# article

# Helicopter parenting and female university students' anxiety: Does parents' gender matter?

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This study examined two potential mechanisms, competence and self-efficacy, that might account for the relationship between helicopter parenting and anxiety symptoms among female university students, and whether any mediating effects differed by parent gender. Structural equation modelling of data collected from 473 undergraduate students showed that both competence and self-efficacy mediated the association between paternal helicopter parenting and female university students' anxiety symptoms. No mediation effect was found for maternal helicopter parenting. A comparison between paternal and maternal effects revealed that they differed significantly from each other. Specifically, associations between helicopter parenting and female university students' competence and self-efficacy were much stronger for fathers than for mothers. Implications of the gender-specific findings are discussed in this article, and their importance for prevention and intervention are highlighted.

**key words** anxiety • competence • gender • helicopter parenting • self-efficacy

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Anxiety among university students is a public health concern in the USA. According to a recent national survey, 20.6% of undergraduate university students reported feelings of overwhelming anxiety within the past 12 months (ACHA, 2016). Specifically, it has been found that Generalised Anxiety Disorder is one of the most common mental health disorders among university students, affecting around 7% of university students nationwide (Eisenberg et al, 2013). Aside from those who are considered to have anxiety at the clinical level, data also suggested that up to 39.4% of university students might be at-risk for developing anxiety disorders such as Generalised Anxiety Disorder (Kanuri et al, 2015). Such mental health issues are particularly relevant to

female university students as the number of women pursuing higher education is increasing (US Department of Education, 2018). Therefore, it is important to identify the various factors that may lead to the development of anxiety symptoms. This need is emphasised by the lack of mental health literacy among students and the low likelihood of them seeking treatment for anxiety (Coles et al, 2015).

One factor that has been associated with the prevalence of anxiety symptoms among university students is helicopter parenting (LeMoyne and Buchanan, 2011; Segrin et al, 2013). This form of parenting is defined as the overinvolved and overcontrolling parenting of emerging adult children (see, for example, Cline and Fay, 1990, 2006; Padilla-Walker and Nelson, 2012). Helicopter parents usually do not encourage the development of autonomous motivation among emerging adult children as they continue to be heavily involved in, and controlling of, their children's lives well into adulthood (Schiffrin et al, 2014). Indeed, helicopter parents of emerging adult children are often described as overprotective, highly responsive, and lack autonomysupportive behaviours (Soenens et al, 2004; Somers and Settle, 2010). Examples of such helicopter parenting behaviours include contacting professors and administrators on the child's behalf, making life decisions for their child (that is, career choice), interfering in minor roommate disputes, or doing the child's laundry. Thus, helicopter parenting is particularly inappropriate developmentally during emerging adulthood because these children are not allowed to develop the skills necessary for a successful transition to an independent life. The helicopter parenting phenomenon has caused concern among both the university administrations and business corporations that have found themselves negotiating with parents instead of the student/employee (Howe and Strauss, 2007; Hunt, 2008).

Therefore, despite good intentions, helicopter parents may be undermining their children's wellbeing during emerging adulthood, including increasing anxiety symptomology (Cline and Fay, 2006; LeMoyne and Buchanan, 2011). Potential cognitive mechanisms that might account for the relationship between helicopter parenting and anxiety include the underdevelopment of competence and self-efficacy (Schiffrin et al, 2014). However, research that moves beyond documenting the link between helicopter parenting and emerging adult anxiety is limited (Schiffrin et al, 2014; Reed et al, 2016).

Additionally, it is important to explore possible parental gender effects in regard to the association between helicopter parenting and anxiety among female university students. The available research in this area has provided some evidence on gender difference, but with very limited information (Cui et al, 2019). To address the issues outlined above, the purpose of this study is to (1) examine the potential mediating role of competence and self-efficacy in the relationship between helicopter parenting and anxiety among female university students, and (2) explore whether maternal versus paternal helicopter parenting demonstrate differing associations with anxiety.

# Theoretical perspectives

Baumrind's (1967) parenting theory describes commonly witnessed parenting styles, including authoritative, authoritarian, indulgent and neglectful parenting. Helicopter parenting is different from these traditionally defined parenting styles because helicopter parents typically display high levels of responsiveness and conditional demandingness (Locke et al, 2012) with high demands on some aspects (for example,

academic achievement) but low on others (for example, mature behaviours). Thus, while authoritarian parents are typically considered strict and cold, helicopter parenting is benevolent and may include characteristics including overinvolvement, care, overprotection, control and a lack of autonomy support.

Both life course theory and socialisation theory suggest that parents have a significant influence on their offspring's wellbeing throughout their life course (Parke and Buriel, 1998; Elder and Giele, 2009). Thus, parents continue to have an impact on their emerging adult children even when their children move out of the house to pursue independent lives. In recent years, increasing evidence has emerged to show that it is not uncommon for emerging adults to experience helicopter parenting (see, for example, Padilla-Walker and Nelson, 2012; Schiffrin et al, 2014). The rise of helicopter parenting of emerging adult children may be attributed to the influx of new communication modes in which parents and their children can communicate regardless of whether they are living at home (for example, smartphone technology; see Hunt, 2008). Additionally, many universities across the USA have implemented parenting programmes that encourage parental involvement (for example, encouraging students to give parents access to school accounts/emails), which may further promote helicopter parenting tendencies (Savage and Petree, 2015). The effect of such parenting behaviours on emerging adult children likely needs further evaluation.

Self-determination theory (SDT, see Ryan and Deci, 2000) assumes that individuals develop self-motivation to succeed in life, as success is considered personally satisfying and rewarding. However, throughout the course of development, one may become unmotivated and passive if growing up in environments that discourage self-motivated behaviour (Ryan and Deci, 2000). Such environments could mitigate against the development of competence and self-efficacy. Therefore, SDT has the potential to shed light on parenting behaviours that facilitate or hinder the development of competence and self-efficacy, which, in turn, may prevent or promote the development of anxiety symptoms (Reed et al, 2016). The development of factors such as competence and self-efficacy is considered especially important during emerging adulthood (Arnett, 2000). Arnett (2000) stresses that it is vital for parents to display autonomy support to their emerging adult children to promote positive developmental outcomes. Specific to helicopter parenting, the overinvolved and overcontrolling nature of helicopter parenting could discourage the development of competence and self-efficacy among emerging adults, which could lead to higher levels of anxiety.

Given societal norms of gender roles it is reasonable to ask whether parent gender matters in regard to helicopter parenting. In traditional gender role theories (Bem, 1981), fathers are expected to be authority figures, whereas mothers are expected to be more emotionally available and nurturing. When parenting behaviours deviate from their norm (for example, paternal overinvolvement and maternal neglect), they may have more negative effects on child development (Rousseau and Scharf, 2015). Specifically, there is some evidence suggesting that paternal overinvolvement may be associated with more negative outcomes among children (Chen et al, 2000; Rousseau and Scharf, 2015). Paternal overinvolvement, which may be more deviant from fathers' parenting expectation, may cue emerging adults that they are not meeting expectations, which may undermine their feelings of competence and self-efficacy, subsequently leading to anxiety. There is little research that specifically addresses the father—daughter relationship in emerging adulthood. Although research suggests that mothers are more involved and have closer relationships with

their daughters compared to fathers, studies have further revealed that fathers do have a significant impact on their daughter's development through the life course (Allgood et al, 2012). Therefore, it is particularly relevant to incorporate parent gender when examining the association between helicopter parenting and anxiety among university students.

# Helicopter parenting and anxiety among university students

Although most research suggests a negative association between helicopter parenting and emerging adult wellbeing, the findings are not always consistent (Earle and LaBrie, 2016). Regarding anxiety in particular, limited research suggests an association between helicopter parenting and anxiety among university students. For example, Segrin and colleagues (2013) examined helicopter parenting and its association with various emerging adult children's maladjustment, including anxiety. They report that helicopter parenting was associated with adult children's reports of anxiety. Other studies also report a positive relationship between helicopter parenting and university student anxiety (see, for example, LeMoyne and Buchanan, 2011; Schiffrin et al, 2014).

Few studies, however, have examined the role of competence and self-efficacy in the association between helicopter parenting and anxiety among university students. Schiffrin and colleagues (2014) reported that helicopter parenting was associated with lower levels of competence. Reed and colleagues (2016) reported significant associations between helicopter parenting and anxiety through self-efficacy. However, some studies did not obtain evidence to support these mediating effects (see, for example, Segrin et al, 2012). Due to the limited and inconsistent evidence, it is essential to further examine the potential mediating role of self-efficacy and competence in the association between helicopter parenting and anxiety in emerging adult offspring.

# **Examining parental gender**

Although research on helicopter parenting is growing, few studies have examined the role of parents' gender in relation to this phenomenon. Klein and Pierce (2009) found that paternal helicopter parenting was associated with more maladaptive university student adjustment problems than maternal helicopter parenting. Specifically, fathers who exhibited higher levels of overprotection had emerging adult children who reported significantly poorer adjustment including anxiety, an association that was not found for mothers. Rousseau and Scharf (2015) also found evidence supporting the salience of paternal helicopter parenting in regard to emerging adult children's adjustment. Specifically, they found that even though mothers reported higher levels of overprotection than fathers, paternal overprotection was more predictive of higher levels of distress among emerging adult children than maternal overprotection.

However, the results are not consistent. Van Ingen and colleagues (2015) studied helicopter parenting and its association with self-efficacy. They examined the association separately by parent gender, and found that maternal helicopter parenting had a significantly stronger association with lower levels of self-efficacy than paternal helicopter parenting, although they were cautious in their interpretations due to the low internal consistency found in reports of father helicopter parenting (van Ingen et al, 2015). Further, fewer studies have focused on female university students.

Parental gender may play a different role for sons and daughters. Given the limited data available and the inconsistent findings, more research is needed to explore the role of parental gender in relation to the phenomenon of helicopter parenting of female university students.

## The present study

The purpose of the current study was to (1) examine whether the relationship between helicopter parenting and anxiety among female university students is mediated by competence and self-efficacy, and (2) explore whether maternal versus paternal helicopter parenting demonstrate differing associations with anxiety. Based on the theories and research reviewed, it is hypothesised that helicopter parenting would be positively associated with anxiety through lower levels of competence (H1a) and self-efficacy (H1b). Also, it is expected that, compared to maternal helicopter parenting, paternal helicopter parenting would have a greater association with competence and self-efficacy, which, in turn, would be associated with the development of anxiety symptoms among female university students (H2). Several important factors, including race and ethnicity, age and family income, were added as covariates as they have shown to have significant associations with the key variables of interest in this study (see, for example, LeMoyne and Buchanan, 2011; Rousseau and Scharf, 2015).

#### Method

# Sample and procedures

Participants were recruited from an undergraduate course of family studies from a large southeastern university in the USA. Participants were asked to report on a variety of topics including demographics, their mother's and father's helicopter parenting, and their health and wellbeing. A total of 473 female university students participated in the survey and were therefore included in the analyses. The final sample had the following ethnic distribution: 70.4% European–American, 14% Hispanic, 11.1% African–American, 4.5% others. The average age of the participants was 19.78 years (SD = 1.82). Reported annual family income (US\$) was 7.7% below 30,000, 15.8% between 30,000 and 50,000, 38.1% between 50,000 and 100,000, and 38.4% above 100,000.

#### Measures

Helicopter parenting. Helicopter parenting was measured using LeMoyne and Buchanan's (2011) 7-item Helicopter Parenting Scale (HPS). Respondents were asked to report exposure to helicopter parenting on a 7-point Likert scale ranging from 1, strongly disagree, to 7, strongly agree. The original measure asked participants to report on their parents collectively; addressing parent gender, the prompt was revised to collect reports on mothers and fathers separately. Sample items include, 'My father/mother often stepped in to solve life problems for me', and 'My father/mother let me figure things out independently' (reverse coded). The total score is calculated by summing all items, where higher scores represented higher levels of helicopter parenting. Participants were asked to complete the HPS for both mother and father separately ( $\alpha_{\rm mother} = 0.67$ ;  $\alpha_{\rm father} = 0.62$ ).

Competence. Competence was measured using the General Competence scale of the Losier et al (1993) Perception of Competence in Life Domains Scale. It contained four items asking participants to indicate the degree to which they agreed with each statement. Example items included, 'In many domains, I don't think I am efficient' and 'Sometimes, I think I am not competent in the many activities in which I participate.' The responses ranged from 1, *very strongly agree*, to 7, *very strongly disagree* (Losier et al, 1993). Some items were reverse scored and the scores were summed with higher scores indicating higher levels of competence ( $\alpha = 0.92$ ).

Self-efficacy. Self-efficacy was measured using the 12-item General Self-Efficacy Scale (GSES-12; Sherer et al, 1982; Bosscher and Smit, 1998). The GSES-12 was created to assess three different domains of self-efficacy: (1) willingness to initiate behaviour (for example, 'If something looks too complicated I will not even bother to try it'), (2) put effort into the behaviour (for example, 'When I make plans, I am certain I can make them work'), and (3) persist in the behaviour in the face of adversity (for example, 'I feel insecure about my ability to do things'; see Sherer et al, 1982). Respondents were asked to report on the degree to which they agreed with each statement on a scale ranging from 1, strongly disagree, to 5, strongly agree. Total scores for each respondent are calculated by summing each item with higher scores indicating higher levels of self-efficacy. Internal consistency was 0.92, which is comparable to previous studies (Bosscher and Smit, 1998; Reed et al, 2016)

Anxiety. A shortened version of the Beck Anxiety Inventory (BAI) was used to assess participants' level of anxiety symptoms (Beck et al, 1988; Osman et al, 1997). The 10-item BAI asked participants to disclose the extent to which various symptoms of anxiety have bothered them during the past month (for example, 'fear of the worst happening') on a scale ranging from 0 (not at all) to 3 (severely – it bothered me a lot). The BAI was scored by summing the coded responses, where higher scores were reflective of higher levels of anxiety. Previous research has found evidence that supported the validity and reliability of the 10-item BAI (Osman et al, 1997; Reed et al, 2016). Internal consistency of this measure in the current study was 0.91.

Covariates. A demographic survey assessed the participants' age, race, ethnicity and family income. Age was assessed in years. Racial/ethnic background was coded as 1 = African-American/Black; 2 = American Indian/Native American; 3 = Asian/Pacific Islander; 4 = Middle Eastern; 5 = Latino/Hispanic; 6 = White/Caucasian/European American; 7 = other. Family income was recorded as 1 = Below 30,000, 2 = 30,000–50,000, 3 = 51,000–100,000, and 4 = Above 100,000.

#### Results

#### Descriptive statistics

The means/percentages, standard deviations and range of scores for the study's variables are presented in Table 1. On average, participants reported moderate levels of exposure to helicopter parenting from both mothers and fathers. A paired t-test comparing the mean levels of maternal helicopter parenting (19.80) and paternal helicopter parenting (18.78) suggested that mothers displayed a significantly higher level of helicopter parenting than fathers, t (469) = 4.40, p < .01, Cohen's d = .23.

The associations among study variables are shown in Table 2. Several important findings can be seen. First, both maternal helicopter parenting and paternal helicopter

Table 1: Descriptive information on study variables

Variables	M or % (%)	SD	Min.	Max.				
Maternal helicopter parenting	19.80	4.31	8	35				
Paternal helicopter parenting	18.78	4.32	7	35				
Competence	20.53	5.40	4	28				
Self-efficacy	44.12	7.55	27	60				
Anxiety	10.87	7.10	0	30				
Demographics								
Age	19.78	1.82	18	39				
Race/ethnicity								
Black	11.0%							
White	70.0%							
Hispanic	14.0%							
Other	5.0%							
Year in college								
First year (Freshman)	29.0%							
Second year (Sophomore)	33.8%							
Third year (Junior)	23.1%							
Fourth year (Senior)	14.1%							
Annual family income (US\$)								
Below 30,000	7.7%							
30,000-50,000	15.8%							
50,000-100,000	38.1%							
Above 100,000	38.4%							

Note: Bolded numbers indicate significant differences between maternal and paternal helicopter parenting based on paired t-tests.

N = 473.

parenting were significantly and positively correlated with anxiety among female university students (r = 0.10, p < 0.05 for mothers; r = 0.14, p < 0.01 for fathers). Second, both maternal helicopter parenting and paternal helicopter parenting were significantly correlated with competence and self-efficacy (for example, r = 0.10, p < 0.05 for maternal helicopter parenting and competence). It is also important to note that the correlations were stronger for fathers than for mothers. Finally, competence and self-efficacy were both significantly correlated with anxiety among female university students.

# Hypotheses testing

Structural equation modelling was used to test the hypotheses of this study (see Figure 1). Covariates were included in the analysis but for ease of presentation are not shown in the figure. The chi-square statistic and fit indices suggested a reasonable fit of the model to the data,  $\chi^2$  (15) = 26.23, p < 0.05, CFI = 0.98, RMSEA = 0.04, and p close (Pc) = 0.72 (Kline, 2015).

Table 2: Correlations of key study variables

Variables	1	2	3	4	5
1. Mother helicopter parenting	1.00				
2. Father helicopter parenting	0.33**	1.00			
3. Competence	-0.10*	-0.21**	1.00		
4. Self-efficacy	-0.09*	-0.19**	0.57**	1.00	
5. Anxiety	0.10*	0.14**	-0.39**	-0.42**	1.00

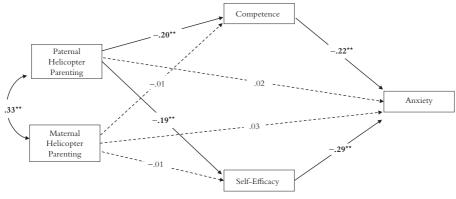
Note: \* p < 0.05. \*\*p < 0.01. Two-tailed tests.

N = 473.

Regarding H1 testing the mediating effects of competence (H1a) and self-efficacy (H1b) between helicopter parenting and anxiety, Figure 1 illustrates several findings. Paternal helicopter parenting was significantly associated with competence (r = -0.20, p < 0.01) and self-efficacy (r = -0.19, p < 0.01). Competence and self-efficacy were significantly related to anxiety (r = -0.22, p < 0.01 for competence; r = -0.29, p < 0.01 for self-efficacy). The direct path from paternal helicopter parenting to anxiety was no longer significant (r = 0.02, ns). This suggests that competence and self-efficacy fully mediated the association between paternal helicopter parenting and offspring anxiety. Maternal helicopter parenting, on the other hand, was not significantly related to competence (r = -0.01, ns), self-efficacy (r = -0.01, ns), or anxiety (r = 0.03, ns).

Next, paternal helicopter parenting and maternal helicopter parenting were compared to test H2. Specifically, the paths from paternal and maternal helicopter parenting to competence and self-efficacy were set to be equal and  $\chi^2$  changes (from the baseline model) were evaluated. The path from paternal helicopter parenting to competence was significantly stronger than the path from maternal helicopter parenting to competence ( $\Delta\chi^2(1)=6.29, p<0.05$ ). The same pattern existed for self-efficacy ( $\Delta\chi^2(1)=5.33, p<0.05$ ). Thus, it can be concluded that parental gender differences exist in the relation between helicopter parenting and anxiety.

Figure 1: Model of helicopter parenting and female university students' anxiety



\* p < 0.05, \*\* p < 0.01. N=473.

#### Discussion

The development of anxiety among emerging adults is an ongoing salient issue across the USA (ACHA, 2016). Due to the large portion of female university students at risk of developing anxiety, and in the context of increasing numbers of female students, it is important to examine factors that may be associated with this mental health outcome. Successfully uncovering the precursors of anxiety among female university students may allow us to prevent or lower the proportion of those who may be at risk.

Recent research has suggested that helicopter parenting may be a potential factor associated with the development of anxiety among university students (LeMoyne and Buchanan, 2011; Reed et al, 2016). However, relevant findings provide mixed support, with some studies reporting a direct relationship between helicopter parenting and offspring anxiety (Klein and Pierce, 2009; LeMoyne and Buchanan, 2011; Segrin et al, 2013) whereas other studies pointed to the potential indirect effects of helicopter parenting on anxiety (see, for example, Reed et al, 2016). At a theoretical level, life course and socialisation theories suggest that helicopter parenting would have a positive association with anxiety among university students. Positive and significant bivariate correlations reported in this study provided support for this view. This finding adds to evidence supporting a direct association between helicopter parenting and anxiety among female university students.

However, parents who are overinvolved and do not promote the appropriate amount of independence among their emerging adult children may be contributing indirectly to the development of anxiety as their emerging adult children enter university. University students who are exposed to this type of parenting may be underprepared for the university transition, thus leading to the development of anxiety and potentially to overall maladjustment. Therefore, this study examined the potential mechanisms that may explain the association between helicopter parenting and anxiety, among female university students. Findings from this study reveal that competence and self-efficacy serve as linking mechanisms that account for the link between helicopter parenting and anxiety among female university students.

This finding, however, is qualified by the fact that only paternal, and not maternal, helicopter parenting was associated with anxiety symptoms among female university students through competence and self-efficacy. In fact, the strength of the association found for mothers and fathers differed significantly. Such findings suggest that, even though the levels of helicopter parenting were higher among mothers than among fathers, the association between helicopter parenting and anxiety among female university students was significantly stronger for paternal helicopter parenting. This is consistent with findings from Klein and Pierce (2009) and Rousseau and Scharf (2015). It suggests that emerging adult children may internalise paternal overparenting that is associated with psychological problems such as anxiety. In contrast, maternal overinvolvement, perhaps because it is more consistent with the gender roles, may not result in maternal helicopter parenting negatively influencing anxiety (Klein and Pierce, 2009). Furthermore, daughters often report closer relationships with their mothers compared to their fathers. Thus, the act of paternal helicopter parenting may be particularly unwarranted by daughters when they seek independence and autonomy from their parents during emerging adulthood. The significant findings obtained for paternal helicopter parenting, but not maternal helicopter parenting, advance the current literature that is for the most part neutral regarding parental gender.

It is possible, that due to the overbearing nature of helicopter parenting, emerging adult children entering university may feel uncomfortable with continued helicopter parenting behaviours. The fact that parental overinvolvement (as offspring are entering adulthood) is not normative combined with role incongruence of paternal helicopter parenting (versus maternal) may place university students with helicopter fathers at an elevated risk of developing symptoms of anxiety.

This research also brings attention to the quality of communication and transitioning of the relationship between parent and adult child. As children continue to develop, the relationship between parent and child continues to change as well (Chickering and Reisser, 1993). Parents and children are continuously negotiating the state of the relationship as children develop autonomy and independence. It is possible that helicopter parenting persists due to a lack of negotiating new roles that allow for a transition from a parent—child relationship to an adult—adult relationship. Similarly, there may be a lack of communication between father figures and their daughters. Future research should examine these factors as they may give valuable insight into this phenomenon.

This research offers new insights by highlighting the role of parent gender in the context of helicopter parenting. Such an insight is valuable as very little research has considered parent gender when examining the relationship between helicopter parenting and adult-offspring outcomes. The significance of paternal helicopter parenting brings attention to fathers as important figures in their daughters' lives, especially when entering emerging adulthood. This may prompt future research to focus more on distinguishing parental gender and especially paternal parenting practices and their association with emerging adult children's outcomes.

Despite the unique contribution of the study in examining the mediating mechanisms and the role of parental gender, this study also had several limitations. First, the sample was comprised of undergraduate students from a southeastern university, the majority of whom were non-Hispanic white female students. Future studies are needed to test the generalisability of the findings to a more diverse population and to compare child gender differences by including male university students. Second, all data came from emerging adult children's self-report that may be subjective and inflate the associations being tested (Cui et al, 2005). Getting perspectives from parents is desired in future studies.

Third, the study was cross-sectional and correlational, so any inferences regarding direction of effects cannot be made. While we found that paternal helicopter parenting was associated with anxiety among female university students, no causal conclusions can be made. In certain cases, it may be possible that some emerging adult children may demand helicopter parenting due to experiencing increased anxiety during the transition to university. Longitudinal and prospective studies are needed to further delineate the direction of effects and developmental processes that may underlie such effects. Finally, the current study only examined competence and self-efficacy as potential mediating mechanisms. Other factors that could potentially explain the helicopter parenting—offspring anxiety association, such as personality (Digman, 1997), and problem–solving skills (Chen et al, 2000) should be considered in future studies.

In conclusion, the current research identified two potential mechanisms, competence and self-efficacy, that might account for the association between paternal helicopter parenting and anxiety among female university students. The finding of

parental gender differences contributes a unique perspective to the growing literature on helicopter parenting. By continuing to further our understanding of helicopter parenting, we may be able to better address developmental issues that are especially salient as children enter emerging adulthood.

## Implications for practice

The findings from this study may inform parents, family practitioners and teachers and administrators in higher education. For example, the findings could provide much needed empirical evidence that might be used to develop intervention and prevention programmes designed to promote parenting practices that are likely to facilitate positive development. Further, the findings highlight the importance of including fathers in parenting programmes to help them practice better parenting and promote their emerging adult daughters' wellbeing. Higher education institutions may consider providing information and programmes that help parents to understand the appropriate degree of involvement and the need for autonomy granting. Such programmes may also benefit from reaching out to fathers who may fall on the helicopter parenting spectrum, to help inform families on how to facilitate a smoother transition into university.

#### Conflict of interest statement

The author declares that there is no conflict of interest.

#### Note

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