

**Feeling Pride and Awe in Parenthood: The Unique Emotional Rewards of Parenting on  
Well-Being**

Princeton X. Chee, Claire J. Shimshock, and Bonnie M. Le

University of Rochester

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Correspondence should be sent to Princeton Chee at [pchee2@ur.rochester.edu](mailto:pchee2@ur.rochester.edu).

**Abstract**

Parenthood is challenging but fulfilling. We examined how parental pride and awe may enhance various aspects of well-being across cross-sectional ( $N=505$ ), longitudinal ( $N=130$ ), and experimental ( $N=261$ ) studies, along with an internal meta-analysis. Thematic analyses suggested similar yet unique frequencies and underpinnings of pride (child growth, talent, resilience, and good behavior) and awe (child love/kindness, growth, talent, and shared moments). Beyond this, we found that pride predicted greater pleasure (i.e., high satisfaction and low negative affect), and awe predicted greater pleasure, purpose (i.e., meaning), and variety (i.e., psychological richness). We found that these rewards could be explained by strengthened relationship quality with a child, self-transcendence (for pride and awe), and slowed time perception (for awe). Further, these rewards were consistent across parent and child characteristics and could not be explained by child temperament or other positive emotions. These findings illuminate how pride and awe can make parenting bright, meaningful, and rich.

*Keywords:* awe, close relationships, parenting, pride, psychological richness, well-being

## **Feeling Pride and Awe in Parenthood: The Unique Emotional Rewards of Parenting on Well-Being**

Parenthood is hard but is also filled with moments of pride and awe. Sometimes these can be big milestones, such as seeing your child take their first steps. Other times, they can be from the little things, such as simply watching your child grow older. However, despite how central these emotions are to parenthood (Bowen et al., 2022; Impett et al., 2011; Keltner, 2024), work has yet to examine pride and awe's potential rewards in this context. Indeed, because parent-child relationships are uniquely unilateral in care, extremely communal (Clark & Mills, 2012), and highly interconnected, the emotional rewards of parenting may be especially prominent and crucial to examine given how parental care is not often immediately reciprocated. In the current work, we took a positive psychological approach to compare the unique rewards of parental *pride*, achievement or success with one's child (Tracy & Robins, 2007b), and parental *awe*, wonder or amazement with one's child (Keltner & Haidt, 2003).

### **Pride and Awe's Broad Rewards**

Broadly, pride is a *self*-focused emotion that functions to inflate one's sense of self (Tracy & Robins, 2007a). Even relational pride (i.e., being proud of others) has been found to direct attention towards oneself and self-inflate (De Hooge & Van Osch, 2021; Van Osch et al., 2018). Despite this, relational pride is perceived as prosocial and communal from other people (Ritzenhöfer et al., 2019; Wubben et al., 2012). Indeed, coupled with the already-documented benefits of self-pride, such as reduced depression and loneliness (Dickens & Robins, 2022), parental pride may be especially rewarding. For example, pride may have untapped interpersonal rewards, such as promoting greater closeness and love with one's child. Thus, we predicted

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parental pride would promote greater relationship quality with one's child, which may in turn enhance parental well-being.

In contrast to pride, awe is an other-focused emotion that functions to forge and maintain social bonds through decreasing one's sense of self, increasing prosocial behaviors, and promoting group cohesion (Piff et al., 2015; Shiota et al., 2007; Stellar et al., 2017). For these reasons and more, awe is associated with greater physical health, subjective well-being, and love (Bai et al., 2021; Monroy et al., 2023; Nelson-Coffey et al., 2019; Yuan et al., 2023). In particular, awe's other-oriented nature and interpersonal rewards suggest that it can strengthen parent-child relationships. Beyond this, awe can increase self-transcendence or focusing on things beyond one's own sense of self (Jiang & Sedikides, 2022). For example, parental awe may orient parents towards the bigger picture and emphasize their broader responsibilities or purpose as a parent. Finally, awe can increase perceived time availability (Rudd et al., 2012). For example, parental awe may shift a parent's attention to the present moment, allowing them to fully take in, savor, and reap the rewards of the awe-inspiring experience at hand. Thus, we predicted that parental awe would promote greater relationship quality with one's child, greater self-transcendence, and slowed time perception, and in turn, enhance parental well-being.

In the current work, we sought to compare the rewards of pride and awe in parenthood. By nature, parenting is a new, life-altering experience and may thus contribute to well-being in ways outside of the traditional categories of the good life (Oishi et al., 2020). In addition, a large portion of parenting work centers on its maladaptive outcomes (Mikolajczak & Roskam, 2020; Twenge et al., 2003). Thus, informed by a social-functional approach on emotions (Keltner & Haidt, 1999) and taking on a positive psychological lens, we sought to compare the unique rewards of pride and awe across three distinct experiences of well-being. We examine

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*pleasure*—hedonic well-being or maximizing positive and minimizing negative feelings (Diener, 1984), *purpose*—eudaimonic well-being or meaning in life (Steger, 2009), and *variety*—psychological richness or having new, diverse experiences (Oishi et al., 2020). In line with the benefits of focusing on others rather than oneself (Crocker & Canevello, 2008; Le et al., 2013), we hypothesized that pride’s *self*-focused nature may confer limited rewards focused primarily on greater pleasure. However, the *other*-focused nature of awe may confer more widespread rewards, holistically predicting greater pleasure, purpose, and variety.

### **Current Research**

In the current work, we conducted cross-sectional, longitudinal, and experimental studies to examine the effects of parental pride and awe. We additionally summarized our findings in an internal meta-analysis across all studies. Beyond this, we sought to identify the key experiences (themes) of parenting events that uniquely elicit these emotions.

We tested three exploratory mechanisms to explain why parental pride and awe may be rewarding. Specifically, because of the relational benefits that parental pride and awe may convey (Nelson-Coffey et al., 2019; Ritzenhöfer et al., 2019), we predicted strengthened relationship quality with one’s child would explain pride and awe’s rewards. In addition, because parental awe may emphasize parents’ broader responsibilities and allow parents to take in the present moment fully (Jiang & Sedikides, 2022; Rudd et al., 2012), we predicted greater self-transcendence and slowed time perception may uniquely explain awe, but not pride’s, rewards. Although we predicted these latter two mechanisms would only be present for awe, we tested all mechanisms for both emotions to examine whether these pathways were indeed unique to awe.

Furthermore, because parental well-being can fluctuate across differing characteristics, such as being more rewarding for fathers relative to mothers (Nelson-Coffey, Killingsworth, et

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al., 2019; Nomaguchi & Milkie, 2020), we tested if the effects of parental pride and awe may differ across different ages and genders of parents and children (all studies). In addition, we tested if our effects were robust against child temperament (all studies), or how easy or difficult it is to care for one's child, since work has shown that parents of children with easier temperaments report greater well-being (Laukkanen et al., 2014). Last, we also sought to rule out that the effects of pride and awe were not due to other positive emotions (Study 3), such as joy and amusement, many of which have been found to be beneficial for parents already (Don et al., 2022).

### **Study 1: Cross-Sectional Tests of Pride and Awe on Parental Well-Being**

In Study 1, we conducted an online, cross-sectional study to explore the distinct rewards of pride and awe. After removing four blank responses, our final sample included 505 parents recruited from Research Match. We conducted a post-hoc power analysis using G\*power indicating a power of .82 to detect a small effect size ( $r=.10$ ) for two-tailed tests at  $p<.05$  (Faul et al., 2007). Demographic information for all studies can be found in Table 1. In all studies, parents with more than one child were instructed to answer questions thinking about the child with the most recent birthday to avoid selection biases (Brummelman et al., 2015).

**Table 1***Sample Demographics of All Studies*

Study	Initial <i>N</i>	Final <i>N</i>	Parent Demographics				Child Demographics		
			% <i>Female</i>	% <i>White</i>	<i>M (SD)</i>	<i>Range</i>	% <i>Female</i>	<i>M (SD)</i>	<i>Range</i>
Study 1	509	505	66%	86%	49 (15)	23-90	55%	15y (10)	2y-31y
Study 2	328	130	48%	91%	44 (13)	27-78	52%	14y (12)	4m-39y
Study 3	291	261	60%	68%	38 (7)	20-61	45%	8y (5)	6m-18y

*Note.* Initial *N* indicates the total number of participants recruited. Final *N* indicates the number of participants retained for analyses. Participants were removed for the following: left a blank response (all studies), reported not being a parent (all studies), and failed an attention check (Study 3). For child demographics, m indicates months and y indicates years.

**Measures**

All measures across studies were completed on Likert scales ranging from 1 (*strongly disagree*) to 7 (*strongly agree*) and averaged into composites unless otherwise indicated.

**Predictors.** *Pride* was assessed with four items (e.g., “I am proud of my child and their accomplishments”;  $\alpha=.76$ ;  $M=6.10$ ,  $SD=.80$ ; Shiota et al., 2006). *Awe* was assessed with six items (e.g., “I often feel awe with my child”;  $\alpha=.85$ ;  $M=5.52$ ,  $SD=1.01$ ; Shiota et al., 2006).

**Outcomes.** *Satisfaction with life* was assessed with five items (e.g., “I am satisfied with my life;  $\alpha=.89$ ;  $M=5.03$ ,  $SD=1.30$ ; Diener et al., 1985) and *negative emotions* were assessed with nine items (e.g., “sad, depressed, down”;  $\alpha=.90$ ;  $M=2.76$ ,  $SD=1.18$ ; Watson et al., 1988).<sup>1</sup>

*Meaning in life* was assessed with ten items (e.g., “I understand my life’s meaning”;  $\alpha=.66$ ;

<sup>1</sup> We originally pre-registered and tested relationship quality and love as outcomes (indicators of pleasure). However, as suggested by a thoughtful reviewer, they were theoretically better suited as mechanisms that we test only in Study 3. See the supplement [[https://osf.io/8x4gy/?view\\_only=581f7b3548454e1eb0b9f35a31510858](https://osf.io/8x4gy/?view_only=581f7b3548454e1eb0b9f35a31510858)] for results of our original analyses.

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$M=4.69$ ,  $SD=.75$ ; Steger et al., 2006). *Psychological richness* was assessed with twelve items (e.g., “My life has been psychologically rich”;  $\alpha=.88$ ;  $M=4.00$ ,  $SD=1.28$ ; Oishi et al., 2019).

## **Results**

We analyzed data across all studies using R v. 4.3.2 (R Core Team, 2023). In Study 1, all variables were standardized prior to analysis. Multivariate multiple regressions were conducted with pride and awe serving as simultaneous predictors of satisfaction with life, negative affect, meaning in life, and psychological richness. Analyses and datasets for all studies can be found at our OSF page [[https://osf.io/8x4gy/?view\\_only=581f7b3548454e1eb0b9f35a31510858](https://osf.io/8x4gy/?view_only=581f7b3548454e1eb0b9f35a31510858)].

### ***The Rewards of Pride and Awe on Parental Well-Being***

As shown in Table 2, pride, controlling for awe, was associated with lower negative affect and greater satisfaction with life but was not associated with meaning in life or psychological richness. Next, awe, controlling for pride, was associated with greater satisfaction with life, meaning in life, and psychological richness but was not associated with negative affect. Therefore, parental pride was uniquely associated with greater pleasure, and parental awe was uniquely associated with greater pleasure, purpose, and variety.

**Table 2***Parental Pride and Awe Simultaneously Predicting Well-Being (Study 1)*

	Pride			Awe		
	$\beta$	SE	$p$	$\beta$	SE	$p$
Satisfaction with Life	.147	.06	.013	.140	.06	.017
Negative Affect	-.386	.06	<.001	-.059	.06	.287
Meaning in Life	.028	.06	.630	.229	.06	<.001
Psychological Richness	.011	.06	.849	.160	.06	.008

*Note.* Effects are standardized beta coefficients, representing partial effects of pride and awe which were entered as simultaneous predictors in all models.

### ***Generalizability of Pride and Awe Across Age and Gender of Parents and Children***

We next tested if the experiences and effects of pride and awe were consistent across (i.e., were not moderated by) parenting characteristics. Although mean levels of pride were consistent across child age ( $\beta=-.006$ ,  $SE=.01$ ,  $p=.257$ ), mean levels of awe decreased with child age ( $\beta=-.021$ ,  $SE=.01$ ,  $p<.001$ ). Regardless, we found that all effects of pride and awe predicting well-being were consistent across the age and gender of parents and children in all studies. Thus, experiences of awe may decrease as children age, but experiences of pride and the rewards of pride and awe are consistent across parents and children.

### **Study 2: Longitudinal Effects of Parental Pride and Awe**

In Study 2, we sought to identify pride and awe's over-time effects. Because this study was part of a larger study on romantic relationships (including parents and nonparents), we were only able to include measures of satisfaction and meaning due to space restrictions. This study was a four-wave longitudinal study. We conducted virtual interviews to screen out participants who were not in romantic relationships. Then, eligible participants completed an initial survey

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and subsequent surveys 45, 90, and 97 days later. Our pre-registered hypotheses for Study 2 can be found on OSF [[https://osf.io/xztsr/?view\\_only=567dbe2a42b54f05a7aead53def8cdfc](https://osf.io/xztsr/?view_only=567dbe2a42b54f05a7aead53def8cdfc)].

## **Method**

We recruited a total sample of 328 coupled US adults from Research Match. Because the current study's focus was on parents, we only included participants who reported having at least one child and excluded couples who did not report having a child. Our final sample included 130 parents, of which 122 reported on the same child as their partner.

## **Measures**

We measured *awe* ( $\alpha$ s ranged .73 to .78; *Ms* ranged 5.37 to 5.60, *SDs* ranged .70 to 1.02; Shiota et al., 2006), *satisfaction with life* ( $\alpha$ s ranged .84 to .88; *Ms* ranged 5.02 to 5.47, *SDs* ranged .102 to 1.18; Diener et al., 1985), and *meaning in life* ( $\alpha$ s ranged .67 to .72; *Ms* ranged 4.51 to 4.69, *SDs* ranged .81 to .83; Steger et al., 2006) using the same measures as described in Study 1. *Pride* was assessed with the same items, except with two additional items to ensure greater face validity (e.g., “accomplished”;  $\alpha$ s ranged .88 to .92; *Ms* ranged 6.12 to 6.33, *SDs* ranged .53 to .93; Shiota et al., 2006; Tracy & Robins, 2007b).

## **Results**

We analyzed our data in R with multilevel modeling, using the *lme4* (Bates et al., 2018) and *lmerTest* (Kuznetsova et al., 2017) packages. Participants (Level 1) were nested within couples (Level 2), with time points crossed between partners to account for dependencies between their reports at the same time point. We aggregated and grand-mean centered our predictors (pride and awe). Then, we conducted lagged analyses to examine how pride and awe

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predicted well-being across all time lags (Kenny et al., 2006).<sup>2</sup> Specifically, we tested if pride and awe (simultaneous predictors) at prior time points (i.e., T1, T2, and T3) predicted greater well-being at subsequent time points (i.e., T2, T3, and T4, respectively), controlling for well-being at prior time points.<sup>3</sup> We used full information maximum likelihood to handle missing data. Because of the complexity of our models, we specified random intercepts for participants and couples and fixed slopes (Kenny et al., 2006). Thus, we sought to test if people higher, relative to lower, in pride and awe at prior time points had increases in well-being at subsequent time points overall, when controlling for prior levels of well-being.<sup>4</sup>

### *The Lagged, Over-Time Effects of Awe and Pride on Well-Being*

As shown in Table 3 below, we found that parents who were higher, relative to lower, in pride at prior time points experienced increases in satisfaction with life, but no differences in meaning in life, at subsequent time points overall. Parents who were higher, relative to lower, in awe at prior time points experienced increases in meaning in life, but no differences in satisfaction with life, at subsequent time points overall. We tested if these effects could be explained by child temperament and found that the effects of pride ( $p=.017$ ) and awe ( $p=.003$ ) held. Thus, we found that parental pride predicted greater pleasure over time, and parental awe predicted greater purpose over time, regardless of child temperament.

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<sup>2</sup> We originally pre-registered analyses using regression. However, we updated our analyses, as suggested by a thoughtful reviewer, to an overall stronger analysis procedure, allowing us to examine the effects of pride and awe across all time points simultaneously rather than at specific time points as originally preregistered (Kenny et al., 2006). See the supplement for results using the original analyses.

<sup>3</sup> We controlled for raw (rather than grand-mean centered) scores of prior well-being because a grand-mean centered control at the prior time point is highly confounded with the subsequent time point outcome variable which leads to multicollinearity issues.

<sup>4</sup> As in Don et al. (2022), we did not include person-mean centered variables because examining within-person effects with few time points can lead to inaccurate associations due to lack of sufficient variability (Gordon & Thorson, 2023).

**Table 3***Parental Pride and Awe Simultaneously Predicting Longitudinal Well-Being (Study 2)*

	Pride			Awe		
	<i>b</i>	<i>SE</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>p</i>
Satisfaction with Life	.205	.06	<.001	-.049	.06	.388
Meaning in Life	-.007	.06	.902	.177	.06	.003

*Note.* Effects are unstandardized beta coefficients representing partial effects of pride and awe entered as simultaneous predictors of well-being at subsequent time points, controlling for well-being at prior time points.

### **Study 3: Experimental Tests of the Rewards of Pride and Awe**

In Study 3, we used thematic analyses to identify the types of experiences that elicit pride and awe. We additionally tested the causal effects of each emotion in a three-condition, within-person experiment. We conducted exploratory mediations to examine if greater relationship quality, self-transcendence, and slowed time perception could explain these effects. Finally, we tested if the effects of pride and awe were robust against child temperament and other positive emotions. All hypotheses, analyses, and methods were preregistered and posted on OSF prior to conducting this study [[https://osf.io/q6f48/?view\\_only=fc92ff4e7ceb4eca8a43bbe6784d184b](https://osf.io/q6f48/?view_only=fc92ff4e7ceb4eca8a43bbe6784d184b)].

### **Method**

We recruited 291 parents from Prolific with children 18 years or younger to confine the sample to parents with children living at home. In this way, we could recruit parents who likely spend a lot of time with their children and maximize the pride and awe experiences parents may have. After removing participants who failed an attention check, our final sample included 261

parents, exceeding past work that has utilized similar within-person experimental paradigms (Le & Impett, 2016).

Participants completed all conditions recalling three separate experiences with their child from the past month. Instructions for each condition were written adapting similar recall paradigms in parenting (Le & Impett, 2019) and emotions (Graziosi & Yaden, 2021; Rudd et al., 2012). In all conditions described below, participants were told to (1) describe the experience, (2) describe what their child was doing, and (3) describe why the experience felt typical (control condition), pride-eliciting (experimental pride condition), or awe-eliciting (experimental awe condition).

First, all participants recalled and wrote about “an ordinary experience that [they] had with their child” in the *control condition*. Next, participants completed either the pride or awe experimental conditions. Because order-related confounds may appear when using within-person designs (Charness et al., 2012), we counterbalanced the experimental conditions so an even number of participants completed each experimental condition first. In the *pride condition*, participants recalled and wrote about a time they felt “a sense of achievement from something [their] child succeeded in.” In the *awe condition*, participants recalled and wrote about an experience with their child in which they felt awe (e.g., “wonder or astoundment from something that feels like a big deal”).

### ***Measures***

After each condition, participants completed the following measures directed towards how they felt during their recalled experience.

**Manipulation Checks.** *Pride* ( $\alpha=.84$ ,  $M=5.13$ ,  $SD=1.49$ ) was assessed with six items using a range of 1 (*not at all*) to 7 (*extremely*), including the extent participants felt “successful”

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with their child (Fredrickson et al., 2003; Tracy & Robins, 2007b). *Awe* ( $\alpha=.96$ ,  $M=4.55$ ,  $SD=2.07$ ) was assessed with seven items directed towards one's child, including "I found it hard to comprehend the experience in full" (Fredrickson et al., 2003; Yaden et al., 2019).

**Outcomes.** We measured *satisfaction with life* (one item;  $M=5.90$ ,  $SD=1.05$ ; Diener et al., 1985), *meaning in life* (two items;  $r=.86$ ,  $M=5.32$ ,  $SD=1.36$ ; Steger et al., 2006), and *negative affect* ( $\alpha=.88$ ,  $M=1.29$ ,  $SD=.66$ ; Le & Impett, 2016) using the same measures as described in Study 1. *Psychological richness* was assessed with two items on a scale of 1 (*not at all*) to 7 (*extremely*) ( $r=.64$ ,  $M=3.94$ ,  $SD=1.84$ ).<sup>5</sup>

**Mechanisms.** *Relationship quality* was assessed with a composite of five items tapping relationship satisfaction and love (e.g., "I felt love with my child";  $\alpha=.90$ ,  $M=6.26$ ,  $SD=.90$ ; Rogers & White, 1998; Sprecher & Fehr, 2005). *Time perception* was assessed with the item "I noticed time slowing down" ( $M=3.27$ ,  $SD=1.81$ ; Yaden et al., 2019). *Self-transcendence* was assessed with two items (e.g., "I felt that my individual life was part of a greater whole";  $r=.73$ ,  $M=4.86$ ,  $SD=1.53$ ; Levenson et al., 2005).

### Identifying the Thematic Experiences of Parental Pride and Awe

We first coded the pride and awe free responses parents recalled for central themes. The lead author and a research assistant used thematic analysis (Clarke & Braun, 2017) and ChatGPT (OpenAI, 2023) using methods outlined by Lee et al. (2023). Details of how we used ChatGPT can be found in the supplement. Six overall themes arose for pride and awe (found in Table 4). The lead author and a research assistant coded each of the 291 respective responses for pride and awe into each theme, with discrepancies being resolved by the lead author. Inter-coder reliability was good ( $\kappa_{\text{pride}}=.589$ ;  $\kappa_{\text{awe}}=.796$ ), indicating moderate agreement across coders (McHugh, 2012).

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<sup>5</sup> These items differed from our pre-registered plan because of an error (see supplement).

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**Table 4***Themes of Pride and Awe in Parenthood (Study 3)*

An experience with one's child involving...

<p><b>Compassion, Kindness, or Love with Others</b> <i>9% Pride</i> <i>26% Awe</i></p>	<ul style="list-style-type: none"> <li>● Child engages in kind acts or demonstrates thoughtfulness, empathy, or consideration of others or animals</li> <li>● Child expresses love, warmth, or affection</li> <li>● Child demonstrates positive connections with family or peers</li> </ul>
<p><b>Talent in Academics, Athletics, or Art</b> <i>42% Pride</i> <i>22% Awe</i></p>	<ul style="list-style-type: none"> <li>● Child is recognized for a talent or achievement in academics, athletics, or art</li> <li>● Child demonstrates advanced knowledge or skill</li> </ul>
<p><b>Personal Development and Growth</b> <i>21% Pride</i> <i>26% Awe</i></p>	<ul style="list-style-type: none"> <li>● Child demonstrates maturity or independence beyond their years</li> <li>● Child reaches specific developmental milestones (e.g., first steps)</li> <li>● Child showcases curiosity or learns new things about the world</li> </ul>
<p><b>Resilience, Determination, or Strong Will</b> <i>20% Pride</i> <i>5% Awe</i></p>	<ul style="list-style-type: none"> <li>● Child exhibits resilience in the face of adversity and overcomes challenges or hardships</li> <li>● Child showcases high work ethic and determination to reach a goal</li> <li>● Child advocates for something they strongly believe in</li> </ul>
<p><b>Shared, Special Moments with the Parent</b> <i>0% Pride</i> <i>18% Awe</i></p>	<ul style="list-style-type: none"> <li>● Child and parent share a special moment or outing together that brings them closer (e.g., visiting an aquarium together)</li> <li>● Child reminds the parent of a special time or moment in the past</li> </ul>
<p><b>Child's Excellent Temperament or Nature</b> <i>6% Pride</i> <i>0% Awe</i></p>	<ul style="list-style-type: none"> <li>● Parent hears from others of their child's good behavior</li> <li>● Parent hears praise about their child's good nature</li> </ul>

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Our qualitative analyses suggest that pride and awe may have distinctions in the frequency and experiences of their elicitors. For example, although pride experiences most frequently centered on times involving a child's *talent*, awe experiences were equally dispersed across most of the themes (e.g., *talent*, *compassion*, *growth*, and *special moments*). In addition, among the themes that emerged, many were almost exclusively associated with one emotion and not the other. Specifically, experiences involving resilience or good nature were almost entirely pride-focused. In contrast, experiences involving love/kindness and shared moments were predominantly centered on awe. In this way, and coupled with their varying frequencies, our thematic analyses suggest that pride and awe have distinct experiences and unique underpinnings.

### **Quantitative Results**

Next, we examined pride and awe's causal effects on well-being. We analyzed the data in R with multilevel modeling using the *lme4* (Bates et al., 2018) and *lmerTest* (Kuznetsova et al., 2017) packages to account for dependencies, with conditions nested within participants. We created three dummy codes for the pride, awe, and control conditions (e.g., key condition=1; other conditions=0). To test differences between the experimental and control conditions, we entered the pride and awe dummy codes as simultaneous predictors of well-being. To test differences between the pride and awe conditions, we entered the pride and control dummy codes as simultaneous predictors of well-being. To test mediation, the Monte Carlo Method for Assessing Mediation was used to generate 95% confidence intervals of the indirect effects using 10,000 bootstrapped resamples (Selig & Preacher, 2008). Mediation analyses examined relationship quality, self-transcendence, and time perception as separate mediators of the associations between the pride and awe dummy codes simultaneously predicting well-being.

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### *The Rewards of Awe and Pride*

Our experimental manipulation was successful. Parents reported greater pride in the pride ( $M=5.67$ ,  $SD=1.13$ ) relative to the awe ( $M=5.41$ ,  $SD=1.31$ ;  $b=-.26$ ,  $SE=.08$ ,  $p<.001$ ) and control ( $M=4.66$ ,  $SD=1.37$ ;  $b=-1.01$ ,  $SE=.08$ ,  $p<.001$ ) conditions. Parents also reported greater awe in the awe ( $M=4.67$ ,  $SD=1.08$ ) relative to the pride ( $M=4.11$ ,  $SD=1.27$ ;  $b=-.56$ ,  $SE=.07$ ,  $p<.001$ ) and control ( $M=2.67$ ,  $SD=1.08$ ;  $b=-1.99$ ,  $SE=.07$ ,  $p<.001$ ) conditions.

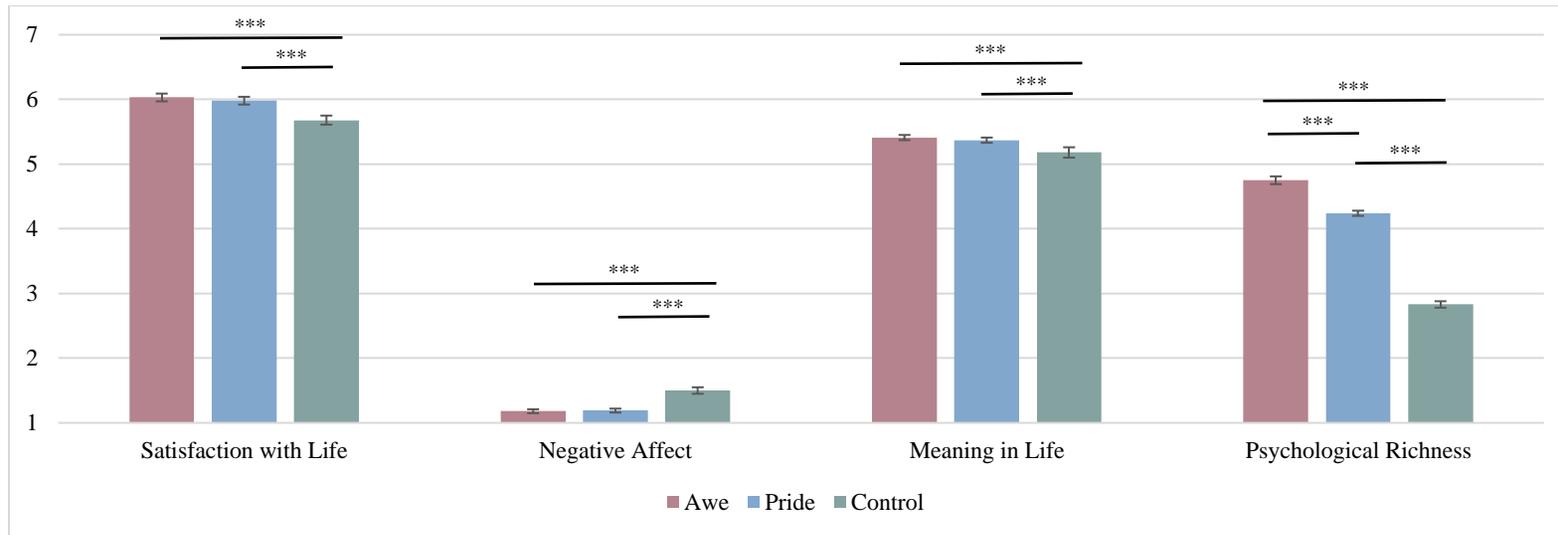
We next compared the pride and awe conditions relative to the control condition. As shown in Figure 1 and Table 5, we found that parents reported lower negative affect and greater satisfaction with life, meaning in life, and psychological richness in the pride ( $/.186|\leq bs|\leq 1.42|$ , all  $ps\leq .008$ ) or awe ( $/.230|\leq bs|\leq 1.92|$ , all  $ps\leq .001$ ) conditions compared to the control condition. We found that parents reported no difference in satisfaction with life, meaning in life, or negative affect in the awe compared to the pride condition ( $/.012|\leq bs|\leq .044|$ , all  $ps\geq .485$ ). However, parents reported greater psychological richness in the awe, relative to the pride condition ( $b=.504$ ,  $SE=.09$ ,  $p<.001$ ). Overall, we found that pride and awe enhanced pleasure, purpose, and variety compared to everyday experiences. Moreover, we found that awe enhanced variety beyond pride.

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**Table 5***Means of Well-Being of Control, Pride, and Awe Conditions (Study 3)*

	<b>Control</b>	<b>Pride</b>	<b>Awe</b>
	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
Satisfaction with Life	5.68 (1.14)	5.98 (0.96)	6.03 (0.99)
Negative Affect	1.50 (0.85)	1.19 (0.49)	1.18 (0.54)
Meaning in Life	5.18 (1.37)	5.37 (1.29)	5.41 (1.41)
Psychological Richness	2.83 (1.76)	4.24 (1.66)	4.75 (1.52)

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**Figure 1***Well-Being Differences between the Pride, Awe, and Control Conditions (Study 3)*

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We last sought to test the pride and awe conditions against the control condition, controlling for felt pride and awe, respectively. When controlling for felt awe in the pride condition, parents felt significantly less negative affect ( $p=.005$ ) relative to the control condition, but no difference in satisfaction with life, meaning in life, or psychological richness (all  $ps>.234$ ). When controlling for felt pride in the awe condition, parents felt significantly less negative affect ( $p=.001$ ), greater satisfaction with life ( $p=.049$ ), and greater psychological richness ( $p<.001$ ) relative to the control condition, but no difference in meaning in life ( $p=.639$ ). Thus, we found that the effects of awe were largely robust against pride but that the effects of pride were attributable to some extent to awe.

### *Mechanisms of Pride and Awe Predicting Well-Being*

We additionally tested three mechanisms of pride and awe: greater relationship quality, greater self-transcendence, and slowed time perception. First, we found that greater relationship quality for one's child significantly mediated the associations between pride with all facets of well-being ( $|.070|\leq\text{direct effect } bs \leq|1.019|$ ,  $ps\leq.238$ , all indirect effect 95% CIs excluded 0) and awe with all facets of well-being ( $|.017|\leq\text{direct effect } bs \leq|1.534|$ ,  $ps\leq.772$ , all indirect effect 95% CIs excluded 0). Next, we found that greater self-transcendence significantly mediated the associations between pride with all facets of well-being ( $|.024|\leq\text{direct effect } bs \leq|1.178|$ ,  $ps\leq.728$ , all indirect effect 95% CIs excluded 0) and awe with all facets of well-being ( $|.046|\leq\text{direct effect } bs \leq|1.512|$ ,  $ps\leq.514$ , all indirect effect 95% CIs excluded 0).

Last, we found that slowed time perception significantly mediated the associations between awe with satisfaction with life, meaning in life, and psychological richness ( $|.160|\leq\text{direct effect } bs \leq|1.788|$ ,  $ps\leq.027$ , all indirect effect 95% CIs excluded 0) but not negative affect. We found that greater time perception did not mediate any of the associations between

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pride and well-being. See the supplement for full results of the mediation models. Thus, we found that pride and awe enhanced well-being due to greater relationship quality and self-transcendence. Further, awe, but not pride, enhanced well-being due to slowed time perception.

### *Alternative Explanations*

We last tested if pride and awe's rewards were robust against alternative explanations (see the supplement for more information). We found that the effects of pride held when controlling for amusement but could be partially explained by joy. We found that the large majority of the effects of awe held when controlling for amusement and joy. Last, the effects of both pride and awe both largely held when controlling for child temperament. Thus, although the rewards of pride may be somewhat attributable to alternative explanations, the rewards of awe were broadly robust.

### **An Internal Meta-Analysis of the Effects of Parental Awe and Pride on Well-Being**

We last conducted an internal meta-analysis to identify high-powered, reliable estimates of our effect sizes across our different methodologies (Goh et al., 2016). We coded all associations as partial *rs* of pride and awe controlling for each other to compare their distinct effects on parental well-being. We converted effect sizes using the appropriate *t*-statistics and *degrees of freedom* (Borenstein et al., 2009).

### **Results**

Analyses were conducted using the metafor package (Viechtbauer, 2010). We used fixed-effects models to estimate an overall effect size across our three studies (Borenstein et al., 2009), with fixed-effects models being more appropriate for meta-analyses with smaller numbers of effects.

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As seen in Table 6, we found that pride was associated with lower negative affect and greater satisfaction with life but was unassociated with meaning in life and psychological richness. Furthermore, we found that awe was associated with lower negative affect and greater satisfaction with life, meaning in life, and psychological richness. Thus, we found that parental pride predicted greater pleasure, and parental awe predicted greater pleasure, purpose and variety for parents.

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**Table 6***Internal Meta-Analysis of the Distinct Effects of Parental Pride and Awe on Well-Being (Studies 1 to 3)*

			Pride			Awe		
	<i>k</i>	<i>N</i>	<i>pr</i> ( <i>SE</i> )	<i>p</i>	95% <i>CI</i>	<i>pr</i> ( <i>SE</i> )	<i>p</i>	95% <i>CI</i>
Satisfaction with Life	3	896	.128 (.03)	<.001	[.064, .192]	.096 (.03)	.004	[.032, .161]
Negative Emotions	2	766	-.313 (.03)	<.001	[-.376, -.250]	-.089 (.04)	.013	[-.160, -.019]
Meaning in Life	3	896	.011 (.03)	.740	[-.055, .077]	.176 (.03)	<.001	[.113, .239]
Psychological Richness	2	766	.025 (.04)	.489	[-.046, .096]	.323 (.03)	<.001	[.261, .385]

*Note.* Effects are partial *r*s derived from models in which pride and awe simultaneously predicted each outcome. In Study 3, we coded effects controlling for felt pride in the awe condition and felt awe in the pride condition.

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### General Discussion

The current findings highlight the distinct rewards of parental pride and awe. Although pride is associated with greater pleasure (i.e., more satisfaction with life and less negative affect), awe is associated with greater pleasure, purpose (i.e., meaning), and variety (i.e., psychological richness). We garner concurrent, over-time, and causal evidence and summarize our findings across an internal meta-analysis. Importantly, we found that these effects were consistent across the age and gender of parents and children (all studies) and could not be fully accounted for by child temperament (all studies) or joy and amusement (Study 3).

The current work uses thematic analyses to identify the kinds of parenting experiences that elicit these emotions. Although pride and awe share somewhat overlapping experiential themes (e.g., child love/kindness, talent, growth, resilience, temperament, and shared experiences), they differed in the frequency and experience across them. For example, many themes heavily skewed towards one emotion rather than the other, implying that pride and awe may stem from these experiences to differing extents. Thus, these descriptive differences suggest that these emotions vary across central themes and may involve somewhat unique underpinnings in which they arise from.

A novel contribution of this work is uncovering the effects of pride in the parent-child relationship. Our findings indicate that parental pride's rewards may be limited to boosting satisfaction perhaps due to pride's self-oriented nature (Crocker & Canevello, 2008; Le et al., 2013). The current findings also make several contributions to the study of awe. Although awe is most studied in the context of nature, it is most frequently experienced interpersonally (Bai et al., 2017). The current work extends our understanding of awe to the parent-child context, one that is colloquially abundant, yet empirically overlooked (Keltner, 2024). Our findings indicate that

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parental awe can have wide-reaching rewards, making parents' lives more satisfying, meaningful, and diverse.

The current work also finds that the rewards of both pride and awe can be explained by strengthened relationship quality with one's child and self-transcendence. This aligns with work suggesting that other-directed pride may be self-inflating but also other-reaching (Van Osch et al., 2018) and with work suggesting that awe binds people together and pushes them outward (Stellar et al., 2017). Thus, parental pride and awe may strengthen well-being by cultivating parent-child bonds and shifting one's focus outside of oneself. We also found that the rewards of awe, but not pride, can be uniquely explained by slowed time perception. This finding is consistent with work in broader domains (Rudd et al., 2012) but is especially prevalent in the context of parenthood, a time in which time is scarce yet importantly beneficial for children's development (Milkie et al., 2015; Parker, 2013).

### **Future Directions and Limitations**

Although we center on the more widespread rewards of awe, parental pride also had unique effects on pleasure. Thus, future work should explore mechanisms that may explain why pride *in particular* may enhance well-being. For example, perhaps pride's nature of being socially evaluative lends adaptive social comparisons of one's child (Thai et al., 2019), or prideful parents may perceive their own self-image as less important, with child-focused, rather than self-focused goals, being especially beneficial for parents (Le & Impett, 2019).

In addition, although we find distinctions in the longitudinal rewards of pride and awe for pleasure and purpose, respectively, we did not examine psychological richness over-time. Indeed, an interesting avenue for future work is to explore how parental awe experiences can compound, making parents' lives more psychologically rich across time. Finally, future research

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should explore how parental pride and awe, and their accompanying rewards, may “spillover” to the child and benefit the entire family unit holistically (Don et al., 2024).

### **Conclusion**

The current work examines a diverse portrait of parents’ emotionally rich lives, going beyond traditional hardships to understand the rewards of parental pride and awe. Although pride may primarily emerge from observing child growth, talent, resilience, and good behavior, awe may primarily emerge from observing child love/kindness, growth, talent, and shared moments. We find that in spite of parents’ pains (Nelson et al., 2014), pride and awe may enhance parents’ pleasures. Beyond this, parental awe may uniquely enhance parents' purpose and variety. Thus, parental pride and awe distinctly contribute to making parenthood bright, fulfilling, and rich.

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