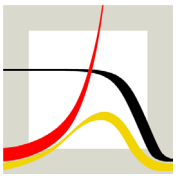

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SES and the Emotional 'Benefits' and 'Costs' of Parenting

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Key words: wellbeing, parenting, education, time use, gender

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Abstract

In today's society, children's value to their parents is primarily emotional. As such, scholars have devoted a tremendous amount of effort to understanding how children both enhance, and diminish, the emotional wellbeing of parents. What remains unclear, however, is how these emotional 'costs' and 'benefits' vary across different socioeconomic segments of U.S. society. We investigate this question using random effects models and a representative sample of adults participating in the American Time Use Survey Wellbeing Module (*N* activities =52,036, *N* respondents =17,481). We find that caring for minor children (versus not) is associated with greater levels of positive emotions (happiness, meaning) and less sadness for all socioeconomic groups, but it is only associated with greater levels of negative emotions (stress, fatigue) for higher SES parents. This overall pattern of results was also observed when looking only at men. For women, however, it was only observed among higher SES mothers. For lower SES women, raising children did not seem to enhance, or diminish, emotional wellbeing. We discuss these SES and gender related findings in the context of recent trends in fertility among both lower and higher socioeconomic segments of society, as well as trends in social inequality more broadly.

Key words: parenting, education, happiness, wellbeing, time use

Economic and cultural changes of the past century have transformed the significance of children, as well as the experience of raising them. Today, children are primarily valued for their emotional status—the ways in which they bring about happiness and a sense of meaning in lives of individuals (Zelizer 1994). At the same time, the time and energy required by the types of parenting practices that enhance children's emotional status (e.g. teaching a child a skill, which yields a sense of meaning) means that raising children is also likely to induce negative emotions such as fatigue, stress, and sadness (Authors 2018; Hays 1998). These negative emotional 'returns to parenting' are also likely brought about by current social conditions, in which parents' employment places increasing demands on their time and performance; yet they are expected to spend an increasing share of their time and financial resources on their children (Glass et al. 2016; Sayer et al. 2004). Furthermore, lofty modern parenting standards may give rise to negative emotions when parents' expectations of themselves, or their children, are unfulfilled. Given this array of factors, modern parenting has been characterized as a mixed bag of emotions (Musick et al. 2016; Nelson et al. 2014; Nomaguchi and Milkie 2003), in which parenting brings about both emotional rewards and emotional costs. What remains unclear is how the emotional experience of raising children varies for different socioeconomic groups. This is a timely question in the context of several key trends.

The first trend is rising inequality. As socioeconomic (SES) differences in other aspects of parents' wellbeing—ranging from their family incomes to their physical health—have widened (Bornstein and Bradley 2014), it is conceivable that the emotional costs and rewards of parenting are unequally distributed as well. Such knowledge could in turn yield insights into a dimension of inequality that tends to receive less attention, the emotional wellbeing of parents, which would inform our understanding of inequality among children as well. A second trend is

nonmarital fertility, which has risen sharply over the past half century, but particularly among lower SES groups (Cherlin 2010). Scholars have suggested that this rise, relative to the slower rise among higher SES groups, may be because lower SES parents derive greater emotional rewards from parenting (Edin and Kefalas 2005; Edin and Nelson 2013), and experience fewer opportunity costs to nonmarital parenthood. At the same time, higher SES parents face greater workplace expectations (e.g., face time, promotion goals) (Stone 2007) in today's economy, but also a uniquely time intensive middle class standard of parenting (Hays 1998; Lareau 2003) that may leave higher SES parents feeling disproportionately stressed, fatigued, and sad. Evidence that parenthood has a greater negative emotional impact on higher SES parents may help illuminate, in part, the greater increase in nonfertility among higher SES segments of the population.

In the context of such factors, we aim to examine how the positive and negative emotions of parenting versus not raising children are experienced by adults of different socioeconomic groups. We define SES by one's highest level of education, which is considered a stronger indicator of overall health, of which emotions are one component, as compared to other indicators like income (Winkleb et al. 1992). Education also shapes one's life experiences in ways that go beyond income; for example, by shaping social networks, one's ability to manage stressful situations, and one's approach to parenting (Augustine 2014; Mirowsky and Ross 2003). We do so by drawing on a contemporary, nationally representative sample of adults participating in the American Time Use Survey, which contains novel measures of respondents *experienced wellbeing* (i.e., how respondents felt in specific activities)—which have improved reliability over global assessments used in much past research (Kapteyn et al. 2015; Krueger and Schkade 2008), *and* capture emotional wellbeing along several dimensions that reflect both

positive (i.e., happiness, meaning) and negative (i.e., sadness, fatigue, stress) feelings. In addition, we attend to the important issue of gender, which is linked to norms of parenting, domestic work, and paid work (Edin and Kefalas 2005; Hays 1998; Hochschild and Machung 1989), which have the potential to further complicate any SES related patterns.

The Links between Parenting, Emotional Wellbeing, and SES

Parenting affects emotional wellbeing in multiple ways. On one hand, parents have less flexibility over their schedules (Cowan and Cowan 2000), less time for leisure activities (Authors 2018), and perform more housework (Nomaguchi and Milkie 2003) in comparison to adults who are not raising children; all factors which may lead to greater negative emotional wellbeing in parents than other-adults (Simon 2008). For example, in a recent study of our own, we find that parents experience both more stress and more fatigue than adults not raising children (Authors 2018). On the other hand, parents also enjoy the emotional closeness that comes with caregiving (Nelson et al. 2014), an expansion of their social networks (Nomaguchi and Milkie 2003), and opportunities to achieve new goals (e.g., teach a child a skill) (Nelson et al. 2014); to engage in an array of activities considered fun and rewarding (e.g., playing) (Connelly and Kimmel 2015; Musick et al. 2016); and to perform a socially valued role (Barnett and Hyde 2001; Hoffman et al. 1978). For such reasons, parents have been shown to also experience greater positive emotional wellbeing than adults who are not raising children (Nelson et al. 2014; Umberson et al. 2010). To this end, in our own recent research, we find that parents experience greater happiness and meaning than adults who are not raising children (Authors 2018).

Yet one important aspect of the link between parenting and wellbeing that remains unclear is how these emotional costs and benefits of parenting are distributed across different

SES groups. The lack of attention to this question is surprising, given the vast amount of research devoted to studying socioeconomic differences in parenting time (Altintas 2016; Kalil et al. 2012), parenting practices (Bornstein and Bradley 2014; Lareau 2003), and work conditions (Augustine 2014; Crouter and Booth 2004)—all factors which are likely to exacerbate and attenuate the positive and negative emotional returns to parenting. It is also surprising, given social scientists' understanding of, and interest in, how socioeconomic inequality shapes modern family life (Gerson and Jacobs 2004). Whether disadvantaged families experience fewer of the rewards of parenting, and more of its costs, thus, remains an important and timely question.

In their widely cited qualitative study, Edin and Kefalas (2005) argue that disadvantaged women pursue motherhood over marriage because the emotional rewards of the motherhood role are greater for them than for more advantaged women. This argument has been supported by studies using quantitative data, which find that higher SES women report less positive attitudes towards motherhood than lower SES mothers (Hoffman et al. 1978), and less meaning and purpose in life during time with children (Kushlev et al. 2012). Yet such findings are also far from conclusive. First, several studies suggest the reverse pattern. Using data from the World Values Survey, Margolis and Myrskylä (2011) and Stanca (2012) find that lower SES parents reported less happiness than higher SES parents. Using data from the General Social Survey, Alesina and colleagues (2004) found a similar pattern. Second, only a handful of studies have explored the emotional costs of parenting, which, can occur simultaneously with its emotional rewards (Authors 2018; Musick et al. 2016). The importance of studying this side of parents' wellbeing is underscored by Crouter and Booth's (2004) finding that lower SES parents experience more stress associated with childcare than higher SES parents, and Nomaguchi and

Brown's (2011) finding that higher SES parents experience more feelings of role captivity but also less parenting anxiety than lower SES parents.

The other issue limiting the power of prior research to address the issue of SES differences in parental wellbeing is that prior research on parental wellbeing has tended to focus only on parents. Such an approach makes sense when paired with longitudinal data, in which changes in emotional wellbeing during the transition into parenthood can be observed. Yet the majority of studies examining SES differences in parental wellbeing have been based on cross-sectional data (an exception is Nomaguchi and Brown 2011). As such, we do not know whether the same SES related patterns observed for parents would be observed for non-parents; in other words, that the observed patterns were driven by SES and not parenting.

SES and the Association between Parenting and Positive Emotions

In proceeding with our investigation of how the emotional costs and benefits of parenting vary by parents' socioeconomic circumstances, we propose two sets of competing hypotheses—one set for positive emotions (H1a and H1b) and one set for negative emotions (H2a and H2b). We consider hypotheses H1a and H2a to be our primary hypotheses, but based on suggestions from the literature, we consider their alternative positions (H1b and H2b) as well. Beginning with hypothesis H1a, we propose that: <u>parenthood (vs. not raising children) will be associated with positive emotions more so for lower SES parents than for higher SES parents</u>. We expect to find this pattern for the following reasons.

First, as articulated earlier, because lower SES individuals have fewer opportunities to achieve culturally normative notions of success (e.g., a satisfying or well-paying job) compared to their higher SES counterparts (Edin and Kefalas 2005), parenting may have more emotional

benefits for lower SES than higher SES individuals. Higher SES individuals, on the other hand, in view of the fact that their careers provide alternative sources of fulfillment, may perceive the experience of parenting as less meaningful and joyful (Hoffman et al. 1978; Jones and Brayfield 1997) than their lower SES counterparts. Second, because lower SES individuals are less likely to be in a stable romantic relationship (Smock et al. 2005), they may benefit more from the emotional rewards of parenting than higher SES individuals. Third, because many lower SES parents experience more disorganization in their daily lives, spanning their work schedules to their neighborhoods, the structure that parenting brings to adults' daily activities may elicit greater positive emotions for lower SES than higher SES parents (Edin and Kefalas 2005). Finally, the adoption of an intensive parenting style by higher SES parents may diminish their enjoyment of the parenting experience compared to lower SES parents (Lareau 2003).

At the same time, despite strong evidence for this hypothesis, there is an alternative hypothesis we must consider. Specifically, parenting (vs. not raising children) will be associated with greater positive emotions for higher SES parents more so than for lower SES parents (H1b). This expectation is based on the ideas that "intensive parenting" fosters greater emotional closeness between higher SES parents and their children than the more naturalistic and directive approach taken by lower SES parents (Lareau 2003); that the opportunity to promote children's development through extracurricular activities yields a sense of happiness and accomplishment that is more accessible to higher SES parents, who are more likely to enroll their children in such activities (Lareau, 2003) than lower SES parents; and that greater financial resources allow higher SES parents to outsource housework responsibilities (Schneider and Hastings 2017), which provides them with more time and energy to enjoy their children than lower SES parents.

SES and the Association between Parenting and Negative Emotions

As to our expectation of how the link between negative emotions and parenting varies by SES, we propose that: parenthood (vs. not raising children) will be associated with greater negative emotions for higher SES more so than lower SES parents (H2a). This expectation is based on the following. First, the intensive style of parenting adopted by many higher SES parents may lead to greater role conflict when they cannot spend the desired amount of time with their children (DeVoe and Pfeffer 2011; Rizzo et al. 2013), as well as higher career costs when they do increase their time with their children (Hochschild and Machung 1989; Stone 2007). This parenting style, which is also more democratic and involves constant negotiation and interaction, may also be more stressful and fatiguing, whereas the more hierarchical relations between lower SES parents and their children may not have the same emotional toll (Lareau 2003). Finally, higher SES parents may experience more negative emotions associated with parenting than lower SES parents because parenthood entails greater opportunity costs in terms of career mobility (particularly for women) and leisure (e.g., travel) (Cowan and Cowan 2000; Stone 2007).

Again, we acknowledge the alternative scenario: that parenthood (vs. not raising children) is associated with greater negative emotions for lower SES parents more so than higher SES parents (H2b). This hypothesis is supported by research underscoring how children induce greater financial strain for lower SES than higher SES families, and as such, higher SES families will experience less worry over meeting children's material needs than lower SES families (Crouter and Booth 2004). There is also evidence that higher SES individuals have greater abilities to cope with stressful situations, such as those that occur during parenting (Augustine 2014); have more extensive social networks than lower SES individuals (Harknett and Hartnett

2011) to provide various forms of social support; and are less likely to be employed in positions with insufficient and variable work hours, or low schedule flexibility; conditions that create various obstacles to balancing work and family (Crouter and Booth 2004). Finally, because higher SES parents have access to other social roles that may compensate for possible failures (i.e., success in a professional role may buffer failure in the parenting role) (Barnett and Hyde 2001), parenting shortcomings may be more sanctioning for lower SES parents than higher SES parents.

The Complicating Role of Gender

In addition to examining whether parents' positive and negative emotions vary by SES, we also consider whether the observed patterns are consistent between men and women. Because the literature on parents' wellbeing has either focused primarily on women, or parents in general, without investigating differences by parent gender (for reviews see Hansen 2012; Nelson et al. 2014; Umberson et al. 2010), we lack adequate knowledge about the emotional wellbeing of fathers (for notable exceptions see Musick et al. 2016; Nomaguchi and Milkie 2003) to posit any a priori expectations related to gender. Nevertheless, we do know that expectations and norms about parenthood, non-parenthood (i.e., not having children), and other social roles that adults occupy (e.g., husband/wife, worker) are different for men and women (Barnett and Hyde 2001; Hochschild and Machung 1989; Koropeckyj-Cox and Pendell 2007). Thus, we can also conceive of various ways that SES differences in the link between parenting and emotional wellbeing will be differentiated by gender.

For example, because higher SES mothers bear the brunt of intensive parenting, as opposed to their male partners (Negraia et al. 2018), negative emotions associated with raising

children may be experienced more strongly for higher SES mothers than higher SES fathers. Alternately, as the careers of lower SES men have been negatively affected by economic changes over the past half-century while career options for lower SES women have widened (Cherlin 2010; Edin and Kefalas 2005; Edin and Nelson 2013; Gerson and Jacobs 2004), parenting may provide an alternative source of status and self-esteem for lower SES men in ways that result in greater emotional rewards than lower SES mothers. We acknowledge such factors by testing the robustness of our results across men and women.

Methods

Data

Data for this study come from the American Time Use Survey (ATUS), a nationally representative time diary survey conducted annually from 2003 through 2016 (BLS 2017; Hofferth et al. 2015). Interviews were conducted by telephone about the duration and type of activities that individuals participated in over the previous 24 hours, as well as relevant demographic factors, such as whether adults had minor household children. Data was collected each day of the week, with weekends oversampled. For the 2010, 2012, and 2013 surveys, ATUS included the Wellbeing Module, which was designed to better understand respondents' experienced wellbeing during their daily activities. To do so, three activities were randomly selected from respondent's time diary. Respondents were then asked to evaluate on a scale from 0 (*not at all*) to 6 (*very much so*) how they felt about each of these activities across six dimensions (happy, meaningful, stressed, fatigued, sad, pain). Such measures of experienced wellbeing have been shown to have improved reliability over evaluative measures (i.e., "All things considered, how satisfied are you with your life as a whole these days?") used in most

other large scale surveys (e.g., General Social Survey, World Value Survey) (Kapteyn et al. 2015; Krueger and Schkade 2008); as well as the distinct advantage of capturing a range of both positive (happiness and meaning) and negative emotions (stress, fatigue, sadness, and pain).

Sample

The study sample was constructed by pooling data from the three waves in which the Wellbeing Module was conducted (n = 102,793 activities; n = 34,564 respondents). Because we focus on the wellbeing of parents actively caring for children (i.e., parents with minor children, versus empty-nesters or parents with non-resident children) in comparison to adults without children, we dropped respondents who reported having no own household children younger than 18, but one of the following: an own household child older than 18 (n = 1,552); a nonresidential child younger than 18 (n =768); a non-own household child younger than 18 (n=1,292); a coresident grandchild (n = 134); or a coresident foster child (n = 47).

We also limited the sample to only include respondents aged 21 to 50 (n=52,036 activities; n=17,491 respondents). This age-related restriction was made because ATUS does not record if a respondent has ever had a birth or adopted a child; only if they had a child living in the household and their relationship to the child. Thus, we cannot distinguish between "non-parents" (respondents without biological or adoptive children) and "empty-nesters" (respondents who are parents of grown children that live outside of the home)—a limitation that is shared by other datasets used in recent studies (e.g., Deaton and Stone 2014; Glass et al. 2016; Herbst and Ifcher 2016). Thus, in following other studies (e.g., Aassve et al. 2012), we cap the sample at age 50 to reduce the risk of including empty-nesters in the non-parent group, and refer to this group

as *other-adults*. Given that higher SES adults tend to have children at older ages, however, we assess the robustness of the results to older age specifications.

Measures

Independent variables. Parenting status, the focal independent variable, reflects two statuses: *parents* and *other-adults*. Parents are respondents between ages 21 and 50 with an own household child younger than 18 years (*n* respondents = 10,915). Other-adults are respondents between ages 21 and 50 who have no own children younger than 18 years (*n* respondents = 5,254). *Education status*, the second independent variable, is based on respondents' reports of their highest level of educational attainment, dummy coded into one of four categories (*less than a high school degree, high school degree, some college, college degree or higher*).

Dependent variables. Subjective wellbeing reflects two dimensions of emotionality: *positive emotions* (happiness and meaning) and *negative emotions* (sadness, stress, fatigue, and pain). We include five of these six ATUS measures, excluding pain, which lacked variation as well as a strong rationale for inclusion. Each emotion was based on a 7-point scale, in regard to the specified emotion, ranging from 0=*not at all* to 6=*very much*. Emotions in activities shorter than 5 minutes, grooming, personal activities, and sleeping were not assessed. To reduce bias related to question ordering, the order in which the wellbeing dimensions were presented to respondents was randomized, although meaning was always asked about last.

Individual level-covariates. To account for a number of factors that may confound the association between parental status, educational attainment, and emotional wellbeing (see Nomaguchi and Brown 2011, and Umberson et al. 2010 for comprehensive reviews), we included measures for the respondent's chronological age (measured continuously), gender (0 =

male, 1= *female*), race or ethnicity (dummy coded as *White non-Hispanic, Black non-Hispanic, Asian non-Hispanic, Other non-Hispanic, Hispanic*), presence of a spouse or partner in the household (0 = *no,* 1 = *yes*), employment status (dummy coded as *full-time employed, part-time employed, unemployed,* and *not working*), school enrollment (0 = *no,* 1 = *yes*), family income (dummy coded into one of five categories: *<$24.999, $25.000-$49.999, $50.000-$99.999, >$100k*), geographic region (dummy coded as *West, Midwest, Northeast,* and *South*), and whether they lived in a metropolitan area (0 = *no,* 1 = *yes*). We also accounted for aspects of the survey, including whether the diary was recorded on a weekday (0 = *no,* 1 = *yes*), on a holiday (0 = *no,* 1 = *yes*), in a summer month (0 = *no,* 1 = *yes*), the year of the interview (dummy coded), and the order in which the wellbeing questions were asked (dummy coded as *first* through *fifth*).

Activity level-covariates. Lastly, we accounted for the following activity level factors that may influence how one feels about an activity: duration of the activity (measured continuously in *minutes per day*); whether the activity took place at home or somewhere else (0 = *somewhere else*, 1 = *at home*); and time of day when the activity took place (dummy coded: *4:00 am to 8:59 am, 9:00 am to 13:59 pm, 14:00 pm to 16:59 pm, 17:00 pm to 20:59 pm, 21:00 pm to 3:59 am*).

Analysis Plan

To test our hypotheses, we pooled data across all the three activity reports, and performed multivariate analysis using linear regression including random effects, in order to predict each of the five emotions by parental status. We included random effects to account for the nested structure of the data (i.e., multiple activity records nested within individuals) and adjust for non-independence and correlated measurement error in these reports. Assuming all confounding factors are accounted for, inclusion of random effects also adjusts for unobserved heterogeneity

in the wellbeing reports (Allison 2009). The pooling of activity reports provides an estimate that reflects "overall" differences in emotional wellbeing by parental status (see Connelly and Kimmel 2015; Kalil et al. 2012; Sayer et al. 2004 for a similar approach). Although it would have been interesting to further explore patterns by activity type (e.g., market work, leisure), we could not do so due to sample size limitations.

Our analysis process proceeded as follows. *Model 1* provided a baseline estimate of the association between parental status and each emotional dimension, net of the full set of controls described above. Each emotion was estimated by a separate model. These results replicate what we have reported in other studies (Authors 2018). Building on such work, for *Model 2* we added an interaction term between the two independent variables (i.e., parental status and education level) to assess whether the patterns we observed in Model 1 (specifically: parents experience greater positive emotions than other-adults, but also more negative emotions) varied for respondents at different education levels. Following the estimation of each model, we used the coefficients from Model 2 to calculate average marginal effects (AMEs). Doing so provided a more direct assessment of whether the significant differences in emotions by parental status, observed in Model 1, were also significant at each level of education; in other words, a test of the conditional effect of education (Esarey and Sumner 2015). For each education group where a significant difference was found (i.e., emotional wellbeing was significantly different for parents vs. other-adults) we also used AMEs to assess whether the size of this difference significantly differed among SES groups (e.g., the difference in wellbeing among parents and other-adults with college degrees compared to the difference in wellbeing among parents and other-adults with high school degrees); in other words, a "difference in difference" test. Lastly, we repeated

these modeling steps separately for men and women to assess how the overall pattern of results varied by gender.

All analyses were conducted using Stata 14 and included activity level weights. Similar to other work using ATUS (e.g., Meier et al. 2016), we used listwise deletion over multiple imputation techniques (Allison 2002) to address missing data because ATUS contains a low amount of missing information and because previous work suggested that missingness in the ATUS violates the MAR assumptions (Abraham et al. 2006).

Results

Descriptive Information on Education Subsamples

Table 1 presents the weighted means for each dimension of emotional wellbeing as well as the sociodemographic characteristics of each education group. Overall, we find that reports of positive emotions (i.e., happiness and meaning) decrease as education increases. At the same time, the lowest educated respondents (i.e., less than a high school degree) reported greater levels of sadness compared to more educated respondents. For other negative emotions, the pattern is not as clear. For stress, the lowest and highest educated groups reported the greatest levels, while for fatigue, the lowest educated respondents report the greatest levels, with the differences among the higher educated groups being small.

Turning to sociodemographic characteristics, across education groups, the average age was 35 years old. About half of each education group was female, with slightly more women than men in the higher educated groups. Not surprisingly, a larger share of higher educated respondents reported household incomes over $50,000 per year (76% for college educated, 53% for some college) compared to lower educated respondents (39% for high school degree, and 17% for less than a high school degree). The share of respondents working full-time was greatest

among the highest educated (75% for college educated), whereas the share that was unemployed or not working was largest for the lowest educated respondents (13% and 29% for less than a high school degree). Part-time employment was similar across education groups (average around 15%). White non-Hispanics (73%) and Asians (10%) were overrepresented in the college educated group, while Hispanics (56%) were overrepresented in the lowest education group. A similar share of respondents, across education groups, reported that a spouse or a partner was present in the household (average around 60%). Among parents, those at the lowest education level reported having an average of two own household children, whereas all other groups reported having an average of slightly less than two own household children.

[Insert Table 1 and 2 about here]

Turning to Table 2, we provide estimates of mean emotional wellbeing by parental status for different education groups. Looking across columns two and three, the results show that parents are happier and report more meaning than other-adults at all education levels. Looking at column 4, t-tests of whether these differences are significant revealed that they were for all groups. For stress and fatigue, the patterns are less clear. Looking across columns 2 and 3, parents reported less stress and fatigue than other-adults for the least educated and most educated groups, but the pattern was revered for those in the middle education tiers. Looking at column 4, we observed that parents with some college education had significantly more stress and fatigue than other-adults, whereas parents with a college degree reported significantly less stress and fatigue than other-adults. Parental status did not seem to significantly distinguish stress and fatigue for parents with high school degrees and less, with one exception; parents with a high school degree reported more fatigue than similarly educated other-adults. For sadness, we find that parents reported significantly less sadness than other-adults, with the difference largest for

the least educated group (except for parents with some college education who reported more sadness than similarly educated other-adults).

Multivariate Results Predicting Parents Emotional Wellbeing by Education Level

Turning to the multivariate models, Model 1 of Table 3 provides estimates of the association between parental status and emotional wellbeing averaged across all activities (i.e., all activity records), net of the full set of controls described above. We find that parents reported both more happiness (*B* = .18, *SE* = .03) and meaning (*B* = .49, *SE* = .03), as well as less sadness (*B*=-.07, *SE*=.02), but they also reported more stress (*B* = .12, *SE* = .03) and fatigue (*B* = .09, *SE* = .03). As for the main effects of education, respondents with some college education or less reported more happiness and meaning than those with a college degree or higher. For stress, respondents with a high school degree or some college reported significantly less stress than the college educated group, but not in comparison to the lowest educated group. For fatigue, there were no significant differences by education. Finally, we find that sadness declined as education increased.

[Insert Table 3 about here]

The second half of Table 3 includes regression estimates from Model 2, in which we added the interaction term between parental status and education level. Based on these model coefficients, we then calculated average marginal effects (AMEs) to directly assess the emotional wellbeing gap between parents and other-adults at each education level. We present these AMEs in Figure 1. They reveal that, at all education levels, parents report significantly more happiness and meaning than other-adults. Subsequent estimates of the difference in difference (results not show) showed that none of these gaps were significantly different from each other. Parents were

also less sad than other-adults across education groups (except for those with some college, for whom we found no significant difference). Estimates of the difference in difference suggested that none of the gaps in sadness were significantly different from each other either. For stress and fatigue, only higher educated parents (some college and higher) reported significantly more stress and fatigue than their similarly educated counterparts not raising children. The difference in the size of the gaps for those with some college education versus a college degree was not statistically significant. For those with a high school degree or less, there were no significant differences in stress or fatigue by parental status. In sum, these results revealed that parenting was associated with higher levels of positive emotions (happiness, meaning) for all education groups, and to a similar magnitude, and generally associated with less sadness, but its association with negative emotions (stress, fatigue) was only observed for the higher educated groups.

[Insert Figure 1 about here]

Comparing Parents' Emotional Wellbeing by Education Level for Women and Men

To assess whether these patterns varied by gender, we repeated these analysis steps separately for women and men. The results of Model 1 (not shown) are the same by gender for positive emotions: parents are happier and report more meaning than other-adults. They also report less sadness. For the negative emotions of stress and fatigue, however, it is only mothers who reported higher levels than women not parenting. As with the estimates for the full sample, results from Model 2, which included the interaction with education, were interpreted by calculating average marginal effects (see Figure 2). These results revealed that for women, it was only higher educated mothers (some college education and higher) who experienced more happiness and meaning than similarly educated women not raising children, but they were also

the only segment of the population of women to experience more stress, and for the highest educated women, more fatigue. For lower educated women, parenting was not generally associated with higher levels of positive or negative emotions (except for high school educated mothers who reported more meaning and less sadness than similarly educated women not raising children).

[Insert Figure 2 here]

For men (see Figure 3), parenting (vs. not raising children) was associated with more happiness for all education groups, but the size of the difference was significantly larger for the lowest educated men (results based on difference in difference test not shown). Similarly, parenting was also associated with more meaning across education groups, although in this case the size of the gap was not significantly different between groups. For negative emotions, a similar pattern as that observed for women emerged. Parenting was associated with more stress for higher educated men (some college education or more) but the difference in the size of the gaps were not significantly different. Fathers with some college education also reported significantly more fatigue than similarly educated other-adults. Taken together, fathers at the lowest end of the education spectrum seemed to experience more emotional benefits, without experiencing the concomitant costs, compared to similarly educated men not caring for children. At higher education levels, fatherhood (vs. not raising children) was associated with more positive emotions but also more negative emotions.

[Insert Figure 3 here]

Robustness Analyses

Partnership status. Unpartnered mothers may experience higher levels of parental and financial stress than partnered mothers (Hansen, 2012), but higher levels of education may buffer this effect (Cooper et al. 2009). Thus, for partnered parents, we may find lower reports of negative emotions (vs. other-adults) than for single parents. We investigated this possibility by repeating the analysis on partnered mothers and female other-adults (available upon request). We only examine this question among women because the number of single fathers raising children was too small (Cherlin 2010). Similar to the patterns observed in the main sample, we find that partnered mothers reported more positive emotions (happiness and meaning) and less sadness, marginally more stress, and significantly more fatigue compared to their peers not raising children. The AME's by education level revealed similar patterns to the ones reported in the main analysis, in which parenting was associated with more happiness and meaning but also more negative emotions, but only at the higher levels of the education spectrum (some college education and more). Thus, we conclude that, at least for women, the patterns reported in the main analysis are not driven by partnership status.

Residential status. The parenting experience also differs for parents who share residency compared to those who do not (Evenson and Simon 2005). Nonresidential parents spend less time with children, do not engage in daily childrearing routines, and often do not share the same responsibilities for children's safety and wellbeing as residential parents (Sayer et al. 2004). As such, nonresidential parents may experience less of the emotional benefits of parenting, but also less of the costs. The main sample included only parents who have at least one own household child younger than 18, excluding nonresidential parents of minor children. To assess how our results compare for nonresidential parents, we repeated the analysis on nonresidential fathers and

other adult males. We focused on men, as they are more likely to be nonresident parents than women (Cherlin 2010). We found no significant differences in the emotional wellbeing of nonresidential fathers compared to men not raising children, although we interpret these results cautiously, given the small number of nonresidential fathers in the ATUS, and even smaller number of nonresidential fathers with higher levels of education.

Sample age. By capping the sample at age 50, we aimed to limit the inclusion of empty-nesters (i.e., respondents with children over 18 years old living outside the home) in the other-adult group, which targeted adults who never had children. In doing so, however, we also had excluded parents who, in comparison to the full sample, were more likely to be highly educated, male, and work full-time. To examine whether the results differed when we included such parents, we replicated the analyses on an older sample that extended to age 58, including 973 parents and 2,928 other-adults. This upper limit brought the average age of the two samples into alignment. Overall, we find that the patterns reported in the main analysis were highly similar to those observed when using the sample aged 21-58 (results available upon request).

Discussion

Theoretical work has suggested that in the 21st century, children's value to their parents is primarily emotional (Zelizer 1994). At the same time, contemporary life has placed new demands on parents' time in ways that create various emotional challenges (Crouter and Booth 2004; Gerson and Jacobs 2004). As such, parenting today is generally described as a mixed bag of emotions that is associated with both costs and rewards (for reviews see Nelson et al. 2014; Umberson et al. 2010). What remains unclear is how these costs and rewards are distributed across various socioeconomic groups. Such information is necessary in the context of rising inequality (Massey 2007), in which other parenting resources are more unequally distributed, and

thus, the emotional costs and reward of parenting may be too. Such knowledge is also important to better contextualize recent trends in fertility, in which scholars presume that higher rates of nonmarital fertility among lower SES groups on one hand, and higher rates of nonfertility among higher educated groups on the other, are connected to how the costs and rewards of parenting are distributed across different SES groups (Edin and Kefalas 2005; Edin and Nelson 2013; Martin et al. 2017). We provide deeper understanding of both of these phenomena by examining several hypotheses, as well as the complicating role of gender.

Tests of our first hypothesis (H1a) and its alternative (H1b) resulted in an unexpected pattern of findings. Specifically, we found that parents were happier and reported more meaning, regardless of their socioeconomic circumstances. This finding runs contrary to prior research, which suggests that advantage or access to other social roles reduces the emotional rewards of parenting for higher SES parents compared to lower SES parents (Kushlev et al. 2012; Hoffman et al. 1978; Jones and Brayfield 1997), as well as research suggesting that lower SES parents may derive a greater sense of meaning from parenthood than their higher SES peers (Edin and Kefalas 2005; Edin and Nelson 2013). The one emotion that did support the general position taken in prior research was sadness, in which the gap between parents and other-adults was largest at the lowest SES level. At the same time, we did find support for our second hypothesis (H2a). Parenthood (vs. not raising children) was associated with greater negative emotions for higher SES parents than lower SES parents. In fact, it was only higher educated parents (those with some college degree or more) that reported more stress and fatigue compared to similarly educated adults not raising children. Thus, contrary to much conventional thinking about the burdens of parenting for lower SES parents, for this group, parenting was associated with greater positive emotions (vs. not parenting), as well as less sadness, but not more negative emotions.

This finding may help illuminate why lower SES adults have children in the face of unfavorable economic conditions: because doing so is beneficial for their emotional wellbeing, and carries few emotional costs. To our knowledge this is one of the first studies to provide such insights using survey data based on a representative sample. It is also one of the first that takes a comparative approach to reveal how the situation for higher SES adults is different. For them, parenting (vs. not raising children) was associated with both more positive but also more negative emotions. Such knowledge provides one potential explanation for recent increases in childlessness among higher SES individuals (Martin et al. 2017). Building on these results, future research could examine this theory further by studying how changes in social conditions differentially affected the parenting experiences of different SES groups. One potential area of focus could be the intensive parenting style practiced by higher SES parents that emerged during the 1980s and 90s (Hays 1989). Another could be the increasing work demands (i.e., long work hours, expectations) placed on higher SES workers in recent decades (Gerson and Jacobs 2004).

Going one step further, when we differentiate our findings by gender, a more complex story emerges. For higher SES women, the results mirror the main study findings: parenting was associated with more happiness and meaning and less sadness, but also more fatigue and stress. For lower SES women, however, parenting seems to make little to no difference in experienced wellbeing. Thus, the emotional boost that many disadvantaged women describe as a result of motherhood (Edin and Kefalas 2005) may, in fact, not actually occur for most women, or perhaps may only occur as a short-term burst in a way we could not detect. Thus, for lower SES women, while there appear to be few emotional costs of motherhood versus not raising children, the perceived emotional rewards do not seem to bear out either. In contrast, lower SES men experienced the greatest "emotional advantage". One possible explanation is that these men—

who in this study were residential fathers—were unique among many of their peers with children, whose lives are often characterized by instability due to economic changes which had the greatest impact on lower SES men (Edin and Nelson 2013). As such, these fathers may enjoy a level of stability, either in their work or relationships, which enables them to experience a positive emotional boost from parenting. This was not the same for lower SES mothers, many of whom were single. There is also some suggestion that lower SES fathers' conceptualization of fatherhood places a larger emphasis on the "fun" side of being a parent. In doing so, however, they also leave the difficult aspects of parenting to women (Edin and Nelson 2013). Further teasing out the reasons for this pattern is another topic we leave for future research. For higher SES men, the results mirror those observed for the full sample.

Despite its contributions, this study also suffers from several limitations. First, the ATUS is a cross-sectional study. A more optimal design would be a longitudinal study containing measurements of wellbeing for the same respondents before and after becoming parents. Doing so would help us rule out various sources of selection that we could not account for, such as fertility intendedness, and observe changes in wellbeing linked to parenting. Unfortunately, we know of no other survey with such a design that also includes similarly high-quality measures of emotional wellbeing. Second, because of sample size limitations, we could not investigate variations in emotional wellbeing across specific activity types (paid work, housework, leisure) which may also be experienced differently by parents and other-adults from various SES groups, and would help provide insight into the day-to-day experiences of different parents and other-adults that may drive some of the results. Third, we did not test whether the emotional costs and benefits associated with the parenting experience for different SES groups further varied by the child gender or age. We leave this question for future research as well. Finally, as discussed in-

depth above, our sample is focused on adults with minor household children, and "other-adults". We would have preferred data in which we could fully delineate parents and non-parents.

In sum, this study explored how the experience of parenting is connected to the emotional wellbeing of adults in different socioeconomic circumstances. Emotions are a key dimension of wellbeing, yet they are often overlooked in both research on SES differences in family life, and research on parents' wellbeing. The results of our investigation revealed a nuanced story that challenges monolithic narratives about the costs and benefits of parenting for different SES groups. Specifically, we found that for higher SES segments of the population, both fathers and mothers experienced higher levels of positive emotions (happiness, meaning) than their peers without children, but also more negative emotions (stress and fatigue). Lower SES women with children, on the other hand, did not experience greater negative emotions compared to their peers without children, but they did not experience more positive emotions either. Lower SES men, in contrast, seemed to derive the greatest emotional returns to parenthood: higher levels of happiness and meaning compared to their peers without minor household children and higher levels of happiness compared to higher SES fathers, but no greater levels of negative emotions. These findings set the stage for future research that further explores how men and women across different SES groups experience the "joys" and "pains" of family life in modern U.S. society, how these differential experiences contribute to the general health and wellbeing of different segments of the population and differential patterns in family formation.

References

Aassve, A., Goisis, A., & Sironi, M. (2012). Happiness and childbearing across Europe. *Social Indicators Research, 108*(1), 65-86. https://doi.org/10.1007/s11205-011-9866-x

Abraham, K., Maitland, A., & Bianchi, S. (2006). Non-response in the ATUS: Who is missing from the data and how much does it matter? *Public Opinion Quarterly, 70*(5), 676-703. https://doi.org/10.1093/poq/nfl037

Alesina, A., Di Tella, R., & MacCulloch, R. (2004). Inequality and happiness: Are Europeans and Americans different? *Journal of Public Economics, 88*(9), 2009-2042. https://doi.org/10.1016/j.jpubeco.2003.07.006

Allison, P. (2009). *Fixed Effects Regression Models*. Newbury Park, CA: Sage.

Allison, P. (2002). Missing data: Quantitative applications in the social sciences. *British Journal of Mathematical and Statistical Psychology*, 55(1), 193-196. https://doi.org/10.1348/000711002159653

Altintas, E. (2016). The widening education gap in developmental child care activities in the United States, 1965–2013. *Journal of Marriage and Family, 78*(1), 26-42. https://doi.org/10.1111/jomf.12254

Augustine, J. (2014). Mothers' employment, education, and parenting. *Work and Occupations, 41*(2):237-270. https://doi.org/10.1177/0730888413501342

Barnett, R., & Hyde, J. (2001). Women, men, work, and family: An expansionist theory. *American Psychologist, 56*(10), 781-796. http://dx.doi.org/10.1037/0003-066X.56.10.781

Bornstein, M., & Bradley, R. (Eds.). (2014). *Socioeconomic status, parenting, and child development*. Routledge.

Bureau of Labor Statistics and U.S. Census Bureau. (2017). American Time Use Survey User's Guide. Retrieved May 3, 2017 http://www.bls.gov/tus/atususersguide.pdf.

Cherlin, A. (2010). Demographic trends in the United States: A review of research in the 2000s. *Journal of Marriage and Family, 72*(3), 403-419. https://doi.org/10.1111/j.1741-3737.2010.00710.x

Connelly, R., & Kimmel, J. (2015). If you're happy and you know it: How do mothers and fathers in the US really feel about caring for their children? *Feminist Economics, 21*:1-34. https://doi.org/10.1080/13545701.2014.970210

Cooper, C., McLanahan, S., Meadows, S., & Brooks-Gunn, J. (2009). Family structure transitions and maternal parenting stress. *Journal of Marriage and Family, 71*:558-574. https://doi.org/10.1111/j.1741-3737.2009.00619.x

Cowan, C., & Cowan, P. (2000). *When partners become parents: The big life change for couples*. Mahwah, NJ: Lawrence Erlbaum Associates Publishers.

Crouter, A., & Booth, A. (Eds). (2004). *Work-family challenges for low-income parents and their children.* Mahwah, NJ: Erlbaum.

Deaton, A., & Stone, A. (2014). Evaluative and hedonic wellbeing among those with and without children at home. *Proceedings of the National Academy of Sciences*, *111*(4), 1328-1333. https://doi.org/10.1073/pnas.1311600111

DeVoe, S., & Pfeffer, J. (2011). Time is tight: How higher economic value of time increases feelings of time pressure. *Journal of Applied Psychology*, *96*(4), 665-676. https://doi.org/10.1037/a0022148

Edin, K., & Kefalas, M. (2005). *Promises I can keep: Why poor women put motherhood before marriage*. Berkeley, CA: University of California Press.

Edin, K., & Nelson, T. (2013). *Doing the best I can: Fatherhood in the inner city*. Berkeley, CA: Univ of California Press.

Esarey, J., & Sumner, J. (2015). Marginal effects in interaction models: Determining and controlling the false positive rate. *Comparative Political Studies,* 1-33. https://doi.org/10.1177/0010414017730080

Evenson, R., & Simon, R. (2005). Clarifying the relationship between parenthood and depression. *Journal of health and Social Behavior*, *46*(4), 341-358. https://doi.org/10.1177/002214650504600403

Gerson, K., & Jacobs, J. (2004). The work-home crunch. *Contexts*, *3*(4), 29-37. https://doi.org/10.1525/ctx.2004.3.4.29

Glass, J., Simon, R., & Andersson, M. (2016). Parenthood and happiness: Effects of work-family reconciliation policies in 22 countries. *American Journal of Sociology, 122(3)* 886-929. https://doi.org/10.1086/688892

Hansen, T. (2012). Parenthood and happiness: A review of folk theories versus empirical evidence. *Social Indicators Research*, *108*(1), 29-64. https://doi.org/10.1086/688892

Harknett, K., & Hartnett, C. (2011). Who lacks support and why? An examination of mothers' personal safety nets. *Journal of Marriage and Family*, 73(4), 861-875. https://doi.org/10.1111/j.1741-3737.2011.00852.x

Hays, S. (1998). *The cultural contradictions of motherhood*. New Haven, CT: Yale Univ Press.

Herbst, C., & Ifcher, J. (2016). The increasing happiness of US parents. *Review of Economics of the Household*, *14*(3), 529-551. https://doi.org/10.1007/s11150-015-9302-0

Hochschild, A., & Machung, A. (1989). *The second shift: Working families and the revolution at home*. Penguin.

Hofferth, S., Flood, S., & Sobek, M. (2015). American Time Use Survey Data Extract Builder: Version 2.5 [dataset]. College Park, MD. (http://www.atusdata.org).

Hoffman, L., Thornton, A., & Manis, J. (1978). The value of children to parents in the United States. *Journal of Population, 1*(2), 91-131. https://doi.org/10.1007/BF01277597

Jones, R., & Brayfield, A. (1997). Life's greatest joy? European attitudes toward the centrality of children. *Social Forces, 75*(4), 1239-1269. https://doi.org/10.1093/sf/75.4.1239

Kalil, A., Ryan, R., & Corey, M. (2012). Diverging destinies: Maternal education and the developmental gradient in time with children. *Demography, 49*(4), 1361-1383. https://doi.org/10.1007/s13524-012-0129-5

Kapteyn, A., Lee, J., Tassot, C., Vonkova, H., & Zamarro, G. (2015). Dimensions of subjective well-being. *Social Indicators Research, 123*(3), 625-660. https://doi.org/10.1007/s11205-014-0753-0

Koropeckyj-Cox, T., & Pendell, G. (2007). Attitudes about childlessness in the US: Correlates of positive, neutral, and negative responses. *Journal of Family Issues, 28*, 1054-82. https://doi.org/10.1177/0192513X07301940

Krueger, A., & Schkade, D. (2008). The reliability of subjective well-being measures. *Journal of Public Economics, 92*(8-9), 1833-1845. https://doi.org/10.1016/j.jpubeco.2007.12.015

Kushlev, K., Dunn, E., & Ashton-James, C. (2012). Does affluence impoverish the experience of parenting? *Journal of Experimental Social Psychology*, *48*(6), 1381-1384. https://doi.org/10.1016/j.jesp.2012.06.001

Lareau, A. (2003). *Unequal childhoods: Race, class, and family life*. Univ of California Press.

Margolis, R., & Myrskylä, M. (2011). A global perspective on happiness and fertility. *Population and Development Review, 37*(1), 29-56. https://doi.org/10.1111/j.1728-4457.2011.00389.x

Martin, J., Hamilton, B., & Osterman, M. (2017). Births in the United States, 2016. Retrieved May 5, 2018 https://www.cdc.gov/nchs/data/databriefs/db287.pdf

Massey, D. (2007). *Categorically unequal: The American stratification system*. Russell Sage.

Meier, A., Musick, K., Flood, S., & Dunifon, R. (2016). Mothering experiences: How single parenthood and employment structure the emotional valence of parenting. *Demography,* 53(3), 649-674. https://doi.org/10.1007/s13524-016-0474-x

Mirowsky, J., & Ross, C. (2003). *Education, social status, and health*. NY: Aldine De Gruyter.

Musick, K., Meier, A., & Flood, S. (2016). How parents fare: Mothers' and fathers' subjective well-being in time with children. *American Sociological Review, 81*(5), 1069-1095. https://doi.org/10.1177/0003122416663917

Negraia, D., Augustine, J., & Prickett, K. (2018). Gender disparities in parenting time across activities, child ages, and educational groups. *Journal of Family Issues*. https://doi.org/10.1177/0192513X18770232

Nelson, K., Kushlev, K., & Lyubomirsky, S. (2014). The pains and pleasures of parenting: When, why, and how is parenthood associated with more or less well-being? *Psychological Bulletin, 140*(3), 846-95. http://dx.doi.org/10.1037/a0035444

Nomaguchi, K., & Milkie, M. (2003). Costs and rewards of children: The effects of becoming a parent on adults' lives. *Journal of Marriage and Family, 65*(2), 356-374. https://doi.org/10.1111/j.1741-3737.2003.00356.x

Nomaguchi, K., & Brown, S. (2011). Parental strains and rewards among mothers: The role of education. *Journal of Marriage and Family, 73*(3), 621-636. https://doi.org/10.1111/j.1741-3737.2011.00835.x

Rizzo, K., Schiffrin, H., & Liss, M. (2013). Insight into the parenthood paradox: Mental health outcomes of intensive mothering. *Journal of Child and Family Studies, 22*(5), 614-620. https://doi.org/10.1007/s10826-012-9615-z

Sayer, L., Bianchi., S., & Robinson, J. (2004). Are parents investing less in children? Trends in mothers' and fathers' time with children. *American Journal of Sociology, 110*(1), 1-43. https://doi.org/10.1086/386270

Schneider, D., & Hastings, O. (2017). Income inequality and household labor. *Social Forces, 96*(2), 481-506. https://doi.org/10.1093/sf/sox061

Simon, R. (2008). The Joys of Parenthood, Reconsidered. *Contexts, 7*(2):40–45. https://doi.org/10.1525/ctx.2008.7.2.40

Smock, P., Manning, W., & Porter, M. (2005). Everything's there except money: How money shapes decisions to marry among cohabitors. *Journal of Marriage and Family, 67*, 680-96. https://doi.org/10.1111/j.1741-3737.2005.00162.x

Stanca, L. (2012). Suffer the little children: Measuring the effects of parenthood on well-being worldwide. *Journal of Economic Behavior and Organization, 81*(3), 742-750.

Stone, P. (2007). *Opting out? Why women really quit careers and head home*. Berkeley, CA: Univ of California Press.

Umberson, D., Pudrovska, T., & Reczek, C. (2010). Parenthood, childlessness, and well-being: a life course perspective. *Journal of Marriage and Family, 72*(3), 612-629. https://doi.org/10.1177/019251389010004002

Winkleby, M., Jatulis, D., Frank, E., & Fortmann, S. (1992). Socioeconomic status and health: how education, income, and occupation contribute to risk factors for cardiovascular disease. *American Journal of Public Health*, *82*(6):816-820. doi: 10.2105/AJPH.82.6.816

Zelizer, V. (1994). *Pricing the Priceless Child: The Changing Social Value of Children*. Princeton, NJ: Princeton University Press.

Table 1. Characteristics of Study Sample (Means and Percentages) by Education level

	Less than HD	HD	Some College	CD and Up	Full sample
Emotional Wellbeing					
Happiness	4.47	4.32	4.33	4.10	4.25
Meaning	4.63	4.38	4.24	4.12	4.27
Sadness	0.92	0.61	0.50	0.53	0.58
Stress	1.67	1.52	1.54	1.77	1.63
Fatigue	2.52	2.37	2.46	2.42	2.43
Respondent Characteristics					
Age	35.56 (8.31)	35.82 (8.85)	34.01 (8.89)	35.71 (7.87)	35.26 (8.50)
Female	0.49	0.45	0.53	0.54	0.51
Male	0.51	0.55	0.47	0.46	0.49
Hh income <$25k	0.49	0.28	0.19	0.07	0.20
$25k to 49.99k	0.33	0.32	0.27	0.15	0.24
$50k to 99.99k	0.14	0.30	0.37	0.37	0.33
$100k+	0.03	0.09	0.16	0.39	0.22
White Non-Hispanic	0.31	0.60	0.66	0.73	0.64
Black Non-Hispanic	0.10	0.14	0.14	0.08	0.12
Asian Non-Hispanic	0.02	0.02	0.04	0.10	0.05
Other Non-Hispanic	0.02	0.02	0.02	0.01	0.02
Hispanic	0.56	0.22	0.15	0.07	0.18
Student	0.01	0.03	0.20	0.10	0.10
Full-time employed	0.43	0.59	0.58	0.75	0.63
Part-time	0.15	0.14	0.18	0.12	0.15
Unemployed	0.13	0.09	0.08	0.03	0.07
Not working	0.29	0.17	0.15	0.10	0.15
Spouse in house	0.64	0.59	0.55	0.69	0.62
Hh Child Characteristics					
Youngest child 0-4	0.50	0.43	0.44	0.47	0.45
Youngest child 5-12	0.35	0.40	0.39	0.40	0.39
Youngest child13-17	0.15	0.18	0.18	0.13	0.16
Number of children	2.02	1.83	1.79	1.85	1.85
N respondents	1,254	3,590	4,669	6,656	16,169
N activities	3,730	10,699	13,911	19,889	48,229

Note: Emotions are measured on a 7-point scale ranging from 0 (*not at all*) to 6 (*very much).* Estimates for region, metropolitan area, season, and survey year not shown. Standard deviations are reported in parentheses. 2010, 2012 and 2013 ATUS wellbeing sample, N's are unweighted, means and percentages are weighted. HD= high school degree; CD= college degree; k=thousand; Hh=household.

Table 2. Mean Emotional Wellbeing during All time by Adult's Parenting Status and Education

	Full sample		Parents		Other-adults		Diff. P -O
Variables	Mean (SD)		Mean (SD)		Mean (SD)		
	(1)		(2)		(3)		(4)
Less than HD							
Happiness	4.47	(1.78)	4.65	(1.72)	4.09	(1.85)	0.56*
Meaning	4.63	(1.97)	4.85	(1.84)	4.14	(2.17)	0.71*
Sadness	0.92	(1.71)	0.84	(1.68)	1.10	(1.78)	-0.26*
Stress	1.67	(2.05)	1.66	(2.04)	1.71	(2.08)	-0.06
Fatigue	2.52	(2.11)	2.49	(2.12)	2.60	(2.08)	-0.11
N activities	3,710		2,782		928		
HD/GED							
Happiness	4.32	(1.69)	4.37	(1.65)	4.24	(1.73)	0.14*
Meaning	4.38	(1.90)	4.53	(1.83)	4.16	(1.98)	0.37*
Sadness	0.61	(1.36)	0.57	(1.33)	0.66	(1.41)	-0.10*
Stress	1.52	(1.89)	1.54	(1.87)	1.49	(1.92)	0.05
Fatigue	2.37	(1.98)	2.41	(1.98)	2.32	(1.99)	0.10*
N activities	10,668		7,186		3,482		
Some College							
Happiness	4.33	(1.54)	4.43	(1.55)	4.22	(1.53)	0.21*
Meaning	4.24	(1.89)	4.50	(1.80)	3.96	(1.94)	0.55*
Sadness	0.50	(1.20)	0.53	(1.24)	0.48	(1.15)	0.05*
Stress	1.54	(1.80)	1.61	(1.82)	1.46	(1.78)	0.15*
Fatigue	2.46	(1.92)	2.62	(1.95)	2.29	(1.87)	0.32*
N activities	13,888		9,359		4,529		
CD or more							
Happiness	4.10	(1.47)	4.25	(1.38)	3.95	(1.54)	0.31*
Meaning	4.12	(1.73)	4.33	(1.68)	3.90	(1.76)	0.43*
Sadness	0.53	(1.17)	0.44	(1.05)	0.62	(1.28)	-0.18*
Stress	1.77	(1.77)	1.73	(1.73)	1.80	(1.82)	-0.06*
Fatigue	2.42	(1.80)	2.38	(1.80)	2.46	(1.79)	-0.09*
N activities	19,855		13,197		6,658		

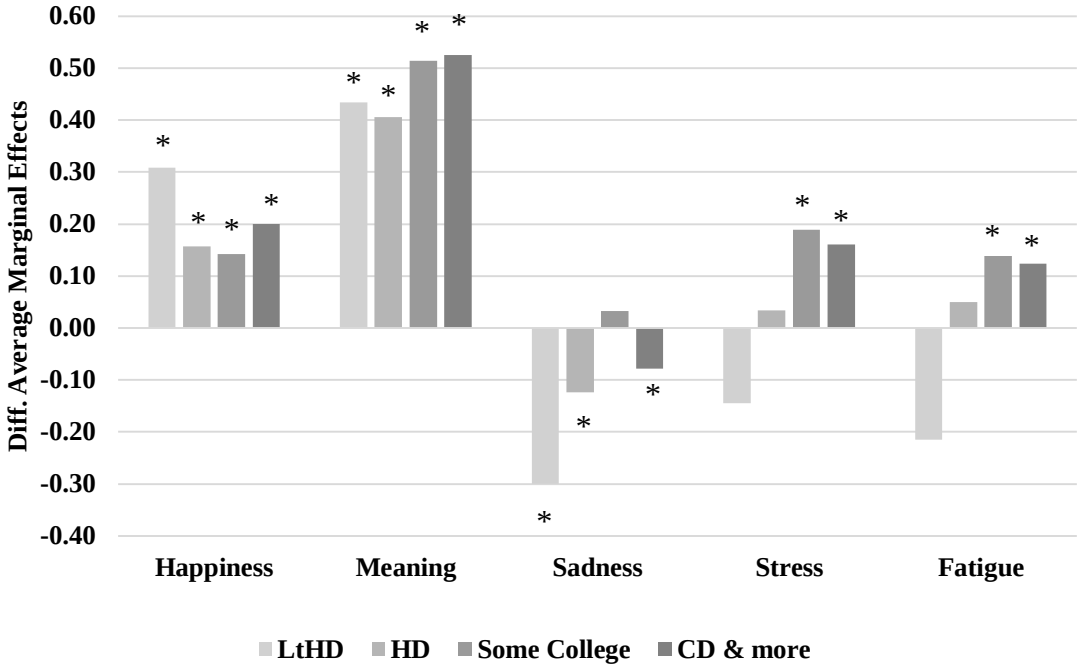
Note: Emotions are measured on a 7-point scale ranging from 0 (*not at all*) to 6 (*very much).* N's are unweighted, means are weighted. Positive values = parents experience more of that emotion than other-adults (the reverse for a negative value). All time consists of all activities included in the Wellbeing Module of ATUS. SD = standard deviation; HD= high school degree; CD= college degree. * Differences between parents (P) and other-adults (O) are statistically significant at least at p<.05.

Table 3. Emotional Wellbeing during All time for Full sample

	B (SE) Emotional Wellbeing				
	Happiness	Meaning	Sadness	Stress	Fatigue
	(1)	(2)	(3)	(4)	(5)
Model 1					
Parents (ref. = Other-adults)	0.18***	0.49***	-0.07**	0.12***	0.09**
	(0.03)	(0.03)	(0.02)	(0.03)	(0.03)
Education (ref. = CD & up)					
Less than HD	0.21***	0.39***	0.24***	-0.04	-0.00
	(0.05)	(0.06)	(0.05)	(0.06)	(0.06)
HD	0.12***	0.28***	0.08***	-0.12***	-0.03
	(0.03)	(0.03)	(0.02)	(0.03)	(0.04)
Some College	0.08***	0.19***	-0.00	-0.10***	0.05
	(0.02)	(0.03)	(0.02)	(0.03)	(0.03)
Female (ref. = Male)	0.08***	0.13***	0.03+	0.19***	0.35***
	(0.02)	(0.03)	(0.02)	(0.02)	(0.03)
Constant	4.30***	3.26***	0.34***	1.20***	2.55***
rho	0.467	0.412	0.565	0.520	0.524
Model 2					
Parents (ref. = Other-adults)	0.20***	0.52***	-0.08**	0.16***	0.12**
	(0.03)	(0.04)	(0.03)	(0.04)	(0.04)
Education (ref.= CD & up)					
Less than HD	0.12	0.45***	0.41***	0.18+	0.25*
	(0.09)	(0.10)	(0.10)	(0.11)	(0.10)
HD	0.15**	0.36***	0.11*	-0.04	0.02
	(0.05)	(0.06)	(0.05)	(0.06)	(0.06)
Some College	0.12**	0.19***	-0.08*	-0.12*	0.04
	(0.04)	(0.05)	(0.04)	(0.05)	(0.05)
Female (ref. = Male)	0.08***	0.13***	0.03+	0.19***	0.35***
	(0.02)	(0.03)	(0.02)	(0.02)	(0.03)
Parental status x Education level					
Parents x Less than HD	0.11	-0.09	-0.22*	-0.31**	-0.34**
	(0.10)	(0.12)	(0.11)	(0.12)	(0.12)
Parents x HD	-0.04	-0.12+	-0.05	-0.13+	-0.07
	(0.06)	(0.07)	(0.05)	(0.07)	(0.07)
Parents x Some College	-0.06	-0.01	0.11**	0.03	0.01
	(0.05)	(0.06)	(0.04)	(0.06)	(0.06)
Constant	4.29***	3.25***	0.35***	1.20***	2.55***
rho	0.467	0.412	0.565	0.520	0.524
N activities	47,577	47,463	47,624	47,634	47,621
N respondents	16,016	15,998	16,021	16,022	16,022

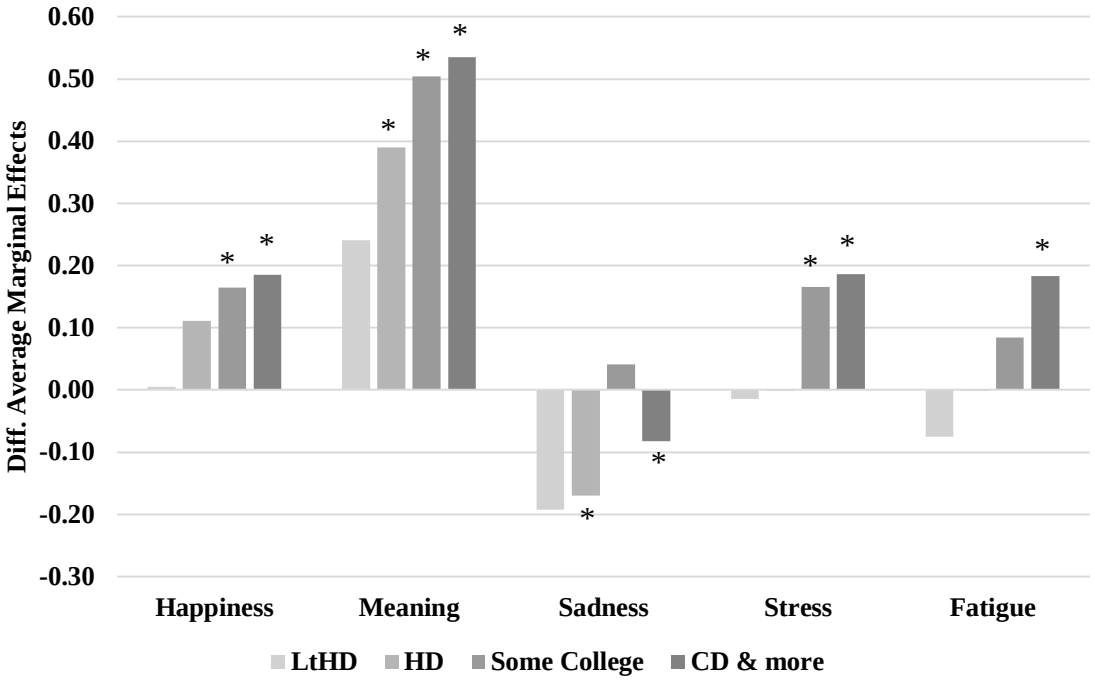
Note: Results from random effect models. Standard errors in parentheses. Controls for individual, household, survey level factors not shown (full results available upon request). All time consists of all activities included in the Wellbeing Module of ATUS. Ref. = reference group; HD = high school degree; CD = college degree. Significant at: * p<.05. **p<.01. *** p<.001.

Figure 1. Emotional Wellbeing Gap (Parents – Other-adults) during All time by Education– Full sample



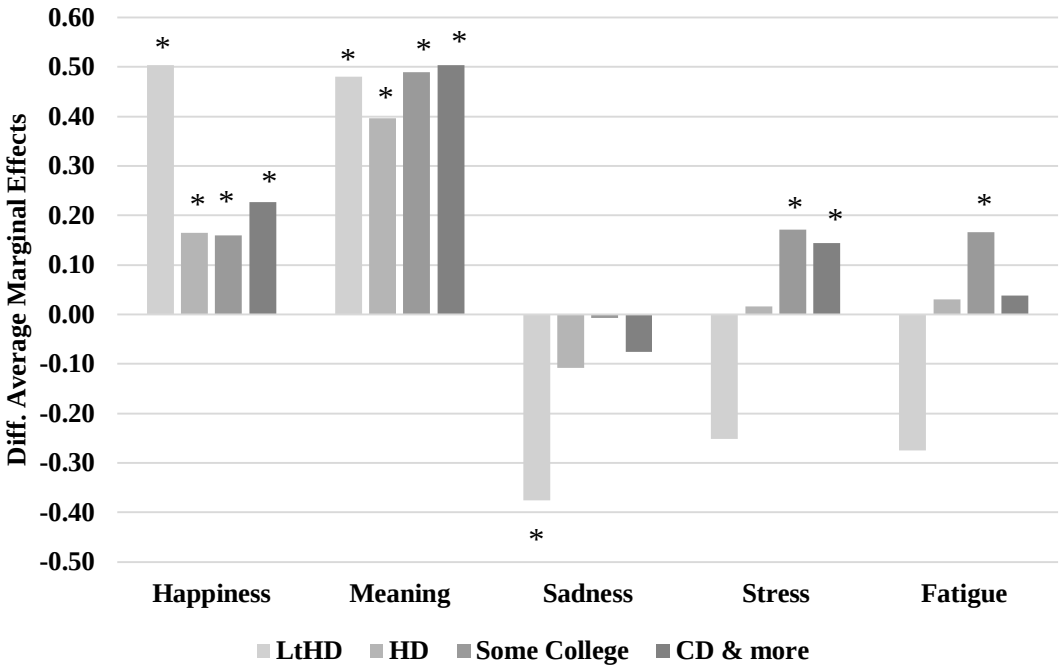
Note: Results from random effect models including all controls. Columns represent the difference in wellbeing between parents and other-adults. A positive value indicates that parents report higher levels of that emotion, than other-adults did (the reverse for a negative value). LtHD = less than a high school degree; HD = high school degree; CD = college degree. All time consists of all activities included in the Wellbeing Module of ATUS. * The difference between parents and other-adults is statistically significant at least at $p <. 05$.

Figure 2. Emotional Wellbeing Gap (Parents – Other-adults) during All time by Education for Women



Note: Results from random effect models including all controls. Columns represent the difference in wellbeing between mothers and women not raising children. A positive value indicates that mothers report higher levels of that emotion, than women not raising children did (the reverse for a negative value). LtHD = less than a high school degree; HD = high school degree; CD = college degree. All time consists of all activities included in the Wellbeing Module of ATUS. * The difference between parents and other-adults is statistically significant at least at p <. 05.

Figure 3. Emotional Wellbeing Gap (Parents – Other-adults) during All time by Education for Men



Note: Results from random effect models including all controls. Columns represent the difference in wellbeing between fathers and men not raising children. A positive value indicates that fathers report higher levels of that emotion, than men not raising children did (the reverse for a negative value). LtHD = less than a high school degree; HD = high school degree; CD = college degree. All time consists of all activities included in the Wellbeing Module of ATUS. * The difference between parents and other-adults is statistically significant at least at p <. 05.