Emotion

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Gratitude Improves Parents' Well-Being and Family Functioning

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Parents are inundated with suggestions to improve their relationships with their children and promote child development, but improving caregiver well-being is often overlooked despite being considered one of the most important methods to promote healthy child development. Drawing on the robust literature on the emotional and relationship benefits of gratitude, we present two studies demonstrating the advantages of gratitude for parents' well-being and family functioning. First, in a 7-day daily experience study conducted in 2018 ($N = 270$), daily gratitude predicted greater well-being and family functioning, controlling for daily happiness, coder-rated care difficulty, and sociodemographics. Second, in a short-term longitudinal experiment conducted in 2018 ($N = 619$), participants were randomly assigned to write a gratitude letter or to complete a control activity. In this study, expressing gratitude predicted greater well-being and family functioning 1 week later via increases in positive emotions. Notably, across both studies neither felt nor expressed gratitude referred to one's children; however, the results of our studies suggest that gratitude in general improves parent–child relationships and family well-being. This work provides insights regarding ways to improve parents' well-being without requiring greater effort, energy, or attention to one's children, and it suggests that promoting parents' gratitude in general may benefit the entire family.

Keywords: gratitude, positive emotions, parent–child relationships, positive psychology interventions, family systems theory

Improving caregiver well-being has been identified as one of the most important methods to promote healthy child development (Luthar & Eisenberg, 2017; National Research Council, 2019). Efforts to promote child development, however, often provide parents numerous dos and don'ts for interacting with their children rather than offering strategies to nurture parents' well-being. Separately, considerable research demonstrates that improving subjective well-being is possible via simple activities, such as expressing gratitude (Bolier et al., 2013); however, the efficacy of positive activities has not been widely investigated among parents, and evidence for the potential downstream benefits for the family is also limited. Drawing on the robust literature demonstrating the emotional and relationship benefits of gratitude (Algoe, 2012; Cregg & Cheavens, 2021; L. R. Dickens, 2017), we evaluate whether gratitude is associated with parents' well-being and family functioning in daily life (Study 1) and whether expressing gratitude promotes parents' well-being and family functioning in a longitudinal experiment (Study 2).

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Data and study materials are available at https://osf.io/2e3hf/.

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Defining Well-Being and Family Functioning

Well-Being

Subjective well-being—characterized by high levels of life satisfaction, frequent positive emotions, and infrequent negative emotions (Diener et al., 1999)—is one of the most common conceptualizations of well-being. Many studies also include other indicators of well-being, such as the experience of meaning and purpose in life (King & Hicks, 2021) and satisfaction of psychological needs for autonomy, competence, and connectedness (Deci & Ryan, 2000). Some scholars have argued that these different measures of well-being reflect unique types of well-being (i.e., hedonia and eudaimonia; Ryan & Deci, 2001; Waterman, 2008); however, this distinction has been debated (Biswas-Diener et al., 2009; Kashdan et al., 2008). Although eudaimonia has been inconsistently defined and measured, a comprehensive review of research on eudaimonia revealed that meaning in life was included across all approaches (Huta & Waterman, 2014; Nelson-Coffey & Schmitt, 2023). Satisfying needs for autonomy, competence, and connectedness has also been tied to both hedonic and eudaimonic well-being (Ryan & Deci, 2001). Given these diverse traditions to investigating well-being (Diener et al., 1999; King & Hicks, 2021; Ryan & Deci, 2001), we included multiple indicators of well-being across our two studies, including subjective well-being (i.e., positive emotions, negative emotions, empathic emotions, life satisfaction, subjective happiness), meaning in life, and psychological need satisfaction (i.e., autonomy, competence, connectedness), all of which are also included in a theoretical model of parents' well-being (Nelson et al., 2014).

Family Functioning

We also investigated whether parents' gratitude would predict several important family outcomes, which we refer to as family

functioning. Few studies have evaluated the benefits of positive psychological constructs for families, and the few existing studies typically include only a single family outcome, such as parent–child relationship quality or family communication (see Waters, 2020 for a review). Considerably more work is needed to evaluate whether, how, and on what outcomes families could benefit from positive psychological practices, such as gratitude. Furthermore, evidence from developmental psychology and family sciences demonstrates that several relationship, behavioral, and emotional constructs may promote or inhibit overall family functioning (Henry et al., 2015). For example, indicators of relationship quality (i.e., parent–child closeness, conflict) are associated with subjective well-being for both parents and adolescents (Coffey et al., 2022; Fosco et al., 2021). Additionally, overinvolved parenting behaviors, such as parental overcontrol and helicopter parenting, are also associated with poorer well-being among both parents and children (Borelli et al., 2015; Rizzo et al., 2013; Schiffrin et al., 2014). Thus, we sought to capture a broad perspective on family functioning, including indicators of parent–child relationship quality (i.e., parent-reported closeness, coder-rated conflict), as well as indicators of behavioral and emotional adjustment among both parents (i.e., parental overcontrol, coder-rated support, parenting satisfaction) and children (i.e., parents' perceptions of their children's positive and negative behaviors, parent-reported child maladjustment).

Gratitude

Gratitude is a social emotion that is commonly felt after benefiting from another person's actions (McCullough et al., 2001). Building on early investigations demonstrating benefits of trait gratitude (i.e., general tendencies to experience gratitude in daily life; McCullough et al., 2002), experimental studies assigned participants to count their blessings (e.g., Emmons & McCullough, 2003), write gratitude letters (e.g., Lyubomirsky et al., 2011), or reflect on times they felt grateful (e.g., Layous et al., 2017). In one experiment, writing a gratitude letter led to immediate boosts in feeling grateful, uplifted, and connected to others, along with a greater range of social emotions compared to control conditions (Layous et al., 2017). In a longitudinal experiment, writing a gratitude letter weekly for 8 weeks led to greater increases in subjective well-being than a neutral activity (Lyubomirsky et al., 2011). Further, meta-analyses indicate that gratitude interventions improve subjective well-being and reduce depressive and anxiety symptoms (Cregg & Cheavens, 2021; L. R. Dickens, 2017). Thus, existing evidence suggests that practicing gratitude reliably improves subjective well-being, although the benefits of gratitude specifically for parents and families have not been thoroughly investigated.

Notably, studies investigating the well-being benefits of gratitude have primarily evaluated subjective well-being or one of its components (e.g., Lyubomirsky et al., 2011; Sheldon & Lyubomirsky, 2006), and relatively fewer studies have evaluated other indicators of well-being, such as meaning in life or psychological need satisfaction. Like other positive emotions, gratitude is theorized to contribute to upward spirals of improved well-being by broadening people's thought processes and building resources across domains (Fredrickson, 2004). Thus, theoretically, gratitude ought to promote a variety of well-being outcomes. Indeed, positive affect—which includes gratitude—increases meaning in life (King et al., 2006), and in one experimental study, penning gratitude letters led to immediate boosts in meaning in life (Nelson-Coffey et al., 2023). With respect to psychological need satisfaction, in one longitudinal study, gratitude was associated with greater fulfillment of needs for connectedness and autonomy, but not competence, over time (Lee et al., 2015). Thus, some evidence supports our prediction that gratitude would promote a variety of well-being outcomes, but more work is needed to evaluate whether the well-being benefits of gratitude are isolated to subjective well-being, or whether those benefits extend to meaning in life and psychological need satisfaction.

We postulate that gratitude would also be associated with improved family functioning for several reasons. Family systems theory suggests that improving one family member's experiences could result in improvements for the entire family by creating new family dynamics (von Bertalanffy, 1968; Waters, 2020). Thus, the immediate cognitive, behavioral, and motivational consequences of gratitude may be specifically beneficial for parents and parent–child interactions. As a self-transcendent emotion, gratitude encourages people to focus on the needs of others rather than themselves (Stellar et al., 2017). To this end, prior research reveals that gratitude not only encourages reciprocity (e.g., returning a favor to one's benefactor), but also paying it forward by promoting greater prosocial behavior to others (not just one's benefactor; Bartlett & DeSteno, 2006). Gratitude has also been linked with greater patience (L. Dickens & DeSteno, 2016), reduced aggression (DeWall et al., 2012), and more positive construals of events via increased positive emotions (Layous et al., 2023). Additional evidence suggests that gratitude motivates people to become better versions of themselves and helps them muster greater effort toward those goals (Armenta et al., 2017; Walsh et al., 2022). Taken together, gratitude may help facilitate parents' caregiving behaviors; their patience, kindness, and perspectives of their children's behavior; and their effort and motivation in their parenting role. Consistent with family systems theory, this profile of consequences associated with gratitude may generate a positive family dynamic and promote overall family functioning.

Two studies provide direct insights regarding the potential benefits of gratitude for parents' well-being and family functioning. In a longitudinal study of first-time parents, gratitude toward one's partner predicted mothers' and fathers' psychological adaptation during the transition to parenthood; however, the benefits of gratitude for psychological adjustment were minimized after accounting for other indicators of relationship quality (Ter Kuile et al., 2017). In another experiment, parents were randomly assigned to write a gratitude letter to someone who was kind to them (general gratitude), to write a gratitude letter to someone who made them feel cherished, protected, or accepted (safe haven gratitude), or to write about their daily activities (control). Both forms of gratitude expression led to immediate boosts in well-being relative to control. Additionally, safe haven gratitude—an activity intended to draw attention to high-quality relationships—led to improvements in connectedness for parents with greater attachment insecurity, and connectedness in turn predicted parents' well-being (i.e., subjective well-being, meaning in life, psychological need satisfaction) and family functioning (i.e., perceptions of children's behavior and maladjustment, and parent-reported parental overcontrol) 1 week later (Nelson-Coffey et al., 2023). These studies suggest that parents' gratitude may promote well-being and family functioning, yet a more thorough investigation of this hypothesis is needed.

Positive Emotion as a Mechanism

We propose that one mechanism by which gratitude may promote parents' well-being and family functioning is by increasing positive emotion. Evidence suggests that expressing gratitude elicits a range of positive emotions (Layous et al., 2017, 2023; Sheldon & Lyubomirsky, 2006). In one study, parents who were randomly assigned to express gratitude reported immediate boosts in positive emotions (Nelson-Coffey et al., 2023). Further evidence suggests that positive activities, including gratitude, improve well-being in part by increasing positive emotions (Lyubomirsky & Layous, 2013). For example, positive emotions mediated the relationship between gratitude and reduced depressive symptoms (Lambert et al., 2012). Finally, positive emotions are theorized to be an important predictor of parents' well-being, partially explaining why some parents are happier than others (Nelson et al., 2014).

Parents' positive emotions are also associated with several benefits for themselves and their families. Positive emotions promote a variety of beneficial parenting practices, such as more sensitive care and parent–child bonding (Dix, 1991). Experiencing greater positive emotions during the transition to parenthood buffers subsequent declines in romantic relationship satisfaction (Don et al., 2022). Finally, a relational savoring activity to promote parents' positive emotions directed toward their children increased parent–child relationship satisfaction and closeness among parents of young children (Burkhart et al., 2015). Thus, existing evidence suggests that positive emotion may be an important mechanism linking gratitude to parents' well-being and family functioning. We tested this hypothesis directly in our second study.

Current Research

In sum, evidence suggests that gratitude would likely benefit parents' well-being and family functioning, although the benefits of gratitude among parents have not been comprehensively investigated. Given the amount of effort already involved in caring for children and the prevalence of parental burnout (especially in the United States; Roskam et al., 2021), approaches to support families without requiring parents to devote more resources to their children are needed. Thus, in line with prior research on the benefits of gratitude described above, we evaluate the benefits of gratitude in general rather than gratitude for children. Although some studies explore the benefits of expressing gratitude within specific relationships (e.g., Algoe & Zhaoyang, 2016; Visserman et al., 2018), a much larger literature focuses on the broader well-being benefits of gratitude (for meta-analyses, see Cregg & Cheavens, 2021; Davis et al., 2016; L. R. Dickens, 2017), which provided the foundation for the research questions addressed in the current studies. Moreover, evaluating the links between general gratitude and parents' well-being and family functioning may reduce potential demand characteristics that could be introduced by asking about gratitude for children followed by questions about family functioning, which includes questions about children's behavior.

We investigated the benefits of gratitude for parents' well-being and family functioning in two studies harnessing daily experience and experimental designs, as well as parent-reported and observational (coder-rated) assessments. In our first study, parents completed a 7-day daily diary, in which they described daily experiences caring for their child and reported several emotions, including gratitude, along with well-being and family functioning. Parents' diaries were evaluated by independent coders for the extent to which the caregiving experience included conflict between parents and children and high-quality supportive care for children. This design allowed us to determine the extent to which within-person fluctuations in daily gratitude were associated with greater well-being on the same day, controlling for between-person differences in gratitude. Moreover, given evidence that parent and child demographic characteristics are related to parents' well-being (Nelson et al., 2014), we also tested whether the associations between parents' gratitude and well-being and family functioning remained consistent after accounting for parents' happiness, coder-rated care difficulty in the interaction, parent age, parent gender, number of children, and age of the youngest child.

In our second study, we tested the causal benefits of expressing gratitude for parents' well-being and family functioning in a short-term longitudinal experiment, comparing two forms of gratitude expression (general gratitude and safe haven gratitude) with a neutral control. We included these two forms of gratitude expression based on prior research demonstrating their benefits. General gratitude involves writing a gratitude letter to someone for whom the participant feels extremely grateful, which has been linked to increases in well-being in prior experiments (Layous et al., 2017; Lyubomirsky et al., 2011). Safe haven gratitude involves writing a letter to someone who makes participants' feel cherished, protected, or accepted (Nelson-Coffey et al., 2023), which is intended to draw special attention to high-quality relationships as described by the find-remind-and-bind theory of gratitude (Algoe, 2012). We also tested whether gratitude improves well-being and family functioning via immediate boosts in positive emotions in this study.

Transparency and Open Science Practices

We did not preregister our hypotheses, design, or analyses for these studies. We report how we determined our sample size and all data exclusions, manipulations, and measures for each study. Data, analysis code, and study materials are available at https://osf.io/2e3hf (Nelson-Coffey & Coffey, 2023). To balance participant privacy and future hypothesis testing using Study 1 data with transparency and open science practices, the data set for Study 1 includes the variables analyzed for this article.

Study 1

Method

Participants

Parents ($N = 270$, 65.3% women) from the United States with at least one child under the age of 18 living in the home were recruited via Amazon Mechanical Turk in 2018. Most parents were White (75.6%), followed by African American (8.9%), Asian American (6.3%), Latinx (4.8%), American Indian/Alaskan Native (1.5%), other (0.7%), and Middle Eastern (0.4%). Parents' ages ranged from 22 to 64 ($M_{age} = 36.21$, $SD = 7.72$). On average, parents reported that they had 1.98 children ($SD = 1.06$) with an average age of 6.15 ($SD = 3.90$). We decided to recruit 270 participants based on the budget available for the study, which would provide >80% power to detect small within-person effects (Arend & Schafer, 2019).

Procedure

Parents were invited to complete a 9-day study in exchange for $8.75 (Nelson-Coffey & Coffey, 2018). The first and last surveys included questions regarding demographics, global well-being, and parenting, which were included to test separate hypotheses and are not reported here (study protocol and full list of measures available at https://osf.io/2e3hf; Nelson-Coffey & Coffey, 2023). Beginning the day after the initial survey, parents completed a short daily survey every day for 7 days, with the following open-ended question (adapted from Le & Impett, 2015):

> People give care to their children in both good times and bad times. Sometimes giving this care is easy and enjoyable, whereas other times it is difficult and frustrating. Please describe a time today, be it easy or difficult, when you gave care to your child. Please describe what your child was going through and what you did for your child.

To minimize selection biases, parents were asked to focus on their child with the most recent birthday. After completing the daily diary, parents reported subjective well-being (emotions, life satisfaction), psychological need satisfaction, and meaning in life felt that day, along with closeness to their children. Measures of partner relationship satisfaction and closeness were included to test separate hypotheses and are not reported here. This study was approved by The University of the South Institutional Review Board (IRB).

We tested our hypotheses using the data collected during this 7-day period. On average, parents completed 4.46 out of seven diaries ($SD = 2.69$), providing 1,205 diaries in total. Compliance was good, with 51.4% of participants completing six or more diaries, 19.3% completing 3–5 diaries, and 29.2% completing fewer than three diaries. Given that we were interested in within-person variability in gratitude across the diary period, we only included participants who completed at least two diaries ($n = 208$ parents). Also, 17 participants did not provide enough detail in their diaries to be coded, resulting in a sample of 191 participants for analyses including coded variables. Participants with incomplete data reported that they had fewer children, $t(268) = 2.20$, $p = .014$ and relatively lower levels of autonomy at baseline, $t(268) = 1.96$, $p = .026$, but did not differ on other demographics or study variables, ts < 1.40, ps $> .08$, χ^2s < 9.71, ps $> .12$. See Table 1 for means, standard deviations, and correlations among study variables.

Measures

Daily Well-Being

Emotions. Each day, parents reported their daily experience of several emotions, including single items for "grateful" and "happy," along with an additional five positive (i.e., pleased, joyful, enjoyment/fun, love, interested; αs .89–.92), six empathic (i.e., compassion, tenderness, sympathetic, softhearted, caring, affection; αs .89–.93), and nine negative (i.e., worried/anxious, angry/hostile, frustrated, depressed/blue, unhappy, guilt, sad, concerned, disgusted; αs .88–.92) emotions on a scale ranging from 1 (*not at all*) to 7 (*very much*; adapted from the Affect Adjective Scale to include empathic emotions; Diener & Emmons, 1984; Lishner et al., 2011). In our analyses, we use the single items for gratitude and happiness, and we created daily composites for positive emotions, empathic emotions, and negative emotions by averaging the emotions within each category (absent gratitude and happiness).

Satisfaction. Participants rated their daily satisfaction with life on one item (i.e., "How satisfying was your life today?") on a scale ranging from 1 (*not at all*) to 7 *(very much*). Single-item measures of life satisfaction are reasonably valid, correlating with well-being measures, including interviews, informant reports, and measures of daily affect (Sandvik et al., 1993).

Meaning. Participants rated their daily feelings of meaning in life on the Daily Meaning Scale (i.e., "How meaningful did you feel your life was today?" and "How much did you feel your life had purpose today?"; Steger et al., 2008) on a scale ranging from 1 (*not at all*) to 7 (*very much*). Reliability was high, with αs ranging from .90 to .97 across days.

Psychological Need Satisfaction. Daily, parents completed the 18-item Balanced Measure of Psychological Needs (Sheldon & Hilpert, 2012), which includes subscales for autonomy (αs = .72–.81; e.g., "I was free to do things my own way"), competence (αs = .65–.74; e.g., "I took on and mastered hard challenges"), and connectedness (αs = .75–.84; e.g., "I felt close and connected with other people who are important to me"). Participants rated their agreement with each statement on a scale from 1 (*no agreement*) to 5 (*much agreement*). Daily composite scores were calculated for each subscale.

Daily Family Functioning

Closeness. As an indicator of relationship quality via closeness between parents and children, parents completed the Inclusion of Other in Self scale (Aron et al., 1992), which presents individuals with two circles reflecting themselves and their child that range from *not touching* (1) to *almost completely overlapping* (7). Parents were asked to select the pair of circles that best represents their relationship with their child that day.

Parenting Diaries. Parenting diaries were coded for the amount of conflict, the level of support parents provided their children, and the degree of care difficulty in the interaction by two independent coders. Coders trained to reliability on a separate set of 52 responses to the same prompt collected for training purposes (i.e., not part of the study sample). After achieving interrater reliability on the training narratives, intraclass correlation coefficient, ICC(2, 1) > .50, the two coders each coded 67% of responses, overlapping by 33% to evaluate reliability in the study sample. For diaries with overlapping coders, we randomly selected one coder's rating to include in analyses. The full coding manual is available at https://osf.io/2e3hf (Nelson-Coffey & Coffey, 2023).

Conflict Interactions. As an indicator of relationship quality, coders rated the extent to which the interaction demonstrated a conflict between the parent and the child on a scale ranging from 0 (*no conflict described*) to 4 (*complex description of a parent–child conflict*). Interrater reliability was good, average ICC(2, 1) = .77 (range .61–.94).

Supportive Interactions. As an indicator of family functioning, coders rated the extent to which the parent provided support, warmth, and kindness toward the child on a scale ranging from 0 (*no support mentioned*) to 4 (*description demonstrates parent's intention to help the child or demonstrate love for the child*). Interrater reliability was moderate, average ICC(2, 1) = .62 (range .47–.93).

Care Difficulty. Finally, coders rated the level of care difficulty by considering the extent to which the interaction was challenging

Table 1
Means, Standard Deviations, and Correlations of All Variables (Averaged Across the Week) for Study 1

Variable	*M* (*SD*)	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Grateful	4.83 (1.41)	—												
2. Happy	4.80 (1.32)	.83*	—											
3. Positive emotions	4.75 (1.16)	.87*	.91*	—										
4. Empathic emotions	4.80 (1.24)	.78*	.63*	.77*	—									
5. Negative emotions	1.95 (0.76)	−.30*	−.43*	−.35*	−.08	—								
6. Autonomy	3.82 (0.62)	.53*	.59*	.62*	.42*	−.63*	—							
7. Competence	3.75 (0.60)	.49*	.53*	.55*	.39*	−.61*	.67*	—						
8. Connectedness	4.06 (0.60)	.58*	.63*	.64*	.54*	−.61*	.74*	.64*	—					
9. Daily satisfaction	5.43 (1.22)	.68*	.74*	.74*	.52*	−.51*	.71*	.65*	.71*	—				
10. Daily meaning	5.48 (1.22)	.69*	.73*	.75*	.57*	−.49*	.68*	.65*	.73*	.95*	—			
11. Closeness	4.83 (1.70)	.25*	.32*	.32*	.25*	−.22*	.30*	.25*	.31*	.37*	.36*	—		
12. Conflict	0.53 (0.66)	−.06	−.14*	−.14*	.01	.27*	−.21*	−.20*	−.12	−.21*	−.12	−.04	—	
13. Support	2.25 (0.82)	−.02	−.09	−.05	.15*	−.004	.02	.10	.11	.06	.08	.04	−.11	—
14. Care difficulty	1.50 (0.78)	−.16*	−.24*	−.20*	.05	.42*	−.26*	−.21*	−.19*	−.18*	−.14*	−.04	.58*	.17*

* $p < .05$.

(e.g., caring for a sick child) for either the parent or the child on a scale ranging from 0 (*no challenge described*) to 4 (*complex or intense challenge described*). Interrater reliability was good, average ICC(2, 1) = .83 (range .75–.89). In line with prior research, this variable is included as a covariate in analyses ensure that any advantages of gratitude do not merely reflect an easier parenting day (Le & Impett, 2015).

Results

Analytic Approach

We tested our hypotheses using multilevel models to account for repeated measurements nested within individuals (Singer & Willett, 2003). We began with unconditional means models with no predictors and proceeded to hypothesis-testing models. To evaluate within-person fluctuations in gratitude, we calculated person-mean-centered daily gratitude by subtracting each participant's weekly average gratitude score from their daily gratitude score. Thus, positive person-mean-centered scores indicate that a participant felt more gratitude on that day than they did throughout the week, on average. To evaluate between-person associations between gratitude and our well-being and family outcomes, we first averaged participants' gratitude scores over the course of the entire diary period and then grand-mean-centered it by subtracting the average across the entire sample. In this case, a positive score reflects that a participant felt more gratitude over the course of the entire diary period than other participants in the study. This approach is consistent with recommended procedures for decomposition of within-person and between-person effects in daily diary studies (Bolger & Laurenceau, 2013).

We tested our hypotheses in two models. In Model 1, we tested the associations between daily fluctuations (i.e., within person) and individual differences (i.e., between person) in gratitude and daily well-being, controlling for time. In Model 2, we evaluated the robustness of these associations by including several within- and between-person covariates. Within-person covariates include parents' daily happiness and coder-rated care difficulty in the interaction described in the diary, which were person-mean-centered as described above. Between-person covariates include parent-reported happiness, coder-rated care difficulty, parent age, number of children, age of the youngest child, and parent gender, which were grand-mean-centered except parent gender (dummy-coded, women as the reference group).

Parents' Daily Gratitude and Daily Well-Being

In Model 1, parents' daily gratitude predicted greater daily subjective well-being, including greater positive emotion ($\gamma = 0.48$, 95% CI [0.43, 0.54], $p < .001$) and empathic emotion ($\gamma = 0.26$, [0.20, 0.32], $p < .001$), less negative emotion ($\gamma = -0.18$, [−0.22, −0.14], $p < .001$), and greater daily satisfaction ($\gamma = 0.40$, [0.33, 0.47], $p < .001$). In addition, parents' daily gratitude predicted greater meaning ($\gamma = 0.33$, [0.27, 0.39], $p < .001$), and psychological need satisfaction—autonomy ($\gamma = 0.14$, [0.10, 0.17], $p < .001$), competence ($\gamma = 0.09$, [0.06, 0.12], $p < .001$), and connectedness ($\gamma = 0.15$, [0.12, 0.19], $p < .001$)—after accounting for between-person differences in gratitude as well as time. Thus, on days when parents felt more gratitude than they normally did, they also reported greater well-being.

We tested the robustness of these findings in Model 2 by including several additional covariates at both Level 1 (within-person; i.e., time, daily happiness, coder-rated care difficulty) and Level 2 (between-person; i.e., average gratitude, average happiness, average care difficulty, parent age, number of children, age of youngest child, and parent gender). Daily gratitude was significantly associated with daily subjective well-being, including positive emotion ($\gamma = 0.21$, 95% CI, [0.16, 0.26], $p < .001$), empathic emotion ($\gamma = 0.20$, [0.14, 0.27], $p < .001$), negative emotion ($\gamma = -0.07$, [−0.11, −0.03], $p < .001$), satisfaction ($\gamma = 0.22$, [0.15, 0.30], $p < .001$), meaning ($\gamma = 0.21$, [0.15, 0.27], $p < .001$), and two indicators of psychological need satisfaction, autonomy ($\gamma = 0.06$, [0.03, 0.10], $p < .001$) and connectedness ($\gamma = 0.09$, [0.06, 0.12], $p < .001$), but not competence ($\gamma = 0.03$, [−0.01, 0.06], $p = .231$; see Table 2).

Parents' Daily Gratitude and Family Functioning

Next, we tested our hypotheses that parents' daily gratitude would be associated with family functioning. In Model 1, parents' daily gratitude was associated with greater parent-reported closeness ($\gamma = 0.22$, 95% CI [0.11, 0.33], $p < .001$), less coder-rated conflict ($\gamma = -0.14$, [−0.20, −0.09], $p < .001$), and higher coder-rated

Table 2
Multilevel Models Predicting Parents' Daily Well-Being From Daily Gratitude and Covariates in Study 1

Parameter	Positive emotion	Empathic emotion	Negative emotion	Daily satisfaction	Meaning	Autonomy	Competence	Connectedness
Intercept, γ_{00}	4.67*** (0.04)	4.84*** (0.07)	1.88*** (0.06)	5.45*** (0.08)	5.54*** (0.08)	3.86*** (0.05)	3.80*** (0.05)	4.07*** (0.04)
Daily gratitude, γ_{01}	0.21*** (0.03)	0.20*** (0.03)	−0.07*** (0.02)	0.22*** (0.04)	0.21*** (0.03)	0.06*** (0.02)	0.03 (0.02)	0.09*** (0.02)
Daily happiness, γ_{02}	0.46*** (0.03)	0.16*** (0.03)	−0.15*** (0.02)	0.25*** (0.04)	0.18*** (0.03)	0.10*** (0.02)	0.08*** (0.02)	0.11*** (0.02)
Daily care difficulty, γ_{03}	−0.07*** (0.02)	0.07** (0.02)	0.16*** (0.02)	−0.06* (0.03)	−0.04+ (0.02)	−0.07*** (0.01)	−0.04* (0.01)	−0.04** (0.01)
Time, γ_{10}	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	−0.01 (0.01)	0.004 (0.01)	−0.01 (0.01)	0.01* (0.01)
Average gratitude, γ_{04}	0.28*** (0.04)	0.63*** (0.03)	0.09+ (0.05)	0.11 (0.08)	0.18* (0.07)	0.04 (0.05)	0.06 (0.05)	0.06 (0.04)
Average happiness, γ_{05}	0.61*** (0.04)	0.08 (0.07)	−0.28*** (0.06)	0.60*** (0.08)	0.52*** (0.08)	0.24*** (0.05)	0.19*** (0.05)	0.24*** (0.04)
Average care difficulty, γ_{06}	0.01 (0.04)	0.23** (0.07)	0.28*** (0.05)	0.02 (0.08)	0.08 (0.08)	−0.10* (0.05)	−0.06 (0.05)	−0.04 (0.04)
Parent age, γ_{07}	0.01 (0.005)	0.01+ (0.01)	−0.003 (0.01)	0.01 (0.01)	0.01 (0.01)	0.004 (0.01)	0.004 (0.01)	0.01** (0.005)
Number of children, γ_{08}	−0.02 (0.03)	−0.02 (0.05)	0.01 (0.04)	−0.01 (0.06)	0.01 (0.06)	−0.04 (0.04)	−0.04 (0.04)	0.01 (0.03)
Youngest child age, γ_{09}	−0.005 (0.03)	0.0004 (0.06)	−0.03 (0.04)	0.004 (0.06)	−0.04 (0.06)	0.03 (0.04)	0.05 (0.04)	−0.02 (0.03)
Parent gender, γ_{010}	0.01 (0.07)	−0.16 (0.12)	0.03 (0.09)	−0.15 (0.13)	−0.06 (0.13)	−0.06 (0.08)	0.01 (0.08)	−0.09 (0.07)

Note. Daily gratitude, daily happiness, and daily care difficulty were person-mean-centered. Time is centered on Day 1. Average gratitude, average happiness, average care difficulty, parent age, number of children, and age of youngest child were grand mean centered. Parent gender was dummy-coded (1 = men, 0 = women). In all models, daily gratitude and daily happiness were free to vary. Random effects of daily care difficulty and time were small and largely not significant and were removed to improve model convergence.
$^{+}p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

quality of parent-provided support ($\gamma = 0.09$, [0.03, 0.15], $p = .001$). On days when parents felt more gratitude than usual, they reported feeling closer to their child, and coders rated parents' descriptions of caring for their children as involving less conflict and higher quality supportive care for children.

We tested the robustness of these findings in Model 2 by including the covariates described above. Parents' daily gratitude remained significantly associated with parent-reported closeness ($\gamma = 0.14$, 95% CI [0.01, 0.27], $p = .037$), coder-rated conflict ($\gamma = -0.07$, [−0.12, −0.01], $p = .007$), and coder-rated quality of support ($\gamma = 0.09$, [0.02, 0.16], $p = .009$; see Table 3).

Discussion

The results of Study 1 indicate that on days when parents felt more gratitude than they usually did, they also reported higher levels of well-being and feeling closer to their children. Coders also rated parents' descriptions of their interactions with their children as being more supportive and as involving less conflict on days when parents reported feeling more gratitude. These within-person associations between gratitude, daily well-being, and family functioning were independent of daily happiness, suggesting that parents' gratitude may confer unique benefits in addition to the well-documented advantages of happiness (Lyubomirsky et al., 2005). These associations were also independent of coder-rated care difficulty within parent–child interactions, which suggests that the benefits of gratitude are not merely reflective of an easier parenting day. However, we cannot determine whether parents' gratitude causes improvements in well-being or family functioning.

In Study 2, we evaluate the effects of parents' gratitude on well-being and family functioning using an experimental design comparing two forms of gratitude expression (general gratitude, safe haven gratitude) with a control activity. We also evaluate a potential mechanism of the benefits of gratitude expression—namely, positive emotions. Furthermore, we expand our measures of family functioning to evaluate whether parents' gratitude improves parenting satisfaction, parental overcontrol, and parents' perceptions of their children's positive behavior, negative behavior, and child maladjustment.

Study 2

Method

Participants

Parents ($N = 619$; 72.5% women) in the United States with at least one child under age 18 were recruited online via Amazon's mTurk in 2018 in exchange for $4. Ages ranged from 19 to 75 ($M_{age} = 36.35$, $SD = 8.01$). Most participants were White (76.1%), followed by African American (10.8%), Asian American (4.6%), Latinx (4.6%), American Indian/Alaska Native (1.8%), more than one (1.6%), Middle Eastern (0.3%), and Hawaiian/Pacific Islander (0.2%). Most participants were married (65.3%), and 13.7% were in a relationship, 9.6% were cohabiting, 2.5% were divorced or separated, 7.9% were not in a relationship, and 1.0% were widowed.

Gratitude interventions elicit small-to-medium effects on positive emotions (Layous et al., 2017; Nelson-Coffey et al., 2023), so we estimated the number of participants needed to achieve 90% power using the pwr package in R ($k = 3$, $f = .175$, sig. level = .05, power = .9). According to this analysis, we would need 417

Table 3
Multilevel Models Predicting Parent–Child Relationship Quality and Family Functioning From Daily Gratitude and Covariates in Study 1

Parameter	Parent–child closeness	Support provision	Conflict
Intercept, γ_{00}	4.80*** (0.16)	2.39*** (0.08)	0.38*** (0.05)
Daily gratitude, γ_{01}	0.14* (0.07)	0.09** (0.04)	−0.07* (0.03)
Daily happiness, γ_{02}	0.09 (0.07)	0.03 (0.03)	−0.01 (0.03)
Daily care difficulty, γ_{03}	−0.06 (0.05)	0.08** (0.03)	0.35*** (0.02)
Time, γ_{10}	0.02 (0.02)	−0.04** (0.02)	0.06*** (0.01)
Average gratitude, γ_{04}	−0.17 (0.15)	0.05 (0.07)	−0.004 (0.04)
Average happiness, γ_{05}	0.58*** (0.16)	−0.04 (0.08)	−0.01 (0.04)
Average care difficulty, γ_{06}	0.03 (0.16)	0.14+ (0.07)	0.40*** (0.04)
Parent age, γ_{07}	0.04* (0.02)	0.02+ (0.01)	−0.004 (0.004)
Number of children, γ_{08}	−0.20+ (0.12)	0.01 (0.06)	0.003 (0.03)
Age of youngest child, γ_{09}	−0.17 (0.12)	−0.03 (0.06)	−0.06* (0.03)
Parent gender, γ_{010}	−0.14 (0.26)	−0.01 (0.12)	−0.15* (0.06)

Note. Daily gratitude, daily happiness, and daily care difficulty were person-mean-centered. Time is centered on Day 1. Average gratitude, average happiness, average care difficulty, parent age, number of children, and age of youngest child were grand mean centered. Parent gender was dummy-coded (1 = *men*, 0 = *women*). In all models, daily gratitude and daily happiness were free to vary. Random effects of daily care difficulty and time were small and largely not significant and were removed to improve model convergence.
$^{+}p < .10$. $^{*}p < .05$. $^{**}p < .01$. $^{***}p < .001$.

participants to achieve 90% power. We decided to recruit at least 200 participants per condition ($N = 600$) to account for attrition.

Of the original 619 participants, 102 did not complete the follow-up survey. Attrition was evenly distributed across conditions, $\chi^2(2) = 1.22, p = .543$, as well as participant demographics, χ^2s < 9.71, ts < 1.93, ps $> .06$. Participants with missing follow-up data did not differ in postmanipulation feelings of gratitude, positive emotions, empathic emotions, competence, meaning, or parent–child closeness (ts < 1.63, ps $> .10$); however, those with missing data reported relatively more negative emotions, and lower connectedness and autonomy immediately following the experimental manipulation (ts > 2.85, ps $< .01$). Importantly, this pattern did not differ by condition (Fs < 1, ps $> .47$). Additionally, nine participants failed at least one of two attention checks. Attention checks were embedded in the survey and directed participants to select a specific response option (e.g., "Please select *slightly agree*"). Participants who failed these checks were evenly distributed across condition (three in the control condition, two in the safe haven gratitude condition, and four in the general gratitude condition). Excluding these nine participants did not alter the pattern of findings reported here. Thus, following the intention-to-treat principle, all available data were used in analyses, and participants who failed the attention checks were included. For analyses of the immediate effects of writing gratitude letters, we included all participants who completed the initial survey, whereas analyses of the follow-up measures only included participants who completed those measures. Notably, the 517 participants with complete follow-up questionnaires provide >90% power to detect a small-to-medium effect.

Procedure

After logging into the survey, participants were randomly assigned to one of three conditions: (a) to write a gratitude letter to someone for whom they are extremely grateful (general gratitude, $n = 213$), (b) to write a gratitude letter for someone who made them feel cherished, protected, or accepted (safe haven gratitude, $n = 188$), or (c) to write about their actions from the previous week (control, $n = 218$). Immediately following the writing activity, participants reported their emotions, psychological need satisfaction, meaning in life, and closeness with their children. One week later, they were invited to complete a follow-up survey, which included the same measures of emotions, psychological need satisfaction, meaning in life, and closeness with children, as well as subjective happiness, parenting satisfaction, autonomy support, parental overcontrol, and perceptions of their child's behavior. This procedure was approved by the University of the South IRB.

Measures

In both surveys, parents completed the same measures of psychological need satisfaction (autonomy: $\alpha_{t1} = .72$, $\alpha_{t2} = .77$; competence: $\alpha_{t1} = .62$, $\alpha_{t2} = .72$, and connectedness: $\alpha_{t1} = .76$, $\alpha_{t2} = .81$), meaning ($\alpha_{t1} = .88$, $\alpha_{t2} = .97$), and closeness with children as in Study 1. Measures of attachment orientation, interpersonal trust, self-compassion, and validation were included to test separate hypotheses and are not discussed further. The parental autonomy support questionnaire had poor reliability ($\alpha = .43$), so we did not analyze this outcome. In sum, well-being measures included positive emotions, negative emotions, empathic emotions, subjective happiness, meaning, and psychological need satisfaction, and family functioning measures included parent reports of parent–child closeness, parenting satisfaction, parental overcontrol, and parent perceptions of children's positive behavior, negative behavior, and maladjustment. See Table 4 for *M*, *SD*s, and correlations among study variables.

Well-Being

Emotions. At each time point, parents responded to 34 items measuring their positive (e.g., happy, content, inspired), negative (e.g., worried, unhappy, guilt), and empathic (i.e., compassion, softhearted, caring, affection) emotions (Diener & Emmons, 1984; Fredrickson et al., 2003; Lishner et al., 2011). We created composites for positive emotions ($\alpha_{t1} = .97$, $\alpha_{t2} = .96$), negative emotions

Table 4

Means, Standard Deviations, and Correlations of Variables in Study 2

Variable	*M* (*SD*)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1. T1 gratitude	5.39 (1.60)	—																						
2. T1 positive emotions	4.72 (1.49)	.88*	—																					
3. T1 negative emotions	2.11 (1.18)	−.21*	−.18*	—																				
4. T1 empathic emotions	4.98 (1.48)	.75*	.83*	−.09*	—																			
5. T1 meaning	5.44 (1.41)	.50*	.57*	−.30*	.42*	—																		
6. T1 connectedness	3.80 (0.80)	.41*	.47*	−.55*	.39*	.53*	—																	
7. T1 autonomy	3.48 (0.76)	.33*	.40*	−.47*	.29*	.46*	.66*	—																
8. T1 competence	3.61 (0.69)	.34*	.39*	−.47*	.28*	.45*	.59*	.57*	—															
9. T1 closeness	5.00 (2.41)	.10*	.08*	−.12*	.09*	.17*	.16*	.14*	.17*	—														
10. T1 gratitude	4.98 (1.47)	.48*	.52*	−.06	.48*	.50*	.37*	.32*	.31*	.11*	—													
11. T2 positive emotions	4.48 (1.31)	.44*	.56*	−.07	.50*	.54*	.40*	.40*	.37*	.08	.89	—												
12. T2 negative emotions	2.90 (1.21)	−.15*	−.15*	.61*	−.07	−.32*	−.52*	−.48*	−.49*	−.06	−.20*	−.26*	—											
13. T2 empathic emotions	4.97 (1.26)	.39*	.46*	−.03	.51*	.41*	.36*	.27*	.28*	.10*	.75*	.79*	−.12*	—										
14. T2 meaning	5.36 (1.49)	.34*	.42*	−.24*	.35*	.64*	.46*	.39*	.41*	.10*	.65*	.73*	−.42*	.62*	—									
15. T2 connectedness	3.73 (0.85)	.25*	.29*	−.35*	.25*	.43*	.58*	.45*	.41*	.10*	.53*	.59*	−.59*	.50*	.62*	—								
16. T2 autonomy	3.51 (0.81)	.22*	.27*	−.35*	.20*	.37*	.47*	.58*	.44*	.10*	.41*	.50*	−.61*	.38*	.54*	.60*	—							
17. T2 competence	3.60 (0.76)	.22*	.26*	−.33*	.16*	.39*	.42*	.40*	.59*	.11*	.42*	.49*	−.60*	.35*	.57*	.53*	.59*							
18. T2 subjective happiness	4.84 (1.37)	.29*	.38*	−.25*	.31*	.52*	.45*	.44*	.43*	.07	.56*	.67*	−.44*	.50*	.69*	.56*	.52*	.56*	—					
19. T2 closeness	4.87 (2.28)	.18*	.18*	−.08	.20*	.26*	.17*	.16*	.22*	.58*	.17*	.18*	−.12*	.18*	.20*	.21*	.15*	.18*	.17*	—				
20. T2 parent satisfaction	5.39 (1.07)	.18*	.24*	−.07	.24*	.39*	.26*	.26*	.33*	.25*	.36*	.46*	−.29*	.37*	.47*	.37*	.35*	.42*	.51*	.41*	—			
21. T2 overcontrol	1.92 (0.65)	−.07	−.02	.46*	−.07	−.06	−.28*	−.24*	−.27*	−.13*	−.13*	−.08	−.02	.40*	−.14*	−.11*	−.25*	−.26*	−.20*	−.12*	−.19*	—		
22. T2 positive child behavior	4.07 (0.79)	.22*	.24*	−.09	.25*	.37*	.23*	.19*	.27*	.33*	.41*	.43*	−.16*	.44*	−.16*	.44*	.44*	.30*	.32*	.40*	.61*	−.23*	—	
23. T2 negative child behavior	1.94 (0.82)	−.11*	−.09	.30*	−.07	−.19*	−.26*	−.28*	−.31*	−.25*	−.18*	−.19*	.39*	−.18*	−.26*	−.33*	−.32*	−.34*	−.32*	−.28*	−.53*	.47*	−.51*	—
24. T2 child maladjustment	2.18 (0.76)	−.15*	−.14*	.30*	−.11*	−.20*	−.31*	−.33*	−.35*	−.17*	−.21*	−.25*	.42*	−.22*	−.29*	−.34*	−.39*	−.36*	−.36*	−.26*	−.57*	.48*	−.48*	.82*

Note. T1 = Time 1, postactivity measures; T2 = Time 2, follow-up measures.
* $p < .05$.

($\alpha_{t1} = .93$, $\alpha_{t2} = .93$), and empathic emotions ($\alpha_{t1} = .90$, $\alpha_{t2} = .88$) by averaging the relevant items. For our manipulation check, we also calculated a separate gratitude composite by averaging the three items used in the Gratitude Adjective Checklist (McCullough et al., 2002): grateful, appreciative, thankful ($\alpha_{t1} = .94$, $\alpha_{t2} = .93$).

Subjective Happiness. In the follow-up survey, parents completed the four-item Subjective Happiness Scale (Lyubomirsky & Lepper, 1999); for example, "In general, I consider myself: 1 = *not a very happy person*, 7 = *a very happy person*," which demonstrated good reliability ($\alpha = .88$).

Family Functioning

Parenting Satisfaction. In the follow-up survey, parents completed the three-item Kansas Parental Satisfaction Scale (James et al., 1985); for example, "How satisfied are you with yourself as a parent?" 1 = *extremely dissatisfied*, 7 = *extremely satisfied*. Reliability was good ($\alpha = .82$).

Parental Overcontrol. In the follow-up survey, parents completed the University of Southern California Parental Overcontrol Scale (Borelli & Margolin, 2013; Borelli et al., 2015). Participants responded to 10 items (e.g., "I do not allow my child to get angry with me") on a scale from 0 (*not at all descriptive*) to 4 (*extremely descriptive*). Reliability in this sample was good ($\alpha = .76$).

Parent Perceptions of Child's Behavior and Maladjustment. At follow-up, parents rated their child's positive (e.g., "My child is respectful to me") and negative (e.g., "My child is rude to me") behavior, as well as the perceptions of children's maladjustment (e.g., "My child is irritable"; Luthar & Ciciolla, 2015) on a scale ranging from 1 (*very rarely*) to 5 (*usually*). Composite scores were calculated for each of the three subscales: six-item positive child behavior ($\alpha = .88$), five-item negative child behavior ($\alpha = .85$), and 13-item child maladjustment ($\alpha = .91$).

Results

Immediate Effects of Gratitude Letters

We evaluated the benefits of expressing gratitude with planned contrast analyses comparing the two gratitude conditions (each weighted +1) to the control condition (−2). As a manipulation check, we confirmed that parents in the two gratitude conditions reported greater feelings of gratitude than control.[1] Immediately after writing their gratitude letters, parents also reported feeling greater positive emotions and empathic emotions, but lower levels of competence. They did not report differences in negative emotions, autonomy, connectedness, or meaning in life (see Table 5). In addition, expressing gratitude did not directly predict any well-being or family outcomes in the follow-up survey, $t_{\text{contrast}} < 1.71$, $ps > .09$.

Indirect Effects of Gratitude Letters via Positive Emotions

Next, we evaluated whether expressing gratitude confers subsequent benefits for well-being and family functioning via immediate increases in positive emotions. Following Hayes (2018) recommended procedures, we estimated path coefficients, as well as bootstrap bias-corrected confidence intervals (with 5,000 bootstrapped samples) for the indirect effects of gratitude conditions via positive emotions relative to control on each outcome reported at the 1-week follow-up (see Table 6 for a summary of results).

Well-Being. Both gratitude letter activities led to significantly greater positive emotions (safe haven gratitude: $b = 0.79$, $SE = 0.16$, $p < .001$, general gratitude: $b = 0.91$, $SE = 0.15$, $p < .001$), which in turn predicted subsequently greater subjective well-being, including, greater positive emotions ($b = 0.54$, $SE = 0.03$, $p < .001$) and empathic emotions ($b = 0.42$, $SE = 0.03$, $p < .001$), lower negative emotions ($b = -0.14$, $SE = 0.04$, $p < .001$), and greater subjective happiness ($b = 0.39$, $SE = 0.04$, $p < .001$), as well as greater meaning ($b = 0.47$, $SE = 0.04$, $p < .001$), and psychological need satisfaction—autonomy ($b = 0.16$, $SE = 0.02$, $p < .001$), competence ($b = 0.15$, $SE = 0.02$, $p < .001$), and connectedness ($b = 0.19$, $SE = 0.02$, $p < .001$)—1 week later. Furthermore, indirect effects of safe haven gratitude and general gratitude via positive emotions on all well-being outcomes were significant (see Table 6).

Family Functioning. Expressing gratitude also led to subsequent improvements in most indicators of family functioning via increases in positive emotions. Again, both safe haven gratitude and general gratitude letters elicited greater positive emotions (safe haven gratitude: $b = 0.79$, $SE = 0.16$, $p < .001$, general gratitude: $b = 0.91$, $SE = 0.15$, $p < .001$), which in turn predicted greater parent-reported parent–child closeness ($b = 0.29$, $SE = 0.07$, $p < .001$), parenting satisfaction ($b = 0.19$, $SE = 0.03$, $p < .001$), and perceptions of positive child behavior ($b = 0.15$, $SE = 0.02$, $p < .001$), negative child behavior ($b = -0.06$, $SE = 0.03$, $p = .02$), child maladjustment ($b = -0.07$, $SE = 0.02$, $p = .001$), but not parental overcontrol ($b = -0.02$, $SE = 0.02$, $p = .39$). Furthermore, the indirect effects of safe haven gratitude and general gratitude via positive emotions on all family functioning outcomes except parental overcontrol were significant (see Table 6).

Discussion

The results of Study 2 indicate that parents' gratitude expression led to greater well-being and family functioning over time via increases in positive emotions. In other words, writing gratitude letters led participants to feel greater happiness, joy, and gratitude, which predicted subsequent well-being and family functioning. Additionally, these findings replicate and expand on the results of Study 1 by demonstrating the causal benefits of gratitude via positive emotions.

General Discussion

Our research suggests that parents can improve their well-being, relationships with their children, and family functioning, not necessarily by engaging in more intense parenting practices or increasing engagement with their children, but by practicing simple positive activities—namely, gratitude. In two studies harnessing longitudinal, daily experience, and experimental designs, we found that, among parents, gratitude was associated with greater well-being and family functioning. In a 7-day daily diary study, we found that on days when parents felt more gratitude than they usually did, they also reported greater subjective well-being (i.e., greater positive emotion, less negative emotion, and greater life satisfaction), meaning, autonomy, connectedness, and parent–child closeness. Coders also rated parents' descriptions of their interactions with their children as being more supportive and involving less conflict. The

[1] As an additional manipulation check, we also tested indirect effects of gratitude conditions on well-being and family functioning via felt gratitude, which paralleled the results for positive emotions. Those results are reported in supplemental materials on Open Science Framework (https://osf.io/2e3hf/).

Table 5
Study 2: Descriptive Statistics, Contrast Tests, and Effect Sizes for Postactivity Measures

	Control		Safe haven gratitude		General gratitude				
	Contrast weight = −2		Contrast weight = +1		Contrast weight = +1				
Outcome	*M* (*SE*)	*n*	*M* (*SE*)	*n*	*M* (*SE*)	*n*	*F*	*t*-contrast	*r* [95% CI]
Gratitude	4.73 (0.12)	217	5.67 (0.10)	187	5.81 (0.09)	213	31.91***	7.89***	.30 [0.23, 0.37]
Positive emotions	4.22 (0.10)	217	4.93 (0.10)	187	5.05 (0.09)	213	20.90***	6.38***	.25 [0.17, 0.32]
Negative emotions	2.06 (0.08)	216	2.13 (0.08)	187	2.15 (0.08)	213	0.37	0.84	.03 [−0.05, 0.11]
Empathic emotions	4.49 (0.11)	216	5.22 (0.10)	187	5.27 (0.09)	213	19.28***	6.18***	.24 [0.17, 0.32]
Meaning	5.37 (0.10)	216	5.39 (0.10)	187	5.55 (0.09)	212	1.06	0.86	.03 [−0.04, 0.11]
Autonomy	3.52 (0.05)	217	3.44 (0.06)	187	3.49 (0.05)	212	0.55	−0.83	−.03 [−0.11, 0.05]
Competence	3.72 (0.05)	217	3.54 (0.05)	187	3.55 (0.04)	212	4.46*	−2.99*	−.12 [−0.20, −0.04]
Connectedness	3.87 (0.06)	217	3.76 (0.06)	187	3.76 (0.05)	213	1.52	−1.74	−.07 [−0.15, 0.01]
Parent–child closeness	5.06 (0.16)	213	5.18 (0.17)	186	4.79 (0.17)	211	1.42	−0.35	.01 [−0.07, 0.09]

* $p < .05$. *** $p < .001$.

benefits of gratitude in this study were independent of several psychological and sociodemographic characteristics, including happiness, care difficulty, parent age and gender, number of children, and age of youngest child. Further, in a short-term longitudinal experiment, we found that expressing gratitude led to greater well-being (i.e., positive emotions, empathic emotions, subjective happiness, meaning, psychological need satisfaction) and parent-reported family functioning (i.e., parent–child closeness, parenting satisfaction, perceptions of child behavior, and maladjustment) 1 week later via increases in positive emotions.

These findings contribute to an emerging body of research demonstrating the efficacy of positive psychology interventions for strengthening families (Borelli et al., 2020; Waters, 2020); however, the current research is unique because parents were not asked to change their parenting behaviors. Prior approaches adapt interventions for the family context by directing parents or entire families to engage in new family-oriented or child-focused activities. For example, in a strengths-based intervention, families (including parents and children) participated in a goal-setting exercise to focus on strengths to create family happiness (Waters, 2020). This intervention increased family happiness relative to a control condition; however, this intervention is intensely focused on families, and any increases in happiness could reflect each family member's own participation in the intervention activity independent of other family members.

Conversely, family systems theory suggests that improving one aspect of the system (e.g., parents) may improve other aspects of the system as well (Fosco & Grych, 2013; von Bertalanffy, 1968; Waters, 2020); thus, interventions could target one family member and result in family-wide improvements. Our findings are consistent with family systems theory and demonstrate that increasing parents' gratitude in general led to improvements not only for parents (e.g., increases in subjective well-being), but for the entire family system via improvements in overall family functioning (e.g., coder-rated parental support, parenting satisfaction, perceptions of child behavior). These findings also converge with prior research demonstrating that adolescents felt more loved by their parents on days their parents reported greater support and less conflict (Coffey et al., 2022). Thus, to the extent that parents' gratitude is linked with higher quality support and less conflict (as indicated by our Study 1 findings), their children may feel more loved.

Notably, we investigated gratitude in general rather than gratitude for one's children and found that even gratitude outside the parent–child relationship contributed to improvements in family functioning.[2] Of course, parents may also feel grateful for their children and express gratitude to them, which could also strengthen parent–child relationships. Future research could compare the relational and well-being outcomes associated with gratitude expressed toward one's children or another person to better understand how the context of gratitude expression improves parents' well-being and family functioning. Furthermore, the current research is among the first to demonstrate that the benefits of gratitude "spill over" into other relationships. Thus, gratitude may generate a ripple effect, benefiting many relationships, not only the recipient of one's gratitude. We demonstrated this possibility within the family system, but future research could explore this pattern in other relationship contexts.

Table 6
Indirect Effects of Safe Haven Gratitude and General Gratitude Interventions via Positive Emotions on Parents' Well-Being and Parent-Reported Family Functioning 1 Week Later in Study 2

	Indirect effects of positive emotions	
Outcome	Safe haven gratitude	General gratitude
Positive emotions	0.43* [0.26, 0.60]	0.48* [0.32, 0.66]
Negative emotions	−0.11* [−0.19, −0.04]	−0.12* [−0.22, −0.05]
Empathic emotions	0.33* [0.20, 0.47]	0.38* [0.24, 0.53]
Subjective happiness	0.30* [0.17, 0.44]	0.35* [0.22, 0.49]
Meaning	0.37* [0.22, 0.53]	0.42* [0.27, 0.57]
Autonomy	0.13* [0.07, 0.20]	0.15* [0.08, 0.22]
Competence	0.11* [0.06, 0.18]	0.13* [0.08, 0.20]
Connectedness	0.15* [0.08, 0.23]	0.17* [0.10, 0.25]
Parent–child closeness	0.23* [0.10, 0.38]	0.26* [0.12, 0.42]
Parent satisfaction	0.15* [0.08, 0.23]	0.17* [0.10, 0.26]
Positive child behavior	0.12* [0.06, 0.18]	0.13* [0.08, 0.20]
Negative child behavior	−0.05* [−0.10, −0.01]	−0.06* [−0.11, −0.01]
Child maladjustment	−0.06* [−0.11, −0.02]	−0.07* [−0.12, −0.02]
Parental overcontrol	−0.01 [−0.05, 0.02]	−0.02 [−0.05, 0.02]

* $p < .05$.

[2] Notably, of the 401 gratitude letters written in Study 2, only 22 (approximately 5%) were addressed to participants' children.

Why does gratitude promote parents' well-being and family functioning? Our findings point to positive emotions as one mechanism explaining the benefits of gratitude for families. These findings are consistent with the broaden and build theory of positive emotions, which suggests that positive emotions contribute to upward spirals of well-being by broadening people's perspectives, helping them to build social, psychological, cognitive, and physical resources (Fredrickson, 2013). Gratitude is associated with several benefits, including increases in patience (L. Dickens & DeSteno, 2016), self-control (DeSteno et al., 2014), and prosocial behavior (Bartlett & DeSteno, 2006), all of which may be especially useful for parents. Future research focusing on additional psychological or behavioral mechanisms linking gratitude to parents' happiness and family functioning would be informative.

Strengths, Limitations, and Future Directions

The strengths of this research include the reliance on large, well-powered samples and the use of both daily experience and experimental designs to test our hypotheses. Our first study included coder-rated observations of parent–child conflict and supportive interactions to provide an independent assessment of parents' descriptions of giving care to their children. The longitudinal experimental design for Study 2 strengthens our ability to causally determine whether expressing gratitude increases positive emotions, which longitudinally predicted subsequent outcomes. This study also represents an important advance in understanding how to improve parents' well-being, a largely underexplored but important topic with implications for child development (Luthar & Eisenberg, 2017; National Research Council, 2019).

Our findings should also be considered in light of a few limitations, which offer ideas for future research. Although we included coder-rated evaluations of conflict and supportive interactions in our first study, most of our measures of parent–child relationship quality and family functioning were parent-reported, which could be biased. Future research incorporating direct measures of children's functioning would be useful to uncover whether parents' gratitude is associated with improvements for children. Measuring children's perceptions of parent–child relationship quality could also determine whether parents' gratitude is linked with improved relationship quality for both parents and children.

Second, the gratitude manipulation in our second study was brief: Participants only practiced their gratitude activity once followed by a 1-week follow-up. This design provides insight into the immediate and short-term benefits of gratitude expression, but it does not reveal whether gratitude results in long-term changes in well-being and family functioning. Relatedly, the gratitude manipulation did not directly predict follow-up well-being or family functioning. Instead, expressing gratitude indirectly predicted these outcomes via immediate increases in positive emotions. These findings are consistent with prior research demonstrating that a single gratitude exercise predicted immediate well-being benefits, which were not maintained 1 week later (Nelson-Coffey et al., 2023). Prior studies revealed that expressing gratitude via letters weekly for 8 weeks led to direct increases in well-being relative to control (Lyubomirsky et al., 2011). Future research using a similar longitudinal experimental design may reveal the direct benefits of gratitude expression for parents' well-being and family functioning.

Constraints on Generality

The findings presented here primarily represent how gratitude is associated with well-being and family functioning among White, cisgender people in heterosexual relationships in the United States. Although our studies included parents from diverse backgrounds, many of whom are underrepresented in parenting research (e.g., single parents, LGBTQ+ parents, fathers), roughly 68% of our samples were women; 75% were White; and 65% were married. Future research could oversample parents with LGBTQ+ identities, single parents, or parents with more diverse cultural, racial, and ethnic backgrounds to gain a more complete portrait of gratitude, well-being, and family functioning across contexts. For example, writing gratitude letters did not elicit gratitude among individuals in collectivist cultures in one study (Shin et al., 2020); thus, the benefits of gratitude for families may not extend to individuals from other cultural backgrounds.

Implications and Conclusions

This research provides insights into methods to improve parents' well-being without asking them to do more for their children, with demonstrated benefits for the entire family; however, gratitude is not a silver bullet and should not replace other valuable institutional supports for families (e.g., paid family leave). Given that parents are inundated with instructions for how to care for, interact with, and guide their children, demonstrating that simple and enjoyable activities not focused on one's children could improve parent–child relationships may be a breath of fresh air for overwhelmed parents.

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