth among mothers than fathers observed for emerging adults (Nelson et al. 2011) and also found in Padilla-Walker et al.'s (2019) person-centered analyses. They show that maternal HP is most often accompanied by high levels of warmth, whereas paternal HP is typically accompanied by high or average levels of warmth. The finding that both *Overcontrol* profiles still showed some problematic outcomes, despite relatively a high degree of parental warmth, is also consistent with the importance of both relatedness and autonomy for successful development in adolescence and emerging adulthood (Inguglia et al. 2015; Koepke and Denissen 2012; Lamborn and Groh 2009).

In the current study, we also found that *HP Acceptors* reported greater maternal warmth than emerging adults in the *Autonomous* group. This implies that experiencing HP but not perceiving it as overcontrol is associated with an even warmer mother-emerging adult relationship than not experiencing HP in the first place. These findings are consistent with Padilla-Walker et al.'s (2019) recent profile analysis showing that some families are characterized by "warm helicopter parenting" and that warmth in these families is higher than in those with low HP (characterized as uninvolved). It is also consistent with theorizing that youth may perceive high parental involvement as an indication of warmth and care when they do not interpret it as overcontrolling (Pomerantz et al. 2007) or alternatively, that helicopter parenting in the context of an otherwise warm relationship reduces feelings of being overcontrolled (as might be indicated by the moderation analyses conducted by Nelson et al. 2015).

HP Acceptors also reported the highest levels of intimate disclosure towards both mothers and fathers (although disclosure towards fathers was not significantly lower in the *Father Overcontrol* group). Thus, youth who report higher levels of HP but who do not perceive it as overcontrolling report more intimate disclosure to parents than do other youth. Unlike warmth, however, intimate disclosure to parents among college-aged youth may indicate dependence on parents for emotional support and companionship past the point that it is normative. Indeed, the tendency of *HP Acceptors* not to interpret HP as overcontrol may indicate that boundaries are blurred within this particular type of family. This would be consistent with the construct of enmeshment, or family patterns that facilitate psychological and emotional fusion among family members (Minuchin 1985). Enmeshed family relationships disrupt the individuation process and the development and maintenance of psychosocial maturity; they often involve family communication patterns that are psychologically and emotionally inhibitive or intrusive (Barber and Buehler 1996). Enmeshment has been theorized to be part of the motivational basis for overparenting (Segrin et al. 2012, 2013) and this conceptualization is consistent with the notion that HP exerts problematic effects partially through its intrusive nature and inhibition of psychological, as well as behavioral, autonomy (Schiffrin et al. 2014). However, the conceptual overlap between family enmeshment and HP is likely complex, as prior research has found enmeshment to be positively correlated with some aspects of overparenting but negatively or uncorrelated with others (Segrin et al. 2012), and this study found signs of enmeshment only among *HP Acceptors*.

Adjustment Correlates of Profile Membership

Consistent with hypotheses, *Autonomous* emerging adults were lowest in internalizing symptoms, and emerging adults who felt overcontrolled (*Father* or *Mother Overcontrol groups)* were highest in internalizing symptoms, with *HP Acceptors*, who experienced relatively higher levels of HP but who did not perceive it as overcontrol, falling in-between. Thus, it appears that the adjustment problems accompanying HP depend somewhat, but not fully, on students' interpretations of the parenting behavior (i.e., felt overcontrol) and do not depend on which parent is perceived as overcontrolling. This supports self-determination theory in that it shows the importance of autonomy, felt competence, and relatedness for psychological health.

Moreover, our results align well with Schiffrin et al.'s (2014) findings that HP exerts negative effects through both reducing felt competence (likely occurring regardless of felt overcontrol) and felt autonomy (likely depending on felt overcontrol).

Others have found that paternal, as compared to maternal, HP may be less problematic for parent-youth relationships (McGinley 2018; Padilla-Walker and Nelson 2012). In the present study, however, students reported just as much felt overcontrol when they perceived fathers rather than mothers as high in HP. Likewise, emerging adults in the *Father Overcontrol* profile reported all of the same negative relationship correlates as did those in the *Mother Overcontrol* profile. Therefore, these previous results may reflect methodological limitations of past research, in which paternal HP has been examined in relative isolation from maternal HP levels. Higher paternal HP appears to be more commonly accompanied by higher levels of maternal HP in a family, rather than performed in isolation (as is implied by our finding that there were almost double the number of students in the *HP Acceptors* than *Father Overcontrol* profiles). This means that past studies examining paternal HP would have primarily been be assessing *HP Acceptors*, who have positive relationships with parents. In contrast, mothers appear to engage in HP as frequently on their own as alongside fathers (represented by equivalently sized *Mother Overcontrol* and *HP Acceptors* profiles). When combined, this would produce stronger negative relationship correlates for maternal HP than paternal HP, as well as the lack of correlation between maternal HP and warmth previously observed (Padilla-Walker and Nelson 2012).

Our hypothesis that higher levels of HP would be associated with less academic motivation, regardless of felt overcontrol, was not supported—in fact, we observed the opposite. Academic motivation was higher in the *Mother Overcontrol* group than in the groups low on felt overcontrol, and there was no association between family profile and GPA. If HP (especially when perceived as overcontrol) is a type of pressuring control (Pomerantz et al. 2007; Schiffrin et al. 2014), it is possible that college students who reported the most felt overcontrol *are* more motivated to be in college—but perhaps in a somewhat problematic way. That is, they may experience higher *controlled* academic motivation (feeling pressured from outside or guilted from within to perform certain behaviors; Deci and Ryan 2012). Our measure of academic motivation did not distinguish among types of motivation, but such an interpretation is consistent with evidence that HP is related to more extrinsic motivation to learn as well as avoidance learning goals (Schiffrin and Liss 2017). It is just as possible that students in the *Mother Overcontrol* profile *are* intrinsically academically motivated, however, especially as GPA was high in our sample and did not differ between profiles. For instance, high maternal involvement at a young age may have set these youth up to both value and succeed academically, but the family has maintained this old pattern of behavior despite it no longer being appropriate, resulting in felt overcontrol but not lower intrinsic academic motivation. Adolescents with both high extrinsic and intrinsic academic motivation and those with only high intrinsic motivation appear to perform equally well academically (Wormington et al. 2012). Thus examining individual differences in how HP relates to combined patterns of extrinsic and intrinsic academic motivation, and in turn, academic success may help explain the inconsistent links found between HP and academic performance in past research (Bradley-Geist and Olson-Buchannan 2014; Darlow et al. 2017; Luebbe et al. 2018).

Limitations and Future Directions

This study has several limitations that bear mentioning. First, females were overrepresented in the sample. Profiles may have differed somewhat had there been a more equal distribution of male and female participants, especially as sons and daughters have different relationships with parents (e.g., van wel et al. 2002). Indeed, girls were overrepresented in the *Mother Overcontrol* group. Notably, though, controlling for gender did not meaningfully alter profile differences on distal outcomes. Participants were also drawn from a private university and were predominantly Caucasian or Asian. Although we examined and found ethnic, but not racial differences, the observed profiles and correlates need to be replicated in a more diverse sample of emerging adults. This is particularly true as parenting practices and their interpretation differ by socioeconomic status (Hoff and Laursen 2019), race, and ethnicity (Chen et al. 2019). Moreover, the socioeconomic status (SES) of participants was not collected and could not be examined as a correlate or predictor of class membership in these analyses. It should be noted that prior work has not found associations between SES and helicopter parenting, however (Gagnon 2019; Romm et al. 2020).

The family profiles that emerged in this study will also not apply to all family structures (such as single-parent families without a second parent involved in the child's life or, potentially, families with same-sex parents). Fourteen (5%) participants in our sample did not report on fathers, because they did not have a relevant father figure in their lives and thus may have come from such family structures. Although these 14 participants were included in the study (as their exclusion did not meaningfully alter results), they do not fully fit into the profiles as described. Thus, further research is needed to compare profiles of emerging adults with and without two, opposite-gender parents involved in their lives. Furthermore, although almost all participants

reported on their biological or adoptive parents, we did not obtain information about parents' marital or cohabitation status or their level of interaction with one another. Parents who do not cohabitate or are not a couple may engage in coparenting (McHale and Irace 2011), but we did not measure coparenting processes (such as coparenting support or communication between parents) directly. Non-nuclear family systems may form distinct patterns of coparenting, as well as of HP and perceived overcontrol, that differ from families that are a single unit—for instance, engaging in more maternal gatekeeping behavior (Pruett et al. 2007) or more paternal overparenting when fathers have shared or primary custody. An important direction for future research would be to measure family structure or coparenting processes directly and to determine whether these variables are associated with HP profile membership or links between profiles and distal outcomes.

It also should be noted that the current sample size was somewhat small for a latent profile analysis. Monte Carlo simulations have shown that adequate power can be achieved with samples as small as 200, especially when class differentiation is large (Nylund et al. 2007), and the BCH method of distal outcome comparisons provides relatively unbiased estimates even in conditions with small sample sizes and lower separation (Bakk and Vermunt 2016). Nevertheless, with a larger sample, we would have had more power to detect a greater number of profiles and more, or more significant group differences in distal outcomes might have emerged—especially for comparisons involving the relatively small *Father Overcontrol* profile. Furthermore, the three non-majority profiles were relatively small, representing only 12, 11, and 6% of the sample, respectively. Although this is not surprising, as these profiles all involved higher HP and such parenting is relatively infrequent in the population (Padilla-Walker and Nelson 2012; Schiffrin et al. 2014), the resulting small samples may decrease the chance of finding significant profile differences. Indeed, although all profiles comprised over 5% of the sample, which is often a recommended cutoff for identifying profiles (Collins and Lanza 2010; Geiser 2012; Nylund et al. 2007), the smallest profile (*Father Overcontrol)* included only 17 emerging adults. This profile was of an expected pattern, however, with a very high probability of latent profile membership. Furthering our confidence in the results, differences in distal outcomes associated with the *Father Overcontrol* profile paralleled those found for the *Mother Overcontrol* profile, which was double its size. Therefore, despite the small profile (and sample) sizes, the resultant profiles and their correlates are consistent with previous research and theory.

The sole use of student reports is also a potential limitation of this study, as reporter bias can inflate correlations between constructs. However, student reports of HP are considerably more predictive of student adjustment and negative family relationships than are parent reports (Schiffrin and Liss 2017; Segrin et al. 2015). Further, a primary purpose of this study was to demonstrate that students can report the same levels of HP behavior and yet interpret it in very different ways. To do this, student reports are needed of both parenting behavior and its interpretation. Otherwise it could be argued that youth who do not perceive high overcontrol do not even recognize the HP behaviors as occurring. Nevertheless, an interesting next step would be to see whether the patterns obtained in the currently study replicate when using parent-reported HP behaviors alongside youth reports of felt overcontrol. Indeed, parents' and students' reports of parental HP are only mildly correlated (Segrin et al. 2015) with parent-reports sometimes higher than their youth (Padilla-Walker and Nelson 2012; Schiffrin and Liss 2017), so this method would also allow researchers to examine whether discrepancies between parent- and youth-reported HP are larger when youth do not perceive such HP as overcontrol.

Despite these limitations, this study is the first to examine family-wide differences in patterns of HP practices and emerging adults' perceptions of them. Overall, most emerging adults were *Autonomous* (experiencing low HP and low felt overcontrol across both parents). Consistent with the importance of developing autonomous-relatedness in emerging adulthood (Koepke and Denissen 2012; Inguglia et al. 2015), this group showed the best psychosocial adjustment, were on equal academic footing with their peers, and had generally positive relationships with their parents. We also observed parallel *Mother Overcontrol* and *Father Overcontrol* profiles (high HP and felt overcontrol by just one parent); these emerging adults reported the worst psychological adjustment, slightly more academic motivation, and more negative relationships with the strongly involved parent. These profiles are broadly consistent with conceptions of HP as problematic and functioned similarly regardless of parental gender. Finally, a unique group of emerging adults appeared who were *HP Acceptors* (high HP and low felt overcontrol across both parents); they appeared to come from highly involved, cohesive family environments in which higher levels of HP were more normative. They reported the most positive relationships with parents but somewhat worse psychological adjustment and academic success than their peers, indicating that they may be maintaining relatedness at the expense of developing full adult competencies.

These findings highlight the importance of considering the meaning emerging adults attribute to parenting behaviors, and to HP in particular, and contribute to a growing body of research demonstrating that felt parental overcontrol explains some of the associations between HP and negative adjustment. Consistent with evidence that HP must

be examined within the broader family context, these results also demonstrate that there are distinct patterns of HP among parents within a family and that these patterns are linked with the way HP is interpreted and its associations. Future research should expand on these patterns, investigating whether HP affects autonomy and relatedness distinctly for groups of emerging adults who interpret the behavior differently, and investigating potential concordance between enmeshment behaviors and HP, especially at the family level.

Compliance with Ethical Standards

Conflict of Interest The authors declare that they have no conflict of interest.

Ethical Approval This research was approved by the Institutional Review Board of the [name of University blinded for review] (RSRB00046771) which maintains an Assurance of Compliance with the Office for Human Research Protection (OHRP). All procedures performed in the study involving human participants were in accordance with the ethical principles described in the Belmont Report and by the regulations of the U.S. Food and Drug Administration (21 CFR 50 and 56) and the U.S. Department of Health and Human Services (45 CFR 46).

Informed Consent Informed consent was obtained from all participants included in this study. No identifying information was collected from participants as part of this research.

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