

# Pointing out learning opportunities reduces overparenting

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## Abstract

Overparenting—taking over and completing developmentally appropriate tasks for children—is pervasive and hurts children's motivation. Can overparenting in early childhood be reduced by simply framing tasks as learning opportunities? In Study 1 ( $N=77$ ; 62% female; 74% White; collected 4/2022), US parents of 4-to-5-year-olds reported taking over less on tasks they perceived as greater learning opportunities, which was most often the case on academic tasks. Studies 2 and 3 ( $N=140$ ; 67% female; 52% White; collected 7/2022–9/2023) showed that framing the everyday, non-academic task of getting dressed as a learning opportunity—whether big or small—reduced parents' taking over by nearly half ( $r=-.39$ ). These findings suggest that highlighting learning opportunities helps parents give children more autonomy.

Persistence is critical for children's academic and interpersonal success (Duckworth et al., 2011; Eskreis-Winkler et al., 2014), yet parents often take over and complete challenging, developmentally appropriate tasks for children (e.g., tying shoes, doing homework), a behavior known as “overparenting.” Overparenting (also referred to as “helicopter parenting,” “overprotective parenting,” or “snowplow parenting”) refers to a style of parental control (see Grolnick & Pomerantz, 2009) in which parents intervene or solve problems for children in a manner that exceeds children's developmental needs (e.g., Hastings et al., 2010; Locke et al., 2012; Obradović et al., 2021; Padilla-Walker & Nelson, 2012). Critically, overparenting is pervasive in the United States across socioeconomic backgrounds (Doepke et al., 2019; Ishizuka, 2019; Lythcott-Haims, 2015) and is associated with worse child mental health, self-regulation, and reduced motivation starting in early childhood (Distefano et al., 2018; Joussemet et al., 2005; Leonard et al., 2021; Love et al., 2020; Moilanen & Lynn Manuel, 2019; Obradović et al., 2021; Padilla-Walker & Nelson, 2012; Schiffrin et al., 2014; Sobel et al., 2021; Sobel & Stricker, 2022). Thus, it is crucial to investigate what can help parents step back and allow children to develop persistence, resilience, and independence before they enter the classroom.

Prior work shows that overparenting-type behaviors are more prevalent in countries with greater income inequality and higher stakes for educational attainment

(Doepke et al., 2019), potentially because parents in these circumstances are more likely to prioritize children's performance outcomes. Indeed, experimental work shows that parents intervene more when their school-aged children's performance is evaluated (Grolnick et al., 2002, 2007; Wuyts et al., 2017) and the most famous cases of overparenting occur in competitive contexts, such as parents writing their child's college essay for admission into an Ivy League college (e.g., Heisserer, 2022). Given the link between performance-based cultures and overparenting, there is reason to believe that interventions to reduce overparenting must rely on widespread economic and cultural initiatives or overt, direct training programs for parent behavior (Froiland, 2011; Grolnick et al., 2021; Meuwissen & Carlson, 2019).

However, here we ask about the merits of a psychological approach: Can overparenting be reduced by simply intervening on how parents *represent* a task? Specifically, would merely framing a task as a learning opportunity cause parents to take over less and allow children more autonomy? (Note that by autonomy, we specifically mean children independently completing tasks on their own, see Soenens et al., 2007). This hypothesis was inspired by decades of research on the tension between learning and performance in the achievement motivation literature (e.g., Elliott & Dweck, 1988; Grant & Dweck, 2003). When parents prioritize their children's performance outcomes, they may rationally take over to complete the task more efficiently or skillfully, but this comes at



the cost of children learning new skills from the process of doing (Bonawitz et al., 2011; Gweon & Schulz, 2019; Schulz & Bonawitz, 2007). Thus, when parents prioritize what their children can learn from doing a task on their own, we predict that they will step back and let children learn from trial and error.

Critically, parents may not always realize what their young child can learn from certain tasks. Although most parents prioritize their young child's learning in academic subjects (e.g., math and reading; Silander et al., 2018; Sonnenschein et al., 2016, 2021), they may not always appreciate learning in informal, everyday tasks like getting dressed or cleaning up toys (Rende, 2021; Song et al., 2017). Parents may overlook the skills children learn from everyday tasks because many of those skills, including problem-solving, confidence, and independence, may transcend the tasks themselves. Additionally, in the current competitive educational climate, parents may believe that children can benefit most from concentrating on learning academic skills (Doepke et al., 2019). Given this, we explore whether parents are more likely to take over on young children's non-academic tasks compared to academic tasks because they view learning as something that happens primarily in academic contexts.

Across three studies, we test whether emphasizing preschool-aged children's learning opportunities reduces overparenting. Although overparenting is a broad construct encompassing a range of verbal and physical forms of parental intervention (e.g., Grolnick et al., 2007; Hastings et al., 2010; Locke et al., 2012; Obradović et al., 2021; Padilla-Walker & Nelson, 2012), here we specifically focus on the amount that parents *physically* take over and complete actions of a developmentally appropriate task for their child. We examine this facet of overparenting because prior work found that physical taking over, but not verbal instruction, correlates with 4-to-8-year-old children's persistence and also causally reduces 4-to-5-year-old children's persistence (Leonard et al., 2021). However, for completeness, we also explore parents' verbal messages in exploratory analyses.

In Study 1, we use correlational and self-report methods to examine the relation between parents' perceptions of their child's learning and their tendency to take over on a wide range of tasks in their home environment, including academic and non-academic tasks. Study 1 seeks to establish the relation between parents' perceptions of learning and their reported taking-over behaviors, but it does not provide evidence of a causal relation. Therefore, in Studies 2 and 3, we experimentally manipulate parents' perceptions of children's learning and measure parents' real-time interaction with their child. In Study 2, we test whether framing the non-academic task of getting dressed as a learning opportunity causally reduces parents' taking over, and in Study 3, we test whether the magnitude of the learning opportunity matters. These experiments, while conducted in more controlled settings and focus on a single task of interest, provide robust

evidence of a *causal* relation. Thus, these studies serve as our main sources of empirical evidence. Finally, experimental Studies 2 and 3 focus on overparenting when children are getting dressed because this task is ecologically valid: parents in Study 1 and a pilot study reported they take over most often on this task. Importantly, our paradigm involved putting on novel clothes—hockey gear—which we first ensured children could put on independently, to establish that taking over on this task exceeds children's developmental needs. All studies were pre-registered (Study 1: <https://osf.io/mv7xw> Study 2: <https://osf.io/d2456>; Study 3: <https://osf.io/wr6mz>, and all materials, data files, and analysis scripts are publicly available on OSF: [osf.io/6kdtg](https://osf.io/6kdtg)).

## STUDY 1

### Methods

#### Participants

We recruited 77 parents (48 mothers, 29 fathers) of 4–5-year-olds ( $M=5.10$ ,  $SD=0.59$ ; 40 girls, 37 boys) from CloudResearch in April 2022. All participants were from the United States. Parental education ranged from 12 to 20 years ( $M=15.13$ ,  $SD=2.00$ ), and parental median income was \$87,500 ( $M=\$81,203$ ,  $SD=\$44,891$ ; missing data from 1 parent). The reported racial makeup of children was 74% White, 9% Black, 4% Asian, 10% multiracial, and 3% another race, and the ethnic makeup was 87% not Hispanic/Latino, 12% Hispanic/Latino, and 1% another ethnicity. According to our pre-registered exclusion criteria, an additional 23 subjects were recruited and excluded for reporting that their child had a developmental delay ( $N=15$ ), reporting that their child was outside of our age range ( $N=4$ ), participating in one of our pilot studies ( $N=3$ ), or responding to the open-ended question at the end of the survey with a nonsensical response ( $N=1$ ), as judged by three independent coders.

#### Procedure

We presented parents with seven hypothetical scenarios in which their child was struggling to complete a task. Four of these tasks were traditionally non-academic (*put on jacket*, *clean up toys*, *open a toy container*, *brush teeth*), and three were traditionally academic (*trace letters*, *solve a puzzle*, *sort objects based on shape*). For each scenario, parents rated their likelihood of taking over on the task (e.g., “Imagine [child's name] is struggling to put on her jacket. How likely are you to step in and put [child's name]'s jacket on for her?”) on a 5-point scale from “not at all likely” to “extremely likely.” After completing a brief distractor task (see SM), parents rated their perceptions of their child's learning from completing each task on

their own (e.g., “How much do you think [child's name] would learn if she keeps trying to put on the jacket on her own?”) on a 5-point scale from “nothing” to “a great deal.”

## Results

As predicted, parents reported taking over less on tasks they viewed as greater learning opportunities: A linear mixed-effects model predicting parents' reported likelihood of taking over by their perceived child learning (with a random slope and intercept for learning by task and participant) revealed a significant negative main effect of child learning ( $b = -.25$ , 95% CI  $[-.37, -.13]$ ,  $p = .002$ ; Figure 1a). In exploratory linear mixed-effects models, parents' average reported taking over and average perceived child learning did not relate to child age, child gender, parent gender, or family socioeconomic status (SES; calculated as the average of parents' standardized education and standardized income; all  $|b|s < .21$ , all  $p$ 's  $> .210$ ).

Next, we ran exploratory tests examining whether parents' perceived child learning and reported likelihood of taking over differed between academic and non-academic tasks. To do so, we averaged parents' taking over and learning ratings on non-academic tasks and on academic tasks. Paired-sample  $t$ -tests revealed that parents thought children learn less ( $t(76) = -7.70$ ,  $p < .001$ ;  $d = -.88$ , 95% CI  $[-1.21, -.55]$ ; Figure 1b), and report taking over more ( $t(76) = 12.22$ ,  $p < .001$ ;  $d = 1.47$ , 95% CI  $[1.11, 1.83]$ ; Figure 1c) on non-academic tasks compared to academic tasks.

## Discussion

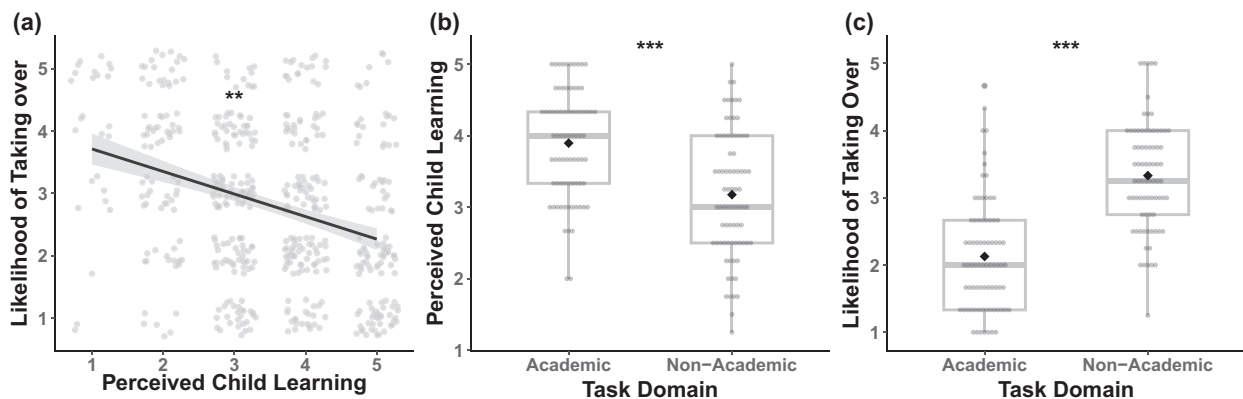
Results from Study 1 revealed that parents report taking over less when they view tasks as greater learning

opportunities, which was more often the case on academic compared to non-academic tasks. However, the study's reliance on correlational and self-report measures limits our ability to determine whether parents' perceptions of learning opportunities directly cause them to step back, and whether the results accurately reflect parents' actual behavior (as opposed to parents' beliefs about their behavior or their aspired behavior). Furthermore, this study did not control for the potential effects of time pressure, which are prevalent in parents' lives (Milkie et al., 2009), and could vary significantly between tasks (e.g., parents may often be more pressed for time when children are getting dressed versus when they are tracing letters). To address these limitations, Studies 2 and 3 use an experimental, randomized-controlled design while holding the effect of time pressure constant.

## STUDY 2

In Study 2, we experimentally test whether framing a task as a learning opportunity causes parents to take over less. We focused on the non-academic task of getting dressed as this was the task that parents most frequently reported taking over on in an exploratory pilot study (see SM). Furthermore, Study 1 confirmed that parents believe that they would take over more ( $t(76) = 10.65$ ,  $p < .001$ ,  $d = 1.38$ , 95% CI  $[1.02, 1.73]$ ) and that their children would learn less ( $t(76) = -4.38$ ,  $p < .001$ ,  $d = -.54$ , 95% CI  $[-.87, -.22]$ ) when getting dressed compared to doing academic tasks. Thus, manipulating parents' representation of getting dressed as a learning opportunity presents an ecologically valid point of intervention.

To ensure our dressing task was challenging and novel, we had children dress up in hockey gear (i.e., two shin guards and one chest guard) and excluded children with hockey gear experience ( $N = 2$ ; pre-registered). Importantly, we pilot-tested this task on twenty 4-to-5-year-olds ( $M = 4.97$ ,  $SD = 0.55$ , range = 4.18–5.82; 11



**FIGURE 1** Study 1 results. Parents reported taking over less on tasks from which they think their child learns more (a). They also reported that their child learns less (b) and that they take over more (c) on non-academic tasks compared to academic tasks. Error bands represent 95% CIs; black diamonds represent group means; dots represent individual ratings. \*\*\* $p < .001$ ; \*\* $p < .01$ .



girls, 9 boys) and found that all participants were able to put on the hockey gear without parents' physical help (see SM for details). From these pilot data, we can reasonably conclude that in most cases, parents' taking over on this task exceeds 4- and 5-year-old children's developmental needs and thus can be classified as overparenting. We also matched performance demands (e.g., the child had to be wearing all the clothes to move on and we explicitly stated that there was no time pressure) across conditions.

## Methods

We randomly assigned parent–child dyads to either the Big Learning Opportunity condition, where parents were told that children can learn key lifelong skills from putting on clothes, or a Control condition, where parents were told that children can more deeply engage with museum exhibits when putting on these clothes. Following this manipulation, we measured how many times parents took over when their 4–5-year-old put on the hockey gear. We predicted that framing getting dressed as a big learning opportunity would cause parents to take over less on this task. In exploratory analyses, we also examined whether this manipulation changed how parents verbally interacted with their children during the task; specifically, whether it caused them to support their child's autonomy not only in their actions but also their words (e.g., providing less direct instruction and more positive feedback).

## Participants

We recruited 60 parent–child dyads at an urban children's museum in Philadelphia, Pennsylvania between July 2022 and August 2022. We chose this sample size based on a simulated power analysis with pilot data indicating that 30 dyads per condition would yield a power of .9. Parent–child dyads were randomly assigned to the Big Learning Opportunity condition ( $N=30$ ; 57% mothers, 43% fathers) or the Control condition ( $N=30$ ; 67% mothers, 30% fathers, 3% legal guardians). We tested an equal number of 4- and 5-year-olds ( $M_{age}=5.03$ ,  $SD_{age}=.57$ ) and an equal number of girls and boys within each condition. Parental education ranged from 10 to 20 years ( $M=16.61$ ,  $SD=2.58$ ; missing data from 1 parent), and parental median income was \$175,000 ( $M=\$136,245$ ,  $SD=\$69,395$ ; missing data from five parents). The racial makeup of the children in the final sample was as follows: 48% White, 20% Asian, 13% Black, 10% multiracial, 2% American Indian or Alaskan, 3% another race, and 3% preferred not to answer, and the ethnic makeup was 77% not Hispanic/Latino, 17% Hispanic/Latino, 5% another ethnicity, and 2% preferred not to answer. According to our pre-registered exclusion criteria, an additional

26 dyads were recruited and excluded since the child wanted to stop midway ( $N=10$ ), the parent needed to stop midway ( $N=1$ ), an experimenter error occurred ( $N=8$ ), the child was diagnosed with autism or oppositional defiant disorder ( $N=5$ ), or the child had experience wearing hockey gear ( $N=2$ ).

## Procedure

Parents and children were told that they were going to play a fun game that required children to first put on hockey clothes. We used this cover story, which made the dress-up task seem like a means to an end, to minimize parents' feelings of being observed on the dressing task and elicit more naturalistic behavior. After explaining the cover story, the experimenter asked children and parents to sit next to each other (see experimental setup in [Figure 2a](#)) and handed the parents a note to read that contained our condition manipulation while they asked children warm-up questions about themselves. In both conditions, parents read that their child could gain something from putting on clothes themselves. However, in the Control condition, parents read that children could gain a deeper interaction with the museum, whereas in the Big Learning Opportunity condition, parents read that children could learn key lifelong skills like problem-solving and self-confidence (see [Figure 2b](#)). Furthermore, the word “learning” was not mentioned in the Control condition. Importantly, as only the parent read the note while the experimenter was distracting the child, the child was not exposed to the manipulation.

Next, the experimenter explained how to put on the clothes, provided families with a full-length mirror, and pointed to pictures on top of the mirror showing how the clothes should look when worn. The mirror also had a sign that read “Dress Up is Learning” (to remind parents of the manipulation; Big Learning Opportunity) or “Dress Up is Happening” (Control). To minimize the potential effects of time pressure, the experimenter told families in both conditions that they could take all the time they needed to put on the clothes and that when the child was dressed, they should join the experimenter at a different table to “start the game.” The experimenter sat with her back to the families throughout the duration of the dress-up activity. After the child got dressed in the hockey gear, the experimenter played the “real game” with the child (pretending to be warriors together and performing “warrior moves”).

## Measures

### *Taking over*

Our key dependent variable was the number of actions parents completed for their child (i.e., took over) out of 19 possible actions (e.g., close a strap on the shin

## (a) Setup



## (b) Procedure

## 1. Parent reads note

“Before we can start our activity, your child needs to put on hockey clothes. I will soon explain how to put them on. Feel free to help your child as much or as little as you want.”

**Control**  
(Study 2)

💡 **“Fun fact:**  
Many museums have dress-up stations for children, where they get to put on various clothes and outfits themselves! Putting on these clothes helps children interact with the museum and engage with the exhibits.”

**Big Learning Opportunity**  
(Study 2+3)

💡 **“Fun fact:**  
Children learn a lot from putting on clothes themselves! They learn things like motor skills, problem-solving, and self-confidence. The skills children learn from putting on clothes help them develop into capable, independent adults”

**Small Learning Opportunity**  
(Study 3)

💡 **“Fun fact:**  
Children can learn about hockey gear, like shinpads and chest guards, from putting on clothes themselves! However, knowledge about hockey gear is not very relevant for children’s development.”

**2. Experimenter explains to child how to put on novel hockey clothes**

**3. Measure parents’ taking over actions**  
(of 19 possible actions)


**FIGURE 2** Experimental setup and study protocol of Study 2 and Study 3. Note that Study 3’s Big Learning Opportunity note varied slightly from the wording above in order to match the length of Study 3’s Small Learning Opportunity note, and it did not include the word “independent” (see SM for full wording). Participant photos shared with permission.

guards, pull the chest guard over the child’s head; see SM for the full list of actions). Two coders, one blind to condition and hypotheses, independently coded parents’

taking over behavior and achieved excellent reliability (ICC = .93, 95% CI [.92, .94],  $F(1139, 1139) = 26.6, p < .001$ ). Discrepancies were resolved by a third coder.

### Verbal interaction (Exploratory)

We adapted a parent–child interaction coding scheme from Leonard et al. (2021) and refined it based on common utterances in our pilot videos. Our final coding scheme included direct instruction (e.g., “open the strap”), positive feedback (e.g., “good job!”), and scaffolding (e.g., “what do you think is the front?”; see SM for full coding scheme).

We were able to code parents' talk in 55 out of 60 videos (in four videos parents spoke a language other than English and in one video the parent's voice could not be heard in the recording). A research assistant transcribed all videos and two coders (one blind to condition and the other blind to both condition and hypotheses) independently coded parents' utterances (reliability: ICC = .93, 95% CI [.92, .94],  $F(1139, 1139) = 26.6$ ,  $p < .001$ ). A third coder (blind to condition) resolved discrepancies.

## Results

### Taking over

Following our pre-registration, we used a non-parametric test for our main analysis since the taking over variable was not normally distributed (Shapiro–Wilk test:  $W = .86$ ,  $p < .001$ ; Skewness = .74). As predicted, parents in the Big Learning Opportunity condition completed significantly fewer actions for their child than parents in the Control condition ( $W = 275.5$ ,  $p = .010$ ,  $r = -.39$ , 95% CI [-.61, -.11]). Specifically, framing the task as a learning opportunity decreased the number of actions parents performed for their child by about half, from an average of 8.6 actions in the Control condition ( $SD = 6.59$ , range = 0–19) to 4.4

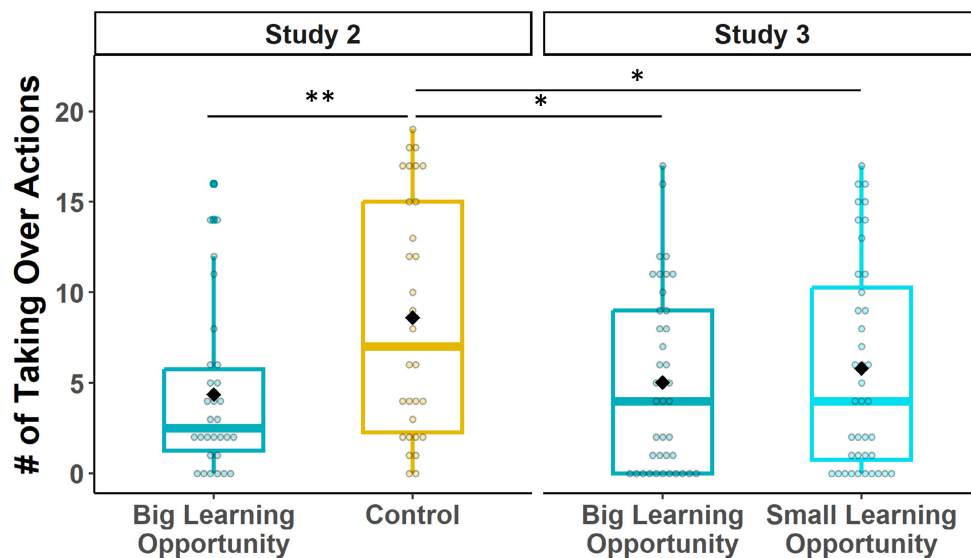
actions in the Big Learning Opportunity condition ( $SD = 4.63$ , range = 0–16; Figure 3).

In exploratory coding, we found that in 65% of dyads, parents' first taking over action was initiated by them, rather than solicited by the child, with no differences between conditions (Big Learning Opportunity: 65%, Control: 64%;  $W = 368$ ,  $p = .942$ ,  $r = .01$ , 95% CI [-.29, .31]; missing data from six parents who did not take over at all). Furthermore, partial Spearman correlations revealed that, controlling for condition, parents' taking over on the dressing task did not relate to child age, child gender, parent gender, or family SES (all  $|r|$ 's < .14, all  $p$ 's > .309).

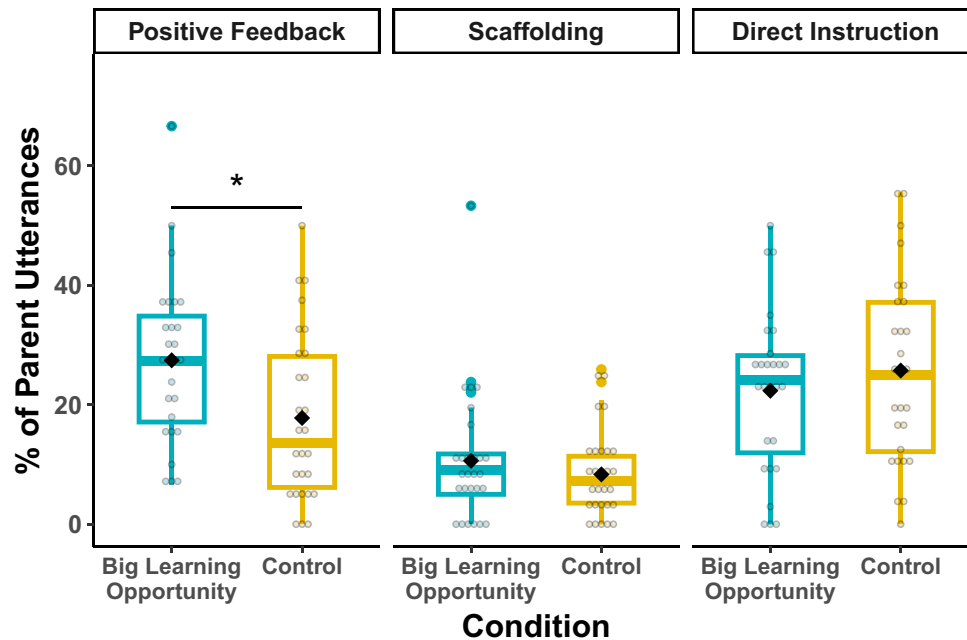
### Verbal interaction (Exploratory)

Since some parents naturally talked more than others, we controlled for overall parent talk by dividing the number of utterances for each category by parents' total number of utterances (note that there was no condition difference in parents' total number of verbal utterances; Big Learning Opportunity:  $M = 30.4$ ,  $SD = 28.5$ ; Control:  $M = 27.3$ ,  $SD = 22.1$ ;  $W = 341.5$ ,  $p = .544$ ,  $r = -.10$ , 95% CI [-.38, .21]). Parents in the Big Learning Opportunity condition used more positive feedback than parents in the Control condition ( $W = 523.5$ ,  $p = .044$ ,  $r = .38$ , 95% CI [.10, .61]). There were no condition differences in parents' use of scaffolding ( $W = .414$ ,  $p = .548$ ,  $r = .10$ , 95% CI [-.21, .38]) or direct instruction ( $W = 333.5$ ,  $p = .548$ ;  $r = -.12$ , 95% CI [-.40, .19];  $p$ -values FDR corrected for multiple comparisons; Figure 4).

We also explored whether parents' verbal interaction with their child correlated with their taking over, controlling for condition. We found that parents who took over more provided less positive feedback ( $\rho = -.40$ ,



**FIGURE 3** Study 2 and Study 3 results. As compared to the Control condition, parents completed significantly fewer dress-up actions for their child in the Big Learning Opportunity condition (Study 2 and Study 3) and Small Learning Opportunity condition (Study 3). Black diamonds represent group mean; dots represent individual scores. \*\* $p < .01$ ; \* $p < .05$ .



**FIGURE 4** Study 2. Categories of parent utterances by condition. Parents in Study 2 provided more positive feedback in the Big Learning Opportunity condition than in the Control condition. Black diamonds represent group means; dots represent individual scores. \* $p < .05$ .

$p = .008$ ) and produced marginally more utterances ( $p = .27$ ,  $p = .053$ ). However, taking over did not significantly relate to parents' use of scaffolding ( $\rho = -.01$ ,  $p = .971$ ) or direct instruction ( $\rho = -.07$ ,  $p = .947$ ;  $p$ -values FDR corrected).

## Discussion

In Study 2, we found that framing a non-academic task as a learning opportunity significantly decreased parents' taking over behavior and increased their use of positive feedback. Strikingly, in the Control condition, parents on average completed around half of the actions for their child on a task for which taking over was not necessary (and typically unsolicited), confirming that overparenting is common when young children get dressed.

Recall that parents in Study 1 reported that they would take over less for bigger versus smaller learning opportunities, but it is unclear whether this self-report aligns with actual behavior. As in, do parents actually calibrate their taking over based on the perceived magnitude of the learning opportunity, or do they take over less whenever they perceive a learning opportunity for their child, no matter how big or small it is? Study 3 aims to address this question.

## STUDY 3

### Methods

In Study 3, we explored whether parents calibrate their taking over based on the perceived magnitude of their child's learning opportunity. As in Study 2, we framed

the act of putting on clothes as a learning opportunity and gave children novel hockey clothes to wear. Critically, we either told parents that children can learn highly valuable life skills (e.g., problem-solving and self-confidence) from putting on clothes (Big Learning Opportunity Condition, as in Study 2), or that children can learn less valuable skills (e.g., knowledge of shin pads and chest guards) from this task (Small Learning Opportunity Condition). In a preliminary online questionnaire with 44 parents of 4–5-year-olds, we confirmed that parents believe that learning problem-solving and self-confidence is significantly more valuable for their child's development than learning about shin pads and chest guards ( $t$ 's  $> 19$ ,  $p$ 's  $< .001$ ). Based on the self-report findings from Study 1, we predicted that parents would take over less in the Big (vs Small) Learning Opportunity condition. An alternative possibility is that parents take over less *whenever* they view a task as a learning opportunity, no matter how big or small. If this were the case, we would expect parents to take over equally little in the Big and Small Learning Opportunity conditions.

Study 3 also aimed to both minimize and probe the effect of experimental demands on our manipulation. To do so, we reduced the manipulation to only the fun fact on the note (there was no reminder note on the mirror) and included a post-study questionnaire exploring parents' inferences about the study's goals and experimenter expectations.

### Participants

We recruited 80 parent–child dyads at the same urban Philadelphia-based children's museum as in Study 2



between July 2023 and September 2023. We determined this sample size based on a simulated power analysis with data from Study 2, indicating that 40 dyads per condition would yield a power of .87. Parent–child dyads were randomly assigned to the Big Learning Opportunity Condition ( $N=40$ , 70% mothers, 30% fathers; 60% girls, 40% boys) or the Small Learning Opportunity Condition ( $N=40$ , 73% mothers, 27% fathers; 60% girls, 40% boys). We tested an equal number of 4- and 5-year-olds within each condition ( $M_{age}=4.99$ ,  $SD_{age}=.52$ ). Parental education ranged from 12 to 20 years ( $M=16.75$ ,  $SD=2.30$ ; missing data from three parents) and parental median income was \$125,000 ( $M=\$129,911$ ,  $SD=\$62,456$ ; missing data from 18 parents). The racial makeup of children was 55% White, 15% Black, 10% Asian, 9% multiracial, 9% another race, and 3% preferred not to answer, and the ethnic makeup was 75% not Hispanic/Latino, 14% Hispanic/Latino, 5% another ethnicity, and 6% preferred not to answer. According to our pre-registered exclusion criteria, an additional 21 dyads were recruited and excluded since the child wanted to stop midway ( $N=10$ ), the child had experience wearing hockey gear ( $N=6$ ), sibling interference occurred ( $N=2$ ), an experimenter error occurred ( $N=2$ ), or the child was diagnosed with autism spectrum disorder ( $N=1$ ).

## Procedure

The procedure of Study 3 was similar to that of Study 2, except that we did not use any reminder signs on the mirror, and we made a few small changes to the Big Learning Opportunity note. In particular, the Big Learning Opportunity note emphasized that putting on clothes is an opportunity for children to learn important, life-long skills (as in Study 2); however, it was made shorter to match the length of the Small Learning Opportunity condition, and it did not include the word “independent” (see SM for full wording). In contrast, in the Small Learning Opportunity condition, the note emphasized that putting on clothes is an opportunity for children to learn about hockey gear (Figure 2b).

## Measures

### *Taking over*

Our dependent variable—parent taking over—was the same as in Study 2. Two coders, one blind to condition and hypotheses, independently coded parents' taking over behavior and achieved good reliability ( $ICC=.88$ , 95% CI [.86, .89],  $F(1500, 1500)=15$ ,  $p<.001$ ). Discrepancies were resolved by a third coder.

### *The role of experimental demands*

To probe experimental demands, parents were asked “What do you think today's study was about?” in a

post-study questionnaire and could choose among seven options, one of which was “correct” (i.e., “how much parents intervene in their children's work”) and the rest were based on common open-ended responses that parents wrote in our pilot study (e.g., “how dressing up affects how children play”; see SM for full list). Parents were also asked: “What do you think were the researcher's expectations from you, if any?,” and could choose among eight options, one of which was the “correct” response (“to try to help as little as possible with the clothes”) and the rest were similarly based on common open-ended responses from our pilot study (e.g., “there were no expectations”).

## Results

Contrary to our predictions, we did not find evidence that parents in the Big Opportunity condition took over less than parents in the Small Learning Opportunity condition ( $W=750.5$ ,  $p=.634$ ,  $r=-.06$ , 95% CI [−.31, .19]). Similar to the Big Learning Opportunity condition in Study 2, parents across both conditions took over little, completing on average about five actions for their child (Big:  $M=5.03$ ,  $SD=4.95$ , range: 0–17; Small:  $M=5.8$ ,  $SD=5.74$ , range: 0–17). In exploratory analyses, we found that parents in both conditions took over less than parents in the Control Condition in Study 2 (Big vs Control:  $W=395.5$ ,  $p=.015$ ,  $r=-.34$ , 95% CI [−.56, −.08]; Small vs Control:  $W=428.5$ ,  $p=.041$ ,  $r=.29$ , 95% CI [−.51, −.02]; Figure 3).

Parents' response on the post-study questionnaire suggested that these results could not be accounted for by experimental demands. Only 25% of parents correctly inferred the study goal (25% in each condition), and once we exclude them, the effect of the manipulation on parents' taking over remains robust in the Big Learning Opportunity condition (S3 Big Learning Opportunity vs S2 Control:  $W=313.5$ ,  $p=.043$ ,  $r=.30$ , 95% CI [−.54, −.02]; exploratory analyses) and somewhat weaker in the Small Learning Opportunity condition (S3 Small Learning Opportunity vs S2 Control:  $W=328$ ,  $p=.071$ ,  $r=-.27$ , 95% CI [−.52, .02]; exploratory). Similarly, only 28% of parents correctly inferred experimenter expectations (25% in Big and 30% in Small conditions), and results are similar once we exclude them (S3 Big Learning Opportunity vs S2 Control:  $W=315$ ,  $p=.046$ ,  $r=-.30$ , 95% CI [−.54, −.01]; S3 Small Learning Opportunity vs S2 Control:  $W=291$ ,  $p=.045$ ,  $r=-.31$ , 95% CI [−.55, −.02]; exploratory).

In exploratory analyses, as in Experiment 1, we found that in 65% of dyads, parents' first taking over action was initiated by them rather than solicited by the child, with no difference between conditions (Big Learning Opportunity: 69%, Small Learning Opportunity: 61%;  $W=484$ ,  $p=.524$ ,  $r=.08$ , 95% CI=[−.21, .36]; missing data from 21 parents who did not take over at all). We



also examined whether parents' taking over differed by demographic variables while controlling for condition. Partial Spearman correlations revealed that parents of older children took over less than parents of younger children ( $\rho = -.27, p = .018$ ). However, parents' taking over did not differ by family SES, parent gender, or child gender (all  $|\rho|$ 's  $< .17$ , all  $p$ 's  $> .140$ ). Since we did not observe condition differences in taking over, we did not further code or analyze exploratory data regarding the verbal interaction between parents and children.

## Discussion

Results from Study 3 revealed that, contrary to parents' self-report in Study 1, parents' taking over did not vary based on the magnitude of their child's learning. Instead, we found that framing a task as a learning opportunity—whether big or small—causes parents to take over less than when the task is not framed as a learning opportunity. These results provide further support for our hypothesis that parents take over less when they represent a task as a learning opportunity and also show that this effect is not driven by experimental demands.

## GENERAL DISCUSSION

Overparenting is prevalent in the United States (Doepke et al., 2019; Ishizuka, 2019) and negatively impacts children's motivation and cognitive development starting in early childhood (e.g., Joussemet et al., 2005; Leonard et al., 2021; Obradović et al., 2021). What can help parents take over less and allow children more autonomy? Across three pre-registered studies, we find that the simple act of pointing out learning opportunities causes parents to step back.

Specifically, we found that parents of 4-to-5-year-olds report taking over less on tasks they view as learning opportunities, which is more common on academic tasks compared to non-academic tasks like getting dressed. In an experimental task, we found that parents' taking over is prevalent when preschool-aged children get dressed (a task we confirmed children can physically do themselves) and is typically not solicited by the child. Critically, briefly highlighting children's learning opportunities when dressing, both big and small, caused parents to take over about half as much as a control message and also increased the amount of positive feedback parents provided to their child. Finally, we confirmed that our findings could not be attributed to demand effects.

Although parental taking over on non-academic tasks is efficient for daily routines, it may also inadvertently demotivate children. Indeed, past work shows the demotivating effects of taking over transfer across task domains: When an experimenter took over and completed puzzles for 4-to-5-year-old children, children persisted

less on a subsequent novel box-opening task (Leonard et al., 2021). Thus, it is possible that parents' taking over on traditionally non-academic tasks may prevent children from developing general feelings of competence or autonomy, which could then impede their child's engagement in other tasks, including academic ones.

Study 3 results suggest that parents took over equally little when we framed the learning opportunity for their child as big or small. In contrast to parents' self-report in Study 1, it could be that parents step back when they think their child has *any* opportunity to learn, regardless of its magnitude. One interpretation of this finding is that parents *think* they would take over more when their child could learn more (as found in Study 1) but *actually* take over when they perceive any learning opportunity for their child (as found in Studies 2 and 3). However, it could also be that our manipulation was not as effective as intended in lowering parents' perceptions of their child's learning in the Small Learning Opportunity condition, despite our preliminary survey validating that parents report that knowledge of hockey gear is less valuable than skills like problem-solving and self-confidence. By mentioning that children can learn about hockey gear before having them dress up in this gear, we may have inadvertently conveyed to parents that this learning opportunity was in fact valuable, relevant to the current study, or unique (e.g., a rare, special learning opportunity).

Our work has a number of limitations. First, our participants came from a Western, educated, industrialized, rich, and democratic (WEIRD) country, so we were not able to capture cultural differences in parenting styles or in parents' beliefs about which skills they think their child should learn. For instance, parents in Maya villages in Yucatán encourage toddlers to take an active role in everyday tasks from cooking to digging fields (Doucleff, 2021), suggesting that cultures may differ in their valuation of non-academic skills. By only studying parents of preschool-age children in the United States, in a largely affluent sample, our results are limited in scope to this specific population. Future work should explore the effect of learning opportunity manipulations across diverse cultural contexts which markedly differ in parenting practices.

Second, due to our focus on experimental condition differences, our study was not well-suited for evaluating the role of individual differences. Specifically, to ensure that our experiments capture overparenting (e.g., taking over on a developmentally appropriate task), we needed to choose a task with minimal individual differences in children's capabilities. To this end, we verified prior to the study that most, if not all, typically developing 4–5-year-olds could physically put on the hockey gear independently. Even so, children's capabilities likely differed (e.g., speed at which it takes them to dress, ease of each action). Since we did not assess children's abilities on the dressing task as part of our experiment, we were

unable to explore whether parents were sensitive to slight individual differences in their child's capabilities. Future work should test how highlighting learning opportunities influences parents' behavior in tasks where children's capabilities are more variable to determine whether this manipulation not only causes parents to step back but also helps them do so in a way that is attuned to their child's unique capabilities.

Notably, in the real world, where young children are constantly changing, it may be a genuine challenge for parents to accurately evaluate children's capabilities. Especially if a parent is prone to taking over, they may not allow children the opportunity to demonstrate their competencies. A vicious cycle of parenting may ensue: Parents underestimate their children's skills, take over, and undercut children's chances of developing these skills. In our experiments, we explicitly state that children *can* learn skills from getting dressed, signifying that children were *capable* of learning on this task. However, this manipulation may not be as effective in cases where parents believe that their child is not yet capable of learning these skills from their independent actions, or that their child's skills are not changeable (e.g., Moorman & Pomerantz, 2010).

Our focus on condition differences also obscured individual differences in parenting behavior. Past observational studies in museum settings have documented considerable variation in the extent to which parents spontaneously set goals for their child's activities, demonstrate exploratory behavior, use explanations and causal language, and take over challenging tasks (McHugh et al., 2024; Sobel et al., 2021). Given this, future work employing a within-subject design (in contrast to the between-subject design used in our experiments) should test the effectiveness of learning-based messaging on parents with different baseline levels of interaction style. It is possible that the learning manipulation is most effective for parents who naturally exhibit more controlling behaviors as they have the greatest room for change. Individualized parenting interventions thus may be a fruitful avenue for future research.

A third limitation is that our study only focused on how beliefs about children's learning relate to overparenting. Of course, parents' decision to take over or step back is likely driven by several important goals other than (or in tandem with) children's learning, including social obligation, safety concerns (Robichaud et al., 2020), and emotional well-being (Coplan et al., 2009). However, our studies do not provide evidence for which goals are most influential in parents' taking over behaviors or which goals are most common or relevant for parents to consider. Future work should compare the influence of parents' learning goals with other important goals in families' daily lives to better understand how different beliefs and priorities interact and shape parent behavior.

To inform interventions aimed at reducing overparenting outside of the lab, further research is required to

evaluate the robustness of our manipulation across contexts. In particular, it remains unclear whether highlighting learning opportunities has a sustained, long-term effect on parental behavior. Additionally, the efficacy of learning messages may vary for tasks other than dressing. Dressing, as shown in Study 1, is a task that parents do not often view as a learning opportunity, suggesting that parents may particularly benefit from learning-based messaging on this task. However, dressing is also frequently associated with conflict (e.g., the child wanting to wear clothes that are not weather-appropriate, or the child not wanting to get dressed at all) and *must* be completed, which may limit parents' willingness to step back. Therefore, learning messages might be even more effective in encouraging parents to step back in tasks that do not have these challenging features. Furthermore, it is unclear whether focusing on children's learning is effective at reducing taking over when other performance demands, like time pressure (which our studies controlled), are also heightened. Parents of young children often experience time famine—the feeling that you have too much to do and too little time (Milkie et al., 2009). Past work demonstrates that time famine leads people to prioritize goal completion (i.e., exploitation) over learning (i.e., exploration, Wu et al., 2022) and value immediate outcomes (e.g., the task getting done rapidly) over long-term rewards (e.g., developing new skills, Ariely & Zakay, 2001). In light of this, interventions aimed at reducing overparenting may be most effective if they not only highlight the benefits of children's learning from the process but also reduce the beliefs and constraints (e.g., time pressures) that lead parents to prioritize the outcome. Such interventions would be particularly important to test in families' natural environments since parents may experience more time famine at home than they do in museum settings.

In addition to parents potentially feeling less pressed for time at museums, these environments are unique in that they emphasize learning through play and exploration (Andre et al., 2017; Degotardi et al., 2019; Leech et al., 2022). As such, it is possible that the museum environment affected the strength of our manipulation, for example, by encouraging parents to focus on children's learning and thus enhancing the impact of our experiment's messaging in the Learning condition. Contrary to this possibility, past research has shown that, in line with the high levels of taking over in our Control condition, parents tend to overlook children's learning opportunities even in museum settings. Specifically, parents tend to rate the learning affordances of museum exhibits significantly lower than experts do (Song et al., 2017), and sometimes even perceive learning as irrelevant or detracting from the main purpose of their museum visit (Letourneau et al., 2017). Nonetheless, it is possible that learning-based interventions outside the museum environment require more extensive messaging than the brief notes used in our experiments.

Taken together, our studies show that the simple act of pointing out learning opportunities reduces overparenting. These findings suggest that the next time caregivers find themselves tempted to complete a task for a child, they should take a moment to appreciate all that children could learn from trying to do it on their own.

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## CONFLICT OF INTEREST STATEMENT

The authors declare no conflicts of interest.

## DATA AVAILABILITY STATEMENT

The data, analytic code, and materials necessary to reproduce the analyses presented here are publicly accessible on OSF: [osf.io/6kdtg](https://osf.io/6kdtg). Analyses were also pre-registered (Study 1: <https://osf.io/mv7xw>; Study 2: <https://osf.io/d2456>; Study 3: <https://osf.io/wr6mz>).

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## SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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