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The Effects of Helicopter Parenting on Academic Motivation

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Abstract There is a growing concern that overinvolved, helicopter parenting may have negative consequences for college students' well-being and academic achievement. The goal of this study was to examine the effects of helicopter parenting on constructs related to academic achievement and success such as motivation for learning, perfectionism, and entitlement. Survey data are presented from 192 college students and their mothers (N = 121). Children's report of maternal helicopter parenting was related to extrinsic motivation to learn, perfectionistic discrepancy, and avoidance goals for learning, which have been associated with lower academic performance in prior research. Mother's report of helicopter parenting was related to children's sense of entitlement. This study suggests that helicopter parenting is related to maladaptive academic motivations that may have negative implications for academic achievement.

Keywords Helicopter parenting · Overparenting · Perfectionism · Entitlement · Mastery vs. performance goals · Academic motivation

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Introduction

Helicopter parenting has become an increasing concern among college administrators (Hunt 2008; Somers and Settle 2010). Although parental involvement has generally been found to be associated with positive cognitive and psychosocial child outcomes (Day and Padilla-Walker 2009; Fingerman et al. 2012; Wilder 2014), there is mounting evidence that developmentally inappropriate levels of involvement associated with helicopter parenting is associated with decreased well-being (LeMoyne and Buchanan 2011; Schiffrin et al. 2014; Segrin et al. 2013) and academic achievement (Nelson et al. 2015; Padilla-Walker and Nelson 2012; Shoup et al. 2009) among adolescents and young adults. Although research has suggested some mechanisms for how helicopter parenting might interfere with well-being (Nelson et al. 2015; Schiffrin et al. 2014), less is understood about why this style of parenting might adversely impact academic performance. In addition, the majority of studies have focused on child reports of "parent" helicopter behavior, while fewer studies have compared how child report compares to parental report of their own parenting practices (Padilla-Walker and Nelson 2012; Segrin et al. 2015).

Prior research has linked helicopter parenting to decreased well-being among children. Adolescent and adult children's report of helicopter parenting has been associated with an increased use of medications for depression and anxiety (LeMoyne and Buchanan 2011) as well as higher levels of neuroticism and interpersonal dependency (Odenweller et al. 2014). When asked specifically about maternal helicopter parenting, college students who reported more helicopter parenting also experienced higher levels of depressive symptoms, decreased life satisfaction, as well as lower levels of autonomy, competence, and a sense of

being related to others (Schiffrin et al. 2014). Fewer studies have asked parents about their own helicopter parenting behavior and linked those to child outcomes. However, those that did have also found negative effects. For example, parent reports of their own helicopter parenting have been linked to worse psychological adjustment in children such as higher levels of anxiety, distress, and narcissism (Rousseau and Scharf 2015; Segrin et al. 2013).

Although there has been more research on the impact of helicopter parenting on well-being than on academic outcomes, emerging evidence has suggested that this style of parenting may also negatively influence academic performance. Helicopter parenting has been associated with decreased school engagement (Padilla-Walker and Nelson 2012; Nelson et al. 2015) and academic achievement (Kim et al. 2013; Shoup et al. 2009). However, the mechanisms maintaining this relationship are not entirely clear. Given that previous research has found that helicopter parenting is associated with decreased self-determination (Schiffrin et al. 2014), helicopter parenting may interfere with academic outcomes because it reduces children's intrinsic motivation to learn and puts the emphasis on more extrinsic motivators (e.g., parental approval, grades, etc.).

There is a robust literature indicating that people who are intrinsically motivated to learn the material (i.e., have mastery goals) have better performance on academic tasks and better academic achievement than people who are extrinsically motivated by performance goals (Lepper et al. 2005; Utman 1997). Although mastery orientation has consistently been associated with better academic outcomes (Hulleman et al. 2010; Richardson et al. 2012), the relationship between performance orientation (e.g., a focus on grade) and achievement is somewhat equivocal (Hulleman et al. 2010). The negative impact of having performance goals seems to primarily occur when the motivation involves fear of failure, or an avoidance goal, rather than desire for success, an approach goal (Elliot and McGregor 2001; Richardson et al. 2012). Specifically, performance avoidance goals seem to be associated with decreased intrinsic motivation (Elliot and Harackiewicz 1996).

Another characteristic of helicopter parenting that might impede academic performance is the presence of a critical family environment. Both child and parental report of helicopter parenting behaviors have been associated with children's perception that their parents do not give them unconditional positive regard (Segrin et al. 2015). If parents send the message, even unintentionally, that children must be successful academically in order to be loved and accepted, this may enhance children's extrinsic motivation for learning. Such a family environment may also set a child up to develop perfectionistic tendencies because children may receive the message that being loved is contingent upon being perfect. Maladaptive perfectionism occurs when

students feel as though they are unable to live up to standards of achievement that have been set for them (Rice and Slaney 2002). Although having high personal standards for one's own academic achievement is linked to higher grades, fearing other people's reaction to one's academic achievement is linked with lower grades (Thorpe and Nettelbeck 2014). Perfectionism that is driven by worrying about what other people think has been linked to increased extrinsic motivation (Mills and Blankstein 2000). In addition, perfectionists tend to exemplify mastery avoidance (i.e., they avoid challenging tasks where they might make a mistake), which is associated with worse academic outcomes (Elliot and McGregor 2001; Richardson et al. 2012). Thus, the critical home environment associated with helicopter parenting may increase maladaptive perfectionism.

Finally, helicopter parenting has been associated with an increased sense of entitlement, which may interfere with academic performance. Parents' report of their own helicopter behaviors has been associated with an increase in children's reported sense of entitlement (Segrin et al. 2012) and narcissism (Segrin et al. 2013); entitlement is one of the two defining components of narcissism (Brown et al. 2009; Twenge and Campbell 2009). Prior research has linked a sense of academic entitlement to parental rewards for getting good grades and extrinsic motivational factors for learning (Greenberger et al. 2008). One thing that children who have helicopter parents may feel entitled to is getting a great deal of help from their parents or other authority figures (e.g., professors) on academic work. However, this sort of entitlement has negative consequences. Research suggests that when people even think about someone who has helped them in the past it decreases their motivation and effort as well as encourages procrastination - a concept referred to as self-regulatory outsourcing (Fitzsimons and Finkel 2011). In other words, when someone has been helped in the past, they reduce their own effort and come to rely on that helper to obtain their future goals. If children come to expect that (i.e., feel entitled to) their parents will be heavily involved in their academics and their lives in general, they may be less motivated to intrinsically work for academic goals. Given that helicopter parenting seems to increase children's sense of entitlement, then it might also reduce academic performance by reducing children's intrinsic motivation to learn.

The research literature on helicopter parenting contains a mixture of child and parent reports of parenting behaviors and child outcomes. However, few studies have directly compared child to parental report of helicopter parenting behaviors to examine similarities and differences across reports and their relationships to various outcomes. In terms of comparing parent and child reports, there is limited and conflicting evidence in the literature. One study found no mean differences between mother and child report on the



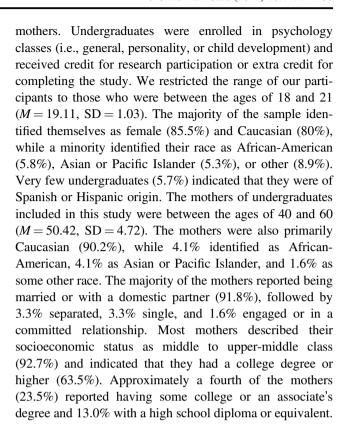
same measure of helicopter parenting and, subsequently, combined them into one latent variable (Padilla-Walker and Nelson 2012). Another came to the conclusion that parent and child perceptions do not always align based on finding only modest correlations between their reports, albeit on slightly different measures (Segrin et al. 2015). In the latter study, children's and parents' reports of helicopter parenting were not related to the same outcomes. For example, only children's reports of helicopter parenting behavior were predictive of children's academic and social problems (Segrin et al. 2015). While shared reporter variance may account for this outcome, prior research consistently supports the idea that people's perceptions about their relationships are generally more important than more objective measures (Hendrick 1981; Thomas et al. 1997). Nevertheless, if the parents' report of their own behavior are important, then they should still be correlated with child outcomes (Burk and Laursen 2010).

The current study investigated how both child and maternal report of helicopter parenting relate to variables associated with academic achievement in college students. The first goal of this study was to compare how children and their mothers perceived helicopter parenting behaviors. We hypothesized a small positive correlation between mother and child reports of helicopter parenting. We also hypothesized that if there were mean differences between mother and child report that they would be relatively small. The second purpose of this study was to investigate both child and maternal report of helicopter parenting to determine if they differentially relate to academic motivation (i.e., performance vs. mastery orientation, perfectionism, and entitlement). Specifically, we hypothesized that child report of helicopter parenting would increase both types of performance orientation (performance approach and performance avoidance), decrease both types of mastery orientation (mastery approach and mastery avoidance), increase maladaptive perfectionism (perfectionistic discrepancy), and increase entitlement. In addition, we hypothesized that child report of helicopter parenting behaviors would be more strongly related to child outcomes than parent report would be.

Method

Participants

The current study surveyed undergraduates from a small, public, liberal arts University in the mid-Atlantic region and their mothers. A total of 202 individuals who met our inclusion criteria began the survey but 10 did not provide complete data and were not included in the analyses. Thus, our sample included 192 undergraduates and 121 of their



Procedure

Undergraduates completed the measures (described below) on-line. At the end of the survey, students were asked to provide their mother's email address, which generated an automatic email to the participant's mother containing a link to the on-line parent questionnaire. All participants were treated according to the ethical guidelines of the American Psychological Association (APA 2001).

Measures

Helicopter parenting behaviors

Both college students and their mothers rated their agreement to nine statements on a scale from 1 (*strongly disagree*) to 6 (*strongly agree*). Students completed the questions about their mother (e.g., "My mother regularly wants me to call or text her to let her know where I am"). Items were slightly reworded to ask mothers their assessment of their own helicopter parenting behaviors (e.g., "I want my child to call or text me regularly to let me know where s/he is"). Cronbach's alpha in the original study was .77 for child-rated maternal helicopter parenting behaviors (Schiffrin et al. 2014). In this sample, the helicopter parenting subscale had a Cronbach's alpha of .71 for maternal parenting behaviors. Cronbach's alpha was also .71 for



mother's ratings of their own helicopter parenting behaviors.

Achievement goal questionnaire

Students answered the 12-item questionnaire in reference to their goals for performing well in an academic environment (i.e., general psychology, psychology of personality, or child development). Students rated how much a statement characterized them, on a scale from 1 (not at all true of me) to 7 (very true of me). The achievement goal questionnaire contains four subscales: Performance-Approach (e.g., "It is important for me to do better than other students"), Mastery-Avoidance (e.g., "Sometimes I'm afraid that I may not understand the content of this class as thoroughly as I'd like"), Mastery-Approach (e.g., "I want to learn as much as possible from this class"), and Performance-Avoidance (e.g., "My goal in this class is to avoid performing poorly"). Reported Cronbach's alphas for the subscales are as follows (Elliot and McGregor 2001): Performance-Approach $(\alpha = .96)$, Mastery-Avoidance Mastery-Approach ($\alpha = .87$), and Performance-Avoidance ($\alpha = .82$). In the current sample, Cronbach's alphas were .88 for Performance-Approach, .87 for Mastery-Avoidance, .87 for Mastery-Approach, and .79 for Performance-Avoidance.

Almost perfect scale – revised (APS-R)

Students completed the APS-R, which measures three aspects of perfectionism including 12 items measuring discrepancy ("My performance rarely measures up to my standards"), 7 items measuring high standards ("I set very high standards for myself"), and 4 items measuring order ("I am an orderly person"). The items are rated on a scale of 1 (*strongly disagree*) to 7 (*strongly agree*). In the original study (Slaney et al. 2001), the subscales of the APS-R had Cronbach's alphas as follows: Discrepancy ($\alpha = .91$), High Standards ($\alpha = .85$), and Order ($\alpha = .82$). Cronbach's alphas

Table 1 Average difference between child and mother report of helicopter parenting behaviors (Listwise N = 114)

Standards, and .91 for Order. In general, high standards and order are considered more adaptive forms of perfectionism, while perfectionistic discrepancy is considered maladaptive perfectionism (Slaney et al. 2001).

Psychological entitlement scale (PES)

in this sample were .93 for Discrepancy, .89 for High

Students completed the nine-item PES, which measures participants' sense of entitlement. Students were asked to rate the extent to which they endorsed a statement (e.g., "I honestly feel I'm just more deserving than others") on a scale from 1 (*strong disagreement*) to 7 (*strong agreement*). The Cronbach's alpha of this scale was .87 in prior research (Campbell et al. 2004), and .88 in this sample.

Data Analyses

Descriptive analyses were conducted to determine mean and standard deviations on all measures as well as the correlations among them. To test the first hypothesis, we conducted item-by-item correlations between mother and child reports of helicopter parenting and conducted dependent t-tests to determine mean differences. To examine the second hypothesis, we conducted correlations to examine how mother and child reports of helicopter parenting related to the measures of child outcome.

Results

First, we compared how similarly students and their mothers answered questions on helicopter parenting. Most of the helicopter parenting behaviors were below the midpoint of the scale with the exception of mother's report of wanting her child to call or text frequently (see Table 1). Overall, the correlation between students' reports of their mothers' helicopter parenting and mothers' own reports was

Item	Correlation	Child report M (SD)	Mother report M (SD)		
1. Select major	.34***	1.84 (1.24)	2.17 (1.26)*		
2. Monitor exercise	.22*	1.56 (0.99)	2.30 (1.31)***		
3. Has curfew	.38***	2.74 (1.73)	3.17 (1.70)*		
4. Wants call/text	.18	3.07 (1.73)	3.90 (1.36)***		
5. Call professor	.06	1.54 (0.88)	1.63 (1.00)		
6. Monitor diet	.19*	1.67 (1.11)	2.17 (1.21)***		
7. Monitor friends	.14	1.26 (0.63)	2.33 (1.27)***		
8. Monitor school	.32**	2.98 (1.56)	2.90 (1.61)		
9. Intervene with roommate	.19*	1.37 (0.86)	1.63 (1.00)*		
Total	.35***	1.99 (0.66)	2.44 (0.71)***		

p < .05, p < .01, p < .001



Table 2 Intercorrelation of child report measures (Listwise N = 192)

	M (SD)	1	2	3	4	5	6	7	8	9
1. Helicopter mother	2.02 (0.72)	_								_
2. Entitlement	3.08 (1.14)	.11	-							
3. High standards	6.06 (0.86)	10	.12	_						
4. Order	5.33 (1.33)	12	.10	.42***	-					
5. Discrepancy	4.05 (1.27)	.17*	.01	.07	.07	_				
6. Performance approach	4.90 (1.51)	.18*	.27***	.30***	.14	.17*	-			
7. Performance avoidance	5.32 (1.48)	.18*	.24**	.04	.08	.25**	.07	_		
8. Mastery approach	5.60 (1.17)	.06	.04	.33***	.19**	.10	.20**	.09	_	
9. Mastery avoidance	4.36 (1.63)	.15*	.10	.14*	.15	.35***	.23**	.18*	.34***	-

p < .05, p < .01, p < .01, p < .001

significant and represented a moderate positive correlation, r(114) = .35, p < .001. However, when we examined the correlation of their responses item-by-item, only about half of the items were significantly correlated. There was a positive correlation between mother and child for having a say in major selected, monitoring exercise, having curfew, monitoring diet, monitoring school work, and intervening with roommate disputes. The remaining items were not significantly related, including wanting student to call or text, calling professor, and monitoring who the student spends time with. Next, we conducted a series of dependent sample t-tests to examine mean differences in their response to each of the 9 items. Mothers reported significantly more helicopter parenting behaviors on all of the items except for whether they would call the professor about a low grade or whether they call the student to keep track of their schoolwork where there was no difference between mother and child report.

Next, we investigated how child reports of maternal helicopter parenting related to our achievement-related outcomes. All achievement goals were above the midpoint of the scale with participants most strongly endorsing approach for mastery goals and avoidance for performance goals (see Table 2). Participants reported levels of perfectionism that were above the midpoint of the scale; they had particularly high levels on the high standards subscale. Finally, college students reported levels of entitlement that were slightly below the mid-point on the scale. Child report of maternal helicopter parenting was positively correlated with perfectionistic discrepancy, performance approach goals, performance avoidance goals, and mastery avoidance goals. However, it was not related to child's sense of entitlement, the high standards and order components of perfectionism, or having master approach goals.

In order to determine whether demographic differences accounted for any of our results, we re-analyzed our data, only including those participants who identified as female and Caucasian (n = 132). The results were almost identical.

However, the relationship between the child's report of her mother's helicopter parenting behavior and performance avoidance was no longer significant r(132) = .05, p = .60. The other variables that were significant with the full sample continued to be significant, including mastery avoidance r(132) = .18, p = .04, performance approach r(132) = .23, p = .01, and perfectionistic discrepancy r(132) = .24, p = .01.

Finally, we examined how maternal report of her own helicopter parenting behavior was related to child outcomes. Maternal report was only associated with the child reported sense of entitlement, r(121) = .18, p = .05. The more mothers said they did for their children, the higher their children scored on the entitlement measure. However, maternal report was not related to aspects of perfectionism including high standards, r(121) = -.01, p = .95, order r (121) = .08, p = .39, or discrepancy r(121) = .07, p = .42. It was also not related to any academic motivation including performance approach r(121) = -.03, p = .75, performance avoidance, r(121) = .16, p = .07, mastery approach r(121) =-.07, p = .45, or mastery avoidance, r(121) = -.02, p = .87. When these data were re-analyzed on the participants who identified as female and Caucasian (n = 92), the correlation between maternal report of her helicopter parenting and entitlement was no longer significant, r(92) = .14, p = .20.

Discussion

The purpose of this study was to compare child and mother reports of helicopter parenting and to examine the relationships between both mother and child report of helicopter parenting and academic motivation. Our first hypothesis was that there would be a small positive correlation between mother and child report. This hypothesis was supported for the helicopter parenting total score; however, parent and child reports were uncorrelated on approximately half of the individual items. Interestingly, mothers reported



higher levels of helicopter parenting than did children on almost all items. This finding is in contrast with Padilla-Walker and Nelson (2012) who did not find an average difference between helicopter parenting as reported by mothers and their children. However, other studies have found that helicopter parenting behavior was associated with increased parental anxiety (Segrin et al. 2013), which may influence how they view their own behaviors. It appears that mothers and children often have different perceptions of their behavior and what is and is not appropriate. Future research should explore the ways in which children and parents perceive parenting behaviors.

Our second hypothesis was that child's report of helicopter parenting would be related to maladaptive perfectionism, increased performance orientation, decreased mastery orientation, and increased entitlement. Our hypotheses were partially supported. Child report of mother's helicopter parenting behaviors was related to a maladaptive form of perfectionism (i.e., perfectionistic discrepancy) as well as performance approach, performance avoidance, and mastery avoidance goals. Although we did not expect mother's helicopter parenting to be positively related to any mastery goals, it was related to mastery avoidance, which represents the child's concern over not being able to master the material. Thus, this pattern of results is consistent with research showing that helicopter parenting was related to decreased self-efficacy (Bradley-Geist and Olson-Buchanan 2014; van Ingen et al. 2015) and reduced a sense of perceived competence (Schiffrin et al. 2014). It is also consistent with research connecting helicopter parenting with lowered self-regulation of learning and decreased ability to set one's own goals in order accomplish tasks (Hong et al. 2015). When parents pressure students and worry about their academic achievement, it may undermine students' confidence that they can learn academic content.

As hypothesized, performance goals were more common among participants who reported helicopter parenting. It should be noted that when only white females were included, the performance goal of getting good grades was more salient than the fear of failure. Parents are more likely to have performance goals for their children when they view their child's achievement as a reflection of themselves (Grolnick et al. 2002) as well as when they have anxieties about being judged by others (Grolnick et al. 2002) or that the world is a threatening place (Gurland and Grolnick 2005). In addition, when parents hold performance-based goals for their children, they are more likely to act in a controlling manner to ensure their "child's success." Ironically, children whose parents are controlling tend to demonstrate worse task performance than those whose parents give them more autonomy support (Grolnick et al. 2002). Given that helicopter parenting has been specifically linked to higher levels of anxiety in parents (Segrin et al. 2013), they may engage in a cycle of establishing performance goals for their children that increases their use of controlling parenting behaviors and reduces their children's academic performance.

Child's report of maternal helicopter parenting was also related to increased perfectionistic discrepancy. Children who feel as though their mothers are over controlling may come to doubt their ability to live up to their own standards. which is consistent with research suggesting that child report of maternal helicopter parenting behaviors was associated with a decreased sense of competence (Schiffrin et al. 2014). Although perfectionistic discrepancy is about not being able to meet one's own personal standards, it is likely that children with over controlling parents internalize the high and unrealistic standards set by their parents (Soenens et al. 2005). Unfortunately, if parents instill a maladaptive perfectionism in their children, it may result in lower grades and greater anxiety (Rice and Slaney 2002). Setting high personal standards is only beneficial if one feels competent to meet those standards.

Our final hypothesis pertained to the academic consequences of mother's report of her own helicopter parenting behaviors. Consistent with our hypothesis as well as with previous research (Segrin et al. 2012; Segrin et al. 2013), we found that mother's report of helicopter parenting was related to increased child reports of entitlement (for the full sample, but not for the sub-sample of Caucasian women). However, it was unrelated to any other academic outcomes. It may be that some mothers are highly engaged and overinvolved but have children who do not see this level of involvement as problematic. Children may perceive this as an appropriate level of involvement that they are entitled to receive. Research has shown that some parents over-value their children and children can internalize these views, which is associated with greater levels of narcissism (Brummelman et al. 2015; Brummelman et al. 2016). Of course, given the fact that our data were cross-sectional, it is also possible that the relationship runs in the reverse direction and that children who are more entitled evoke higher levels of involvement from their parents.

Much of the research that has found negative consequences of helicopter parenting has asked children to report on their parents' behaviors (e.g., Bradley-Geist and Olson-Buchanan 2014; Hong et al. 2015; LeMoyne and Buchanan 2011; Odenweller et al. 2014; Padilla-Walker and Nelson 2012; Schiffrin et al. 2014; Segrin et al. 2015; van Ingen et al. 2015; Willoughby et al. 2015). The studies that have asked both children and parents to report on helicopter behaviors found, consistent with our study, that child report was more predictive of child outcomes than was parent report (Padilla-Walker and Nelson 2012; Segrin et al. 2015). Our study suggests that children and their mothers seem to have related, but different views about parenting



behaviors that differentially relate to child outcomes. It is only when children perceive that their parents engage in helicopter parenting that they experience negative consequences. Common reporter variance may partially explain our findings; however, they are also consistent with prior research on perception being more important than actual relationship quality (Hendrick 1981; Thomas et al. 1997). Although mother's report of helicopter parenting was not related to many child outcome variables, it may be related to negative outcomes for the parent. One study found that when parents perceive that their adult children need more help than other adults, they have lower levels of satisfaction with their lives (Fingerman et al. 2012).

A limitation of the research on helicopter parenting is that it has often been examined in primarily female samples (e.g., 85% of the participants in this study were female). For example, men tend to have higher levels of entitlement than women and entitlement has been linked to self-advocacy such as advocating for higher pay (O'Brien et al. 2012). Thus, future research should examine whether the relationship between helicopter parenting and entitlement differs for men and women. Gender differences should also be investigated for other outcomes of helicopter parenting. One study found that overparenting by mothers was related to positive social and emotional outcomes in sons (Rousseau and Scharf 2015). The researchers hypothesized that sons interpret their mother's overparenting as allowing them to have free time in order to do what they want. Daughters on the other hand may be more likely interpret maternal overparenting as a sign that they are not competent to do things for themselves. Future research should more closely investigate how the outcomes of overparenting differ based on the gender of the child.

In addition, future research should determine whether there are differences in the outcomes of helicopter parenting based on the gender of the parent. Most studies have asked children to report on the helicopter parenting of their parents in general (Bradley-Geist and Olson-Buchanan 2014; Fingerman et al. 2012; Hong et al. 2015; LeMoyne and Buchanan 2011; Odenweller et al. 2014; Padilla-Walker and Nelson 2012; Segrin et al. 2015; van Ingen et al. 2015). However, it is likely that when questions reference parents in general, respondents are most likely answering about their mothers (Hays 1998). In addition, there is some justification for the focus on mothers in this study given that prior research has found that child outcomes were better predicted by child reports of maternal rather than paternal helicopter behaviors (Nelson et al. 2015). However, future studies should overcome this limitation by examining the impact of paternal helicopter parenting.

Data on the effects of helicopter parenting done by fathers is scarce and contradictory. One study found that child reports of mother and father helicopter parenting were so highly correlated that they combined the data into a composite "parent" score (Willoughby et al. 2015). Another study found more positive outcomes when helicopter parenting was done by fathers (Padilla-Walker and Nelson 2012). Specifically, these researchers found that children who saw their fathers engage in helicopter parenting actually felt warm and close to their fathers; although, they did have lower levels of school engagement. Children may perceive helicopter parenting differently when it comes from their mother vs. father. It may be that mothers who are overly involved are seen as smothering while fathers who are overly involved are seen as good parents. Our cultural tendency toward mother blaming (Caplan and Hall-McCorquodale 1985; Jackson and Mannix 2004), and the fact that fathers are generally held to lower standards than mothers in terms of parenting may contribute to this dynamic (Arendell 2000; Hays 1996; Tummala-Narra 2009; Wall and Arnold 2007). On the other hand, a study conducted in Israel found that father report of overparenting was related to a host of negative social and emotional child outcomes (Rousseau and Scharf 2015). It is unclear whether these divergent results are due to the fact that the studies had different reporters of helicopter parenting (i.e., child vs. father) or whether the difference is due to cultural context of the studies. Additional research separately examining helicopter parenting in fathers and mothers is needed to address these issues.

Future researchers may also wish to replicate these findings with a more demographically diverse sample to determine if these relationships are generalizable to other populations. The study of helicopter parenting has been almost exclusively done with largely middle to upper middle class families. The prevalence of this style of parenting and the ways it may affect children in more diverse socio-economic and cultural groups is largely unknown. In addition, future studies can expand upon these findings by examining how having a mastery vs. performance orientation, perfectionistic tendencies, and a sense of entitlement impact the relationship between helicopter parenting and academic outcomes (e.g., GPA or standardized test scores) as well as by incorporating other constructs that may influence this relationship. For example, perceived competence mediated the relationship between helicopter parenting and emotional outcomes (Schiffrin et al. 2014) and may also affect the relationship between helicopter parenting and academic outcomes. Locus of control has been found to mediate the relationship between helicopter parenting and emotional well-being such that helicopter parenting reduces locus of control which, in turn, reduces well-being (Kwon et al. 2016). Other variables that have been associated with achievement, such as having a fixed vs. growth mindset (Dweck and Leggett 1988) or self-efficacy (Bandura 1993), may also mediate the relationship between helicopter parenting and academic outcomes.



Although there appears to be a negative relationship between helicopter parenting and academic achievement in the literature, the causal direction of the relationship remains unclear due to the cross-sectional nature of the research. It is possible that students who struggle more in school necessitate more parental involvement, which results in helicopter parenting. However, it is also possible that that there are aspects of helicopter parenting (e.g., reduces mastery motivation, increases perfectionism, and increases sense of entitlement) that undermine student success. It is likely that the relationship goes in both directions. When college-aged children perceive that their mothers engage in helicopter behaviors, their academic motivation shifts such that they care more about grades and avoiding failure than they do about truly learning information. Furthermore, they are more likely to feel as though they do not live up to their own standards. When children focus on outcomes rather than the process of learning, they become less engaged with the material and are less likely to do well. At the same time they may feel entitled to get good grades and anxious if they do not, which may create a cycle of dependency. The more involved a parent is in helping their child, the more a child feels entitled to receive that help. This help decreases their motivation (Fitzsimons and Finkel 2011) and ability to master the material themselves (Hong et al. 2015), which can make students feel as though they cannot achieve their goals on their own, so they seek additional help from their parents. Well-meaning parents who want their children to do well may wish to focus on encouraging learning for its own sake rather than focusing on external indicators of achievement such as grades (Richardson et al. 2012). Supporting children's autonomy to try new and challenging academic material, and even allowing them to fail without withdrawing their love and support (Segrin et al. 2015), could help shift their children's focus to intrinsic motivators, which will, in turn, improve academic outcomes.

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 (IRB) at the university where it was conducted, which has Federal-wide Assurance from the Office of Human Research Protection (OHRP). Thus, all procedures performed in studies involving human participants 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

Informed Consent Informed consent was obtained from all individual participants included in the study. No identifying information was obtained during data collection.

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