



Associations between maternal envy and parenting practices

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Abstract

Children's achievements factor significantly into Chinese mothers' sense of self-worth and related parenting practices. Mothers often evaluate themselves and their children through social comparison, which might lead to malicious envy or benign envy toward another advantaged parent. This research examined how malicious envy and benign envy were differently associated with autonomy support, helicopter parenting, and psychological control, and whether parental mastery or performance achievement goals mediated these associations. Study 1 included 250 Mainland Chinese mothers ($M_{age} = 44.22$, $SD = 2.40$), who reported dispositional malicious and benign envy, achievement goals, and parenting practices. Study 2 manipulated mothers' ($N = 205$, $M_{age} = 42.48$, $SD = 3.83$) recall of malicious or benign envy experiences, and investigated the immediate effects on their attitudes toward parenting practices. Study 1 found that malicious envy positively predicted helicopter parenting and psychological control, through performance-avoidance goals. Benign envy positively predicted helicopter parenting through performance-approach goals, and also positively predicted autonomy support through mastery goals. Results of Study 2 showed that malicious envy prompted stronger endorsement of psychological control than benign envy. Findings call attention to the risks that maternal envy, especially malicious envy, might hold for engagement in childrearing motivations and behaviors characterized by heightened control.

Keywords Malicious envy · Benign envy · Helicopter parenting · Psychological control · Autonomy support · Achievement goals

Introduction

Childrearing in contemporary society has become increasingly competitive, with higher standards for being a “successful” parent and raising “successful” children. Mothers, who often serve as primary caregivers, might frequently compare themselves with other parents, or compare their child with other children, in order to evaluate their own childrearing achievements. Mothers of late adolescents might be especially concerned about these evaluations, as their offspring start to navigate educational, vocational, and relationship behaviors that might be crucial to their futures

(Zarrett & Eccles, 2006). Mothers might be exposed to, or intentionally look for, parents with obvious childrearing success. This upward social comparison can prompt feelings of frustration and desires to become the ‘better mother’ or to have the ‘better child’. The present research focused on mothers' feelings of envy toward other parents, and whether these feelings might predict mothers' parenting goals and parenting practices emphasizing autonomy or control toward their late adolescent children.

Envy is an emotion generated by upward social comparisons in identity-relevant domains (Lange & Crusius, 2015a; Salovey & Rodin, 1991), characterized by threatened self-worth and desires for another's advantages. Dual Envy Theory (e.g., Van de Ven et al., 2009) conceptualizes envy as a negative emotion with two subtypes: Envy can either take on malicious characteristics (e.g., hostility toward the envied target), or more benign qualities including benevolent feelings toward the envied other and motivations for self-improvement. It is argued that both malicious envy and benign envy exist across different cultures, regardless of whether languages distinguish between these two forms

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(e.g., Dutch, Chinese) or do not (e.g., English) (Van de Ven et al., 2009).

The key factor distinguishing malicious envy from benign envy is their differentiated cognitive appraisals of deservingness/fairness, with appraisals of controllability being a secondary distinguishing characteristic (Salerno et al., 2019; Van de Ven et al., 2012). Malicious envy is characterized by appraisals that the envied target does not deserve their advantage, and that the envier has low sense of control over changing their disadvantaged situation. In contrast, benign envy is characterized by thoughts that it is fair that envied person is superior, and belief that the envier can obtain similar advantages. In addition, malicious envy is associated with hostility, unethical behaviors such as cheating, and derogating or tearing down the envied other (Gino & Pierce, 2009; Lange & Crusius, 2015b), while benign envy is associated with positive attitudes toward the target (Van de Ven et al., 2009). Prior research also suggests that distinctions between benign and malicious maternal envy exist among Mainland Chinese mothers of adolescent children (Zong & Hawk, 2021). The experiential content of these two envy subtypes differed in terms of mothers' feelings, thoughts, and motivations. While prior work positions unfairness as the primary differentiator (Crusius et al., 2020), some findings suggest that controllability appraisals may hold greater salience in parenting contexts (Zong & Hawk, 2021), potentially reflecting caregivers' unique focus on agency in childrearing dynamics. The current study aims to extend existing research on maternal envy and examine the connections that malicious and benign maternal envy hold with both overbearing and autonomy-supportive parenting practices, as well as whether parental achievement goals mediate these associations.

Envy and parenting practices

Mothers' social comparisons and feelings of envy can impact their behaviors outside the family, as well as parenting within the family. Frequent social comparison has been linked to higher competitiveness and overly intensive parenting ideologies (e.g., Chae, 2015). Previous research has found that both malicious and benign envy were connected to efforts by Chinese mothers to improve their childrearing (Zong & Hawk, 2021). However, it remains unclear how these types of envy differently affect adaptive versus problematic parenting.

Both types of envy might be associated with overbearing parenting practices such as "helicopter parenting" and psychological control. Helicopter parenting includes behaviors such as anticipatory problem-solving, intensive instrumental

assistance and emotional involvement, and over-monitoring (Segrin et al., 2012). Psychological control refers to maintaining parental authority by manipulating youth's thoughts and emotions through guilt induction, shaming, and love withdrawal (Barber, 1996). Desiring other parents' advantages might pressure mothers to improve their chances for childrearing success by using various highly directive approaches in interactions with their children. The pressure to meet their standards of excellence (i.e., achievements of the envied parent) might override their ability to attend to youth's need for autonomy. Giving orders, using less reasoning, and/or offering excessive instrumental assistance might therefore be efficient strategies for promoting short-term success and avoiding failure, but these outcomes come at the cost of youth development of autonomous decision-making and opportunities to grow from trial-and-error learning.

According to the parental involvement model (Walker et al., 2005), parental role construction, sense of efficacy in parenting, and perceptions of parenting resources (e.g., time, energy, parenting skills and knowledge) contribute to parents' decisions and approaches to involving themselves in their children's education at home or school. Childrearing challenges (e.g., unmet competence needs) might limit mothers' thought-action repertoires for effective parenting strategies, promoting overbearing parenting decisions and practices. For example, parental anxiety, regret, and concern for the child predict helicopter parenting behaviors (Rousseau & Scharf, 2017; Segrin et al., 2013), while parental need frustration predicts use of psychological control strategies. Frustration over competence, in particular, implies parental role failure and might create urges to obtain authority and compliance (Soenens et al., 2006).

Both malicious and benign maternal envy indicate mothers' distress and frustration (Zong & Hawk, 2021), thereby signaling feelings of parental role inadequacy and diminished parental efficacy (i.e., a reduced belief in their capacity to fulfill caregiving responsibilities effectively). The negative experiences of interpersonal threat and the overriding concern of reducing envious feelings might predict mothers' irrational and self-centered (instead of child-oriented) decisions in parenting. Experiments show mothers under stress (e.g., being evaluated by others) used less autonomy-supportive and more controlling parenting behaviors in interactions with their child (Grolnick et al., 2007). Social comparison, as a source of pressure, might force mothers to thoughtlessly tie their own sense of self-worth to their child's achievements, and impose their own standards onto their child as a result (Wuyts et al., 2017). Therefore, experiences of malicious and benign maternal envy might act as

important social stressors that spill over into daily parenting practices.

Differential associations with parenting practices

Malicious and benign envy might direct mothers to engage in different levels and forms of maladaptive childrearing. While episodes of benign envy are as painful as episodes of malicious envy (Crusius et al., 2020), dispositional malicious envy, which is characterized by a lower sense of control and higher perceptions of unfairness, is linked to poorer well-being and may more strongly predict overbearing parenting. From a social-functional perspective, malicious and benign envy are status-related emotions that relate to pursuit of dominance and prestige, respectively (Crusius & Lange, 2017). Accordingly, behavioral responses to malicious envy might include coercive approaches such as using fear induction, intimidation, or aggression to obtain dominance. Research has revealed that unfairness perceptions, which are central to malicious envy, induce selfish behaviors in rewards distribution tasks (Hansson et al., 2021). These dominance pursuits and self-centered decision-making might manifest as autonomy restrictive, over-protective, and psychologically controlling behaviors. Mothers feeling malicious envy may defend their self-worth at the cost of supportive parenting.

While mothers' parenting improvement efforts following benign envy might also include over-involvement, their behaviors might be less self-oriented and include less over-control. Compared to malicious envy, benign envy entails less aggression and more self-assurance (Van de Ven et al., 2009). Benign envy, with mothers' strong hope for their child's success, might still encourage them to be proactively involved in structuring their child's life, but in less manipulative ways. The pursuit of prestige requires the demonstration of legitimate achievements and the principle of fairness (Crusius & Lange, 2017). Previous research has also found that dispositional benign envy predicted a focus on improvement process, reasonable goal setting, and better work, academic, and athletic performance (Crusius & Lange, 2014; Ierides, 2014; Lange & Crusius, 2015a; Van de Ven et al., 2011a; Ven et al., 2011b). Apart from its painful components, benign maternal envy might still make mothers attend to their child's growth process, with less coercion or power-assertion, compared to malicious envy. Therefore, we expect that benign maternal envy would predict over-involved yet less psychologically manipulative behaviors, compared to malicious envy.

Parental achievement goals as a mediator

Drawing on an "emotion-motivation-behavior" model (Salerno et al., 2019; Seifert, 1995), motivations and achievement goals that parents have for themselves or their children might mediate associations between maternal envy and parenting practices. Parents' achievement goals can be oriented towards mastery, performance-approach, or performance avoidance (Mageau et al., 2016). Mastery goals involve evaluating achievements using temporal comparison (i.e., comparison between past and current achievements), which emphasize improvement process and learning new knowledge and skills. This goal orientation often relates to autonomy-supportive behaviors and child-focused help (Gonida & Cortina, 2014). In contrast, performance goals involve evaluating achievements based on social comparisons, and predict parents' controlling behaviors (Gonida & Cortina, 2014; Mageau et al., 2016). Furthermore, parents' approach-oriented or avoidance-oriented performance goals respectively indicate desires to outperform others or to avoid appearing less competent than others. Performance-approach goals predict higher performance but less cooperative behaviors, while performance-avoidance goals consistently predict negative learning outcomes (e.g., lower GPA; see Moller & Elliot, 2006, for a review).

Both malicious and benign maternal envy might predict overbearing parenting practices through mothers' performance goals but might differ in their approach or avoidance orientations. Though achievement orientations might also predict susceptibility to envy, our model focuses on maternal envy that is triggered by unfavorable social comparisons as the proximal emotional driver of parenting behaviors. Previous research suggested that malicious envy is linked to a fear of failure (Lange & Crusius, 2015a), and also that that fear of failure predicts manipulative parenting behaviors (i.e., love withdrawal; Elliot & Thrash, 2004). These findings suggest that malicious maternal envy might promote a performance-avoidance goal orientation, leading to risk-averse or psychologically controlling parenting. In other words, the perceived lack of control associated with malicious envy might motivate mothers to favor over-controlling practices over democratic negotiations with children to avoid failure or loss of reputation.

Comparatively, benign maternal envy might promote over-involved parenting behaviors through performance-approach goals. Benign envy is positively associated with desires to achieve more than others (Lange & Crusius, 2015a), and performance-approach goals facilitate intensified effort in challenging situations (Senko et al., 2013). Its relatively higher sense of controllability and self-efficacy,

compared to malicious envy, may drive excessive involvement aimed at demonstrating childrearing competence. However, it is unclear whether benign envy also promotes mastery goals, which would further predict autonomy supportive behaviors. A multiple goal perspective suggests that performance-approach goals and mastery goals can coexist, because outperforming others might require mastery of the task in question (Darnon et al., 2010; Matos et al., 2017). It is therefore possible that benign envy also positively predicts mastery goals, which then go on to predict autonomy support. The lower perceptions of unfairness, higher sense of control, and focus on self-improvement might lead to greater patience in balancing mothers' and their child's needs. Therefore, we expect that benign envy would predict overbearing parenting behaviors through performance-approach goals, while also predicting autonomy supportive behaviors through mastery goals.

Overview and hypotheses

The current research examined whether malicious and benign maternal envy directly predict autonomy supportive behaviors and overbearing parenting (i.e., helicopter parenting and psychological control) among mothers of late adolescents, and whether parental achievement goals account for these associations. Study 1 examined correlational data and path models that included direct and indirect paths. Study 2 utilized a between-participants experimental design, manipulating mothers' accessible memories of malicious and benign maternal envy experiences, and examined their immediate effects on parenting achievement orientations and beliefs about parenting practices. Our hypotheses were:

H1: Malicious envy will show stronger negative associations with autonomy support, compared to benign envy.

H2: Malicious and benign envy will both show positive associations with helicopter parenting. Given the relative ambiguity of helicopter parenting's adaptiveness (Wang, Hawk, & Yang, in press) and the lack of prior research comparing envy types in this context, we made no a priori predictions about differences in the strength of associations between malicious and benign envy. This hypothesis explicitly tests their shared roles in predicting helicopter parenting, leaving comparative effects as an open research question.

H3: Malicious envy will show stronger positive associations with psychological control, compared with benign envy.

H4a. Malicious envy will positively predict helicopter parenting and psychological control through performance-avoidance goals.

H4b. Benign envy will positively predict helicopter parenting through performance-approach goals.

H4c. Benign envy will positively predict autonomy support through mastery goals.

Study 1

Study 1 examines associations among malicious and benign maternal envy, parental achievement orientations, and the parenting practices of autonomy support, helicopter parenting, and psychological control.

Methods

Participants

Participants were an online sample of 259 mothers, recruited from 27 provinces and municipalities in Mainland China. All mothers had at least one secondary school-aged child aged between 15 and 19 years and were asked to focus on only one child in this age range in the current research. One participant was excluded due to an extremely long survey completion time (414.18 min). Because the target participants in this research were mothers of adolescents attending senior high school, we excluded eight participants who reported that their children were attending college. There were no additional exclusion criteria.

The remaining 250 mothers were 44.22 years old ($SD=2.40$), on average. Regarding mothers' educational levels, 17.20% had senior high school education or below, 28.00% had a secondary vocational or junior college degree, 42.80% had a four-year undergraduate degree, and 12.00% had a postgraduate degree. Most mothers (73.60%) had only one child, 21.60% had two children, and 4.80% had three children. The children on whom we asked mothers to focus in this research were 50.80% male and 16.59 years old, on average (ranging from 15 to 19 years, $SD=1.03$). Among the children who had siblings, 63.77% were the eldest, 15.94% were the middle, and 20.29% were youngest. In senior high school, 38.40% were in their first year, 37.60% were in second year, and 24.00% were in third year. Most of the children (74.80%) lived with their mothers, 21.20% lived in student dorms at their high schools, and 4.00% in other arrangements.

Procedure

Participants were recruited from Sojump.com, an online survey platform in Mainland China. The platform has a large sample pool varying in demographic backgrounds.

Recruitment was on a random basis after screening for our sample requirements. At the beginning of the survey, the purpose, confidentiality, and the time of the survey were provided. Participants were specifically instructed to not pause or to be distracted during the survey. All participants consented to taking part in the survey. The questionnaire was administered in Chinese and took an average of 24.31 min ($SD=31.13$) to complete. The research was approved by the Ethics Review Board of the lead author's university.

Measures

For measures without available Chinese translations, we conducted translation and back-translation with two fluent bilingual speakers of English and Mandarin to create Chinese versions for the current study. All scales, including both English and Chinese translations, are provided in [Appendix I](#). No additional measures were included in this study.

Malicious and benign envy

Participants' general tendencies toward experiencing malicious and benign envy were assessed using the Benign and Malicious Envy Scale (BeMaS), originally developed and tested by Lange and Crusius (2015a) in four studies. Five of the items assess malicious envy and five assess benign envy. Previous research has used this scale with Chinese college students and reported good reliability (Xiang et al., 2018, 2019; Zhao et al., 2020). We reworded the items to refer specifically to parenting contexts. A sample item for malicious maternal envy is, "I feel ill will toward other parents when I want their childrearing successes for myself." A sample item for benign maternal envy is, "Longing for other parents' achievements motivates me to accomplish my goals in childrearing." Responses were on a Likert scale ranging from "1 = *strongly disagree*" to "6 = *strongly agree*". Mean scores were created for malicious and benign envy, respectively. The scale had acceptable reliability for both malicious envy ($\alpha=0.826$) and benign envy ($\alpha=0.715$).

Mastery achievement goals

Parental mastery goals for their child were assessed using the five-item scale from Watkins (1997). Mean score for the total measure was used. The items included parents' attitudes about their child's mistakes, motivations behind their parenting efforts, and standards for success. A sample item is, "I pay closer attention to my child's improvement in his or her school learning than to the final grade he/she gets." Responses ranged from "1 = *not at all true of me*" to "7 = *very true of me*". Although the scale had suboptimal reliability ($\alpha=0.617$), we continued to use this measure in

order to test related hypotheses about whether benign envy was positively associated with mothers' adaptive parenting goals (H4c).

Performance achievement goals¹

Mothers' performance-approach goals and performance-avoidance goals for their child were assessed using the eight-item scale from Mageau et al. (2016). Mean scores were created for each achievement goals measures. Four items assessed performance-approach goals (e.g., "I want my child to be better than others in the activities he/she does"; $\alpha=0.710$). The other four items assessed performance-avoidance goals (e.g., "I encourage my child to avoid the activities where he/she could feel inferior to others"; $\alpha=0.827$). Responses ranged from "1 = *not at all true of me*" to "7 = *very true of me*".

Psychological control and autonomy support

Psychological control and autonomy support were assessed using adaptations of existing ten-item and eight-item scales, respectively (Cheung et al., 2016). Mean scores were created for each measure. The original items for both scales assessed academic psychological control and academic autonomy support toward children in both Mainland China and the United States. Items were reworded so as to be not limited to academics. A sample item for psychological control is, "I let my child know that what I want him/her to do is the best for him/her, and he/she shouldn't question it" ($\alpha=0.859$). A sample item for autonomy support is, "I allow my child to decide things for himself/herself" ($\alpha=0.747$). Responses for both scales were scored from "1 = *never*", "2 = *rarely*", "3 = *sometimes*", "4 = *pretty often*", to "5 = *very often*".

Helicopter parenting

Helicopter parenting was assessed using the 19-item scale from Zong and Hawk (2022). The measure has been validated with three Mainland Chinese samples, and assesses commonly identified characteristics of helicopter parenting, including advice/affect management, anticipatory problem solving, information seeking, emphasis on academic performance, and tangible assistance. A sample item is "I try to help my child steer clear of any troubles that s/he might encounter in the world." The total measure mean score

¹ we also included the mastery goals subscale of this measure, but initial investigations did not yield a set of items with an acceptable internal consistency ($\alpha=0.560$). Additional examination of item combinations also did not yield an acceptable internal consistency. Therefore, this subscale was not included in further analysis

across the subscales was used in this study. Responses were on a six-point Likert scale from “1 = *strongly disagree*” to “6 = *strongly agree*”. The scale had acceptable reliability ($\alpha = 0.829$).

Socially desirable responding

Social desirability was assessed using the 13-item Social Desirability Scale (SDS-SF Form C) from Reynolds (1982), which has been validated with Mainland Chinese parents by Bornstein et al. (2015). One item (“There have been times when I felt like rebelling against people in authority even though I knew they were right.”) was excluded from current research because of political sensitivity. Response options were *True* or *False*, and higher sum scores indicated greater tendency toward socially desirable responses. The 12 items had adequate reliability ($\alpha = 0.743$).

Analyses

We first examined bivariate correlations in SPSS. We then examined an initial model in Mplus (version 8; Muthén & Muthén, 2017) that included direct links between malicious and benign envy, on the one hand, and helicopter parenting, psychological control, autonomy support, on the other hand. Wald tests were used to compare the strengths of different path coefficients. Next, we expanded this model to incorporate indirect pathways from maternal envy to the three parenting practices through mastery, performance-approach and performance-avoidance goals. Child gender, mother educational level, mothers’ social desirability, and whether participants lived with their child were controlled in both models. To address potential confounding effects, a one-way ANOVA was conducted to compare the effect of mother educational level on tested variables. There was a significant effect of mother educational level on benign envy ($F(5, 244) = 3.191, p = 0.008, \eta^2 = 0.061$), psychological control ($F(5, 244) = 2.427, p = 0.036, \eta^2 = 0.047$), autonomy

support ($F(5, 244) = 5.344, p < 0.001, \eta^2 = 0.099$), and performance-avoidance goals ($F(5, 244) = 2.402, p = 0.038, \eta^2 = 0.047$). Because social desirability may not meaningfully influence mothers’ self-acknowledgement of undesirable thoughts/feelings (e.g., envy) while potentially leading to substantive variance (e.g., Lanz et al., 2022), we conducted additional sensitivity analyses excluding social desirability as a covariate and report those results in supplementary materials.

Malicious and benign envy were free to covary, as were the error terms between each pair of achievement goals, and between each pair of parenting behaviors. We used model fit to assess overall model construction and tested standardized indirect effects with 10,000 bias-corrected bootstrap resamples to assess separate indirect effects. To address concerns about statistical power and complement traditional maximum likelihood with robust standard errors (MLR) estimation, we supplemented the analysis with Bayesian estimation in Mplus. We used 10,000 MCMC iterations and a thinning factor of 10 to ensure convergence. This approach allowed us to report posterior means, 95% credible intervals (CIs), deviance information criterion (DIC), posterior predictive p-value (PPP) and convergence diagnostics (potential scale reduction < 1.1) alongside traditional MLR estimates.

Results

Mean scores and bivariate correlations are shown in Table 1. Our results showed that malicious and benign maternal envy were not correlated, consistent with prior research that found no correlation or weak positive correlations between malicious and benign envy using the same measure (Cruisius & Lange, 2017). Malicious envy was negatively correlated with socially desirable responding, while benign envy was not correlated with socially desirable responding. Malicious envy was positively correlated with both performance-approach and performance avoidance goals, and was

Table 1 Study 1 means and bivariate correlations

Measure	1	2	3	4	5	6	7	8	9
1. Benign Envy									
0. Malicious Envy	0.037								
0. Mastery Goals	0.259***	−0.223***							
0. Performance-Approach	0.498***	0.158*	0.088						
0. Performance-Avoidance	0.105	0.440***	−0.115	0.246***					
0. Psychological Control	0.167**	0.487***	−0.238***	0.273***	0.404***				
0. Helicopter Parenting	0.261***	0.233***	0.115	0.301***	0.360***	0.433***			
0. Autonomy Support	0.159*	−0.273***	0.491***	−0.040	−0.137*	−0.415***	−0.021		
0. Social Desirability	0.058	−0.261***	0.253***	−0.047	−0.137*	−0.283***	0.026	0.409***	
Mean	4.79	2.44	5.64	5.32	3.66	2.78	4.30	3.85	8.58
SD	0.67	0.96	0.73	0.86	1.33	0.71	0.58	0.53	2.72

* $p < .05$, ** $p < .01$, *** $p < .001$

negatively correlated with mastery goals, while benign envy was positively correlated with mastery and performance-approach goals. Both malicious and benign envy were positively linked with psychological control and helicopter parenting. However, malicious envy was negatively linked with autonomy support, while benign envy was positively linked with autonomy support. Both performance-approach goals and performance-avoidance goals were positively related to psychological control and helicopter parenting. Performance-avoidance goals were additionally negatively related with autonomy support. Mastery goals were negatively related with psychological control and positively related with autonomy support, but not related to helicopter parenting.

The initial model examining the link between malicious and benign envy and parenting practices showed acceptable fit: $\chi^2(8)=24.336$, CFI=0.917, RMSEA=0.090, SRMR=0.063. Bayesian estimation revealed a PSR of 1.06 for all parameters, indicating satisfactory convergence (values < 1.1 are recommended; Gelman & Rubin, 1992). The hypothesized model showed substantially better fit than the null model (no structural paths), as evidenced by a DIC of 2363.085 compared to the null model's DIC of 5465.567 (Δ DIC=3102.482). However, the PPP<0.001 suggested some model-data discrepancy.

There was a negative link from malicious envy to autonomy support ($\beta = -0.200$, $p < 0.001$, 95% CI [-0.31, -0.09]; Bayesian posterior mean = -0.192, 95% CI [-0.32, -0.06]). The link from benign envy to autonomy support was not significant with MLR estimation ($\beta = 0.142$, $p = 0.094$, 95% CI [-0.02, 0.31]) but significant with Bayesian estimation (Bayesian posterior mean = 0.140, 95% CI [0.04, 0.25]). A Wald test (MLR estimation) revealed a significant difference between the coefficients for malicious and benign envy in these two links ($p = 0.005$). These results were consistent with our hypothesis (H1). There were also significant positive links from malicious envy ($\beta = 0.236$, $p < 0.001$, 95% CI [0.13, 0.34]; Bayesian posterior mean = 0.228, 95% CI [0.10, 0.34]) and benign envy ($\beta = 0.235$, $p = 0.003$, 95% CI [0.08, 0.39]; Bayesian posterior mean = 0.219, 95% CI [0.14, 0.32]) to helicopter parenting, supporting our hypothesis (H2). Wald test showed that there was no difference between the coefficients for malicious and benign envy in these two links ($p = 0.441$). There were also significant links from both envy types to psychological control ($\beta = 0.451$, $p < 0.001$, 95% CI [0.35, 0.55]; Bayesian posterior mean = 0.447, 95% CI [0.36, 0.55] for malicious envy; $\beta = 0.177$, $p = 0.004$, 95% CI [0.06, 0.30]; Bayesian posterior mean = 0.167, 95% CI [0.06, 0.30] for benign envy). Wald tests showed that the difference between the coefficients for malicious and benign envy in these two links was not

significant ($p = 0.070$). These results did not support our hypothesis (H3).

Next, the model including the three achievement goals as mediating variables (Fig. 1) had acceptable fit: $\chi^2(20)=45.480$, CFI=0.948, RMSEA=0.071, SRMR=0.070. Bayesian estimation revealed a PSR of 1.05 for all parameters, indicating satisfactory convergence. The hypothesized model also showed substantially better fit than the null model (Δ DIC=3329.429). However, the PPP<0.001 still suggested some model-data discrepancy.

Results showed positive indirect effects from malicious envy to both helicopter parenting and psychological control, through performance-avoidance goals, supporting H4a ($\beta = 0.124$, $p < 0.001$; 95% CI [0.04, 0.11]; Bayesian posterior mean = 0.113, 95% CI [0.05, 0.21] for helicopter parenting; $\beta = 0.082$, $p = 0.003$; 95% CI [0.02, 0.10]; Bayesian posterior mean = 0.081, 95% CI [0.02, 0.12] for psychological control). There was a positive indirect effect from benign envy to helicopter parenting, through performance-approach goals, supporting H4b ($\beta = 0.071$, $p = 0.029$; 95% CI = [0.004, 0.12]). However, Bayesian estimation showed that this effect was nonsignificant (Bayesian posterior mean = 0.064, 95% CI [-0.02, 0.12]). There was also a positive indirect link from benign envy to autonomy support, through mastery goals, supporting H4c ($\beta = 0.105$, $p = 0.009$; 95% CI = [0.03, 0.17]; Bayesian posterior mean = 0.094, 95% CI [0.05, 0.17]). Finally, an additional negative indirect effect existed from malicious envy to autonomy support, through mastery goals ($\beta = -0.092$, $p = 0.006$; 95% CI [-0.10, -0.02]; Bayesian posterior mean = -0.085, 95% CI [-0.14, -0.04]).

Study 2

Results in Study 1 largely supported our hypotheses regarding associations between maternal envy and autonomy support, helicopter parenting, and psychological control. Further experimental evidence is necessary to establish the causal effects of maternal envy on those parenting behaviors. Study 2 implemented an experimental design, which aimed to elicit mothers' recall of malicious or benign maternal envy toward another parent, and investigate effects upon their immediate attitudes toward particular parenting practices (i.e., autonomy support, helicopter parenting, and psychological control). This study adopted a two-condition design in which participants were manipulated to recall an experience of either malicious or benign envy. We hypothesized that benign envy would more strongly predict endorsement of autonomy support than malicious envy (H1). Based on the results of Study 1, we did not expect malicious and benign envy to promote different levels of endorsement of helicopter parenting (H2). Finally, we expected that

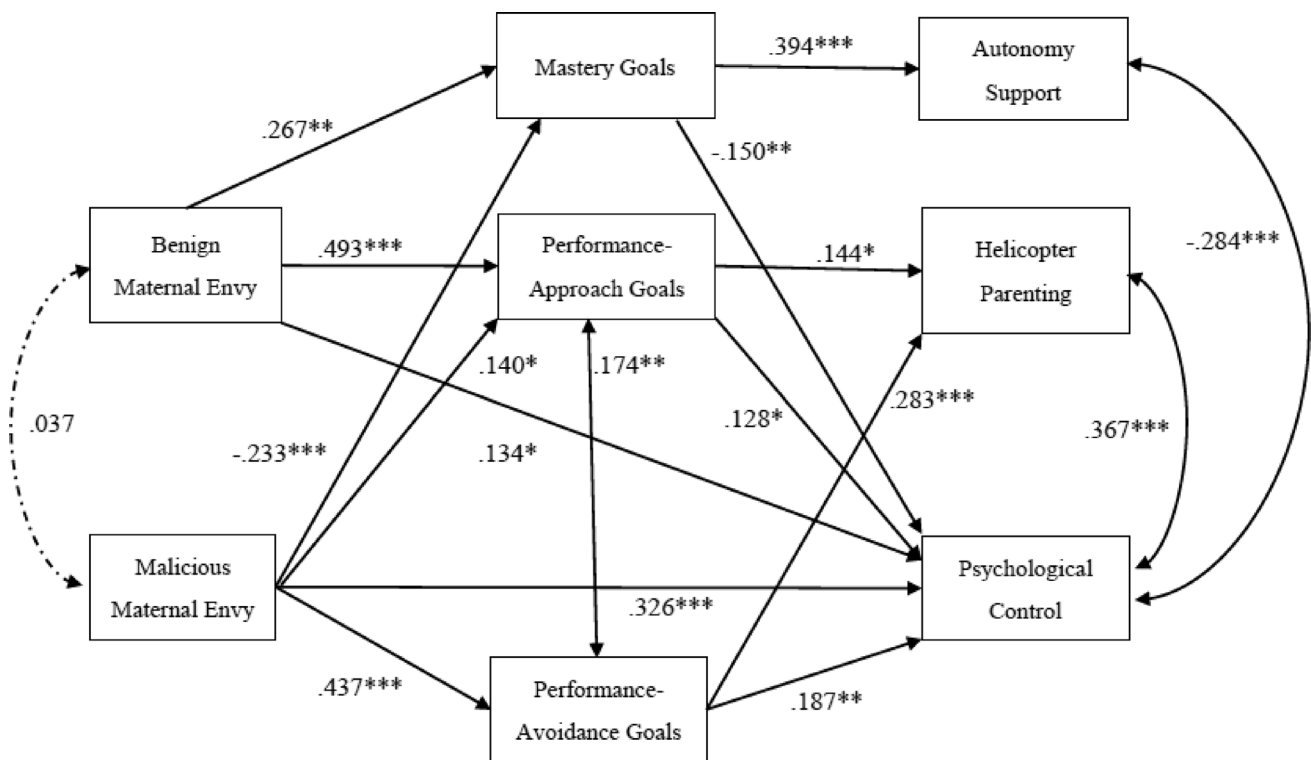


Fig. 1 Study 1. Mediation model of achievement goals in the links between envy and parenting practices. *Note.* The model was controlled for child gender, mother educational level, social desirability and whether mothers lived with child. Model fit: $\chi^2 = 45.480$, $df = 20$, CFI = 0.948, RMSEA = 0.071, SRMR = 0.070. Standardized indirect effects: Benign Envy \rightarrow Mastery Goals \rightarrow Autonomy Support ($\beta = 0.105$, $p = .009$; 95% CI = [0.04, 0.20]); Benign Envy \rightarrow Performance-

Approach Goals \rightarrow Helicopter Parenting ($\beta = 0.071$, $p = .029$; 95% CI = [0.006, 0.14]); Malicious Envy \rightarrow Mastery Goals \rightarrow Autonomy Support ($\beta = -0.092$, $p = .006$; 95% CI [-0.17, -0.04]); Malicious Envy \rightarrow Performance-Avoidance Goals \rightarrow Helicopter Parenting ($\beta = 0.074$, $p < .001$; 95% CI [0.07, 0.19]); Malicious Envy \rightarrow Performance-Avoidance Goals \rightarrow Psychological Control ($\beta = 0.082$, $p = .003$; 95% CI [0.03, 0.15]). * $p < .05$, ** $p < .01$, *** $p < .001$

malicious envy would more strongly predict endorsement of psychological control, compared with benign envy (H3).

Method

Participants

Participants consisted of an online sample of 210 mainland Chinese mothers from 26 provinces and municipalities. All mothers had at least one child aged between 15 and 19 years who was attending senior high school, and they were asked to focus on only one child in this age range for the study. Five participants were excluded because they did not report any recalled envy experience in the manipulation. There were no additional exclusion criteria.

The remaining 205 mothers were 42.48 years old, on average ($SD = 3.83$). Most of them (60.49%) had a four-year undergraduate degree, 22.93% had a secondary vocational education or junior college degree, 7.32% had a postgraduate degree, and 9.26% had a senior high school degree or below. Two mothers reported being divorced, and all others

reported being married. Most mothers (67.80%) had only one child, 31.22% had two children, and 0.98% had three children. The children on whom mothers focused for this study were 16.45 years old, on average ($SD = 0.88$), and 53.17% were male. For their school grade, 44.88% were in the first year of senior high school, 41.46% were in the second year, and 13.66% were in the third year. Most of these children (74.63%) lived with their mothers, 23.90% lived in a student dormitory, and 1.46% lived with another adult or family member.

Procedure

As in Study 1, participants were recruited from Sojump.com. At the beginning of the survey, the purpose, confidentiality, and the time of the survey were provided. Participants were instructed to not leave or be distracted during the survey. All participants provided consent to take part in the survey. The questionnaire was administered in Chinese. The survey took an average of 16.80 min to complete ($SD = 29.69$). We followed the procedure from previous research (Salerno et al., 2019), asking participants to complete a writing task about

a past experience that aimed to elicit malicious or benign envy emotions.

Participants were randomly assigned to the malicious envy ($N=101$) or benign envy ($N=104$) groups. For the two experimental groups, participants were asked to recall and describe a situation when they felt envy toward another parent. Malicious and benign envy were differentially manipulated by asking participants to write about an envy experience in which they felt the other parent's advantage was undeserved or deserved, respectively. Previous research shows that perceived deservingness is an appraisal that determines whether malicious or benign envy is experienced (Crusius & Lange, 2014). The manipulation prompt was, "Please recall one of your experiences when you have felt envy toward another parent and felt the other parent's advantage was undeserved (malicious envy condition)/deserved (benign envy condition). Please try to close your eyes and re-experience that emotion as much as possible. And please then describe as detailed as possible below about the specific situation, why you felt envy, and your specific feelings and thoughts at that time." After the recall task, participants responded to a manipulation check, followed by a set of measures asking how acceptable they currently considered certain parenting behaviors to be.

Measures

For measures without available Chinese translations, we conducted translation and back-translation with bilingual speakers of English and Mandarin. All scales and instructions, including both English and Chinese translations, are available in [Appendix II](#). No additional measures were included in this study.

Manipulation checks for malicious and benign envy

Participants in the malicious and benign envy groups were asked to think about the envy experience they described and indicate their current overall mood (1 = "very negative" to 9 = "very positive") and the extent to which they currently felt malicious envy and benign envy, as well as two similar emotions – admiration and resentment – to differentiate the two envy types from other emotions (1 = "not at all", to 9 = "very much so"). They were then asked to indicate "to what extent do you feel that the advantage that parent held over you was deserved?" (1 = "not at all deserved", to 9 = "very deserved") and "to what extent do you feel that gaining such an advantage was under your own control?" (1 = "not at all controllable", to 9 = "very controllable"). As an additional check, we assessed socially desirable responding using the 12-item Social Desirability Scale (SDS-SF Form C) from Reynolds (1982), validated with Mainland Chinese parents

by Bornstein et al. (2015). The 12 items had acceptable reliability ($\alpha=0.727$).

The following measure items were rephrased to be suitable for answering participants' current opinions or acceptance.

Helicopter parenting

Helicopter parenting was assessed using the same 19-item scale from Study 1, with slight rephrasing of the wording to ask about parents' attitudes instead of behaviors. The measure included five dimensions: advice/affect management, anticipatory problem solving, information seeking, emphasis on academic performance, and tangible assistance. A sample item is "I should try to help my child steer clear of any troubles that s/he might encounter in the world." Responses were on a 6-point Likert scale from "1 = *strongly disagree*" to "6 = *strongly agree*". The total measure had acceptable reliability ($\alpha=0.851$).

Psychological control and autonomy support

Psychological control and autonomy support were assessed using the same adapted ten-item and eight-item scales, respectively, used in Study 1 (Cheung et al., 2016). Wordings were slightly rephrased to ask about parents' attitudes instead of behaviors. A sample item for psychological control is, "I should let my children know that what I want them to do is the best for them and they shouldn't question it." A sample item for autonomy support is "I should allow my child to make his/her own choices whenever possible." Responses for both scales were scored from "1 = *strongly disagree*" to "5 = *strongly agree*". Both measures had acceptable reliabilities ($\alpha=0.873$ and 0.756 for Psychological Control and Autonomy Support, respectively).

Analyses

Manipulation checks were first conducted using independent t-tests in SPSS, to determine the effectiveness of envy recall manipulation, and to ensure that participants in the two conditions did not differ in their levels of socially desirable responding. To address potential confounding effects, a one-way ANOVA was conducted to test for potential associations between mother educational level and the dependent variables. Results indicated no significant effects of mother educational level on any of the dependent variables (all $ps > 0.170$). We then conducted one-way multivariate analysis of variance (MANOVA) in SPSS to examine effects of the two conditions on the dependent variables. Post-hoc power analyses were conducted using G*Power 3.1 to estimate the likelihood of detecting the observed effects for

Table 2 Study 2 independent T-tests for manipulation check questions and social desirability

Questions	Group	Mean	SD	t	df	Sig.	Cohen's d
1. What is your current overall mood?	BE	6.26	1.77	2.057	203	0.041	0.29
	ME	5.74	1.83				
2. To what extent do you currently feel benign envy toward the parent described in the situation?	BE	7.39	1.51	2.208	176.824	0.029	0.31
	ME	6.81	2.19				
3. To what extent do you currently feel malicious envy toward the parent described in the situation?	BE	3.48	2.25	-6.363	203	<0.001	-0.89
	ME	5.52	2.35				
4. To what extent do you currently feel admiration toward the parent described in the situation?	BE	7.22	1.52	5.113	169.298	<0.001	0.72
	ME	5.79	2.38				
5. To what extent do you currently feel resentment toward the parent described in the situation?	BE	1.96	1.60	-3.291	190.184	0.001	-0.46
	ME	2.80	2.03				
6. To what extent do you feel that the advantage that parent held over you was deserved?	BE	7.63	1.11	7.858	143.042	<0.001	1.11
	ME	5.63	2.30				
7. To what extent do you feel that gaining such an advantage is under your own control?	BE	5.65	1.72	0.390	203	0.697	0.06
	ME	5.55	1.92				
Social desirability	BE	8.16	2.72	1.251	203	0.213	0.18
	ME	7.68	2.78				

BE Benign envy, ME Malicious envy

Table 3 Study 2 mean scores and results of the one-way MANOVA

	Mean (SD)		F (1, 203)	Sig.	Partial η^2
	ME	BE			
Psychological control	2.98 (0.84)	2.73 (0.82)	4.315	0.039	0.021
Autonomy support	4.09 (0.56)	4.22 (0.41)	3.709	0.056	0.018
Helicopter parenting	4.40 (0.61)	4.36 (0.62)	0.242	0.623	0.001

ME Malicious envy condition, BE Benign envy condition

each dependent variable, given the sample size ($N=205$), two-group design (malicious envy vs. benign envy), and $\alpha=0.05$.

Results

Manipulation checks

Results of the independent t-tests for the manipulation check are shown in Table 2. All the manipulation check questions showed overall differences between two groups, except for the controllability question. The malicious envy group showed more negative mood than the benign envy group. Participants in the malicious/benign envy groups reported feeling their respective target emotions more strongly than the other group. The malicious envy group reported lower feelings of admiration and higher resentment than the benign envy group. The benign envy group reported stronger perceptions of deservingness than the malicious envy group. The two groups did not differ in socially desirable responding. Considering that we found main differences between

malicious and benign envy groups in perceived target emotions as well as perceptions of deservingness (the main differentiating appraisal; Salerno et al., 2019), we determined that the manipulation was effective.

Effects on dependent variables

Mean scores and results of the one-way MANOVA are shown in Table 3. Results showed that the malicious envy group scored higher than the benign envy group on endorsements of using psychological control. There were no differences between the malicious envy group and the benign envy group on the total score for endorsements of helicopter parenting or autonomy support. Post-hoc power analyses showed that for psychological control, the analysis revealed a large effect size ($f=0.516$, partial $\eta^2=0.21$) with 100% power to detect the critical $F(1,203)=3.89$. Similarly, autonomy support showed a large effect ($f=0.469$, partial $\eta^2=0.18$) with 99% power. In contrast, helicopter parenting exhibited a trivial effect ($f=0.032$, partial $\eta^2=0.001$) and very low power (7%) to detect the critical $F(1,203)=3.89$.

Discussion

The current research examined the relationships that malicious and benign maternal envy hold with overbearing parenting practices, and parental achievement motivations. Correlational results in Study 1 showed that benign envy was positively associated with autonomy support, while malicious envy showed a negative association with autonomy support, in line with our hypothesis (H1). Results also supported our prediction that malicious and benign maternal

envy were both positively associated with helicopter parenting (H2). Contrary to H3, however, malicious envy was not more strongly associated with psychological control than benign envy. Tests of indirect effects in Study 1 revealed that malicious envy predicted both helicopter parenting and psychological control through performance-avoidance goals (supporting H4a), while benign envy predicted helicopter parenting through performance-approach goals (supporting H4b), and predicted autonomy support through mastery goals (supporting H4c). Experimental evidence in Study 2 provided mixed support for our hypotheses. The benign envy group did not show significant difference from the malicious envy group in endorsement of autonomy support, failing to support H1. In line with H2, no significant differences existed between malicious and benign envy in prompting endorsement of helicopter parenting. Notably, this result should be interpreted with caution due to insufficient statistical power (7%), which may have limited the ability to detect meaningful effects. However, malicious envy prompted significantly stronger endorsement of psychological control than benign envy (supporting H3). Overall, the current research suggests that malicious and benign maternal envy showed some of the expected differences in their relations with parenting practices, and that malicious envy predicted more control-oriented parenting goals and behaviors than benign envy. This research provides new perspectives on the sources of mothers' aspirations for childrearing, particularly regarding unstable childrearing standards based on self-evaluations and upward comparisons.

Maternal envy and parenting practices

This research provides insights into how malicious and benign maternal envy predict mothers' subsequent childrearing behaviors. Mothers often view their children as extensions of themselves, incorporating them into their self-evaluations (Collett, 2005; Thai et al., 2018). However, conflicts might arise between parents' and adolescents' goals. Envy might direct mothers to focus disproportionately on protecting their threatened self-views, potentially at the cost of their child's developmental needs. Existing research indeed has found that mothers' social comparison tendencies (a prerequisite for envy) generally predicted greater anxiety, depression, parental role overload, and lower parental competence (e.g., Caverly, 2019; Coyne et al., 2017; Filik-Uyanık & Demircan, 2021). In this sense, envy might reorder mothers' childrearing goals, prioritizing the restoration of positive self-views. Consequently, their improvement efforts might be misguided and lead to undesirable behaviors. Our results across two studies supported this proposition by showing that malicious envy, in particular, predicted parenting practices that are over-involved, over-protective,

and manipulative. These results are consistent with previous findings that social comparison orientation was related to heightened competitiveness and intensive parenting ideologies (Chae, 2015).

Our results also reveal that malicious and benign envy directed mothers to enact different forms and levels of parenting efforts. Supporting our hypotheses (H1 and H3), results across the two studies showed that malicious envy was negatively associated with autonomy support, whereas benign envy was positively associated with autonomy support. Malicious envy was also more strongly associated with psychological control than benign envy. These results align with recent findings linking malicious envy to immoral decision-making and selfish behaviors (Hansson et al., 2021; Wei & Yu, 2022). Prior research suggests that a competitive versus cooperative mindset might moderate the effects of social comparison on dissimulative or assimilative self-evaluations (Colpaert et al., 2015). Although malicious and benign envy both include dissimulation following upward social comparisons (i.e., to contrast oneself from the envied other; Smith, 2000), the cognitive appraisals can be further differentiated according to their competitive versus cooperative orientations, respectively. The hostility and overall more competitive evaluations associated with malicious envy can consume mothers' attention that is normally allocated to childrearing, and increase their need for self-protection.

In contrast, results suggested that benign envy might be less maladaptive, or even promote positive parenting efforts. Study 1 results showed that benign envy had a positive correlation with helicopter parenting and a modest positive correlation with psychological control, but also had a modest positive correlation with autonomy support. Similarly, in Study 2, the benign envy group showed weaker endorsement of psychological control compared to the malicious envy group. These results align with previous research showing that benign envy was linked with higher but achievable goal setting and better work, academic, and athletic performance (Ierides, 2014; Lange & Crusius, 2015a; Van de Ven et al., 2011a; Ven et al., 2011b). Studies have also revealed that perceiving the envied target as deserving promotes a positive attitude and motivation towards self-improvement for benign envy (Van de Ven et al., 2011a; Ven et al., 2011b). Parenting efforts following benign envy might be associated with both autonomy support and over-involvement. When disengagement from an important envied domain is impossible, benign envy still serves as a healthier and more controllable means for bettering oneself compared to malicious envy.

Furthermore, correlational results in Study 1 showed that both malicious and benign envy positively predicted helicopter parenting, and no significant difference existed in

Study 2 between the two groups' attitudes about helicopter parenting. These results support our hypothesis (H2). Helicopter parenting is a set of over-involved practices that are motivated by parents' intentions to facilitate their child's success (Segrin et al., 2012). Previous research has suggested that helicopter parenting predicts positive youth outcomes (e.g., school engagement) when parents enact it with warmth or emotional support; otherwise it might predict negative youth functioning (e.g., depressive symptoms, lower self-worth, higher risk behaviors; Nelson et al., 2015; Padilla-Walker et al., 2021). Our finding of the positive relationship between benign envy and helicopter parenting align with recent critiques (Lange & Crusius, 2022) challenging the assumption that benign envy is universally adaptive. While benign envy may foster proactive parenting strategies, its association with over-involvement underscores how its adaptiveness is context-bound. Specifically, when childrearing becomes a domain for status competition, even benign envy, which is driven by a desire to "keep up" with others, may prioritize parental status concerns over children's developmental needs. This tension mirrors broader debates about envy's duality: Both benign and malicious envy share roots in social comparison and status-seeking (Lange & Crusius, 2022), which could explain why benign envy, like its malicious counterpart, correlates with traits such as entitlement or overinvestment in extrinsic goals. Parenting thus serves as a critical case study for theories of emotion and motivation, illustrating how domain-specific goals (e.g., fostering autonomy vs. outperforming peers) reshape the consequences of envy.

Notably, the helicopter parenting measure used in this research focused on overt parenting behaviors, instead of cognitive or emotional dimensions. Interpreting whether such over-involvement harms youth's functioning might require additional measures addressing the emotional dimensions of parenting, such as psychological control and autonomy support. Our aforementioned findings from Study 2 that malicious envy more strongly predicted endorsement of psychological control and findings from Study 1 of malicious envy's negative association with autonomy support suggest that when mothers are inclined to experience malicious envy, their helicopter parenting behaviors occur in a harsh, manipulative, and less supportive manner. Future research could explore this issue by examining the relationships between malicious and benign envy and different helicopter parenting profiles characterized by the presence or absence of parental warmth.

Indirect effects through parental achievement goals

Emotions play a guiding role in goal setting, helping individuals make (mostly) constructive decisions (Zeelenberg

et al., 2007). Research shows that various emotions are associated with different implicit motivational goals. For example, anxiety often motivates uncertainty reduction and predicts low risk/low reward gambling decisions (Ragunathan & Pham, 1999). Guilt motivates atonement and increases cooperation (Ketelaar & Au, 2003). This goal-based account helps identify potential behaviors that specific emotions might instigate. Knowing how malicious and benign envy alter mothers' childrearing goals is important for understanding their decision-making processes and subsequent behaviors.

Results in Study 1 supported our hypotheses of the indirect effects of maternal envy on parenting practices through parental achievement goals (H4a–H4c). The finding that malicious and benign envy both predicted overbearing parenting through performance goals highlights the role of social comparison outcomes in shaping mothers' parenting efforts. As hypothesized, the model in Study 1 showed that malicious envy predicted both helicopter parenting and psychological control through performance-avoidance goals, while benign envy predicted helicopter parenting through performance-approach goals. The findings are in line with literature indicating that malicious envy is related to fear of failure (Lange & Crusius, 2015a), and also that a focus on failure prevention predicts helicopter parenting and psychological control (Elliot & Thrash, 2004; Rousseau & Scharf, 2017). An avoidance orientation focuses mothers on negative possibilities, leading to anticipatory worry, anxiety, and depletion of psychological resources (Oertig et al., 2013). Avoiding further failure might prioritize immediate childrearing outcomes over longer-term improvements, potentially leading to manipulative strategies that demand compliance and limit children's self-expression. Our results demonstrated that malicious envy could lead mothers to adopt both over-involved and manipulative strategies, motivated by avoiding further loss or failures.

Results in Study 1 were also in line with our hypotheses (H4b and H4c) that benign envy predicts helicopter parenting through performance-approach goals, while also predicting autonomy support through mastery goals. This is congruent with some research showing that social comparison orientation can be positively associated with both mastery goals and performance-approach goals (Darnon et al., 2010). These dual goal orientations could even predict adaptive outcomes such as academic achievement and effective learning strategies (Linnenbrink, 2005; Pintrich, 2000). Benign envy might motivate mothers to prove their childrearing competence by focusing on learning and supporting their child's independent growth. Previous research has linked benign envy with success-oriented goals and desires to achieve more than others (Lange & Crusius,

2015a), while performance-approach goals correlate with risk-taking, effort, and goal attainment (e.g., Ierides, 2014). Our results further suggest that benign envy fosters genuine interest in learning and skill mastery. These results also echo research that found benign envy predicted process-focused self-improvement goals, unlike malicious envy which predicted outcome-focused goals (Salerno et al., 2019). In childrearing, where mastery goals and performance goals often coexist, benign envy's dual pathways reflect the complex interplay between parental aspirations and societal pressures. Thus, benign envy's "constructive" outcomes may depend on alignment between self-improvement goals and domain-specific values.

Limitations and future directions

The current research held several methodological strengths. First, our samples across Studies 1–2 included mothers of late adolescents from diverse regions across Mainland China, enhancing the generalizability of our findings. Second, by employing both correlational and experimental designs, we were able to examine both dispositional and state-level maternal envy. While state envy affects goals and behaviors immediately and contextually (Toomey & Heo, 2022), dispositional envy might exert an enduring influence beyond state envy on mothers' motivations and behaviors. Although our manipulation of state envy successfully revealed differences in maladaptive practices, it was potentially not strong enough to elicit large differences in the endorsement of adaptive strategies that mothers already value for their children. This investigation of both dispositional and state maternal envy contributes to a wholistic understanding of the effects of envy on mothers' cognitive and behavioral outcomes in childrearing. Our experimental study offers insights that suggest a potential causal relationship between these emotions and subsequent childrearing behaviors.

Despite these advantages, this research had several limitations. First, the current research did not examine the causal links from malicious and benign envy to parental achievement goals, nor from parental achievement goals to parenting practices. It is also possible that particular goal orientations promote different types of envy, instead of the reverse. Future research should employ experimental designs that manipulate both envy experiences and achievement goals to clarify their effects on behaviors. Second, the nonsignificant finding for helicopter parenting in Study 2 reflects anecdotal evidence strength, as inferred from post-hoc power analyses (7% power, $f=0.032$). This severely limits interpretability, as the null result may stem from

insufficient sensitivity rather than a true absence of an effect. Future studies should prioritize larger samples ($n>200$) to adequately test for medium-sized effects. Third, future research could also consider some parent or child characteristics, such as narcissism, that might influence mothers' envy experiences and behaviors, incorporating perspectives from other family members or other parents who are the targets of participants' envy, using self-reports or observations. Fourth, this research did not examine youth outcomes that might result from maternal envy and related parenting behaviors. While malicious maternal envy might predict maladaptive youth outcomes (e.g., lower self-efficacy), the impact of benign envy on youth outcomes remains unclear. Additionally, some research has suggested that the combined performance-approach goals and mastery goals yield more optimal outcomes (e.g., higher achievement motivation) than mastery goals alone (Harackiewicz et al., 2000). Future research could further explore how these goals associated with benign envy might predict various youth outcomes. Fifth, our measures of mastery goals showed suboptimal internal consistency, which potentially affected our results, necessitating further research with alternative measures. Finally, future studies could also replicate this research across diverse cultural contexts and examine additional parenting practices.

Despite these limitations, the current research extends the existing literature by addressing potential social situations and emotions that shape mothers' parenting motivations and behaviors. Malicious and benign envy, as daily stressors that come from unfavorable upward social comparison, could distract mothers from healthy, long-term childrearing goals. Our study indicates that perceptions and feelings following these comparisons might lead to parenting practices characterized by heightened control or over-involvement. The findings call attention to the risks of making childrearing decisions when parents' own interpersonal goals overshadow their child's growth goals. Importantly, our findings contribute to theoretical debates about envy's adaptiveness. While malicious envy consistently predicted maladaptive outcomes, benign envy's mixed associations (e.g., linking to both autonomy support and over-involvement) challenge simplistic "good vs. bad" categorizations of envy. By demonstrating how parental status concerns can reframe even "constructive" envy into a driver of overbearing practices, our work underscores the need to integrate domain-specific motivations into models of envy and goal pursuit. These insights might be valuable for future investigations on maternal social comparisons and their effects on parent-child interactions, as well as youth's outcomes.

Appendix I

Measures (Study 1).

Malicious and Benign Envy (BeMaS; Lange & Crusius, 2015).

1 = *strongly disagree* to 6 = *strongly agree*.

Benign Envy: 1–5; *Malicious Envy*: 6–10.

1. When I desire other parents' achievements, I focus on how I can become equally successful in my childrearing.
2. If I notice that another parent is better than me in childrearing, I try to improve myself.
3. Longing for other parents' achievements motivates me to accomplish my goals in childrearing.
4. I strive to reach other parents' superior achievements in childrearing.
5. If another parent has superior qualities or achievements in their childrearing, I try to attain them for myself.
6. I sometimes wish that superior parents would lose their advantages.
7. If other parents have something that I want for myself, I wish to take it away from them.
8. I feel ill will toward parents when I want their childrearing successes for myself.
9. Longing for another parent's achievements causes me to dislike that person.
10. Seeing other parents' achievements in childrearing makes me resent them.
1. 当我渴望其他家长的成就时，我关注的是我如何在抚养孩子方面取得同样的成功。
2. 如果我发现其他家长在抚养孩子方面比我更好，我就努力提高自己。
3. 对其他家长成就的渴望激励着我去完成自己的抚养孩子的目标。
4. 我努力达到其他家长在抚养孩子方面的优秀成就。
5. 如果有些家长在抚养孩子方面有优秀的品质，或者有所成就，我也会努力去自己实现。
6. 我有时候希望优秀的家长会不再具有优势。
7. 如果其他家长有我想要的东西，我希望从他们那里拿走。
8. 当我希望自己像其他家长一样成功抚养孩子时，我对那些家长有些敌意。
9. 对其他家长成就的渴望使我不喜欢那个家长。
10. 看到其他家长在抚养孩子方面取得的成就，我对他们心存怨念。

Mastery achievement goals (Watkins, 1997).

1 = *not at all true of me* to 7 = *very true of me*.

1. I encourage my child to try to find the reason for the mistakes he or she makes.

2. I encourage my child to do extra work to learn new things.
3. I pay closer attention to my child's improvement in his or her school learning than to the final grade he/she gets.
4. I try to find out from my child what he or she wants to learn about.
5. I encourage my child to feel successful for simply working hard on his or her homework, regardless of the final grade.
1. 我鼓励我的孩子尝试找出他/她所犯错误的原因。
2. 我鼓励我的孩子做额外的事情来学习新东西。
3. 我更关注孩子在学校学习上的进步，而不是他/她最后的成绩。
4. 我试着从我的孩子那里知道他/她想要学习什么。
5. 我鼓励我的孩子只要认真努力完成他/她的家庭作业就会感到成功，而不管最后的成绩如何。

Performance achievement goals (Mageau et al., 2016).

1 = *not at all true of me* to 7 = *very true of me*.

Performance-Approach Goals: 1–4; *Performance-Avoidance Goals*: 5–8.

1. I try to encourage my child to finish among the first in what he/she does.
2. I want my child to be better than others in the activities he/she does.
3. I try to help my child be the best in the activities he/she is engaged in.
4. I would like my child to excel in his/her activities.
5. I do not want my child to do activities in which he/she will be less competent than others.
6. I encourage my child to avoid the activities where he/she could feel inferior to others.
7. I encourage my child to avoid activities where he/she might not be the best.
8. I prefer that my child does not do activities where he/she may not excel.
1. 我鼓励我的孩子在他/她所做的事情中做到第一名。
2. 我希望我的孩子在活动中比别人做得更好。
3. 我尽力帮助我的孩子在他/她参加的活动中做到最好。
4. 我希望我的孩子在他/她参加的活动中出类拔萃。
5. 我不希望我的孩子参加他/她会比别人能力差的活动。
6. 我鼓励我的孩子避免参加那些让他/她感到自卑的活动。
7. 我鼓励我的孩子避免参加他/她可能不能做到最好的活动。
8. 我希望我的孩子不要做那些他/她不擅长的活动。

Psychological control (Cheung et al., 2016).

1 = *never* to 5 = *very often*.

1. I let my child know that what I want him/her to do is the best for him/her and he/she shouldn't question it.
2. If my child does not behave in the way I think he/she should, I tell him/her of all the sacrifices I have made for him/her.
3. I tell my child that when he/she grows up, he/she will appreciate the standards I have for him/her.
4. When I have an argument with my child, I say things like, "You'll know better when you grow up."
5. I let my child know that I am disappointed in him/her when he/she does not do as well as he/she should.
6. I let my child know that he/she should feel guilty when he/she does not meet my expectations for him/her.
7. If my child does something that I do not like, I act less friendly to him/her to let him/her know I am disappointed in him/her.
8. I insist my child do things my way.
9. For many things in my child's life, I'm usually in charge.
10. Even if my child is not having trouble with things, I tell him how to do it.
1. 我让我孩子知道, 我想要他/她做的就是对他/她最好的, 他/她对此不应该有疑问。.
2. 如果我孩子表现得没有我认为的那么努力, 我会告诉他/她我为他/她作的所有牺牲。.
3. 我告诉我孩子, 等他/她长大了, 他/她会感激我为他/她设定的标准。.
4. 当我和我孩子有争论时, 我说一些类似于“你长大了就会明白”的话。.
5. 当我孩子做得没有我认为的那么好时, 我会让他/她知道, 我对他/她感到失望。.
6. 当我孩子没有达到我的期望时, 我会让他/她知道, 他/她应该感到内疚。.
7. 如果我孩子做了我不喜欢的事, 我会显得不友好, 让他/她知道我对他/她感到失望。.
8. 我坚持让我的孩子按我的方式去做事情。.
9. 对于我孩子的很多事情, 通常是我做主。.
10. 即使我孩子没有遇到困难, 我仍会告诉他/她该怎样做。.

Autonomy support (Cheung et al., 2016).

1 = *never* to 5 = *very often*.

1. I allow my child to make his/her own choices whenever possible.
2. When my child and I talk about things, I take his/her opinion or perspective into account.
3. I allow my child to decide things for himself/herself.
4. I am usually willing to consider my child's point of view for many things.
5. When I want my child to do something, I explain to him/her why.

6. I let my child make his own plans for what he/she wants to do.
7. I encourage my child to give his/her ideas and opinions when it comes to making decisions.
8. I trust my child to do what I expect without checking up on him/her.
1. 只要有可能, 我就让我孩子自己作选择。.
2. 当我孩子和我谈论事情时, 我会接受他/她的意见和观点。.
3. 我允许我孩子自己决定关于他/她的事。.
4. 在很多事上, 我通常愿意从我孩子的立场来考虑。.
5. 当我想要我孩子做一些事时, 我向他/她解释为什么。.
6. 我让我孩子自己计划他/她想做的事。.
7. 做决定时, 我鼓励我孩子提出自己的想法和意见。.
8. 我相信不用监督, 我孩子也会按我的期望去做。.

Helicopter parenting (Zong & Hawk, 2022).

1 = *strongly disagree* to 6 = *strongly agree*.

Advice/Affect Management: 1–5, Anticipatory Problem Solving: 6–9, Information Seeking: 10–13, Emphasis on Academic Performance: 14–16, Tangible Assistance: 17–19.

1. I give my child advice on how to do things.
2. I make suggestions to my child to help him/her get things accomplished.
3. I tell my child how to plan out certain activities.
4. I say or do things to cheer my child up.
5. I share ideas with my child about how to handle the various situations that s/he encounters.
6. I try to solve problems for my child before s/he even experiences them.
7. If I can see that my child is about to have some difficulty, I will intervene to take care of the situation before things get difficult for him/her.
8. I try to help my child steer clear of any troubles that s/he might encounter in the world.
9. I try to anticipate things that will prevent my child from reaching his/her goals and act to eliminate them before they become a problem.
10. I want to know the “behind the scenes” information of my child's social life.
11. I like to know the details of my child's daily schedule.
12. I like to have updates on my child's day-to-day life.
13. I like to have updates on my child's whereabouts.
14. I frequently consult teachers on my child's academic progress.
15. I make every effort to raise my child's academic result.
16. I pay great attention to my child's examinations.
17. I see to it that my child's financial needs are taken care of.

18. I don't want my child to have to worry about finances and how much his/her expenses cost.
19. I am happy to do chores for my child such as cooking, cleaning, and laundry when possible.
1. 我给我的孩子做事情的建议。.
2. 为了帮我的孩子完成任务, 我通常给他/她一些建议。.
3. 我会告诉我的孩子如何计划某些活动。.
4. 我对孩子说一些话或者做一些事让他/她高兴起来。.
5. 我和孩子交流如何处理他/她遇到的各种情况。.
6. 我努力在我的孩子遇到问题之前为他/她解决问题。.
7. 如果我能看到我的孩子将要遇到某种困难, 我会介入并在他/她遇到困难之前处理。.
8. 我努力帮我的孩子避免他/她在世界上可能遇到的任何麻烦。.
9. 我试图预测妨碍我的孩子实现目标的事, 并在它变成问题之前解决。.
10. 我想知道孩子社交生活的一些细节。.
11. 我想知道孩子每日安排的细节。.
12. 我想了解我的孩子每天的最新情况。.
13. 我想了解我孩子的行踪的最新情况。.
14. 我经常向老师咨询我孩子的学业进展。.
15. 我尽一切努力提高孩子的学业成绩。.
16. 我非常关注孩子的考试。.
17. 我会注意确保我的孩子的财务需求得到了满足。.
18. 我不希望我的孩子担心财务状况以及他/她的花销是多少。.
19. 我很乐意对我的孩子做家务, 比如做饭, 打扫和洗衣服。.

Socially desirable responding (SDS-SF Form C; Reynolds, 1982).

True or False.

1. It is sometimes hard for me to go on with my work if I am not encouraged.
2. I sometimes feel resentful when I don't get my way.
3. On a few occasions, I have given up doing something because I thought too little of my ability.
4. No matter who I'm talking to, I'm always a good listener.
5. There have been occasions when I took advantage of someone.
6. I'm always willing to admit it when I make a mistake.
7. I sometimes try to get even rather than forgive and forget.
8. I am always courteous, even to people who are disagreeable.
9. I have never been irked when people expressed ideas very different from my own.

10. There have been times when I was quite jealous of the good fortune of others.
11. I am sometimes irritated by people who ask favors of me.
12. I have never deliberately said something that hurt someone's feelings.
1. 如果不能得到别人的鼓励, 有时我便难以再继续自己的工作。.
2. 当我不能随心所欲时, 我有时会怨天尤人。.
3. 有时我会因为觉得自己的能力太差而放弃去做某些事情。.
4. 不管和谁谈话, 我总是是一个好听众(能细心倾听别人的谈话)。.
5. 有时我会占别人的便宜。.
6. 当我犯了过错时, 我总会勇于认错。.
7. 有时我宁可以牙还牙, 而不愿宽恕别人。.
8. 我总是谦恭有礼的, 即使对我所讨厌的人也不例外。.
9. 当别人表示的意见与想法跟我大不相同, 我从不感到厌烦。.
10. 我有时非常嫉妒别人的好运气。.
11. 有时我会被有求于我的人惹火。.
12. 我从未有意地用语言去伤害别人。.

Appendix II

Measures (Study 2).

Manipulation check questions.

1. What is your current overall mood? (1 = *very negative* to 9 = *very positive*)
2. To what extent do you currently feel benign envy toward the parent described in the situation? (1 = *not at all*, to 9 = *very much so*)
3. To what extent do you currently feel malicious envy toward the parent described in the situation? (1 = *not at all*, to 9 = *very much so*)
4. To what extent do you currently feel admiration toward the parent described in the situation? (1 = *not at all*, to 9 = *very much so*)
5. To what extent do you currently feel resentment toward the parent described in the situation? (1 = *not at all*, to 9 = *very much so*)
6. To what extent do you feel that the advantage that parent held over you was deserved? (1 = *not at all deserved*, to 9 = *very deserved*)
7. To what extent do you feel that gaining such an advantage is under your own control? (1 = *not at all controllable*, to 9 = *very controllable*)
1. 您现在整体描述情绪状态的程度有羡慕的感觉?
2. 您现在整体描述情绪状态的程度有羡慕的感觉?

您现在对您描述的那位家长多大程度有忌妒
 3. 您现在对您描述的那位家长多大程度有钦佩
 4. 您现在对您描述的那位家长多大程度有怨恨
 5. 您感觉那位家长的优势多大程度上是他/她应
 6. 得感觉孩子有程度上也有能力/能够得到那位
 7. 家长一样或类似的优势?

Helicopter parenting (Zong & Hawk, 2022).

1 = *strongly disagree* to 6 = *strongly agree*.

Advice/Affect Management: 1–5, Anticipatory Problem Solving: 6–9, Information Seeking: 10–13, Emphasis on Academic Performance: 14–16, Tangible Assistance: 17–19.

1. I should give my child advice on how to do things.
2. I should make suggestions to my child to help him/her get things accomplished.
3. I should tell my child how to plan out certain activities.
4. I should say or do things to cheer my child up.
5. I should share ideas with my child about how to handle the various situations that s/he encounters.
6. I should try to solve problems for my child before s/he even experiences them.
7. If I can see that my child is about to have some difficulty, I should intervene to take care of the situation before things get difficult for him/her.
8. I should try to help my child steer clear of any troubles that s/he might encounter in the world.
9. I should try to anticipate things that will prevent my child from reaching his/her goals and act to eliminate them before they become a problem.
10. I should know the “behind the scenes” information of my child’s social life.
11. I should know the details of my child’s daily schedule.
12. I should have updates on my child’s day-to-day life.
13. I should have updates on my child’s whereabouts.
14. I should frequently consult teachers on my child’s academic progress.
15. I should make every effort to raise my child’s academic result.
16. I should pay great attention to my child’s examinations.
17. I should see to it that my child’s financial needs are taken care of.
18. I should not let my child worry about finances and how much his/her expenses cost.
19. I should do chores for my child such as cooking, cleaning, and laundry when possible.
1. 我应该给我的孩子做事情的建议。.
2. 为了帮我的孩子完成任务, 我应该给他/她一些建议。.
3. 我应该告诉我的孩子如何计划某些活动。.
4. 我应该对我的孩子说一些话或者做一些事让他/她高兴起来。.

5. 我应该和我的孩子交流如何处理他/她遇到的各种情况。.
6. 我应该努力在我的孩子遇到问题之前为他/她解决问题。.
7. 如果我能看到我的孩子将要遇到某种困难, 我应该介入并在他/她遇到困难之前处理。.
8. 我应该努力帮助我的孩子避免他/她在世界上可能遇到的任何麻烦。.
9. 我应该预测妨碍我的孩子实现目标的事, 并在它变成问题之前解决。.
10. 我应该知道我的孩子社交生活的一些细节。.
11. 我应该知道我的孩子每日安排的细节。.
12. 我应该了解我的孩子每天的最新情况。.
13. 我应该了解我的孩子的行踪的最新情况。.
14. 我应该经常向老师咨询我的孩子的学业进展。.
15. 我应该尽一切努力提高我的孩子的学业成绩。.
16. 我应该非常关注我的孩子的考试。.
17. 我应该注意确保我的孩子的财务需求得到了满足。.
18. 我不应该让我的孩子担心财务状况以及他/她的花销是多少。.
19. 我应该为我的孩子做家务, 比如做饭, 打扫和洗衣服。.

Psychological control (Cheung et al., 2016).

1 = *strongly disagree* to 5 = *strongly agree*.

1. I should let my child know that what I want him/her to do is the best for him/her and s/he shouldn’t question it.
2. If my child do not behave in the way I think s/he should, I should tell my child of all the sacrifices I have made for him/her.
3. I should tell my child that when s/he grows up, s/he will appreciate the standards I have for him/her.
4. When I have an argument with my child, I should say things like, “You’ll know better when you grow up.”
5. I should let my child know that I am disappointed in him/her when s/he does not do as well as s/he should.
6. I should let my child know that s/he should feel guilty when s/he does not meet my expectations for him/her.
7. If my child does something that I do not like, I should act less friendly to my child to let him/her know I am disappointed in him/her.
8. I should insist my child do things in my way.
9. For many things in my child’s life, I should usually be in charge.
10. Even if my child is not having trouble with things, I should tell my child how to do it.
1. 我应该让我的孩子知道, 我想要他/她做的就是对他/她最好的, 他/她对此不应该有疑问。.
2. 如果我的孩子表现得没有我认为的那么努力, 我应该告诉孩子自己为他/她作的所有牺牲。.

3. 我应该告诉我的孩子, 等他/她长大了, 他/她会感激我为他/她设定的标准。.
4. 当我和我的孩子发生争论时, 我应该说, “你长大了就会明白”。.
5. 当我的孩子的表现没有我认为的那么好时, 我应该让孩子知道, 我对他/她感到失望。.
6. 当我的孩子没有达到我的期望时, 我应该让孩子知道, 他/她应该感到内疚。.
7. 如果我的孩子做了我不喜欢的事, 我应该显得不友好, 让孩子知道我对他/她感到失望。.
8. 我应该坚持让我的孩子按我的方式去做事情。.
9. 对于我的孩子生活中的很多事情, 通常应该是我做主。.
10. 即使我的孩子没有遇到困难, 我仍应该告诉他/她该怎样做。.

Autonomy support (Cheung et al., 2016).

1 = *strongly disagree* to 5 = *strongly agree*.

1. I should allow my child to make his/her own choices whenever possible.
2. I should take my child's opinion or perspective into account when talking about things with my child.
3. I should allow my child to decide things for himself/herself.
4. I should consider my child's point of view for many things.
5. I should explain to my child why when I want my child to do something.
6. I should let my child make his/her own plans for what s/he wants to do.
7. I should encourage my child to give his/her ideas and opinions when it comes to making decisions.
8. I should trust my child to do what I expect without checking up on him/her.
1. 只要有可能, 我应该就让我的孩子自己作选择。.
2. 当和我的孩子谈论事情时, 我应该考虑孩子的意见和观点。.
3. 我应该允许我的孩子自己决定关于他/她的事。.
4. 在很多事上, 我应该从我的孩子的立场来考虑。.
5. 当我想要我的孩子做一些事时, 应该向孩子解释为什么。.
6. 我应该让我的孩子自己计划他/她想做的事。.
7. 做决定时, 我应该鼓励我的孩子提出自己的想法和意见。.
8. 我应该相信不用监督, 我的孩子也会按我的期望去做。.

Socially desirable responding (SDS-SF Form C; Reynolds, 1982).

(See Appendix I)

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Declarations

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