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Helicopter Parenting, Self-Control, and School Burnout among Emerging Adults

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Abstract

Objectives We examined the mediating role of self-control in the relation between helicopter parenting and college student school burnout and whether the relation between helicopter parenting and college student school burnout varied by parental gender. Specifically, we hypothesized that (1) there would be a positive association between helicopter parenting and school burnout through lower reports of self-control and (2) perceptions of paternal helicopter parenting would have a greater negative impact on school burnout compared to maternal helicopter parenting.

Methods In an online survey, college students (N = 427) reported on both maternal and paternal helicopter parenting, self-control, school burnout, and demographics.

Results Results from structural equation modeling suggested that self-control fully mediated the relation between perceptions of maternal helicopter parenting and feelings of school burnout, and partially mediated the relation between perceptions of paternal helicopter parenting and school burnout. Further, perceptions of paternal helicopter parenting had a stronger direct association with college student school burnout compared to perceptions of maternal helicopter parenting.

Conclusions The results of our study suggest that helicopter parenting behaviors may hinder the development of self-control skills among emerging adult college students, which are associated with feelings of school burnout. Further, helicopter fathers may have a more direct negative impact on college students' feelings of school burnout than helicopter mothers due to violating their child's expectations of the typical fathering role. The implications of the findings for practices in higher education were also discussed.

Keywords Emerging adulthood · Gender · Helicopter parenting · School burnout · Self-control

School burnout—conceptualized as exhaustion due to school work, cynical attitudes toward school, and perceived inadequacy in school-related accomplishment (Salmela-Aro et al. 2008), has been shown to be related to a host of negative outcomes in emerging adults (18–29; Arnett 2000, 2015) including impaired cognition and physiology (May et al. 2015a, b). Developmental research evaluating school burnout highlights the need for early detection as burnout is likely to spill over to additional mental health challenges (i.e., depression, addiction) and subsequent poorer academic achievement (Bask and Salmela-Aro 2013;

One form of parenting that may be particularly related to school burnout is helicopter parenting, a parenting behavior that is considered to be overly involved, overly controlling, and developmentally inappropriate among parents of emerging adult children (Bradley-Geist and Olson-Buchanan 2014; Padilla-Walker and Nelson 2012). Research has indicated that helicopter parenting of college students may hinder their transition to adulthood and result in negative outcomes (e.g., negative psychological well-being, academic problems, anxiety; Cui et al. 2019; Klein and Pierce 2009; Love et al. 2019; LeMoyne and Buchanan

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Tuominen-Soini and Salmela-Aro 2014; also see the review provided by Salmela-Aro 2017). However, available research, particularly that on college students in the U.S., has largely focused on potential consequences of school burnout to the virtual exclusion of identifying mechanisms that might account for this phenomenon. Little attention has been paid to the role of parents and how parenting behavior may be related to school burnout.

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2011; Luebbe et al. 2016; Schiffrin and Liss 2017). More specifically, helicopter parenting may have direct and indirect associations with academic-related outcomes related to school burnout (e.g., GPA, Darlow et al. 2017; school engagement, Padilla-Walker and Nelson 2012).

Documenting an association between helicopter parenting and college students' school burnout further raises the question of what mechanisms may help explain why such an association exists. Self-control, the act of regulating one's behavior, thoughts, and emotions in a socially acceptable manner (de Ridder et al. 2012), may be one such mechanisms, as it has been linked to parenting behavior and to school burnout (Finkenauer et al. 2005; Seibert et al. 2016). Thus, self-control could be a potential mechanism that accounts for the relation between helicopter parenting and college student school burnout.

Finally, parental gender is important when examining associations between parenting behavior and emerging adult academic-related outcomes (Klein and Pierce 2009; Rousseau and Scharf 2015). Recent findings suggested that paternal helicopter parenting may have a stronger negative association with emerging adult children's well-being compared to maternal helicopter parenting (Klein and Pierce 2009; Love et al. 2019; Rousseau and Scharf 2015), though the results are inconsistent (see van Ingen et al. 2015).

Helicopter parenting of emerging adults stems from the framework and ideas presented in the life course perspective and socialization theory, which highlight that parents continue to play a vital role in their children's development throughout their lifespan (Elder and Giele 2009; Parke and Buriel 1998). From these perspectives, parents continue to influence their children's lives even as they are entering adulthood and pursuing further independence. Unlike the traditional categorization of parenting practices (Baumrind 1967; Maccoby et al. 1983), helicopter parenting reflects parents being overinvolved and overcontrolling. Helicopter parenting is a phenomenon particularly relevant to the parent-child relationship as offspring are entering emerging adulthood. Some examples of helicopter parenting include doing laundry for an emerging adult child and reaching out to professors on behalf of the child (LeMoyne and Buchanan 2011). Helicopter parents display behaviors that take over their offspring's responsibilities to protect them from any chance of failure (Bradley-Geist and Olson-Buchanan 2014). The emergence of these parental behaviors may be a result of parental care and investment in their emerging adult children's success (van Ingen et al. 2015). Some higher education institutions across the U.S. also implement programs that promote parental involvement as offspring transition to college (Savage and Petree 2015).

Despite good intentions, multiple theoretical perspectives suggest that helicopter parenting is harmful for emerging

adult children. Traditional parenting theories highlight parental support and autonomy granting as key parenting elements that promote child development (Baumrind 1967; Maccoby et al. 1983). When parents are overly protective and involved, such parenting behavior could deprive children's need for autonomy and lead to internalizing and externalizing maladjustment among children (Baumrind 1991). Further, from the emerging adult perspective (Arnett 2000, 2015), during the stage when young people prepare themselves to assume adult responsibility, such overprotective and overinvolved parenting could be particularly inappropriate developmentally (Padilla-Walker and Nelson 2012). Specifically, helicopter parenting may cue emerging adult children in college that their parents would make major academic decisions on their behalf (e.g., choices of major and courses), monitor their academic activities and performance, interfere with their school life, and plan for their future (e.g., career). Self-determination theory (Ryan and Deci 2000) suggests these parental behaviors could lead college students to feel that they are doing this for their parents and lose their own goal and motivation. Prolonged academic efforts with little self-motivation and under their parents' pressure could lead to school burnout.

The strength model of self-control clarifies the possible link between helicopter parenting and school burnout through self-control (Baumeister et al. 2007). Specifically, individuals may improve their self-control skills through practice. Practicing self-control may improve one's ability to regulate his or her behavior in later situations. The behaviors displayed by helicopter parents (i.e., making major decisions on child's behalf) do not necessarily allow for the development of self-control skills, as children are not required to practice these skills as often as those who are not exposed to helicopter parenting. In the context of emerging adult college students, this period of development may be especially tasking on one's self-control skills. College students face many challenges that require self-control skills and their ability to self-regulate (i.e., making many choices, sexual impulses, intelligent and logical decision making, self-presentation; Baumeister et al. 2007). College students who are exposed to helicopter parenting may not have the self-control skills to adapt to the many challenges that are depleting their self-regulatory resources. Further, the model of self-control also suggests that lower levels of self-control may be linked to a lack of academic achievement, lower levels of persistence, and failure to perform tasks (all closely related to aspects of school burnout, Baumeister et al. 2007). In sum, helicopter parenting does not facilitate the development of self-control skills and lacking the ability to self-regulate may likely lead to unwanted outcomes such as school burnout.

Findings regarding helicopter parenting and academicrelated outcomes have been relatively mixed. Darlow et al.



(2017) reported a significant indirect association between helicopter parenting and GPA and academic adjustment mediated by self-efficacy and depression. Schiffrin and Liss (2017) found partial support for associations between helicopter parenting and maladaptive academic motivations. Emerging adult college students' perceptions of helicopter parenting influenced their academic motivations which led to withdrawal from class material. Further, students, with helicopter parents were more likely to feel unable to meet their academic goals. A lack of engagement in school materials and feelings of incompetency are both characteristic of school burnout (Salmela-Aro and Upadyaya 2014). Furthermore, Padilla-Walker and Nelson (2012) found that higher levels of helicopter parenting were associated with lower levels of college students' school engagement. School burnout is considered diametric to engagement (see Leon et al. 2015; Leiter and Maslach 2017). Taken together, these results provided some support for the association between helicopter parenting and academic-related outcomes. As previously mentioned, school burnout is characterized by exhaustion due to school work, cynical attitudes toward school, and belief of inadequacy in school-related accomplishment. Distinct from anxiety and depressive symptoms, school burnout has been linked to a myriad of negative psychological and physical outcomes, including poorer academic performance (lower GPA, higher absenteeism, May et al. 2015a; Seibert et al. 2016). No research has been done on the association between helicopter parenting and school burnout.

Self-control is defined as the "ability to override or change one's inner responses, as well as to interrupt undesired behavioral tendencies (such as impulses) and refrain from acting on them" (Tangney et al. 2004, p. 274). Thus, self-control is characterized as the ability to regulate responses in a manner that is deliberate, conscious, and effortful (de Ridder et al. 2012; for a further discussion of contrasting conceptualizations of self-control see Friese et al. 2017). The development of self-control may contribute to a range of positive life outcomes. Current research suggests that self-control reflects both dispositional and state characteristics (Baumeister 2014). Dispositional self-control is considered to remain consistent over time, whereas state self-control may fluctuate (Tangney et al. 2004). The theoretical implications mentioned above suggest that parenting behavior may be associated with offspring's development of regulatory processes such as self-control.

Research suggests that parenting behaviors that are restrictive and controlling are associated with lower levels of self-control among offspring (Finkenauer et al. 2005). Research addressing parental influence on children's self-regulation skills has also suggested that overcontrolling behaviors tend to diminish children's ability to self-regulate (Manzeske and Stright 2009; Moilanen et al. 2015).

Helicopter parenting, which reflects parents' involvement and overcontrolling, may therefore be linked to problems in the development of self-control among emerging adults. Studies on the link between helicopter parenting and constructs related to self-control have found a negative association. In one study (Cui et al. 2019) study, higher levels of helicopter parenting were associated with lower levels of self-control. Furthermore, in prior research examining cross-lagged analyses, regulation strategies were shown to precede and predict (reappraisal negatively and suppression positively) increased school burnout, with increased burnout then predicting poorer academic outcomes (lower grade point average, greater absenteeism) in a sample of undergraduate students (Seibert et al. 2017). These findings suggested that students who did not engage in appropriate coping skills or did not possess sufficient regulatory capacity (i.e., self-control) were unable to suppress the effects of school-related stress and were therefore more likely to experience higher levels of school burnout as compared to students who were better able to engage in regulatory strategies that were sufficient to handle the demands of school-related stress. This insight into selfcontrol capacity (for a thorough review of the integration of components of self-control, including control capacity see Katobe and Hofmann 2015) has more directly been evaluated by Seibert et al. (2016) showing that lower levels of self-control have been associated with higher levels of school burnout among undergraduate students.

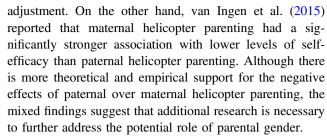
Research has not yet fully addressed the link between helicopter parenting, school burnout, and the potential for self-control to serve as a mediating mechanism. A recent study investigating the association between helicopter parenting and female alcohol use found that self-control served as a mediating mechanism of this association (Cui et al. 2019). Specifically, higher levels of helicopter parenting were associated with higher reports of alcohol use through lower levels of basic psychological needs and lower levels of self-control. Though this study did not examine school burnout as the outcome, the findings shed some light on the mediating mechanism of self-control, that helicopter parenting behaviors may be associated with lower self-control, which in turn, may be related to school burnout.

Furthermore, theory and research suggested that gender may also serve as an influential factor in the association between helicopter parenting and school burnout. Gender role theory emphasizes the importance of examining parental gender in the context of parent-child relationships (Bem 1981). Sex role theory suggests that mothers and fathers play different roles in their child's life, resulting in some differences among child outcomes (Lewis and Lamb 2003). Mothers are usually seen to play a warmer and more nurturing role than fathers (Hosley and Montemayor 1997; Russel et al. 1998). These differences suggest that mothers



are typically expected to be more involved in daily lives with offspring than fathers. More current research has also found evidence of decreased paternal involvement after toddlerhood, supporting the continued prevalence of traditional gender social norms (Buchanan et al. 2016). Among the cultural norms in the U.S., mother figures are typically perceived as being more involved in their offspring's life as compared to fathers. Consequently, maternal helicopter parenting behaviors may be more commonly observed compared to paternal helicopter parenting (Rousseau and Scharf 2015). Paternal helicopter parenting, on the other hand, may be seen as deviating from the expectation of the father figure. Because overinvolvement may deviate from the role expectation of fathers, paternal display of helicopter parenting may be more strongly associated with emerging adult's maladjustment as compared to maternal helicopter parenting. Specific to school burnout, when fathers are overly involved, emerging adult children may feel more stress to perform adequately in school and more pressure to succeed in school. Due to the norm deviation of increased paternal involvement and encouragement of dependency as opposed to exploration, parental helicopter parenting may play a salient role in school burnout among emerging adults. Furthermore, more recent research suggested that, as fathers become increasingly involved in parenting in the current society, their parenting becomes more influential on children's development (Buchanan et al. 2017; Buchanan et al. 2016). Thus, research also needs to further address parent gender role when examining the effects of helicopter parenting among U.S. samples.

Using an Israeli sample, Rousseau and Scharf (2015) examined the salience of parental gender on the association between helicopter parenting and college student psychological adjustment. They found that offspring experienced higher levels of maternal helicopter parenting behaviors than paternal helicopter parenting behaviors. Paternal helicopter parenting behaviors such as overprotection, however, were associated with higher levels of distress among emerging adult children than maternal overprotection (Rousseau and Scharf 2015). Keeping in mind the cultural context of the U.S. and gender socialization theory, maternal helicopter parenting may be observed more frequently than paternal helicopter parenting. Research on parental gender on the association between helicopter parenting and emerging adult children's adjustment to college has been limited and somewhat inconsistent. On one hand, Klein and Pierce (2009) showed high levels of paternal overprotection (characteristic of helicopter parenting) was associated with poor college adjustment among emerging adult children, whereas maternal overprotection was not. Such finding was consistent with that of Rousseau and Scharf (2015), suggesting that paternal helicopter parenting may be more related to emerging adult children's psychological



The purpose of the current study was to explore the association between helicopter parenting and college student school burnout. Specifically, we examined self-control as a potential mediating mechanism that might account for the association and whether the link between helicopter parenting and school burnout differed based on parental gender. Based on related theories and research, we hypothesized that (1) helicopter parenting would be positively associated with school burnout through lower levels of selfcontrol (H1), and (2) paternal helicopter parenting would have a greater impact on school burnout than maternal helicopter parenting (H2). Several important factors, including child gender, race and ethnicity, year in college, family structure, and family income, were included as covariates in light of previous research findings suggesting their associations with the key study variables (e.g., Bask and Salmela-Aro 2013).

Method

Participants

Participants were recruited from undergraduate courses in family and child sciences at two large southern universities in the U.S. Of the 712 students enrolled in the recruited classes, 449 participated (63% participation rate). The sample was further reduced after restricting the age of participants to emerging adulthood (18–29), resulting in a total of 427 participants included in the analysis. The sample was primarily European American (83.6%) and female (89.7%). The average age was 20.23 years (SD = 2.30), 67.4% reported that they came from a two-parent family structure, and the majority of participants reported living away from parents (74.7%). Reported annual family income was 12.8% below 30k, 16.2% 30k to below 50k, 36.0% 50k to below 100k, and 35.0% 100k and above.

Procedures

The data were collected as part of a larger study of helicopter parenting and college students' well-being. In this study, we particularly focused on a much ignored but highly relevant outcome among college students (i.e., school burnout). Participants were asked to report on a variety of



topics including perceptions of their mother's and father's helicopter parenting, their health and well-being, and demographics. A small amount of course extra credit was offered for participation in the study. All procedures were approved by the local Institutional Review Board.

Measures

Helicopter parenting

Helicopter parenting was assessed using a 5-item helicopter parenting scale (Bradley-Geist and Olson-Buchanan 2014). This measure tapped into the key features of helicopter parenting including parental overcontrol and overinvolvement perceived by emerging adult children. Respondents were asked to report on their parents' helicopter parenting behaviors on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree). The original measure asked participants to report on their parents/guardians, the current study rephrased the questions to ask about their mother/mother figure and father/father figure, separately. Sample items include, "I think my father/mother is too overly involved in my life," and "My father/mother is too controlling of me and my life." The total score was calculated by summing all items, where higher scores represented higher levels of helicopter parenting (α_{mother} = 0.86; $\alpha_{\text{father}} = 0.89$). Bradley-Geist and Olson-Buchanan (2014) found that their overparenting scale was related to similar parenting characteristics such as parental involvement, however the scales did not overlap, providing support for a distinction between the measures.

Self-control

Self-control was measured with the 13-item Brief-Self-Control Scale (BSCS; Tangney et al. 2004). The BSCS was created to assess individuals' dispositional self-control. Example items include, "I am good at resisting temptation," and "I wish I had more self-discipline," (reverse scored). Respondents were asked to report on the degree to which each statement reflected how they typically are ranging on a scale from 1, *not at all*, to 5, *very much*. Total scores for each respondent were calculated by summing each item with higher scores indicating higher levels of self-control ($\alpha = 0.84$).

School burnout

School burnout was measured with the 15-item Maslach Burnout Inventory-Student Survey (MBI-SS; Schaufeli et al. 2002). The MBI-SS captures overall school burnout through the assessment of exhaustion due to school work (5 items; e.g., "I feel emotionally drained from my studies"), cynical attitudes toward school (4 items; e.g., "I doubt the

significance of my studies"), and belief in reduced efficacy in school-related accomplishment (6 items; e.g., "In my opinion, I am a good student," reverse scored). Participants were asked to report how often they felt relating to each item on a 7-point Likert scale (1 = never to 7 = always). Scores within each subscale were summed with higher scores reflecting higher levels of school burnout ($\alpha_{exhaustion} = 0.90$, $\alpha_{cynicism} = 0.89$, $\alpha_{inadequacy} = 0.88$). The three subscales were then used as three indicators of a latent construct of school burnout.

Covariates

Key covariates included the participants' race/ethnicity, gender, year in college, family structure, and family income. Racial/ethnic background was dichotomized as 1 = white and 0 = other. Participants' gender was coded as 1 = male and 2 = female. Year in college was coded as 1 = first year (freshman); 2 = second year (sophomore); 3 = third year (junior); 4 = fourth year (senior). Family structure was dichotomized as 1 = two-parent home and 0 = other. Family income was recorded as 1 = Below 30k, 2 = 30k - below 50k, 3 = 50k - below 100k, and 4 = 100k and above.

Data Analysis

Mplus (Version 8) was used to test the proposed mediation model. Mplus was used because it is suitable for testing mediating effects with bootstrapping method in structural equation modeling (SEM) and handling missing data. The ability to perform these tasks simultaneously is why Mplus is considered one of the most comprehensive programs for SEM. First, SEM was conducted to assess the proposed mediation model. Missing data were handled in Mplus with the Full Information Maximum Likelihood method (Muthén and Asparouhov 2003). Model fit was determined using the chi-square statistic (non-significance indicated a good model fit) and other fit indices including the Comparative Fit Index (CFI, 0.90 and above indicated a good fit; Bentler 1990), Root Mean Square of Error Approximation (RMSEA, 0.08 and below indicated a reasonable model fit; Steiger et al. 1985), and p close (non-significance indicated a good fit. Maternal and paternal helicopter parenting were evaluated separately. Second, bootstrapping method (N =1000) was used to determine the significance of the mediating effect by self-control. Mplus allows for the evaluation of indirect, direct, and total effects as well as confidence intervals to properly assess the significance of the mediating mechanism. Finally, to test for parental gender differences, group comparison was used and differences in chi-square values were evaluated. Specifically, we tested the model with parent gender constrained to be equal and compared the fit of this model to the unconstrained model.



Table 1 Descriptive information on study variables

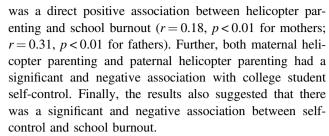
Variables	<i>M</i> or %	S.D.	Min.	Max
Maternal helicopter parenting	10.37	4.06	5	25
Paternal helicopter parenting	9.28	4.08	5	25
Self-control	45.94	8.76	19	65
School burnout				
Exhaustion	13.84	6.38	0	30
Cynicism	5.98	5.10	0	24
Reduced efficacy	10.79	6.37	0	33
Demographics				
Age	20.23	2.30	18	29
Gender				
Male	10.3%			
Female	89.7%			
Race/Ethnicity				
White	83.6%			
Other	16.4%			
Year in college				
First year (freshman)	28.5%			
Second year (sophomore)	37.0%			
Third year (junior)	14.0%			
Fourth year (senior)	20.5%			
Family structure				
Two-parent home	67.4%			
Other	32.6%			
Annual family income				
Below 30k	12.8%			
30k-below 50k	16.2%			
50k-below 100k	36.0%			
100k and above	35.0%			

N = 427

Results

Descriptive statistics including means (or percentages), standard deviations, and range of scores for the study variables are present in Table 1. Descriptive statistics of the study variables indicated sufficient variability. Little's MCAR test was conducted to determine if data was missing at random and results were non-significant, $\chi^2(22) = 17.65$, p = 0.73. An additional paired-sample t-test was conducted to examine the mean levels of maternal and paternal helicopter parenting. Results indicated that participants' perceived significantly higher levels of maternal helicopter parenting as compared to paternal helicopter parenting, t = 4.26, p < 0.001, Cohen's t = 0.23.

Correlations (Pearson r's) among key variables are provided in Table 2. The correlations revealed significant associations in the expected direction. Specifically, there



Structural equation modeling was used to test the proposed models (Kline 2015). All the covariates and their paths to self-control and school burnout were included in the preliminary analysis, however, for reason of parsimony, only the significant paths from the covariates to self-control or school burnout were kept in the final model. Figure 1 illustrates the mediating model testing H1. The chi-square statistic and fit indices suggested an acceptable fit of the model to the data: $\chi^2(24) = 48.05$, CFI = 0.93, RMSEA = 0.05, $p\ close\ (Pc) = 0.52$.

First, both maternal and paternal helicopter parenting were associated with self-control ($\beta = -0.12$, p = 0.04, and $\beta = -0.09$, p < 0.05, for mothers and fathers, respectively). Second, self-control was significantly associated with school burnout. The direct path from maternal helicopter parenting to school burnout was not significant whereas the direct path from paternal helicopter parenting to school burnout remained significant. A test of mediation was conducted using bootstrapping (N = 1000). Results suggested that self-control served as a significant mediator between maternal helicopter parenting and school burnout (0.07, 95% CI: 0.002-0.139) and between paternal helicopter parenting and school burnout (0.05, 90% CI: 0.003-0.113). The results suggested that selfcontrol fully mediated the association between maternal helicopter parenting and college student school burnout, and, given the significant direct path, partially mediated the link between paternal helicopter parenting and school burnout.

Furthermore, it is important to address the possibility that helicopter parenting may occur as a response to student failure. Parents may become overly involved in their child's life if they are unable to successfully transition through college. Thus, an alternative model was also tested proposing helicopter parenting as an outcome to college student self-control and feelings of school burnout. That is, we examined the link from perceived self-control to helicopter parenting through feelings of school burnout. Results of this alternative model indicated acceptable fit, $\chi^2(30) = 57.12$, p < 0.05, CFI = 0.93, RMSEA = 0.05, Pc = 0.62. In this model, self-control was significantly associated with burnout, burnout was significantly associated with paternal helicopter parenting but not with maternal helicopter parenting. The paths from self-control to paternal and maternal helicopter parenting were not significant.

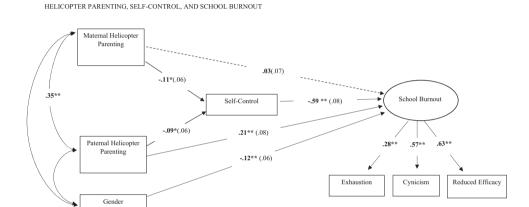


Table 2 Correlations of study variables

Variables	1	2	3	4	5	6	7	8	9
Maternal helicopter parenting	1.00								
Paternal helicopter parenting	0.35**	1.00							
3. Self-control	-0.15**	-0.13*	1.00						
4. School burnout	0.18**	0.31**	-0.62**	1.00					
5. Gender	-0.03	-0.08	-0.07	-0.10	1.00				
6. Year in college	0.00	0.01	-0.03	0.10	-0.05	1.00			
7. Income	-0.11*	-0.10*	0.05	-0.10	-0.01	-0.13**	1.00		
8. Race	-0.05	-0.05	0.05	0.02	0.08	-0.10*	0.24**	1.00	
9. Family structure	-0.01	-0.01	0.06	-0.01	-0.05	-0.07	0.28**	0.12*	1.0

Two-tailed tests. Gender coded as 1 = male and 2 = female. Race coded as 1 = white and 0 = other, family structure coded as 1 = two-parent home and 0 = other. N = 427

Fig. 1 Helicopter parenting and school burnout mediation model. **p < 0.01, *p < 0.05. Standardized values and standard error are presented; standardized values are in bold and standard error is provided in parentheses



Next, paternal helicopter parenting and maternal helicopter parenting were compared to examine potential gender differences that may exist in the relation between helicopter parenting and school burnout (H2). Specifically, the path from maternal helicopter parenting to school burnout and the path from paternal helicopter parenting to school burnout were constrained to be equal and the chisquare value was compared to that of the unrestricted (baseline) model. The results suggested that the path from paternal helicopter parenting to school burnout was significantly stronger than the path from maternal helicopter parenting to school burnout ($\chi^2(1) = 3.87$, p < 0.05). This provided evidence of parental gender differences. In addition, no interactions between covariates and helicopter parenting were found to be statistically significant.

Discussion

The current study examined the relations among helicopter parenting, self-control and school burnout, which have not been directly examined in the context of helicopter parenting. Helicopter parenting behaviors are displayed out of care for offspring success, but the results from our study highlight how these behaviors could be detrimental to college student adjustment. This is especially important as higher education institutions in the U.S. have implemented parental programs that facilitate increased parental involvement during the transition to college (Savage and Petree 2015). Additionally, this research further advanced the current understanding of helicopter parenting as evidence revealed self-control as a mediating mechanism and differences in parental gender, both of which have not been thoroughly addressed in the context of this parenting phenomenon.

Although previous research addressing the relation between helicopter parenting and academic-related outcomes has been mixed, some suggested that higher levels of perceived helicopter parenting were associated with lower levels of school engagement (Padilla-Walker and Nelson 2012). The findings from the current study supported these results by suggesting an association between perceived helicopter parenting and school burnout. Exposure to helicopter parenting may put emerging adult children at risk of



^{*}p < 0.05, **p < 0.01

developing the psychological and physiological symptomatology that has been linked to school burnout.

Previous research also suggested an indirect association between perceptions of helicopter parenting and academicrelated outcomes (Darlow et al. 2017). Both life course and socialization theory suggest that helicopter parenting may be associated with unwanted outcomes among emerging adult children because helicopter parenting behaviors do not facilitate the development of regulatory processes such as self-control. Therefore, the current study examined the indirect association between maternal/paternal helicopter parenting and school burnout through self-control. Findings from the current study revealed that self-control mediated the relation between perceptions of helicopter parenting and school burnout. These results supported the strength model of self-control, which suggests that a lack of self-regulatory skills (due to factors such as parenting behavior) may result in unwanted outcomes among emerging adult children such as, school burnout. Helicopter parenting behaviors may not allow for the development of self-control skills, as emerging adult children are taught that they are not entirely responsible for their own actions. Thus, students of helicopter parents may be unable to meet the many demands of higher education, as they have not developed sufficient self-control skills. Students, whose underdeveloped self-control skills are spread too thin, may likely begin to develop feelings of school burnout as a result. Further, self-control appeared to fully mediate the association between maternal helicopter parenting and school burnout, whereas only partial mediation emerged when examining paternal helicopter parenting and school burnout. The magnitude of the mediating effects seemed similar, but with the stronger bivariate association between paternal helicopter parenting and school burnout, this suggested that there were more left unexplained by selfcontrol in the association between paternal helicopter parenting and school burnout, and more should be done to explore other possible mediating mechanism for such association (e.g., facilitation/interference; Burke et al. 2018; self-regulation skills; Cui et al. 2019; extrinsic motivation for learning; Ryan and Deci 2000).

Related, analyses revealed that the association between paternal helicopter parenting and school burnout was significantly stronger than that between maternal helicopter parenting and school burnout. Parental gender differences found in our study were consistent with theories and recent research that has shown a stronger relation between helicopter parenting and maladaptive college student outcomes for fathers than for mothers (Klein and Pierce 2009; Rousseau and Scharf 2015). Emerging adult children may experience higher levels of maternal helicopter parenting, but paternal helicopter parenting may play a more salient role in school burnout among college students. Due to the normativity of maternal display of involvement, care, and

control, offspring may not negatively internalize maternal helicopter parenting as much compared to paternal helicopter parenting. In contrast, fathers displaying helicopter parenting behaviors are seen as less normative across the U.S. Such deviance from parental norms suggests that overly involved fathers may have a stronger association with emerging adult children's school burnout. Furthermore, intensive fathering moves away from the previous normative practice of paternal absence or lack of involvement as children approach emerging adulthood and towards a positive direction that promotes the salience of fathering (Devault et al. 2015). Too much involvement during this stage of development, however, may have negative implications for emerging adult children regardless of whether these behaviors are displayed by mother or father.

School burnout results from students' inability to meet the daily demands of higher education. Parenting behaviors should facilitate healthy college student adjustment, but behaviors that are characteristic of helicopter parenting may undermine developmental needs (e.g., self-control) critical for a healthy transition to adulthood. Our research also highlighted the important role that parents, especially fathers, continue to play in their offspring's lives even when they move out of the house and enter emerging adulthood. Previous work examining the association between helicopter parenting and academic-related outcomes has not addressed the effects of parent gender (i.e., Darlow et al. 2017).

Limitations and Future Research

Notwithstanding the strengths of the study, it is important to note several relevant limitations when interpreting its results. First, the cross-sectional nature of the data limits confidence in making causal inferences of the mediating effects. For example, it is also possible that high levels of burnout would decrease emerging adults' resources for selfcontrol. Thus, it cannot be concluded that helicopter parenting indirectly or directly causes the development of school burnout. Future research should use a longitudinal design to allow stronger causal inferences. Second, the data collected were self-reports and results may be confounded due to participant desire to be socially acceptable (Krumpal 2013). Self-reports of young adults on all variables may also lead to common method bias and inflation of the proposed associations. The literature on helicopter parenting, however, does suggest that offspring reports of helicopter parenting are more predictive of offspring outcomes than parent-reported display of helicopter parenting (Schiffrin and Liss 2017). Despite the possibility that perceptions of helicopter parenting may be more significant in terms of addressing offspring outcomes, future studies may benefit from incorporating multi-informant method to assess



various constructs from different perspectives. Further, results of the alternative model testing indicated that paternal helicopter parenting may be a response to lack of self-control and school burnout experienced by their emerging adult children. Such an alternative model provided an important perspective into the possible child effects or reciprocal effects. Fathers may be overly involved in their adult-child's life in hopes to promote academic success and well-being. Future research should use longitudinal design to assess these possible effects. It is also important to note that academic performance was not addressed in this study, which may also be useful to better understand the relationship between helicopter parenting and school burnout.

Lastly, the sample was primarily composed of European American females. The lack of diversity regarding sample demographics limits the generalizability of the findings. Although this sample is fairly representative to the student population in the colleges from which they were recruited, it is not representative of the college student population in general, therefore generalizability of the findings is limited, and gender effects should be interpreted with caution. Additionally, this sample did not allow for an examination of racial and gender differences among participants. According to research and theory on parent-child gender role dynamics, it may be possible that gender of the parent interacts with gender of the child. For example, research on maternal control during adolescence suggested a link to female depressive symptoms only (Mandara and Pikes 2008). Future research should use longitudinal design to assess paternal helicopter parenting over time and use a balanced sample to examine potential differences in father-daughter and father-son dyads (Lewis and Lamb 2003).

The results from our study suggest that self-control may account for the association between helicopter parenting and school burnout and highlights the role of parent gender regarding these associations. Our research not only added to the literature on helicopter parenting, but also provided practical implications that may be especially useful for higher education institutions. As previously noted, higher education institutions are using resources to implement parenting programs that help foster parental involvement during the transition to college (Savage and Petree 2015). However, the findings from our study suggested that this approach may not be optimal for the needs of emerging adult offspring. It may be useful for higher education institutions to highlight the degree to which parental involvement is considered appropriate. Higher education institutions may find these results particularly useful for the purposes of facilitating academic success, higher retention rates, and healthy psychological and physiological functioning.

Although it is important to address and prevent parenting behaviors that may negatively influence offspring development, it is equally important to recognize the difficulties and contextual complexities that come with advising parents on how to parent. Simply put, telling parents they are doing too much may not be well-received and it may not be easy for parents to adjust their parenting style. Thus, it may be beneficial to look further into self-control as a buffer to the link between helicopter parenting and school burnout. These interventions should include not only the child, but parents as well, in a collaborative effort to help facilitate the development of positive regulatory skills. Interventions that focus on the development and maintenance of self-control may be useful in combatting negative effects of helicopter parenting (Ballash et al. 2006).

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Compliance with Ethical Standards

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

Ethical Approval All procedures performed in this study involving human subjects were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. This study was approved by the Institutional Review Board (IRB) of Florida State University and Florida International University.

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

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