

Psychological Bulletin

The Pains and Pleasures of Parenting: When, Why, and How Is Parenthood Associated With More or Less Well-Being?

S. Katherine Nelson, Kostadin Kushlev, and Sonja Lyubomirsky

Online First Publication, February 3, 2014. <http://dx.doi.org/10.1037/a0035444>

CITATION

Nelson, S. K., Kushlev, K., & Lyubomirsky, S. (2014, February 3). The Pains and Pleasures of Parenting: When, Why, and How Is Parenthood Associated With More or Less Well-Being?. *Psychological Bulletin*. Advance online publication. <http://dx.doi.org/10.1037/a0035444>

The Pains and Pleasures of Parenting: When, Why, and How Is Parenthood Associated With More or Less Well-Being?

S. Katherine Nelson
University of California, Riverside

Kostadin Kushlev
University of British Columbia

Sonja Lyubomirsky
University of California, Riverside

The relationship between parenthood and well-being has become a hot topic among scholars, media, and general public alike. The research, however, has been mixed—some studies indicate that parents are happier than nonparents, whereas others suggest the reverse. We suggest that the question of whether parents are more or less happy than their childless peers is not the most meaningful one. To reconcile the conflicting literature and expand understanding of the emotional experience of parenthood, we present a model of parents' well-being that describes *why* and *how* parents experience more or less happiness than nonparents (i.e., mediators of the link between parenthood and well-being). We then apply this model to explain *when* parents are more likely to experience more or less happiness (i.e., moderators of parents' well-being, such as parent age or child temperament). Supporting our model, we review 3 primary methodological approaches: studies comparing parents and nonparents, studies examining changes in well-being across the transition to parenthood, and studies comparing parents' experiences while with their children to their other daily activities. Our review suggests that the relationship between parenthood and well-being is highly complex. We propose that parents are unhappy to the extent that they encounter relatively greater negative emotions, magnified financial problems, more sleep disturbance, and troubled marriages. By contrast, when parents experience greater meaning in life, satisfaction of their basic needs, greater positive emotions, and enhanced social roles, they are met with happiness and joy.

Keywords: parenthood, happiness, meaning, well-being

The birth of a child instantly changes how we define ourselves. Women become mothers. Men become fathers. Couples become parents. Our priorities shift in fundamental ways. Parenting may be the most rewarding experience, but it is also the hardest and most humbling.

—Sheryl Sandberg, *Lean In*

Children are the fount of our greatest joys and the source of our greatest sorrows. Many parents consider raising children to be one of the most blissful and gratifying—but also one of the most stressful and challenging—undertakings of their lives. The evolutionary and developmental importance of parenting (Gerson, Berman, & Morris, 1991; Kenrick, Griskevicius, Neuberg, & Schaller, 2010), as well as its associated costs and rewards (Nomaguchi & Milkie, 2003), has led many social scientists to ask whether

parents are better or worse off than their childless peers. Research on this topic has captured both the highs and lows of having children, with some studies indicating that parenthood is associated with higher well-being (Aassve, Goisis, & Sironi, 2012; Ballas & Dorling, 2007; Herbst & Ifcher, 2013; Myrskylä & Margolis, 2012; Nelson, Kushlev, English, Dunn, & Lyubomirsky, 2013), and others suggesting the reverse (Evenson & Simon, 2005; Glenn & Weaver, 1979; McLanahan & Adams, 1987).

Accordingly, the association between parenthood and well-being has become a hot topic among sociologists, psychologists, and economists, as well as the media and the general public. To our knowledge, however, researchers have yet to synthesize or explain the conflicting findings on parents' well-being. We suggest that the question of whether parents are more or less happy than their childless peers is not the most meaningful one. Rather, the inconsistencies in the literature can be better understood by exploring the factors that contribute to parents' happiness and by examining the conditions that may lead some parents to experience more or less happiness than nonparents. Thus, our main goals in this article are to provide a comprehensive review of *when* and *why* parenthood is associated with higher or lower well-being and thereby stimulate new research based on this richer understanding of parents' emotional experience.

To this end, our parent well-being model, depicted in Figure 1, draws on theory and research to propose psychological mechanisms (e.g., social roles) that mediate the relationship between

S. Katherine Nelson, Department of Psychology, University of California, Riverside; Kostadin Kushlev, Department of Psychology, University of British Columbia, Vancouver, British Columbia, Canada; Sonja Lyubomirsky, Department of Psychology, University of California, Riverside.

We are immensely grateful to our research assistants, Dawn Lee, Jeff Hoffman, Talia Montoya, Djordje Vujatovic, and Alex Yarijanian, and to Elizabeth Dunn and Kate Sweeny for their comments on earlier drafts.

Correspondence concerning this article should be addressed to S. Katherine Nelson, Department of Psychology, University of California, Riverside, CA 92521. E-mail: snels007@ucr.edu

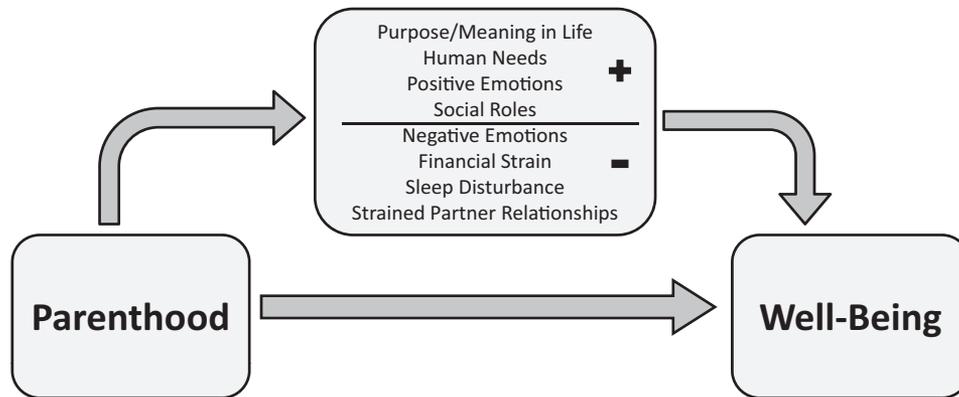


Figure 1. Model of parents' well-being.

parenthood and well-being.¹ We believe our model is positioned to illuminate the specific circumstances that relate to parents' happiness (and unhappiness) and to begin to explain their underlying mechanisms. Accordingly, we apply our model to explain why particular demographic factors (e.g., child age) and psychological factors (e.g., social support) moderate parents' well-being. In addition, we offer readers guidelines for interpreting findings from three different study designs commonly used to investigate parents' well-being, as well as specific recommendations for drawing conclusions from this literature and suggestions for future directions. Finally, our analysis of the existing literature allows us to identify areas where conclusions are strongly supported and areas where additional research is needed to inform understanding of parents' well-being.

Notably, the majority of the studies we review were conducted with primarily Western samples. Accordingly, little is known about how these findings might generalize to other cultures. For example, the experience of parenthood is likely markedly different in non-Western, developing, poor, and/or autocratic nations, such as indigent rural Chinese or tribal cultures in Africa, and the processes we identify in the current review may not apply to parents in these cultures.

Defining Well-Being

Although happiness has been a popular topic for writers, poets, philosophers, and social critics for centuries, psychological scientists have only embraced the construct in the past several decades (Diener, 1984; Diener, Suh, Lucas, & Smith, 1999; Ryan & Deci, 2001; Ryff, 1989). In this article, we review studies that assess one or more components of well-being in parents, including emotional experience, subjective happiness, and life satisfaction, as well as related constructs, such as self-esteem, depression, and psychological distress (see Table 1 for a complete list, along with common measures). Theorists have conceptualized well-being in multiple ways (Busseri & Sadava, 2011; Diener et al., 1999; Ryff, 1989). Our own conceptualization is an adaptation of the causal model proposed by Busseri and Sadava (2011), positing that positive and negative emotions are predictors of overall well-being. Mirroring some of the ambiguity present in the well-being literature, we use the terms *well-being*, *subjective well-being*, and *happiness* interchangeably throughout this article to characterize well-being in its

broadest representation (see Lyubomirsky, Sheldon, & Shkade, 2005). When describing particular investigations, we generally refer to the construct measured by the authors.

Although a large literature explores the link between parenthood and marital satisfaction, the focus of this review is not on marital satisfaction for several reasons. First, a comprehensive meta-analysis has already provided an excellent summary of research on the relationship between parenthood and marital satisfaction (Twenge, Campbell, & Foster, 2003). Second, given our goal to present a broad overview of the literature on parenting and well-being, we have chosen to focus on constructs representing well-being in general (e.g., life satisfaction) rather than well-being in specific domains (e.g., work or relationship satisfaction). However, marital satisfaction is undoubtedly related to more general life satisfaction (with the correlation varying from small to large depending on how the question is asked; see Schwarz, 1999, for a review). Accordingly, we examine marital satisfaction as a possible mediator of the effect of having children on more general well-being measures, thus conceptualizing it as a predictor of well-being rather than an outcome variable.

Is Parenthood Associated With More Well-Being or Less? Evidence From Three Types of Investigations

Researchers have primarily examined the relationship between parenthood and well-being with three types of methodologies. First and most commonly, studies have simply compared parents and nonparents. Second, investigators have explored changes in parents' well-being across the transition to parenthood. Third, they have compared parents' experiences while they are with their children with their experiences during other activities. Because each of these three empirical approaches has unique advantages and addresses somewhat different questions about parents' well-being, a review of the literature would not be complete without considering the results of all three types of studies.

¹ Unfortunately, the use of multiple regression in the vast majority of articles on this topic precluded our ability to conduct a meta-analysis of the association between parenthood and well-being (see Lipsey & Wilson, 2001).

Table 1
Indicators of Well-Being Outcomes and Mediators and Their Respective Measures

Well-being construct	Typical scale and psychometric properties
	Well-being outcomes
Anxiety	<ul style="list-style-type: none"> • 14-item Anxiety subscale of the 90-item Symptom Checklist (Derogatis, 1977): $\alpha = .80$; e.g., "In the past week, I have felt tense or keyed up," 0 = <i>not at all</i>, 4 = <i>extremely</i>. • 5-item Gurin Symptom Checklist (Gurin, Veroff, & Feld, 1960; Veroff, Douvan, & Kulka, 1981); e.g., "nervousness." • 20-item State-Trait Anxiety Inventory, State Subscale (Spielberger, 1972): $\alpha = .89$; e.g., "I feel at ease," 1 = <i>not at all</i>, 4 = <i>very much so</i>. • 40-item IPAT Anxiety Scale (Krug, Scheier, & Cattell, 1976): $\alpha = .85$ (no sample item available). • Single item (Gurin et al., 1960): "Everybody has things he worries about more or less. Do you worry about such things a lot or not very much?" 1 = <i>never</i>, 5 = <i>all the time</i>.
Depressive symptoms	<ul style="list-style-type: none"> • 20-item Center for Epidemiological Studies-Depression Scale (Radloff, 1977): $\alpha = .85$; test-retest reliability = $.32-.67$, 2 weeks to 1 year; e.g., "During the last week, I felt sad" 1 = <i>rarely or none of the time (less than 1 day)</i>, 4 = <i>most or all of the time (5-7 days)</i>. • 30-item Geriatric Depression Scale (Yesavage et al., 1983): $\alpha = .94$; test-retest reliability = $.85$, 1 week; e.g., "Do you frequently feel like crying?" <i>Yes/No</i>. • 21-item Beck Depression Inventory (Beck, Steer, & Carbin, 1988; Beck, Ward, & Mendelson, 1961): $\alpha = .81$; test-retest reliability = $.65-.90$, 1 week to 4 months; e.g., "I do not feel sad (0), I feel sad (1), I am sad all the time and I can't snap out of it (2), I am so sad and unhappy that I can't stand it (3)." • 40-item IPAT Depression Scale (Krug & Laughlin, 1976): $\alpha = .85$ (no sample item available). • 12-item 8 State Questionnaire (Cattell, 1972): $\alpha = .79$ (no sample item available). • Single item (e.g., Hansen, Slagsvold, & Moum, 2009): "How often do you feel lonely?" 0 = <i>never</i>, 4 = <i>always</i>.
Happiness	<ul style="list-style-type: none"> • 4-item Subjective Happiness Scale (Lyubomirsky & Lepper, 1999): $\alpha = .79-.94$; test-retest reliability = $.55-.90$, 3 weeks to 1 year; e.g., "In general, I consider myself: <i>not a very happy person</i> (1) to <i>a very happy person</i> (7)." • 5-item Mental Health Index (Berwick et al., 1991): $\alpha = .86$; e.g., "How often have you felt happy in the past 4 weeks?" 1 = <i>none of the time</i>, 6 = <i>all of the time</i>. • 12-item Well-Being Questionnaire (Mitchell & Bradley, 2001): $\alpha = .87$; e.g., "I have been happy, satisfied, or pleased with my personal life," 0 = <i>not at all</i>, 3 = <i>all the time</i>. • Single item (e.g., Sweet & Bumpass, 1996): "How happy are you?" 0 = <i>extremely unhappy</i>, 10 = <i>extremely happy</i>. (Similar items used in large-scale national surveys, such as the European Social Survey, the General Social Survey, the World Values Survey, and the British Household Panel Survey.)
Parental well-being	<ul style="list-style-type: none"> • 2-item Parental Satisfaction (Ishii-Kuntz & Ihinger-Tallman, 1991); reliability = $.61$; e.g., "Would you say in your case, being a father/mother has always been enjoyable?" 1 = <i>low</i>, 5 = <i>high</i>. • 8-item Parent Self-Efficacy (Gibaud-Wallston & Wandersman, 1978): $\alpha = .76$; test-retest reliability = $.46-.82$, 6 weeks; e.g., "If anyone can find the answer to what is troubling my baby, I am the one," 1 = <i>strongly disagree</i>, 6 = <i>strongly agree</i>. • 4-item Happiness Derived From Children (Ashton-James, Kushlev, & Dunn, 2013; adapted from Subjective Happiness Scale; Lyubomirsky & Lepper, 1999): $\alpha = .80$; e.g., "In general, when I am spending time with my children I am: 1 = <i>not at all happy</i>, 7 = <i>extremely happy</i>." • 5-item Meaning Derived From Children (Ashton-James et al., 2013; adapted from Meaning in Life Questionnaire; Steger, Frazier, Oishi, & Kaler, 2006): $\alpha = .79$; e.g. "My children make my life meaningful," 1 = <i>not at all true</i>, 7 = <i>absolutely true</i>. • Parenting Daily Hassles (Crnic & Greenberg, 1990): Frequency $\alpha = .81$, Intensity $\alpha = .90$; e.g., "I am continually cleaning up kids' messes," 1 = <i>rarely</i>, 4 = <i>constantly</i> (Frequency), 1 = <i>no hassle</i>, 5 = <i>big hassle</i> (Intensity). • 22-item Self-Perceptions of the Parental Role Scale (MacPhee, Benson, & Bullock, 1986): $\alpha = .72-.80$; e.g., "Being a parent is a satisfying experience to some adults," but "For other adults, being a parent is not all that satisfying." Respondents first decide which statement applies to them and then rate 1 = <i>sort of true of me</i>, 4 = <i>really true of me</i>. • 23-item Impact on Family Scale (Stein & Riessman, 1980): $\alpha = .88$; e.g., "I have stopped working because of my child's behavior," 1 = <i>strongly disagree</i>, 4 = <i>strongly agree</i>. • 14-item Family Satisfaction (Olson & Wilson, 1982): $\alpha = .90$; e.g., "How satisfied are you with how close you feel to the rest of the family?" 1 = <i>dissatisfied</i>, 5 = <i>satisfied</i>.
Psychological distress	<ul style="list-style-type: none"> • 53-item Brief Symptom Inventory (Derogatis & Melisaratos, 1983): test-retest reliability = $.90$, 2 weeks; e.g., "In the past week, I have been bothered by feeling so restless I couldn't sit still," 0 = <i>not at all</i>, 4 = <i>extremely</i>. • 12-item General Health Questionnaire (Goldberg, 1972): $\alpha = .90$; e.g., "Have you been able to concentrate on whatever you are doing?" 1 = <i>better than usual</i>, 4 = <i>a lot worse than usual</i>. • 23-item Hopkins Symptom Checklist (Derogatis, Lipman, Covi, & Rickles, 1971); e.g., "In the last week, how much have you been bothered by feeling hopeless about the future?" 1 = <i>not at all</i>, 4 = <i>extremely</i>. • 25-item General Well-Being Schedule (Fazio, 1977); e.g., "Have you been anxious, worried, or upset during the past month?" 1 = <i>extremely so, to the point of being sick or almost sick</i>, 6 = <i>not at all</i>.

(table continues)

Table 1 (continued)

Well-being construct	Typical scale and psychometric properties
Satisfaction with life	<ul style="list-style-type: none"> • 5-item Satisfaction With Life Scale (Diener, Emmons, Larsen, & Griffin, 1985): $\alpha = .82$; test–retest reliability = .87 across 2 months; e.g., “I am satisfied with my life,” 1 = <i>strongly disagree</i>, 7 = <i>strongly agree</i>. • Single item (e.g., Sweet & Bumpass, 1996): “All things considered, how satisfied are you with your life as a whole these days?” 1 = <i>dissatisfied</i>, 10 = <i>satisfied</i>. (Similar items used in the European Social Survey, the German Socioeconomic Panel, the National Survey of Families and Households, and the World Values Survey.)
Stress	<ul style="list-style-type: none"> • 57-item Life Experiences Survey (Sarason, Johnson, & Siegel, 1978): test–retest reliability = .63–.64, 5–6 weeks; e.g., “In the past year, I have experienced the death of a close family member,” –3 = <i>extremely negative</i>, 3 = <i>extremely positive</i>. • 117-item Daily Hassles Scale (Kanner, Coyne, Schaefer, & Lazarus, 1981): test–retest reliability = .48–.79; e.g., “Health of a family member,” 1 = <i>somewhat severe</i>, 2 = <i>moderately severe</i>, 3 = <i>extremely severe</i>. • 10-item Perceived Stress Scale (S. Cohen, Kamarck, & Mermelstein, 1983): $\alpha = .84$, test–retest reliability = .55–.85, 2 days to 6 weeks; e.g., “In the last month, how often have you felt nervous and stressed?” 0 = <i>never</i>, 4 = <i>very often</i>.
Other well-being constructs	<ul style="list-style-type: none"> • 3-item Rosenberg Self-Esteem Scale (Rosenberg, 1986): $\alpha = .63$; e.g., “I am able to do things as well as other people,” 1 = <i>strongly agree</i>, 5 = <i>strongly disagree</i>. • Single-item Efficacy (Duncan & Morgan, 1980): “I have always felt pretty sure my life would work out the way I wanted it to,” 1 = <i>not true at all</i>, 4 = <i>very true</i>. • Open-Ended Inventory of Social Support (Dunst & Trivette, 1988): Respondents list all individuals with whom they have a close relationship and their frequency of contact on a scale from 1 (<i>once a month or less</i>) to 7 (<i>daily contact</i>). • 6-item Social Provisions Scale (Russell & Cutrona, 1984): $\alpha = .65$; e.g., “There are people I can depend on to help me if I really need it,” 1 = <i>strongly disagree</i>, 4 = <i>strongly agree</i>. • 11-item Social Connection (National Survey of Families and Households; Sweet & Bumpass, 1996); e.g., “How often do you spend a social evening with friends?” 0 = <i>never</i>, 4 = <i>several times a week</i>. • 13-item Fatigue Subscale of the Lee Visual Analog Fatigue Scale (K. A. Lee, Hicks, & Nino-Murcia, 1991): $\alpha = .91$; e.g., “Please indicate the point on the line (100 mm) that indicates how you feel right now: not at all drowsy, extremely drowsy.”
Parents’ well-being mediators	
Meaning in life	<ul style="list-style-type: none"> • Single item (World Values Survey; e.g., Nelson, Kushlev, English, Dunn, & Lyubomirsky, 2013): “How often, if at all, do you think about the meaning and purpose of life?” 1 = <i>often</i>, 4 = <i>never</i>. • Single-item Day Reconstruction Method (e.g., Kushlev, Dunn, & Ashton-James, 2012): e.g., “To what extent did you feel a sense of meaning and purpose in life during this episode?” 0 = <i>not at all</i>, 6 = <i>very much</i>. • Single-item Experience Sampling (e.g., Nelson et al., 2013): “In the bigger picture of your life, how personally significant and meaningful to you is what you are doing at the moment?” 1 = <i>not at all</i>, 7 = <i>very much</i>. • 7-item Meaning (Umberson & Gove, 1989): $\alpha = .75$; e.g., “My life often seems empty.” (No response scale provided.)
Mood and emotions	<ul style="list-style-type: none"> • 17-item Experience Sampling Positive and Negative Emotions (e.g., Nelson et al., 2013); e.g., “Please indicate the degree to which you feel joy,” 1 = <i>not at all</i>, 7 = <i>extremely</i>. • 3-item Day Reconstruction Method Positive and Negative Affect (Kahneman, Krueger, Schkade, Schwarz, & Stone, 2004); e.g., “How did you feel during this situation? Warm/friendly (PA), worried/anxious (NA),” 0 = <i>not at all</i>, 6 = <i>very much</i>. • 5-item Positive Affect (Bradburn, 1969): $\alpha = .54$; e.g., “During the past few weeks, did you feel that things were going your way?” <i>Yes</i> or <i>No</i>. • 10-item Positive and Negative Affect Schedule (Watson, Clark, & Tellegen, 1988): $\alpha = .88$ for PA, .87 for NA; test–retest reliability = .47–.68 (PA), 8 weeks, test–retest reliability = .39–.71 (NA), 8 weeks; e.g., “Joyful,” 1 = <i>very slightly not at all</i>, 5 = <i>extremely</i>.
Relationship satisfaction	<ul style="list-style-type: none"> • 4-item Frequency of Disagreements With Spouse (Sweet & Bumpass, 1996): $\alpha = .74$; e.g., “How often, if at all, in the last year have you had open disagreements about each of the following? [household tasks, money, spending time together, sex],” 1 = <i>never</i>, 4 = <i>almost every day</i>. • 4-item Marital Quality (adapted from Spanier, 1976): $\alpha = .84$; e.g., “How happy has your marriage been over the last six months?” (No scale provided.) • 7-item Relationship Assessment Scale (Hendrick, Dicke, & Hendrick, 1998): $\alpha = .73$; e.g., “In general, how satisfied are you with your relationship?” 1 = <i>low satisfaction</i>, 5 = <i>high satisfaction</i>. • 32-item Dyadic Adjustment Scale (Spanier, 1976): $\alpha = .96$; e.g., “In general, how often do you think that things between you and your partner are going well?” 0 = <i>never</i>, 5 = <i>all the time</i>. • 25-item Four-Factor Scale of Intimate Relations (Braiker & Kelley, 1979): $\alpha = .61$; e.g., “To what extent do you have a sense of belonging with your partner?” 1 = <i>very little or not at all</i>, 9 = <i>very much or extremely</i>. • 280-item Marital Satisfaction Inventory (Snyder, 1979; Scheer & Snyder, 1984): $\alpha = .89$, test–retest reliability = .88, 6 weeks; e.g., “My marriage has been disappointing in several ways.” <i>True</i> or <i>False</i>. • Daily Diary Marital Daily Record (Papp, Cummings, & Goeke-Morey, 2002): Parents indicate dimensions of marital conflict, including length, initiator, topics, conflict tactics, and emotions during and at the end of the conflict. • Single item (Gurin et al., 1960): “How happy are you in your marriage?” 1 = <i>not too happy</i>, 4 = <i>very happy</i>.

Parents Versus Nonparents

Description and evidence. The most common approach to evaluating the relationship between parenthood and well-being has been to compare parents and nonparents on global measures of well-being, including happiness, life satisfaction, and depression, which tap into people's general evaluations of their lives. Findings based on such global measures have been mixed: Compared with nonparents, parents have been found to experience lower levels of well-being (Evenson & Simon, 2005; Glenn & Weaver, 1979; McLanahan & Adams, 1987, 1989), higher levels of well-being (Aassve et al., 2012; Nelson et al., 2013), and similar levels of well-being (Rothrauff & Cooney, 2008). One study, for example, found that parents reported less happiness than nonparents (Glenn & Weaver, 1979), whereas another study found the reverse (Nelson et al., 2013). As we discuss in more detail later, research has demonstrated that parents' well-being is, not surprisingly, moderated by such factors as age, gender, or residence of child (e.g., Hansen, Slagsvold, & Moum, 2009; Keizer, Dykstra, & Poortman, 2010; Mirowsky & Ross, 2002). The contradictory findings of the above investigations may be partially explained by the extent to which their samples differ in these moderating factors, as well as by the specific measure of well-being used (e.g., happiness, life satisfaction, depression, worry, efficacy, anxiety, or psychological well-being).

Interpretations, strengths, and limitations. Studies comparing parents with nonparents directly address this question: "Do parents experience greater well-being than their childless counterparts?" These studies serve as an important first step by simply informing investigators whether, in a randomly chosen sample of parents and nonparents, one group is happier than the other. Notably, however, as with all investigations of parenthood and well-being, studies using this design cannot establish whether these group differences are caused by the presence of children. Even if such investigations employ causal modeling and control for additional factors that may explain the link between parenthood and well-being, causal claims are inappropriate with this type of design.

In an attempt to isolate causality in cases in which random assignment is impossible, many investigators treat parents' demographic characteristics (e.g., gender, marital status, age) as confounds and control for their influence on well-being. Many studies using this approach find a net zero or small negative association between parenthood and well-being (e.g., Bhargava, Kassam, & Loewenstein, in press; Blanchflower & Oswald, 2004; Caporale, Georgellis, Tsitsianis, & Yin, 2009; Ferrer-i-Carbonell, 2005). However, a review of this literature noted that such investigations have produced mixed findings (Dolan, Peasgood, & White, 2008). The conflicting results may arise from the fact that these studies often do not use consistent statistical controls or reference groups, thus producing results that are difficult to equate. In addition, statisticians have noted problems with interpreting the effects of variables for which variance due to other factors has been removed (Lynam, Hoyle, & Newman, 2006). They argue, for example, that attributing effects to the variable of interest is impossible when the coefficient changes direction after controlling for additional factors. Indeed, this exact pattern has appeared in analyses of the association between parenthood and well-being, such that the bivariate asso-

ciation is positive (Nelson et al., 2013) but the relationship becomes negative when controlling for additional variables (Bhargava et al.). Finally, distinguishing between moderators and confound variables is particularly important because once a variable has been established as a significant moderator of a relationship, considering it as a control in subsequent analyses is inappropriate (J. Cohen & Cohen, 1983; see also Nelson, Kushlev, Dunn, & Lyubomirsky, in press).

Many psychologists, sociologists, and economists have compared parents and nonparents by analyzing large-scale, nationally representative datasets (e.g., Evenson & Simon, 2005; Nelson et al., 2013; Nomaguchi & Milkie, 2003). These datasets are valuable because they comprise representative samples of respondents, allowing researchers to avoid sampling biases. In addition, because many such datasets include parents across a wide range of ages and cohorts (from teens to the very old), they offer researchers an opportunity to study the relation between parenthood and well-being from a life-course perspective. Finally, many of these datasets also include extensive information about each respondent (e.g., age, marital status, occupation, income, social support), allowing investigators to test the moderating effects of numerous demographic and psychological factors.

Despite these noted benefits, studies comparing the relative well-being of parents and nonparents also have their flaws. Large-scale national surveys typically rely on single-item measures of happiness or life satisfaction. Although single-item measures of well-being have been found to be moderately correlated with other well-being measures (Sandvik, Diener, & Siedlitz, 1993), they are less reliable and revealing than fully validated multi-item scales (Krueger & Schkade, 2008).

Who are the nonparents? An important issue to consider when making group comparisons involves the characteristics of the comparison group—in this case, nonparents. Among adults ages 45 and older, 86% of women and 84% of men have children (Child Trends, 2002), thus making nonparents a minority. In today's child-centered climate, nonparents may feel abnormal and face disapproval and even discrimination. Hence, they may experience less happiness not because they are missing out on the pleasures of having children but as a result of violating cultural norms (cf. Chadi, 2012). Furthermore, comparisons between parents and nonparents in middle age are relatively more likely to capture nonparents who regret not having children. By contrast, many nonparents in their 20s and 30s will eventually have children (Child Trends, 2002). Accordingly, younger nonparents may be childless for very different reasons than older nonparents, and therefore, the questions being answered when comparing parents with younger versus older nonparents are somewhat different.

Parents (or nonparents) by choice? In both the young and middle-aged, however, parents' well-being is in part contingent on the issue of choice. Specifically, very different conclusions about parents' well-being may emerge when comparing nonparents with people who have become parents by choice versus those for whom the arrival of a child is unplanned. Similarly, comparing middle-aged parents with middle-aged nonparents who remained childless by choice is likely to lead to different conclusions than comparing them with involuntarily childless adults. For example, involuntarily (relative to voluntarily) childless individuals may experience regret, anguish, and frustration for failing to fulfill their desire to become parents. Indeed, in one investigation, women who chose

not to have children did not differ from mothers on happiness levels, but infertile women were significantly less happy than both groups (Callan, 1987). In short, whether one's parenthood status is chosen is an important consideration in studies that compare the well-being of parents and nonparents.

Transition to Parenthood

Description and evidence. A second approach to understanding how parenthood is related to well-being is to examine shifts in parents' happiness before and after the birth of a child. Using this method, many studies have explored changes in parents' mental health and well-being across the transition to parenthood. One such study indicated a boost in life satisfaction during pregnancy and immediately after the birth of a child, but a return to pre-pregnancy well-being within 2 years (Dyrdal & Lucas, 2013). Other work, however, has indicated that both personal stress and marital stress increase during this transition and that, although new parents experience an increase in well-being soon after the birth of their child, this increase dissipates within the first year (A. E. Clark, Diener, Georgellis, & Lucas, 2008; Miller & Sollie, 1980). A meta-analysis of this literature revealed different effects across the transition to parenthood depending on the component of well-being measured. After the birth of their child, parents reported a boost in life satisfaction followed by a decline, but an overall rise in positive emotions (Luhmann, Hofmann, Eid, & Lucas, 2012).

Interpretations, strengths, and limitations. Studies investigating the transition to parenthood allow researchers to determine whether having a child is associated with changes in parents' well-being. A strict interpretation of this design involves specifying changes in well-being relative to the timing of the baseline well-being assessment (e.g., pregnancy, pre-pregnancy, pre-adoption proceedings, etc.), as well as the timing of the follow-up. For example, as discussed in more detail below, if baseline well-being is only assessed during pregnancy, researchers should interpret subsequent changes in well-being as changes from pregnancy levels, not changes from a true baseline, as pregnancy itself is likely to be associated with its own well-being shifts. Ideally, the baseline should be established over multiple assessments prior to pregnancy or adoption. Furthermore, researchers would do well to interpret research findings on the transition to parenthood in light of this particular brief stage in the family life course, rather than an enduring impact of parenthood on well-being.

This approach is advantageous in that it avoids selection biases—specifically, that happy people are more likely to have children (Luhmann et al., 2012; Luhmann, Lucas, Eid, & Diener, 2013). In addition, the longitudinal within-subject nature of this design provides for more powerful analyses, as this design also controls for variance due to additional individual factors, such as gender, marital status, and income, to the extent that these factors remain stable across the transition to parenthood. As with studies comparing parents and nonparents, investigations examining the transition to parenthood commonly use large-scale national datasets. As discussed above, these datasets allow researchers to draw on representative samples, which permit broader generalization of findings. Furthermore, such datasets often provide substantial demographics (as well as some psychological variables) on each respondent, presenting researchers an opportunity to test the mod-

erating influence of multiple individual-difference factors on the extent to which becoming a parent is associated with well-being.

A few limitations must be considered when interpreting the findings of these investigations. Studies examining well-being across the transition to parenthood commonly only assess parents' well-being over a relatively small period of time. Baseline well-being is typically measured within 1 year prior to childbirth, and follow-up periods rarely exceed 5 years (Luhmann et al., 2012). Given that children typically reside with their parents for close to 2 decades and maintain relationships with their parents throughout their lives, examining parents' well-being in the first 5 years of their child's life can yield a narrow perspective. Furthermore, as previous research has indicated that raising young children may be wrought with relatively high levels of sleep deprivation and worry (e.g., Nomaguchi & Milkie, 2003), studies focusing on the first few years of the child's life may overestimate the adverse effects of having children on parents' well-being.

The timing of baseline well-being assessments is also important to consider in studies of the transition to parenthood. Previous research has demonstrated that couples experience a boost in life satisfaction 1 year before they get married that lasts up to 2 years after marriage (Lucas, Clark, Georgellis, & Diener, 2003), and the average relationship length when couples have their first child is approximately 3 years (Claxton & Perry-Jenkins, 2008). Accordingly, if prepregnancy baseline well-being is assessed within the first 2 years of marriage—or during the “honeymoon period” of a couple's relationship—well-being estimates may be inflated due to the well-being boost of marriage or new love. Supporting this notion, a recent meta-analysis revealed that individuals' well-being in the months before childbirth is higher than the estimated population level of well-being (Luhmann et al., 2012). Accordingly, this approach potentially distorts estimates of change across the transition to parenthood and makes it difficult to disentangle whether changes in well-being are a normative representation of declines after marriage or are specifically related to having children.

Parents' Experiences While With Their Children

Description and evidence. A final approach to assessing parents' well-being has been to compare the well-being associated with child care with the well-being associated with other daily activities. In daily diary studies using the Day Reconstruction Method (DRM), participants are asked to describe what they were doing during specific episodes from the previous day (e.g., taking care of children, working, watching TV, doing housework, etc.) and to rate how they felt during each episode (e.g., happy, friendly, frustrated, worried). When positive affect ratings are ranked by activity, childcare appears to be about as enjoyable as doing housework or surfing the Web, and somewhat less enjoyable than shopping or watching TV. One study found that childcare ranked 12th on a list of 16 daily activities for women (Kahneman, Krueger, Schkade, Schwarz, & Stone, 2004), while another study found it to be 9th out of a list of 18 daily activities for both men and women (M. P. White & Dolan, 2009). However, when the positive affect parents experience when they are taking care of their children is compared with that experienced during the rest of the day, childcare is associated with greater positive affect than other daily activities (Nelson et al., 2013, Study 3).

Interpretations, strengths, and limitations. Studies comparing parents' experiences with their children to their other daily activities allow researchers to draw conclusions about whether parents are actually happy (or unhappy) when they are spending time with their kids. By contrast, the other two categories of investigations—comparisons of parents and nonparents and transition-to-parenthood studies—may be reflecting parents' sense of well-being away from their children. For example, while at work, a father may report high life satisfaction when he recalls an idealized image of his son but may be miserable when actually caring for him at home.

However, because these designs compare momentary emotional experience during specific times of the day, no conclusions can be made about the overall well-being (emotional or cognitive) of parents as a group. For example, even if parents' experiences with their children are frequently dismaying, taxing, or exasperating, they could still boast high well-being overall if they experience high positive emotions during other parts of their days, perhaps when they recall how grateful or fulfilled they feel as parents. In other words, finding that childcare ranks fairly low on the list of daily activities in terms of positive emotions (e.g., Kahneman et al., 2004) is not incompatible with finding that parents experience more positive emotions overall than nonparents (Nelson et al., 2013, Study 2), or the reverse.

To draw conclusions about parents' well-being from these designs, we recommend a statistical comparison of parents' emotions during time with their children to their other daily activities (e.g., Nelson et al., 2013, Study 3) rather than providing a rank order of activities by their associated levels of positive emotions (e.g., Kahneman et al., 2004). The rank ordering of activities (e.g., child care vs. television) may be misleading because differences between means may not be statistically meaningful. Furthermore, some activities at the top of the list may be comparatively rare (e.g., prayer or sex), making it difficult to interpret the meaning of comparisons with more common activities, as novel and unexpected experiences are more likely to generate strong emotional reactions (Ortony, Clore, & Collins, 1988) and could bias daily well-being ratings. Comparisons of parents' experiences with their children with the other activities they actually performed on a given day will allow investigators to make more accurate conclusions about how much happiness is associated with caring for children.

Studies using this design have several additional strengths. First, like transition-to-parenthood studies, this within-subject design minimizes selection biases. Second, studies using this methodology aim to tap into people's moment-to-moment emotional experiences during particular activities rather than their preconceptions about how they should feel during those activities or how happy they should feel overall as parents. Third, as highlighted above, DRM and experience sampling designs that compare childcare with other activities can be used to specifically examine the effect of time with children on well-being; by contrast, the results of studies comparing parents and nonparents or examining the transition to parenthood could be driven by parents' experiences when they are not with their children.

Despite these benefits, investigations comparing parents' time with their children to their other activities also have their drawbacks. Parents' emotions during time spent with children undoubtedly depend on the specific childcare activity being rated (e.g.,

involving discipline vs. play). Sampling a wide range of parent-child activities will avoid these activity biases. Furthermore, as previously mentioned, these studies preclude any conclusions regarding global well-being, as they only tap into momentary experiences. Finally, this design provides a limited portrait of parenthood, as it only reflects parents' experiences after they have had children. Accordingly, no conclusions can be made about the overall hedonic impact of having (or forgoing) children.

General Methodological Considerations

Each of the three approaches to studying parents' well-being—comparing parents to nonparents, assessing parents' well-being across the transition to parenthood, and comparing parents' emotions when they are with their children versus when they are not—has a unique set of strengths and limitations. Because the drawbacks of one design are often offset by the strengths of another, we recommend that investigators use multiple methodological approaches. For example, if researchers find that parents are happier than nonparents, they should acknowledge the possibility that happier people may be more likely to become parents rather than argue that children must bring greater happiness. Although the use of multiple methodologies does not establish causality, if investigators wish to boost their confidence that children make parents happy, their next step could be to compare parents' well-being before and after having children. Researchers could also take a mixed methodological approach by combining the designs described above in a single study—for example, by comparing changes in well-being among a group of parents across the transition to parenthood to the changes in well-being among a group of nonparents over the same period of time (cf. Lawrence, Rothman, Cobb, Rothman, & Bradbury, 2008; Wolfson Sirignano & Lachman, 1985). These two designs together should provide stronger and clearer evidence for the effect of children on parents' well-being than either methodology alone.

Measurement bias. Social and cultural expectations to place a high value on parenthood, as well as the motivation to reduce dissonance (e.g., "I have sacrificed so much for my children, so it must be worth it"; Eibach & Mock, 2011), may bias parents' self-reports of their own well-being. We believe that most of the studies reviewed here are not highly susceptible to such social desirability and dissonance response biases because parents were not explicitly asked to report how their children had affected their happiness. Moreover, questions about children and about well-being are often embedded among many other items, which reduced the possibility that well-being estimates were biased by questions that remind respondents that they are parents. Nonetheless, avoiding such biases should be a priority in future studies.

Causality. Although the use of triangulating methodologies can provide tentative evidence for causality, because people cannot be randomly assigned to have or to forgo children, researchers cannot conclusively answer the causal question of whether parenthood improves well-being. Therefore, as discussed previously, it is important to consider alternative explanations for why parents might be happier (or less happy in some circumstances) than their childless peers. One particularly important alternative explanation that is supported by recent evidence is that happier people are more likely to become parents (Luhmann et al., 2012, 2013). Additionally, for some people, parenthood may co-occur with other out-

comes (e.g., marriage, stable employment) that confer greater happiness. These outcomes may precede or follow the decision to become parents but nonetheless could be major factors in any differences in well-being observed between parents and nonparents. Because these and many other alternative accounts are plausible, researchers should be particularly sensitive to making causal claims regarding the effect of children on parents' happiness.

Summary

To review the findings so far, whether one is comparing studies of the same design or comparing across designs, the results of three types of studies examining the association between parenthood and well-being point to widely varying conclusions. These disparities may stem from different analytic strategies, as well as from demographic differences among samples (e.g., some investigations focus only on one gender or one level of socioeconomic status [SES]; see Table 2 for details of each study). Unfortunately, the comparisons afforded by these designs are limited in the kinds of conclusions that can be drawn. To provide a more complete understanding of the emotional experience of parenthood and thereby explain the discrepant findings, we suggest a number of mediators and moderators of the relationship between parenthood and well-being.

Why Does Parenthood Relate to Well-Being? Exploring Mediators

Perhaps more than any other human endeavor, having a child is a lifelong commitment that has consequences for a large range of psychological outcomes and life circumstances. Hence, children likely impact their parents' well-being by influencing multiple aspects of their parents' lives, from the satisfaction of basic human needs and the fulfillment of social roles to their influence on financial status and sleep. Despite their plausible connections to parents' well-being, many of these factors have yet to be empirically tested. Consequently, this section of our review is largely theoretical. We introduce our model of parents' well-being by postulating first the factors theorized to mediate the relationship between parenthood and increased well-being and then those theorized to mediate the relationship between parenthood and reduced well-being (see Figure 1). Using this model, we use our theoretical predictions to make recommendations for specific future research to further elucidate the processes that bring more—or less—happiness to parents.

Why Children Might Lead to Greater Happiness

Folk wisdom and anecdotal evidence suggest that children are a source of great happiness in their parents' lives (Caplan, 2011; Hansen, 2012). Parents often refer to their children as "bundles of joy" or "the light of my life," and research indicates that young adults consider having children a valuable part of adult life (Gerson et al., 1991); accordingly, 85% proceed to become parents by age 45 (Child Trends, 2002). Furthermore, 94% of parents say that having children is worth it despite the costs (Martinez, Chandra, Abma, Jones, & Mosher, 2006), and parents report that having children is the most positive event in their lives (Berntsen, Rubin, & Siegler, 2011). In a sample of older adults, no parents reported

regret over having children, yet some childless individuals regretted not having children (Hattiangadi, Medvec, & Gilovich, 1995). Below, we review both theory and empirical evidence that point to several mechanisms by which having children may be associated with greater happiness: by providing goals to pursue and purpose in life, by satisfying human needs, by infusing positive emotions into a parent's life, and by boosting a parent's identity with multiple social roles (see top of Figure 1).

Purpose and meaning in life. Theory and research suggest that a sense of purpose and pursuit of significant life goals are critical to achieving meaning in life (Emmons, 2003; Steger, 2009). To the extent that having children provides valuable goals for parents to pursue (e.g., supplying food, shelter, affection, guidance, and education for their children; Delle Fave & Massimini, 2004) and contributes to parents' understanding of their life purpose (e.g., by illuminating their legacies and contributions to society), parenting should be a source of meaning in people's lives. Indeed, theory emphasizes a heightened sense of purpose and meaning as an outcome of becoming a parent (Baumeister, 1991).

Supporting this notion, empirical evidence from multiple methodologies consistently indicates that parenting is challenging, meaningful, and rewarding (Delle Fave & Massimini, 2004; Nelson et al., 2013; Umberson & Gove, 1989; M. P. White & Dolan, 2009). A representative sample of U.S. parents reported more frequent thoughts about meaning in life than nonparents (Nelson et al., 2013, Study 1). In addition, parents who were paged at various points in their days reported more meaningful moments than nonparents (Nelson et al., 2013, Study 2). Finally, parents reported experiencing more meaning in life specifically during time spent with their children (Nelson et al., 2013, Study 3). Mirroring these findings, in a representative sample of U.S. adults, having a child in the home was associated with lower levels of meaninglessness (Umberson, 1989). Finally, in a DRM study of daily activities, participants were asked how personally meaningful and rewarding was each episode. Time spent with children was found to be highly personally rewarding, ranking 4th on the list of 18 activities, only after volunteering, prayer, and work; more passive experiences, such as television, on the other hand, were much less rewarding (M. P. White & Dolan, 2009).

Current theory and research suggest that meaning and purpose are likely to promote subjective well-being. Activities and personal projects that are found to be challenging, meaningful, and rewarding are often experienced as enjoyable and satisfying (Csikszentmihalyi, 1990; Reker & Wong, 1988; Ryan & Deci, 2001; Ryff, 1989; Steger, Oishi, & Kashdan, 2009), and a sense of meaning and purpose has been conceptualized as integral to global well-being (Ryff, 1989; Steger, 2009). Thus, the meaning parents experience as a result of having children is likely to contribute to global happiness.

Human needs.

Evolutionary perspective. Modern evolutionary theorists position parenting at the top of the pyramid of human needs—not only above immediate physiological needs but above needs such as affiliation, esteem, and mate acquisition (Kenrick et al., 2010). Although evolution undoubtedly serves to maximize gene survival rather than to maximize well-being, it would be adaptive for the satisfaction of basic human needs to have rewarding and psychologically pleasing outcomes. If satisfying basic needs were psychologically rewarding, then humans would be motivated to work

Table 2
Study Information and Summarized Results for Studies Comparing Parents and Nonparents, Studies on the Transition to Parenthood, Studies Examining Parents' Experiences While With Their Children, and Studies Comparing Different Types of Parents

Author and year	Participants (study; mean age)	Well-being	Demographic covariates	Moderators	Findings
Aasve, Goisis, & Sironi (2012)	$N = 14,419$ (ESS; $M_{\text{age}} = 35$)	Happiness	Parents vs. nonparents Age, partnership status, household income, employment status, education		Parenthood was positively associated with happiness for both men and women.
Barnett, Marshall, & Pleck (1992)	$N = 300$ men ($M_{\text{age}} = 35$)	Anxiety and depression	Age, occupational prestige, education, household income	Parental role quality	Fathers and men without children did not differ in levels of psychological distress.
Bird (1997)	$N = 1,601$ (U.S. Survey of Work, Family, and Well-Being; $M_{\text{age}} = 36$)	Psychological distress	Minority status, marital status, age, education, household income	Gender, social support, economic hardship	Parental role quality was associated with lower levels of psychological distress. Parents expressed higher levels of distress than people without children younger than 18 living at home. Women experienced more burdens and diminished resources than did men. Parents with the highest burdens and fewest social resources experienced the highest levels of psychological distress. Social and economic burdens related to parenting mediated the association between number of children on parents' distress. Parenthood was not significantly associated with happiness.
Blanchflower & Oswald (2004)	$N = \sim 1,500$ respondents per year, 1972–1998 GSS	Happiness	Age, gender, race, employment, marital status, education, parents' marital status		Mothers did not differ in happiness from voluntarily childless women or from infertile women. Mothers reported greater satisfaction with self and satisfaction with lifestyle than infertile women (but not significantly different than voluntarily childless women). Mothers also reported less satisfaction with friendship and love, satisfaction with sincerity and honesty, satisfaction with how generous and kind they are, satisfaction with admiration of others, and satisfaction with marriage and family. Mothers reported lower marital quality on all subscales than either voluntarily childless women or infertile women.
Callan (1987)	$N = 135$ women ($M_{\text{age}} = 32$)	Happiness affect balance Domain satisfaction Marital quality (dyadic cohesion, dyadic satisfaction, dyadic consensus, affectional expression)			

(table continues)

Table 2 (continued)

Author and year	Participants (study; mean age)	Well-being	Demographic covariates	Moderators	Findings
Caporale, Georgellis, Tsitsiamis, & Yin (2009)	$N = 30,285$ (ESS)	Satisfaction	Gender, age, marital status, subjective health, education, employment, income		Parents reported less satisfaction than nonparents.
Chou & Chi (2004)	$N = 2,003$ ($M_{age} = 71$)	Depression Loneliness	Gender, marital status, age, education level, self-rated health, financial strain		Parents reported less loneliness and depression than nonparents.
Evenson & Simon (2005)	$N = 11,473$ (NSFH; Sweet & Bumpass, 1996; $M_{age} = 42$)	Depression	Gender, age, race, education, household income, marital status, employment status	Gender, child residence, family structure, marital status	Parents reported higher levels of depression than nonparents.
Ferrer-i-Carbonell (2005)	$N = 15,881$ men and women (GSOEP)	Satisfaction	Age, income, education, household size, gender, cohabiting, employed, geographic location		No difference in depression between empty-nest and full-nest parents. Parents of noncustodial children, adult children in the home, nonresidential adult children, and nonresidential adult stepchildren all reported significantly higher levels of depression than parents with at least one minor biological or adopted child in the home. Single parents reported higher levels of depression than married parents. No differences in satisfaction were detected between parents and nonparents.
Galinsky, Bond, & Friedman (1996)	$N = 2,958$ ($M_{age} = 38$)	Satisfaction with personal and family life Stress		Gender, employment status	Employed parents reported higher stress than employed nonparents.
Glenn & McLanahan (1981)	$N = 2,583$	Happiness Domain satisfaction	Age, family income, education, religiosity, employment		No difference was detected in satisfaction of parents and nonparents. Mothers rated themselves as less satisfied and more stressed than fathers. No differences were detected between parents and nonparents on happiness or domain satisfaction.
Glenn & Weaver (1979)	Respondents to the 1972–1975 GSS	Happiness	Marital status, age, religiosity, family income, occupational prestige		Parents reported lower overall happiness than nonparents.

(table continues)

Table 2 (continued)

Author and year	Participants (study; mean age)	Well-being	Demographic covariates	Moderators	Findings
Grossman, Pollack, Golding, & Fedele (1987)	$N = 20$ couples ($M_{\text{age}} = 28$)	Marital adjustment			Both mothers' and fathers' marital satisfaction was most strongly linked to their connectedness and affiliation with others. Fathers' marital adjustment was strongly linked to their wives' autonomy and affiliation. Parental status had a significant effect on life satisfaction and self-esteem only among women.
Hansen, Slagsvold, & Moum (2009)	$N = 4,169$ (Norwegian Life Course, Aging, and Generation Study; $M_{\text{age}} = 58$)	Life satisfaction Self-esteem	Age, marital status, education	Gender	
Herbst & Ifcher (2013)	$N = 45,000$ men and women (GSS)	Positive and negative affect Depression Loneliness Happiness	Age, gender, race/ethnicity, education, employment, income, marital status		No differences were observed in positive affect, negative affect, depression, and loneliness between parents and nonparents. In both samples, parents reported slightly lower happiness and life satisfaction than nonparents when no covariates were included in model.
Keizer, Dykstra, & Poortman (2010)	$N = 75,000$ men and women (DDB Needham Life Style Survey) $N = 1,451$ men (Netherlands Kinship Panel Study)	Life satisfaction Life satisfaction	Age, education, employment status, health, marital status		In both samples, when all covariates were included, parents reported higher well-being than nonparents. Resident fathers reported lower life satisfaction than childless men.
McLanahan & Adams (1989)	$N = 4,664$ (AVTMH; Gurin, Veroff, & Feld, 1960; Veroff, Douvan, & Kulka, 1981)	Daily mood Worry	Education, gender, age, city size, income, region of country, marital status (whether ever married)		No differences in daily mood were detected between resident fathers and childless men. Parents reported more worries than nonparents.
		Efficacy Happiness Marital happiness		Gender	Parenthood reduced the odds of feeling efficacious. Single mothers reported the lowest happiness of all parent groups. Nonparents reported higher marital happiness than parents (especially parents of young children). No differences in health or anxiety were observed between parents and nonparents. (table continues)
		Health Anxiety			

Table 2 (continued)

Author and year	Participants (study; mean age)	Well-being	Demographic covariates	Moderators	Findings
Menaghan (1989)	$N = 945$	Psychological well-being	Age, gender, race, income, education, employment status, marital status	Gender, economic strain, age, child residence	Parental situation effects varied by gender and extent of economic pressures. Childlessness beyond the age of 30 had a greater negative effect on women, while living apart from minor-age children was more negative for men. The older nonparents and both empty-nest parents and delayed launchers were more negatively affected by economic pressures than were other groups. Parents reported more happiness than nonparents. Marital status moderated the relation of parenthood to happiness. Married parents did not differ in happiness from married nonparents, but unmarried parents reported lower happiness than nonparents. Parents reported more life satisfaction than nonparents. Gender moderated the relation of parenthood to life satisfaction: Parenthood was associated with greater life satisfaction and happiness only among fathers. Marital status significantly moderated the relation of parenthood to life satisfaction. Married parents did not differ in life satisfaction from married nonparents, but unmarried parents reported lower life satisfaction than their childless counterparts. Age significantly moderated the link between parenthood and life satisfaction. Young parents (ages 17–25) were less satisfied with their lives than their childless counterparts, midrange-age parents (ages 26–62) were more satisfied than their childless peers, and older parents (ages 63 and older) did not differ from older nonparents in life satisfaction.
Nelson, Kushlev, English, Dunn, & Lyubomirsky (2013, Study 1)	$N = 6,906$ (World Values Survey, 2006; $M_{\text{age}} = 44$)	Happiness		Marital status	Parents reported higher meaning in life than nonparents.
		Life satisfaction		Marital status, gender, age	Parents reported more positive emotion than nonparents.
					Parents reported more meaning in life than nonparents.
					Parents reported more global happiness than nonparents.
					Parents reported fewer depressive symptoms than nonparents. Parents without a partner reported fewer depressive symptoms than nonparents without a partner.
Nelson et al. (2013, Study 2)	$N = 329$ ($M_{\text{age}} = 57$)	Meaning Emotional well-being (experience sampling) Meaning in life (experience sampling) Subjective happiness Depression			

(table continues)

Table 2 (continued)

Author and year	Participants (study; mean age)	Well-being	Demographic covariates	Moderators	Findings
Nomaguchi & Milkie (2003)	<i>N</i> = 1,933 (NSFH; Sweet & Bumpass, 1996)	Social integration Self-esteem Self-efficacy	Age, race, education, employment status, income	Marital status	New parents showed a higher level of social integration with relatives, friends, and neighbors than nonparents. No differences were detected between new parents and those who remain childless on self-esteem. New parents showed a lower level of efficacy than nonparents. The relationship was moderated by marital status. Continuously married parents demonstrated relatively higher efficacy, whereas newly married and unmarried parents demonstrated relatively lower efficacy. New parents showed no significant difference in strain in their marital relationship compared with nonparents, controlling for previous marital strain. No differences were observed between new parents and nonparents in depression, controlling for earlier depression. Married respondents with children living at home reported somewhat poorer marital quality than did married respondents who did not have children in the home.
Pittman & Lloyd (1988)	<i>N</i> = 810 (Utah Quality of Family Life Survey)	Frequency of disagreements with spouse Depression Marital quality Cohesion Satisfaction Affection Parental satisfaction Life satisfaction	Gender, income, education, number of children, marital status, developmental stage of the oldest child, Mormon or not, rural versus urban living conditions Gender, income, education, number of children, marital status, developmental stage of the oldest child, Mormon or not, rural versus urban living conditions	Children in the home Gender	Fathers were more satisfied than mothers, as were respondents with children at later stages of development. Children enhanced life satisfaction when controlling for other variables. Males reported less life satisfaction than females; separated/divorced parents were less satisfied than the nonseparated/nondivorced. (table continues)

Table 2 (continued)

Author and year	Participants (study; mean age)	Well-being	Demographic covariates	Moderators	Findings
Rochlen, McKelley, Suizzo, & Searingi (2008)	$N = 213$ fathers ($M_{\text{age}} = 37$)	Relationship satisfaction			Stay-at-home dads reported higher levels of relationship satisfaction than men in other studies.
		Life satisfaction			Stay-at-home dads reported higher overall satisfaction with life than men in other studies.
		Well-being			Stay-at-home dads reported similar levels of energy and positive well-being as men in other studies.
Rothrauff & Cooney (2008)	$N = 2,507$ (MIDUS)	Psychological well-being	Age, education, income, health		For both nonparents and parents, there was a positive direct effect between generativity and psychological well-being.
Twenge, Campbell, & Foster (2003)	$N = 31,331$ (meta-analysis; N articles = 90)	Marital satisfaction		Gender, number of children, age of youngest child, SES	Parents had significantly lower marital satisfaction than nonparents. Parents with more children reported greater marital dissatisfaction than people with fewer children. Parenthood was associated with a greater decrease in marital satisfaction for women than men. Marital satisfaction was lower among parents of infants, particularly mothers. High-SES groups showed lower marital satisfaction.
Umberson & Gove (1989)	$N = 1,753$	Positive affect	Gender, age, marital status, race, education, family income, age	Gender, marital status, child residence	Living with children was strongly and positively associated with positive affect for men, but not for women. Adult children who lived separately from parents were more beneficial to the positive affect of women than men.
		Happiness			Parents living with their children, compared with the nonparents, exhibited significantly lower levels of life happiness.
		Depression			Parents living separately from adult children, as compared to nonparents, were less depressed.
		Overall life satisfaction			Parents living with their children, compared with the nonparents, exhibited significantly higher levels of life satisfaction.
		Home life satisfaction			Parents living with their children exhibited significantly higher levels of home life satisfaction than nonparents.
		Self-esteem			Parents living with their children exhibited higher levels of self-esteem than nonparents.
		Meaninglessness			Parents living with their children exhibited lower levels of meaninglessness than nonparents.

(table continues)

Table 2 (continued)

Author and year	Participants (study; mean age)	Well-being	Demographic covariates	Moderators	Findings
L. K. White, Booth, & Edwards (1986)	N = 1,535	Marital happiness	Gender, race, wife's education, marital duration, family income, religiosity, wife's labor force participation, gender role traditionalism	Gender	The presence of children had a significant negative effect on marital happiness. Holding traditional views about the division of labor was positively related to husbands' marital happiness but negatively related to wives' marital happiness. Children were associated with less marital interaction. Children were associated with a more traditional division of labor. Children were associated with more financial dissatisfaction.
Transition to parenthood					
Ballas & Doring (2007)	N = 10,000 (British Panel Household Survey, 1992-1995)	Happiness			Pregnancy or birth of a child was associated with a gain in happiness.
Belsky & Isabella (1985)	N = 50 couples ($M_{\text{age}} = 29$)	Marital adjustment		Family of origin child-rearing history and marital history	Women who reported experiencing greater acceptance and less rejection while growing up reported more stable marital relationships across the transition to parenthood. Men who reported that their own parents had stable marital relationships displayed greater stability themselves across the transition to parenthood. Both mothers and fathers reported an overall decline in marital quality across the transition to parenthood. This effect was more pronounced for mothers.
Belsky & Rovine (1990)	N = 128 couples ($M_{\text{age}} = 28$)	Marital quality		Gender, age, education, duration of marriage, child temperament	Relatively younger ages, less education, and shorter duration of marriage were associated with declines in marital quality experienced by either the husband or the wife. Women who described their infant's temperament as more difficult also experienced declines in marital quality, but this finding did not hold for men. Parents who reported greater social support reported less depression across the transition to parenthood.
Bost, Cox, & Payne (2002)	N = 137 couples ($M_{\text{age}} = 28$)	Depression		Social support	

(table continues)

Table 2 (continued)

Author and year	Participants (study; mean age)	Well-being	Demographic covariates	Moderators	Findings
Ceballo, Lansford, Abbey, & Stewart (2004)	$N = 204$ parents (NSFH; $M_{\text{age}} = 36$)	Depression Life satisfaction Marital relationships (overall quality, disagreements)	Parents' age, gender, age of youngest child		Stepparents reported a decline in depressed affect and an increase in satisfaction across the transition to parenthood. Marital quality decreased over time for respondents who gained a biological child but did not significantly change for respondents who adopted a child. Disagreements between spouses increased following the addition of a child for both adoptive and biological parents. Fathers reported greater happiness, pride, excitement, and being loved after the birth of their child than during pregnancy. Fathers also reported heightened difficulties after the birth of their child, including insufficient sleep, difficulty calming their child, sexual problems, worries about the future, and coping with visitors. Spending leisure time with spouse predicted more love and less conflict between couples.
Chalmers & Meyer (1996)	$N = 115$ new fathers ($M_{\text{age}} = 28$)	Positive and negative emotions			Shared leisure and independent leisure declined for both husbands and wives across the transition to parenthood. Child's difficult temperament was associated with lower parental self-efficacy and higher rates of depression. Women with high levels of social support during pregnancy subsequently reported greater parental efficacy and lower depression.
Claxton & Perry-Jenkins (2008)	$N = 147$ married couples (Work and Family Transitions Project; $M_{\text{age}} = 28$)	Marital quality Leisure behavior	Marital status, work hours, family income, length of relationship	Child temperament, social support	Parents experienced a boost in satisfaction after the birth of a child but returned to their baseline levels of well-being by the time child was 2. Older parents reacted more positively to the birth of a child than did younger parents. Mothers experienced a bigger boost in satisfaction after the birth of a child than fathers.
Currona & Troutman (1986)	$N = 55$ mothers ($M_{\text{age}} = 27$)	Depression Parental self-efficacy		Gender, age of parent	Fatigue significantly increased after the birth of a child for both mothers and fathers. (table continues)
Dyrdal & Lucas (2013)	$N = 3,672$ (GSOEP; M_{age} at childbirth = 28)	Life satisfaction			
Elek, Hudson, & Fleck (2002)	$N = 44$ couples ($M_{\text{age}} = 27.55$)	Fatigue			

Table 2 (continued)

Author and year	Participants (study; mean age)	Well-being	Demographic covariates	Moderators	Findings
Feldman & Nash (1984)	$N = 31$ married couples ($M_{\text{age}} = 29$)	Mood Domain satisfaction		Gender	The transition to parenthood was associated with elevations in good mood. Transition to parenthood was associated with a decrease in satisfaction with spouse. The transition to parenthood was associated with both more positive and more negative changes for women than for men. The transition to parenthood was associated with increases in positive moods for women, but not for men. Transition to parenthood was associated with an increase in satisfaction with friendliness among women, but with a decrease in satisfaction with friendliness among men. The majority of parents experienced stable well-being following the birth of a child.
Galatzer-Levy, Mazursky, Mancini, & Bonanno (2011)	$N = 2,358$ (GSOEP; $M_{\text{age}} = 31$)	Life satisfaction	Gender, education, marital status, income	Education, marital status	Parents who experienced high stable well-being were more likely to be married and to be more educated. For mothers, higher levels of depression 6 months into parenthood were predicted by having less family income, being married, and having unplanned pregnancies. For fathers, higher levels of depression 6 months into parenthood were predicted by low family income and being unmarried. Working a greater number of hours predicted increases in depression for fathers. Increases in sense of control significantly predicted declines in parents' depression over time. Fathers reported more life satisfaction as children got older.
Keeton, Perry-Jenkins, & Sayer (2008)	$N = 153$ couples	Depression	Income, weekly work hours, married versus cohabiting status, planned versus unplanned pregnancy.	Gender	Fathers' feelings of depression increased when a child left the home. Fathers who initially had more children had more positive feelings of health with each new coresident child. Fathers' social activities declined, whereas their involvement in service organizations increased, with new coresident children. When a child left the home, fathers experienced increases in their social activities. Fathers reported slight increases in socializing as their children got older. (table continues)
Knoester & Eggebeen (2006)	$N = 3,088$ men (NSFH; $M_{\text{age}} = 40$)	Life satisfaction Depression Subjective health Social connection	Age, education, race, family income, marital status, fatherhood status, and number of children		

Table 2 (continued)

Author and year	Participants (study; mean age)	Well-being	Demographic covariates	Moderators	Findings
Lawrence, Rothman, Cobb, Rothman, & Bradbury (2008)	$N = 156$ couples ($M_{\text{age}} = 27$)	Marital satisfaction		Pregnancy planning, initial marital satisfaction, gender	Newlywed couples who demonstrated higher marital satisfaction were more likely to become parents in the first 5 years of marriage. New parents (both mothers and fathers) experienced steeper rates of decline in marital satisfaction, compared to nonparents. Pregnancy planning was associated with husbands' (but not wives') changes in marital satisfaction. Fathers of unplanned children demonstrated steeper declines in marital satisfaction.
K. A. Lee, Zaffke, & McEnany (2000)	$N = 33$ women ($M_{\text{age}} = 31$)	Sleep			Sleep disturbance was greatest during the first postpartum month, particularly for first-time mothers.
Miller & Sollie (1980)	$N = 109$ couples	Well-being			Personal well-being scores of new mothers were lower at 8 months postpartum than at 1 month postpartum; personal well being for fathers was lower at 8 months postpartum than during the pregnancy or at 1 month postpartum.
Simpson, Rholes, Campbell, Tran, & Wilson (2003)	$N = 106$ couples ($M_{\text{age}} = 29$)	Personal stress Marital stress Depression		Gender	Both new mothers and fathers reported more stress after they had become parents. New mothers, but not new fathers, reported higher stress in their marriages after the baby had been born than before, and even higher marital stress by 8 months postpartum. Neither men nor women reported significant changes in depressive symptoms. More ambivalently attached men and women, as well as more avoidantly attached men and women, reported more depressive symptoms. Mothers mentioned more positive things about parenthood than fathers and a similar number of negative things.
Wilkie & Ames (1986)	$N = 30$ couples ($M_{\text{age}} = 30$)	General feelings about parenthood Marital satisfaction Salience of parent identity State anxiety Depression		Gender Gender Gender Gender	Mothers were less satisfied than fathers since the birth of the baby. With increased infant crying, mothers judged that more of their identity was attributed to being a parent. Anxiety scores for men increased as the baby cried more. Mothers were more depressed than fathers. Depression of mothers and of fathers was correlated with the amount of infant crying.

(table continues)

Table 2 (continued)

Author and year	Participants (study; mean age)	Well-being	Demographic covariates	Moderators	Findings
Williams et al. (1987)	$N = 238$ women ($M_{age} = 27$)	Emotional state Parental confidence			Parental confidence was related to mothers' emotional well-being. Parental confidence was predicted by mothers' experience with infants and mothers' prenatal expectations about their ability to understand their infants' signals.
Wolfson Sirignano & Lachman (1985)	$N = 70$ ($M_{age} = 29$)	Global efficacy General parental efficacy Depression Anxiety		Gender Child temperament, gender Child temperament	New fathers showed greater increases in global efficacy than nonparents. Mothers showed an increase in parental efficacy, regardless of infant's temperament. The transition to parenthood was not associated with increased depression for mothers and fathers. Fathers who perceived their infant as easier in adaptability and positive mood showed significant decreases in anxiety as compared with nonparents.
Yamazaki, Lee, Kennedy, & Weiss (2005)	$N = 101$ families ($M_{age} = 31$)	Sleep rhythm Social rhythm		Gender Gender	Total sleep time reported by mothers decreased after birth (4–5 weeks postpartum), whereas, for fathers, there was no change in pre- and postpartum total sleep. For fathers, the birth of the first child was associated with fewer social activities and with more regular social rhythms. For mothers, social rhythms became less regular.
Delle Fave & Massimini (2004)	$N = 5$ married couples	Challenge Mood Engagement	Parents' experiences while with their children		Child-related activities were associated with high levels of challenge and engagement and with positive moods compared to average of parents' other daily activities.
Gorchoff, John, & Helson (2008)	$N = 123$ women (Mills Longitudinal Study; $M_{age} = 43$)	Marital satisfaction Life satisfaction			Transition to an empty-nest home was associated with increased marital satisfaction, but not with increased life satisfaction. (table continues)

Table 2 (continued)

Author and year	Participants (study; mean age)	Well-being	Demographic covariates	Moderators	Findings
Impett, English, & John (2011)	$N = 75$ women (Mills Longitudinal Study; $M_{age} = 61$)	Positive and negative emotions		Parents' attachment style	Women experienced more joy, love, and pride during positive events and more sadness during negative events when their children were present than when their children were not present. Women low in attachment avoidance experienced more pride and joy during positive events experienced with their children, but women high in avoidance did not experience greater pride during the presence of their children. During negative events, women low in attachment avoidance experienced less anger and less sadness during negative events experienced with their children, whereas women high in attachment avoidance did not experience such a change in emotions whether or not their children were present. Taking care of one's children was rated to be about as enjoyable as napping.
Kahneman, Krueger, Schkade, Schwarz, & Stone (2004)	$N = 909$ women	Positive and negative emotions			
Nelson et al., (2013, Study 3)	$N = 186$ ($M_{age} = 36$)	Positive affect (DRM) Meaning in life (DRM)			Parents reported more positive affect and meaning in life during episodes when they were taking care of their children than during episodes when they were not.
L. K. White & Edwards (1990)	$N = 402$ married individuals	Marital happiness	Age, gender, education, gender-role traditionalism, mother's employment status, number of children in household, presence of boys, presence of stepchildren, age of youngest child		When children left the home, parents experienced an increase in marital happiness.
M. P. White & Dolan (2009)	$N = 625$ ($M_{age} = 36$)	Life satisfaction Positive and negative affect Reward			When children left the home, life satisfaction did not change. Time with children ranked ninth from a list of 18 activities in terms of pleasure. Time with children ranked fourth from a list of 18 activities in terms of reward. (table continues)

Table 2 (continued)

Author and year	Participants (study; mean age)	Well-being	Demographic covariates	Moderators	Findings
Aber, Belsky, Slade, & Crnic (1999)	$N = 125$ mothers ($M_{\text{age}} = 28$)	Parents' relationships with children	Comparison of different types of parents	Parenting behaviors, daily hassles	More positive parenting was associated with increases in mothers' representations of their children in terms of joy, pleasure, and coherence. As mothers experienced more parenting hassles, their representations of their child increased in anger. Child-centrism (putting the interests of one's child before one's own interest) was positively related to both subjective well-being and meaning in life derived from children. Child-centrism was positively related to meaning and positive affect and negatively related to negative affect, specifically during child care.
Ashton-James, Kushlev, & Dunn (2013, Study 1)	$N = 136$ ($Mdn_{\text{age}} = 34$)	Subjective well-being derived from children Meaning in life derived from children			
Ashton-James et al. (2013, Study 2)	$N = 186$ ($Mdn_{\text{age}} = 36$)	Positive affect (DRM)			
Avison, Ali, & Walters (2007)	$N = 837$ mothers ($M_{\text{age}} = 37$)	Negative affect (DRM) Meaning in life Depression	Age, education, number of children under 17, employment status	Caregiving strain, financial strain, maternal psychopathology, paternal psychopathology, work-home strain, events to self, events to others	Single mothers experienced higher levels of depressive symptoms than married mothers. Employed mothers experience lower levels of depression than unemployed mothers. Caregiving strain increased distress for single mothers more than for married mothers. All stressors (caregiving strain, work strain, financial strain, and the number of personally experienced stressful life events) were related to higher levels of depression among parents. Perceived collective family efficacy (whether measured by parents or children) was associated with higher levels of family satisfaction.
Bandura, Caprara, Barbaranelli, Regalia, & Scabini (2011)	$N = 142$ families ($M_{\text{age}} = 46$)	Family satisfaction			

(table continues)

Table 2 (continued)

Author and year	Participants (study; mean age)	Well-being	Demographic covariates	Moderators	Findings
Belsky, Crnic, & Woodworth (1995)	$N = 69$ married couples ($M_{\text{age}} = 30$)	Positive and negative affect		Personality (neuroticism, agreeableness, extraversion)	Mothers high in neuroticism experienced fewer positive and more negative moods, and mothers high in agreeableness experienced more positive and fewer negative moods. Fathers high in neuroticism reported higher negative mood. Fathers high in extraversion reported more positive mood and less negative mood. Fathers high in agreeableness reported more positive mood and less negative mood.
Birditt, Fingerman, & Zarit (2010)	$N = 633$ (Family Exchanges Study; $M_{\text{age}} = 51$)	Relationship ambivalence	Marital status, education, number of children, ethnicity, income, personality, health, child gender, child age, child marital status, child education, child employment, child parent status	Child problems	Children's problems were associated with greater parent-child relationship ambivalence.
Birditt, Miller, Fingerman, & Lefkowitz (2009)	$N = 474$ (Adult Family Study; $M_{\text{age}} = 62$)	Affective solidarity	Ethnicity, education, self-rated health, social desirability, age of child, gender of child, gender of parent		More intense relationship tensions between parent and child, as well as more intense individual tensions, were associated with less affective solidarity.
Borders, Black, & Pasley (1998)	$N = 144$ (NSFH; $M_{\text{age}} = 42$)	Relationship ambivalence Happiness Depression		Family structure	More intense parent-child relationship and individual tensions predicted greater relationship ambivalence. No significant differences were detected between biological and adoptive parents on happiness or depression.
Conger, McCarty, Yang, Lahey, & Kropp (1984)	$N = 74$ mothers ($M_{\text{age}} = 28$)	Emotional distress Negative perceptions of children Emotions during interactions with children	Maternal age at first birth, family income, mother's education, public assistance, parents in the home, number of children	Parent age, income, education	Maternal age at first birth, family income, and mother's education were all associated with less emotional distress. Mother's education was associated with fewer negative perceptions of the child, and having more children in the home was associated with greater negative perceptions.

(table continues)

Table 2 (continued)

Author and year	Participants (study; mean age)	Well-being	Demographic covariates	Moderators	Findings
Crnic & Greenberg (1990)	$N = 74$ mothers ($M_{\text{age}} = 28$)	Parenting daily hassles Distress Parenting satisfaction Positive parenting behaviors		Employment status, education, mother's age, child problems, social support	Mothers who worked outside the home reported fewer hassles and lower intensity of hassles. Mother's age and education were not associated with hassles. Having children with behavioral problems was associated with greater frequency and intensity of hassles experienced by the mother. Having children with greater social competence was associated with lower frequency and intensity of hassles. Presence of social support moderated the impact of life stress on distress, parenting satisfaction, and positive parenting behaviors. Single parents reported higher rates of depression and alcohol abuse than married parents.
Cunningham & Knoester (2007)	$N = 3,975$ (NSFH); $M_{\text{age}} = 38$	Depressive symptoms Alcohol abuse Financial and work demands	Education, hours worked per week, race/ethnicity, age, recent marital breakup, presence of a coresident adult or romantic partner, number of children	Marital status, gender	Mothers reported more traditional symptoms of depression, whereas fathers reported more alcohol abuse. Economic strain, responsibilities for child care and housework, social support, and religiousness partially mediated the links between gender, family structure, and depressive symptoms. Mothers in their first marriage reported greater happiness than divorced mothers, single mothers, and mothers in stepfamilies. Mothers in stepfamilies also reported greater happiness than single and divorced mothers. Mothers in their first marriage reported lower depression than divorced mothers, mothers in stepfamilies, and single mothers. Mothers in stepfamilies also reported lower depression than divorced and single mothers. Single mothers reported lower self-esteem than mothers in their first marriage, divorced mothers, or mothers in stepfamilies.
Demo & Acock (1996)	$N = 2,781$ mothers	Happiness Depression Self-esteem		Marital status	Mothers in their first marriage reported greater happiness than divorced mothers, single mothers, and mothers in stepfamilies. Mothers in their first marriage reported lower depression than divorced mothers, mothers in stepfamilies, and single mothers. Mothers in stepfamilies also reported lower depression than divorced and single mothers. Single mothers reported lower self-esteem than mothers in their first marriage, divorced mothers, or mothers in stepfamilies.

(table continues)

Table 2 (continued)

Author and year	Participants (study; mean age)	Well-being	Demographic covariates	Moderators	Findings
Fine, Schwebel, & Myers (1985)	$N = 146$ single mothers ($M_{\text{age}} = 35$)	Satisfaction with motherhood Anxiety Depression		Race, culture	Black single mothers reported greater satisfaction with motherhood than White single mothers. Black mothers who were more Afrocentric reported lower levels of anxiety and depression and greater satisfaction with motherhood.
Fingerman, Cheng, Birditt, & Zarit (2012)	$N = 633$ (Family Exchanges Study; $M_{\text{age}} = 51$)	Life satisfaction and depression	Gender, age, marital status, education, income, minority status, number of children in family	Child problems	Parents with at least one child experiencing problems experienced lower well-being. Parents with at least one child successful did not experience greater well-being.
Fingerman, Pitzer, Lefkowitz, Birditt, & Mroczek (2008)	$N = 158$ families (Adult Family Study)	Parent-child relationship quality			Total number of family successes was associated with more positive relationship quality, and total number of family problems was associated with lower relationship quality.
Garrison, Blalock, Zarski, & Merritt (1997)	$N = 69$ couples ($M_{\text{age}} = 49$)	Life satisfaction and depression Marital satisfaction Parenting stress	Gender, ethnicity, age, education		Parents who experienced mixed emotions in their relationships with their children reported lower psychological well-being. Families who delayed parenthood reported higher marital satisfaction and less parenting stress than a normative sample.
Gelfand, Tei, & Radin Fox (1992)	$N = 124$ mothers ($M_{\text{age}} = 29$)	Parenting stress Daily hassles Marital harmony Social support		Child temperament	Depressed mothers reported more parenting stress, more daily hassles, less marital harmony, and less social support than nondepressed mothers. Mothers of temperamentally difficult infants reported greater stress, regardless of their depression status.
Holmes, Erickson, & Hill (2012)	$N = 1,141$ (Study of Early Child Care)	Depression Parenting stress	Marital status, ethnicity, education, income	Employment status, education, social support	Mothers who completed high school reported lower levels of depression and less stress than mothers who did not complete high school. Greater social support was associated with lower depressive symptoms and less stress. Working moms reported more depressive symptoms than stay-at-home moms. Mothers who increased their working hours reported relatively fewer depressive symptoms and less stress.

(table continues)

This document is copyrighted by the American Psychological Association or one of its allied publishers. This article is intended solely for the personal use of the individual user and is not to be disseminated broadly.

Table 2 (continued)

Author and year	Participants (study; mean age)	Well-being	Demographic covariates	Moderators	Findings
Ishii-Kuntz & Ihinger-Tallman (1991)	N = 1,002 (Quality of American Life Survey)	Life satisfaction Marital satisfaction	Race, marital status, age of parent, age of child, income, education, length of marriage, number of children		No differences in marital satisfaction or in life satisfaction were observed between first-married biological parents, remarried biological parents, and stepparents.
Kiecolt, Blieszner, & Savla (2011)	N = 885	Parental satisfaction Depressive symptoms	Age, race, education, previous divorcees, number of children, child's age, geographical distance from the parent, stepchild status.	Child problems	First-married biological parents reported the highest parental satisfaction, and stepparents reported the lowest levels of parental satisfaction. Having children with problems and conflict with a spouse or partner were associated with greater depressive symptoms.
Kimminen, Feldt, Geurts, & Pulkkinen (2006)	N = 202 ($M_{age} = 42$)	Happiness Marital satisfaction	Gender, SES, number of children, total working hours per week		For parents, being partnered, employed, or in better health boosted happiness, whereas marital conflict undermined it. Workers who perceived a negative family-to-work spillover reported lower marital satisfaction.
Krueger et al., (2009)	N = 1,630 women	Psychological distress Positive and negative emotions (DRM)	Gender, SES, number of children, total working hours per week		Workers who perceived their work as positively affecting their family life suffered less psychological distress. Americans reported child care episodes as substantially more unpleasant than did the French; the French spent less time engaged in child care than Americans. Higher SES parents reported lower levels of meaning when taking care of their children.
Kushlev, Dunn, & Ashton-James (2012, Study 1) Lansford, Ceballo, Abbey, & Stewart (2001)	N = 186 ($M_{age} = 36$) N = 799 families (NSFH)	Meaning in life (DRM) Depressive symptoms Self-esteem and self-efficacy Life satisfaction	SES, number of years of education completed by the mother, length of time the parents had been in their present marital status, number of hours per week the mother worked outside the home, age of the parent		Single mothers reported more depressed affect, lower self-esteem and self-efficacy, and lower life satisfaction than other mothers.

(table continues)

Table 2 (continued)

Author and year	Participants (study; mean age)	Well-being	Demographic covariates	Moderators	Findings
Larson, Richards, & Perry-Jenkins (1994)	$N = 55$ families ($M_{\text{age}} = 39$)	Affect			Fathers experienced more positive emotional states than mothers in the family sphere; mothers experienced more positive emotional states in the public sphere. Fathers spent less time in child-related activities, and they experienced more positive emotional states during child-related activities than mothers.
MacEwen & Bartling (1991)	$N = 147$ mothers ($M_{\text{age}} = 36$)	Cognitive difficulties Negative mood	Age, education Age, education		Interrole conflict was associated with greater cognitive difficulties. Interrole conflict was associated with increased negative mood. Role satisfaction as a working mother was associated with decreased negative mood.
McBride, Schoppe, & Rane (2002)	$N = 100$ families ($M_{\text{age}} = 32$)	Parenting stress	Mother's employment		For both fathers and mothers, children perceived as less emotionally intense were less stressful.
Milkie, Bianchi, Mattingly, & Robinson (2002)	$N = 234$ married parents ($M_{\text{age}} = 39$)	Stress	Age, gender, education, income, race, weekly work hours, region of the country, number of adults and children at home		Mothers who said that fathers were less involved in child rearing than they considered ideal reported more stress than mothers without such gaps. Mothers who reported that fathers were more involved in breadwinning than was ideal also reported less stress. Fathers who reported that they were more involved than ideal in child-rearing playing reported less stress.
Minton & Pasley (1996)	$N = 270$ fathers ($M_{\text{age}} = 39$)	Parenting role identity	Income		Divorced fathers reported feeling less competent and less satisfied than nondivorced fathers but perceived the father role to be more salient.
Mirowsky & Ross (2002)	$N = 2,592$ (U.S. 1995 survey of Aging, Status, and the Sense of Control)	Depression	Age, minority status, education	Gender, age at first birth	The depression of male parents declined with increasing age at first birth. For females, a U-shaped relationship was observed, with 30 being the age of first birth associated with the lowest depression.
Munch, McPherson, & Smith-Lovin (1997)	$N = 818$ (Ten Towns Study, 1989; $M_{\text{age}} = 51$)	Current health Network size	Age, minority status, education Age, gender, marital status, employment of children, education	Gender, age at first birth Gender	For women, being 30 or older at first birth was associated with more health problems. Gender was a significant moderator of the effect of parenthood on network size: Having a young child had no statistically significant effect on men's network size, but it had a significant effect in the negative direction for women. Women's networks were largest when children were infants, reached their minimum when children were about age 3, and then began to rebound.
		Contact volume			Having a young child had no statistically significant effect on men's contact volume, but it had a significant effect in the negative direction for women.

(table continues)

Table 2 (continued)

Author and year	Participants (study; mean age)	Well-being	Demographic covariates	Moderators	Findings
Nomaguchi, Milkie, & Bianchi (2005)	<i>N</i> = 860 parents (National Study of the Changing Workforce, 1997).	Feelings of time strain with children	Age, race, education, income, number of children, presence of preschool-age children		Fewer mothers than fathers felt they did not have enough time with their children (64% for mothers vs. 71% for fathers).
		Feelings of time strain with spouse	Age, race, education, income, number of children, presence of preschool-age children		Fewer mothers than fathers felt that they did not have enough time with their spouse (69% for mothers and 74% for fathers).
		Feelings of time strain for oneself	Age, race, education, income, number of children, presence of preschool-age children		More mothers than fathers reported that the time they had for themselves was not enough (79% of mothers vs. 61% of fathers).
		Distress			Mothers were more likely than fathers to be distressed.
		Life satisfaction			No gender differences in life satisfaction were observed.
		Family satisfaction			No gender differences in family satisfaction were observed.
Papp, Cummings, & Goeke-Morey (2002)	<i>N</i> = 47 married couples (<i>M</i> _{age} = 38)	Marital conflict			About 34% of the fathers' reports and 37% of the mothers' reports of conflict involved conflicts that took place when children were present. Both fathers and mothers reported more emotional distress during conflict and generally higher rates of destructive conflict tactics when children were present than when they were absent.
Pett, Vaughan-Cole, & Wampold (1994)	<i>N</i> = 203 families (<i>M</i> _{age} = 32)	Mother's feelings of well-being			Divorced mothers reported lower levels of well-being than married mothers.
		Mother's perceived daily stress			Divorced mothers were significantly more stressed and reported less satisfactory adjustment than married mothers.
Richards & Schmiede (1993)	<i>N</i> = 71 (Longitudinal Study of Generations)	Perceptions of single-parenting stress			78% of mothers said they faced money problems; 18% of fathers said they faced money problems.
		Perceptions of single-parenting strengths			Parenting skills were a source of pride to a majority of mothers and fathers, and family management abilities were mentioned by approximately 40% of all parents.
Rizzo, Schiffrin, & Liss (2013)	<i>N</i> = 181 mothers	Depression Life satisfaction Stress			Beliefs that the mother is the better parent and that parenting is challenging, as well as adopting a child-centered parenting style, were associated with lower levels of life satisfaction, higher rates of depression, and more stress.

(table continues)

Table 2 (continued)

Author and year	Participants (study; mean age)	Well-being	Demographic covariates	Moderators	Findings
Rogers & White (1998)	$N = 1,248$ parents (Marital Instability Over the Life Course Study; Booth, Amato, Johnson, & Edwards, 1993; $M_{\text{age}} = 43$)	Parent satisfaction		Gender, family structure	Parenting satisfaction depended on marital happiness, family structure, and parents' gender. Having stepchildren was associated with lower feelings of satisfaction with the parenting role. Fathers reported significantly lower parental satisfaction than mothers. Marital happiness was positively related to parenting satisfaction.
Sheeber & Johnson (1992)	$N = 77$ mothers ($M_{\text{age}} = 33$)	Anxiety Parenting stress Daily family functioning			Mothers of temperamentally difficult preschool children were more prone to anxiety and depression and to experiencing doubts about their competence as parents. Mothers of temperamentally difficult preschool children reported more psychosocial difficulties than did their cohorts with easier children. Increasingly difficult temperament in a child was predictive of poorer maternal and family functioning. Mothers of difficult children also reported greater difficulties in their relationships with their husbands.
Simon (1992)	$N = 448$ ($M_{\text{age}} = 36$)	Psychological distress	Age, gender, marital status, race, education, income, number of children under 18, employment status, whether at least one of the respondent's minor children resides in the household	Parental commitment, work-home conflict	Strains in the parental role had a significant effect on distress only for high-commitment parents. Strain from combining parenthood with employment increased distress.
Thoits (1992)	$N = 700$ ($M_{\text{age}} = 40$)	Psychological distress		Gender, self-identity	Stepparents were significantly more emotionally distressed than nonstepparents. Husband-fathers with children at home who did not claim a worker identity were more distressed than average, whereas those who claimed the worker identity were less distressed. When they lacked a work identity, divorced custodial mothers were significantly more distressed than the adjusted average person.

(table continues)

Table 2 (continued)

Author and year	Participants (study; mean age)	Well-being	Demographic covariates	Moderators	Findings
Umberson (1989)	$N = 1,502$ (U.S. National Probability Survey, 1974–1975)	Parent–child relationship quality	Gender, race, education, income, marital status, employment status	Gender	Parent–child relationship quality was positively related to age. Divorce was associated with significantly lower levels of parent–child relationship quality. Widowhood was also associated with lower parent–child relationship quality for fathers. Parent–child relationship quality was adversely affected by living with children for fathers.
Vanassche, Swicegood, & Matthijs (2013)	$N = 14,276$ (International Social Survey Programme).	Happiness	Age, education, employment status, situation of spouse, household income	Gender	For men, the effect of young children on happiness was dependent on the broader appreciation of parenthood within a society.
Zimmermann & Easterlin (2006)	$N = 1,733$ (GSOEP; $M_{age} = 29$)	Life satisfaction	Age, gender, income, education, employment, religiosity	Marital status	There was no significant effect of number of children on life satisfaction either for individuals who remained married or for those who did not.

Note. AVTMH = Americans View Their Mental Health; DRM = Day Reconstruction Method; ESS = European Social Survey; GSOEP = German Socioeconomic Panel; GSS = General Social Survey; MIDUS = National Survey of Midlife Development in the United States; NSFH = National Survey of Families and Households; SES = socioeconomic status.

toward them, thus enhancing their survival. Indeed, the satisfaction of each of the fundamental human needs prioritized before parenting has been shown to predict greater well-being (see Lyubomirsky & Boehm, 2010, for a review). It will surprise no one, for example, that satisfying their physiological need for food makes people happy (Desmet & Schifferstein, 2008; Macht & Dettmer, 2006; Smith, Kendrick, Maben, & Salmon, 1994). Furthermore, the satisfaction of higher order needs—affiliation, self-esteem, mate acquisition—is consistently associated with greater well-being (Diener & Diener, 1995; Knowles & Gardner, 2008; Lucas et al., 2003). Because parenting is postulated to be the highest human need—one that is evolutionarily adaptive and hard-wired—successfully raising children to adulthood should be related to relatively greater well-being as well (Schaller, Neuberg, Griskevicius, & Kenrick, 2010).

Two issues need to be considered when evaluating the effect of parenthood on well-being from the evolutionary need perspective. First, working toward the satisfaction of a fundamental need is not the same as satisfying that need. Just as running from a tiger for safety is not psychologically pleasant but successfully managing to escape with one's life is, so many of the activities associated with raising children may not be rewarding in and of themselves. Rather, the psychological benefits of having children may be reaped only when the goal of parenting—to raise children who will be able to pass on one's genes—is being fulfilled (e.g., one's children take their first steps, learn to read, graduate, or find a high-quality mate; Schaller et al., 2010). Second, successfully accomplishing high-level needs (e.g., having children) will not bring happiness if low-level needs (e.g., hunger or safety) remain unfulfilled. Thus, parents who are chronically hungry or reside in dangerous neighborhoods, for example, are unlikely to feel happy regardless of how successful their children might be. From this perspective, to the extent that parenting might interfere with some of the other basic needs, such as safety, affiliation, or mate retention, parenting may compromise rather than enhance well-being.

Psychological need satisfaction perspective. A parallel perspective on human needs comes from self-determination theory, which postulates that humans have three basic needs—autonomy (a sense of control over one's own choices), connectedness (feeling close and connected to others), and competence (feeling that one is effective and skilled)—and that the fulfillment of these needs promotes optimal well-being (Deci & Ryan, 2000, 2008). Thus, to the extent that parenthood enhances feelings of autonomy, connectedness, and competence, it should be associated with greater well-being.

Research has provided preliminary support for the role of these three needs in parents' well-being. First, overall family efficacy, and parental sense of efficacy specifically, significantly predicts greater satisfaction with family life (Bandura, Caprara, Barbaranelli, Regalia, & Scabini, 2011). Furthermore, parental confidence, a related construct, is linked to higher emotional well-being (Williams et al., 1987). Despite this preliminary evidence, to our knowledge, no studies have tested whether having children increases parents' sense of general competence or whether parental competence boosts overall happiness. Future research should explore in more detail the role of general competence (in addition to parental competence) in parents' well-being.

Second, children may serve as continual sources of love and closeness, which are important components of connectedness. For

example, one potential indicator of connectedness with a child—parent–child attachment—has been theorized to emerge within a year after the child’s birth and to enhance well-being (Bowlby, 1982). Further supporting the role of connectedness, one study showed that mothers who described their relationships with their toddlers relatively more positively experienced greater joy and pleasure, especially if that positivity continued to grow over the year (Aber, Belsky, Slade, & Crnic, 1999). On the other hand, conflict with children, which may compromise feelings of connectedness, has been linked to lower well-being among parents (Birditt, Fingerman, & Zarit, 2010; Kiecolt, Bleszner, & Savla, 2011).

Having children may also provide parents with new opportunities to develop relationships with family, friends, and neighbors. Indeed, one study found that new parents showed higher levels of social integration with friends, relatives, and neighbors than those who remained childless (Nomaguchi & Milkie, 2003). As with competence, understanding the role of connectedness is a fertile area for further research on parents’ well-being. Future studies might aim to demonstrate the mediational role of connectedness—for example, by using longitudinal designs to test whether increases in connectedness with children are associated with subsequent increases in well-being.

Finally, parenthood may increase feelings of autonomy because, perhaps more than any other life passage, having a child heralds one’s debut into adulthood and signifies having control over one’s actions and outcomes (Benson & Furstenberg, 2006). In turn, this increase in autonomy is likely to lead to improvements in well-being (cf. Reis, Sheldon, Gable, Roscoe, & Ryan, 2000). For example, autonomy during pregnancy predicts well-being across the transition to parenthood (Grossman, Pollack, Golding, & Fedele, 1987), and sense of control is associated with fewer symptoms of anxiety and depression across the transition to parenthood (Keeton, Perry-Jenkins, & Sayer, 2008).

By contrast, parenthood may not lead to greater autonomy when daily (as opposed to global) autonomy is considered. For example, a new mom may feel a loss of control over her time when her infant dictates her schedule with his needs for feeding, diapering, and napping. Supporting this alternative hypothesis about the influence of parenthood on day-to-day autonomy, parents have relatively less leisure time, and these declines in leisure are associated with lower marital quality (Claxton & Perry-Jenkins, 2008); to our knowledge, however, no study has examined the influence of parents’ leisure time on global well-being. Future research could investigate the interplay between global and daily feelings of autonomy to understand its overall influence on parents’ well-being.

In short, both evolutionary theory and self-determination theory provide clues about why parenting may be associated with the satisfaction of fundamental human needs and how this path promotes well-being. Much more research, however, is needed to fully understand the relationship between parenting and need satisfaction. Future investigators could examine more directly the effect of parenthood on the satisfaction of people’s basic needs of autonomy, relatedness, and competence—and their downstream consequences for parents’ well-being—by examining these needs across the transition to parenthood, between parents and nonparents, and during parents’ time spent with children.

Positive emotions. Most children infuse a great deal of positive emotions into their parents’ lives. Parents may experience profound feelings of pride and joy from witnessing their children’s first words or steps or from watching them win an award, graduate from high school, or get married. Similarly, anecdotal evidence suggests that children are a reliable source of positive emotions because they can be amusing, entertaining, and simply fun to be around. Parents undeniably enjoy listening to and sharing their child’s stories, and popular media has capitalized on this phenomenon in programs such as *Kids Say the Darndest Things!* (Schotz, Paolantonio, & Linkletter, 1998). The experience of a range of pleasant emotions is an important component of well-being and contributes to what makes one feel alive (Loewenstein & Ubel, 2008). In addition, positive emotions are linked to the experience of other rewarding aspects of life, such as enhanced life satisfaction (e.g., Schimmack, Diener, & Oishi, 2002).

Multiple investigations using different methodologies support the link from parenthood to enhanced positive emotions. Experience sampling and daily diary studies show that parents experience more positive emotions in their daily lives than nonparents (Nelson et al., 2013, Study 2) and more positive emotions when they are with their children than during their other daily activities (Delle Fave & Massimini, 2004; Nelson et al., 2013, Study 3). Moreover, fathers with children in the home experience greater positive emotions than nonparents (Umberson & Gove, 1989). Mothers experience more positive emotions from positive events experienced with their children than from positive events experienced without their children (Impett, English, & John, 2011). Finally, work has also indicated that both mothers and fathers experience more positive emotions following the birth of their child than during pregnancy (Chalmers & Meyer, 1996; Feldman & Nash, 1984).

In addition to being a direct source of positive emotions themselves (Nelson et al., 2013, Study 3), children may also enhance positive emotions by injecting a greater variety of experiences into their parents’ lives. Past research has demonstrated that variety is an important predictor of sustained well-being (Sheldon, Boehm, & Lyubomirsky, 2012; Sheldon & Lyubomirsky, 2012). Being a parent may increase well-being through its influence on the intensity and variety of positive experiences. By continually changing and growing, children bring novelty, variety, and surprise into their parents’ lives, which can forestall hedonic adaptation to positive circumstances and prevent boredom. Despite evidence for the role of variety in well-being in general, no studies have examined the impact of variety specifically on parents’ happiness. Future research examining this possibility would advance understanding of parents’ sources of positive emotions.

Social roles. Research on social roles suggests that holding multiple roles is advantageous for both mental and physical health (Barnett & Hyde, 2001; Thoits, 1992), in part because the rewards or successes in one role can offset the stresses or disappointments of another. Fathers, for example, are less likely to feel distress after negative experiences at work when they have positive relationships with both their wives and their children (Barnett, Marshall, & Pleck, 1992). This research suggests that parents may benefit from their parenting role via positive relationships with their children. In turn, parenthood may be associated with higher ability to deal with stress in other domains, thus potentially enhancing overall well-being.

Social roles may be particularly beneficial when one feels called to fulfill those roles (Bellah, Madsen, Sullivan, Swidler, & Tipton, 1985). A calling invokes themes of identity, passion, life purpose, meaningful contribution, and awareness of the role (Coulson, Oades, & Stoyles, 2012), and parenting has been theorized as a role that people naturally feel called to fulfill (Baumeister, 1991). Indeed, because evolutionary theorists have placed parenting at the top of the pyramid of human needs (Kenrick et al., 2010), being a parent may be a social role that people are hard-wired to fulfill.

Despite the strong theoretical reasons for postulating that parenthood may be a calling for most parents, little empirical evidence exists to support the idea directly. Research suggests, however, that being a parent is indeed associated with a greater sense of purpose and meaning (Nelson et al., 2013; Umberson & Gove, 1989; M. P. White & Dolan, 2009), which provides indirect evidence that parenting enriches one's identity. Future research should directly explore the extent to which becoming a parent is associated with enrichment of one's identity and with feeling called to the parenting role, as well as the conditions under which the role of being a parent (vs. a spouse, worker, etc.) predicts well-being.

Why Children Might Lead to Less Happiness

Just as anecdotal evidence indicates that children are a fount of happiness, it also suggests that they are a source of stress (Hansen, 2012). In the words of one psychologist, “[Children] are a huge source of joy, but they turn every other source of joy to shit” (Senior, 2010, p. 3). Hence, theory and empirical evidence suggest multiple reasons that children might be associated with decreased well-being: negative emotions, sleep disturbance and fatigue, strained partner relationships, and financial strain.

Negative emotions. Just as raising a child may provide many opportunities for positive emotions, such as delight or pride in the child's accomplishments, it may also provide many opportunities for negative emotions, such as frustration with a toddler's defiance, disappointment over a middle schooler's laziness, or worry over a teen's moodiness. Of all these negative emotions, anxiety and worry may be the most prevalent. To some degree, parents' vigilance and concern are evolutionarily adaptive, as parents must protect their vulnerable offspring from potential threats (Hahn-Holbrook, Holbrook, & Haselton, 2011). Yet parents often worry excessively about their children's safety. Supporting this claim, one study revealed that parents worry a great deal about their children's welfare, including concerns about their children's health (e.g., that they would get cancer) and safety (e.g., that they would be abducted). Indeed, parents were more troubled about these negative outcomes than the statistical risk of such outcomes warranted (Stickler, Salter, Broughton, & Alario, 1991). In addition, a nationally representative study comparing the emotions reported by parents and nonparents revealed that parents report more negative feelings associated with anxiety, such as being fearful, restless, and worried (Simon & Nath, 2004).

Like worry and anxiety, caring for children may also be associated with frustration and anger, in part due to children's defiance of parents' authority. Indeed, several studies have shown that, compared to nonparents, parents report feeling more anger (Ross & Van Willigen, 1996; Simon & Nath, 2004), and caring for children was ranked as one of the most negative-affect-eliciting

activities (second to working; Kahneman et al., 2004). In sum, parenthood may reduce well-being by heightening negative emotions—especially worry, anxiety, and anger.

Sleep disturbance and fatigue. Parents may also be more susceptible than their childless counterparts to experiencing sleep disturbance and fatigue, especially when children are young. In one survey, for example, insufficient sleep was one of the most commonly reported problems experienced in the first months of parenthood (Chalmers & Meyer, 1996). In addition, studies using both self-report and objective measures of sleep have shown that people report relatively more sleep problems after the birth of a child (Gay, Lee, & Lee, 2004; K. A. Lee, Zaffke, & McEnany, 2000; Yamazaki, Lee, Kennedy, & Weiss, 2005). These disturbances may be one source of decreased well-being, especially among parents of infants and toddlers. In fact, a restful night's sleep and early bedtime are associated with cheerfulness the following day (Totterdell, Reynolds, Parkinson, & Briner, 1994), whereas sleep deprivation is followed by increases in levels of anger and hostility (Selvi, Gulec, Agargun, & Besiroglu, 2007) and decreases in friendliness, elation, and positive mood (Acheson, Richards, & de Wit, 2007). In addition, sleep deprivation negatively impacts many cognitive resources, such as cognitive flexibility (Leonard, Fanning, Attwood, & Buckley, 1998) and attention (Van Dongen, Maislin, Mullington, & Dinges, 2003), that may be particularly valuable for regulating emotion and solving problems endemic to the challenges of child rearing (Medina, Lederhos, & Lillis, 2009). Consistent with all of the above findings, sleep deprivation has been shown to predict parental depression after childbirth (Evenson & Simon, 2005).

In addition to the disruptions to sleep that parents typically experience when their children are young, the many tasks and chores associated with parenthood may contribute to persistent fatigue, which can also depress well-being among parents. Consistent with this argument, a recent meta-analysis revealed that parents, who were less physically active than nonparents, cited fatigue as a primary barrier to activity (Bellows-Riecken & Rhodes, 2008). In addition, child care is associated with higher levels of tiredness than virtually all other daily activities except, not surprisingly, napping (Kahneman et al., 2004), and a majority of parents report that their least enjoyable aspect of parenthood is being on call 24/7 and having little time for themselves (Feldman & Nath, 1984). Finally and not surprisingly, new mothers and fathers report greater fatigue after the birth of their child than during the final month of pregnancy, with higher levels of fatigue being associated with higher rates of depression and lower marital satisfaction (Elek, Hudson, & Fleck, 2002).

In short, extensive evidence suggests that parents of young children are especially prone to experiencing sleep disturbances, which in turn have been associated with negative emotions, depression, and reduced cognitive function. Given these negative effects of sleep disturbance, researchers would do well to examine the conditions under which sleep disturbance occurs and how its effects can be mitigated. The well-known adage that “it takes a village to raise a child” provides one insight for researchers to explore. Specifically, sleep problems associated with having a child may be especially present in modern advanced economies, where parents and their children tend to live away from their extended families. Traditionally, family members such as grandparents, aunts, and uncles may have provided much needed sup-

port and help in child raising, especially to new parents, thus alleviating the extent of sleep disturbance associated with caring for a newborn child. Similarly, greater participation of women in the workforce today, combined with short maternity leaves, may further be aggravating the problem. This leads to the specific testable prediction that parents in countries with longer maternity leaves and greater familial support in child raising may experience less sleep disturbance and fatigue and therefore be able to enjoy relatively greater well-being in the first few years after childbirth.

Strained partner relationships. The stress and strain of parenthood also extend to the marital relationship. A multitude of studies indicate that marital satisfaction declines after the birth of a child (e.g., Belsky & Pensky, 1988; Lawrence et al., 2008), with a meta-analysis of the literature revealing a small but reliable negative association between children and marital happiness ($r = -.10$; Twenge et al., 2003). Some factors that may contribute to reduced marital happiness are the declines in spousal support and quality time spent together (L. K. White, Booth, & Edwards, 1986) and more frequent conflict (Papp, Cummings, & Goeke-Morey, 2002) after having children. As young children grow into adolescents, parents' disagreements over how to raise them are associated with declines in marital satisfaction (Cui & Donnellan, 2009).

In light of previous research suggesting that marital satisfaction and life satisfaction are positively related (Schwarz, Strack, & Mai, 1991), children may reduce parents' overall well-being through their impact on the parents' relationship with one another. Identifying methods to protect relationship quality after the birth of a child is an important area of future research. Sharing equal responsibility between partners in child rearing, for example, may buffer some of the negative effects of having children on marital satisfaction by alleviating excessive (and uneven) stress and fatigue and by helping foster feelings of shared responsibility and role fulfillment.

Financial strain. Relative to their childless peers, parents typically make multiple financial sacrifices—paying, for example, for their children's food, clothing, medical care, and schooling. Not surprisingly, past research suggests that having children in the home increases financial strain (McLanahan & Adams, 1987; Ross & Van Willigen, 1996; Umberson & Gove, 1989) and dissatisfaction with one's financial situation (Zimmermann & Easterlin, 2006). In turn, financial strain is associated with higher rates of depression among mothers (Jackson, Brooks-Gunn, Huang, & Glassman, 2000). Thus, it appears that children may be associated with decreases in parents' well-being due to their influence on financial stress. However, to our knowledge, only one study has tested financial stress as a mediator, finding that economic hardship mediates the link between parenthood and psychological distress (Bird, 1997). Including measures of income and other indicators of economic hardship would be desirable in future research to allow investigators to directly explore the role of financial strain as a mediator of the link between parenthood and reduced well-being.

Investigating the mediating role of financial hardship also holds potential to explain why a number of other factors are associated with lower well-being among parents. For example, lack of extended family and social support may be particularly detrimental when parents are also experiencing financial difficulties. In addition, cross-national variation in social services for parents may

impact their well-being through its effect on financial strain. Thus, exploring the role of financial strain in parents' well-being is a potentially fruitful and important area for future research.

Summary

Few theories to date have been developed to explain why parenthood may be related to higher or lower well-being. To provide a theoretical framework capable of buttressing the mixed research findings, we propose a number of processes—both promoting and inhibiting—by which parenthood may lead to greater versus lower well-being (see Figure 1). Specifically, with respect to the path from parenthood to greater well-being, evidence supports the role of purpose in life, and theory and some empirical evidence also suggest an important role for need satisfaction, positive emotions, and the availability of multiple social roles. Regarding the path from parenthood to lower well-being, considerable evidence attests to the roles of negative emotions, sleep disturbance and fatigue, and strained partner relationships, and some evidence supports the role of financial strain. More direct empirical evidence is needed to explore need satisfaction, positive emotions, and social roles as predictors of parents' well-being.

When Is Parenthood Associated With Well-Being? Exploring Moderators

As spotlighted by our discussion above, theoretical, empirical, and anecdotal evidence suggests multiple mechanisms by which parents might experience both more and less happiness than their childless counterparts. It is not surprising, therefore, that research has painted a mixed portrait of the boons and banes of parenting (e.g., Evenson & Simon, 2005; Nelson et al., 2013). Parents, for example, show diverse responses after the birth of a child, such that some become happier, some become less happy, and others remain stable (Galatzer-Levy, Mazursky, Mancini, & Bonanno, 2011). Instead of asking whether being a parent is associated with greater or lower well-being, some researchers have noted the importance of understanding the various circumstances of a parent's situation (e.g., whether a mother is married; Umberson & Gove, 1989), as well as stage in the family life course (e.g., her children's ages; Shields & Wooden, 2003), as predictors of her well-being. Accordingly, the answer to the question of whether parents are relatively more or less happy is not a clear yes or no. To be sure, research has shown that the answer depends on many factors, including the type of well-being considered, parent demographic factors (e.g., age, gender, marital status, SES), parent psychological factors (e.g., parenting style, social support), child demographic factors (e.g., age, residence), and child psychological factors (e.g., temperament). To better understand the inconsistent findings, we next address in detail the moderators of the relation between parenthood and well-being.

The demographic and psychological characteristics of parents and their children may shift how parents experience the rewards and demands of parenting (i.e., impact the mediators of the link from parenthood to well-being), thereby influencing their happiness. An unemployed or single parent, for example, may face relatively more economic burdens associated with child care and may consequently experience low levels of well-being. A parent of toddlers is likely to experience wildly different challenges and joys

than one with either teenagers or grown children starting their own families. Thus, comparing all types of parents to nonparents, comparing all parents across the transition to parenthood, or investigating time with children of every type of parent is almost certainly oversimplifying the complexity of experiences associated with parenting. We aim, therefore, to provide a more nuanced understanding of the parenting experience by exploring the circumstances under which parenthood may be associated with relatively high (vs. relatively low) levels of well-being (see Table 3 for a list of all moderators and a brief overall summary of the findings for each moderator).

To this end, we review both demographic and psychological moderators of parents' well-being, as well as moderating characteristics of both the parent and the child: (a) parents' age, gender, marital status, SES and income, employment status, family structure, culture, social

support, parenting style, and attachment style, and (b) child's age, residence, problems, and temperament. We posit that each moderator exerts its influence on the relationship between parenting and happiness via its impact on the specific mediators highlighted in our model of parents' well-being illustrated in Figure 1. We review each moderator below by first describing *how* it impacts parents' well-being (e.g., single parents report relatively lower well-being), followed by an explanation for *why* it impacts parents' well-being (e.g., because single parents experience relatively greater financial strain and more negative emotions).

Demographic Factors

Parent age. The relationship between parenthood and well-being in part depends on parent age. To address this question, some

Table 3
Overview of the Moderators of Parents' Well-Being

Moderator variable	Type of parent	Association with well-being
Parent demographic characteristics		
Parent age	Young	–
	Middle-aged	0/+
	Old	0/+
Parent gender	Male	+
	Female	+/-
Employment status	Employed	?
	Unemployed	?
	Stay-at-home	+/-
SES	Low SES	?
	Middle SES	?
	High SES	–
Marital status	Unmarried	–
	Married	0/+
Family structure	Biological	+/-
	Step	0/+/-
	Adoptive	+/-
Culture	Non-Western	?
	Western	+/-
Parent psychological characteristics		
Social support	With high social support	+
	With low social support	–
Parenting style	With an intensive parenting style	+/-
Parent attachment style	Securely attached	+
	Insecurely attached	–
Child demographic characteristics		
Child age	With young child(ren)	–
	With middle-childhood child(ren)	?
	With adolescent child(ren)	?
	With adult child(ren)	+/-
Family residence	Noncustodial	–
	Custodial	+/-
	Empty nest	+
Child psychological characteristics		
Child problems	With at least one child with problems	–
	With no children with problems	+
Child temperament	With child(ren) with difficult temperament	–
	With child(ren) with easy temperament	+

Note. + = parents in this group report higher levels of happiness than nonparents; – = parents in this group report lower levels of happiness than nonparents; 0 = parents in this group report similar levels of happiness to nonparents; +/- = findings for this group are mixed; ? = findings for this group are scarce or inconclusive; SES = socioeconomic status.

investigators have compared young and old parents with their respective childless peers. This research has demonstrated that middle-aged and old parents are either as happy or happier than their childless peers, whereas young parents are less happy than their childless peers. In a nationally representative sample of U.S. adults, for example, parents ages 26 to 62 were more satisfied with their lives than their childless counterparts, whereas parents ages 17 to 25 were relatively less satisfied (Nelson et al., 2013, Study 1). In addition, in a sample of Chinese adults over 60, parents reported lower levels of loneliness and depression than nonparents (Chou & Chi, 2004). A study using a sample of people over 50, however, showed that having children had minimal effects on their happiness and life satisfaction (Glenn & McLanahan, 1981). Similarly, parents aged 63 or older in a large U.S. sample did not differ from their peers without children (Nelson et al., 2013, Study 1). Despite methodological differences among these studies, taken together, the evidence suggests that relatively older parents are generally more likely to reap rewards and to experience fewer negative consequences than their childless counterparts.

Parents' age may influence their overall well-being via its influence on negative emotions, financial strain, and marital satisfaction. Young parents may lack the material resources, career and family stability, and emotional maturity of their older peers (Mirowsky & Ross, 2002). By contrast, older parents may possess greater emotional maturity and financial resources, which can alleviate many of the stresses associated with parenting.

Investigations in which parents' age is defined by their age when their first child was born are particularly informative regarding the influence of parents' age on their well-being, as this operationalization of parent age is independent of child age. Studies show, for example, that, compared to younger parents, those who are relatively older when they have their first child demonstrate more positive maternal behaviors (e.g., hugs, kisses, and praise) and fewer negative ones (e.g., threats, derogatory statements, and slaps; Conger, McCarty, Yang, Lahey, & Kropp, 1984) and report feeling relatively more mature and competent (Frankel & Wise, 1982) and less stressed (Garrison, Blalock, Zarski, & Merritt, 1997), suggesting an influence of parent age on positive and negative emotions. Furthermore, older parents demonstrate relatively larger boosts in life satisfaction following the birth of a child (Luhmann et al., 2012). By contrast, parents who are relatively younger when they have their first child report stronger feelings of isolation, restlessness, and financial stress (Frankel & Wise, 1982), are at greater risk for low self-esteem and feelings of incompetence (Cowan & Cowan, 1992), and report more depressive symptoms than nonparents in the same age group (Mirowsky & Ross, 2002). Future research could further elucidate the role of parent age by directly exploring the relationship between parent age and other mediators of parents' well-being, including financial strain and marital satisfaction.

Child age. Parent age is undeniably linked to child age, and parenting younger children involves more demands than parenting older children (Mowder, Harvey, Moy, & Pedro, 1995). Parents with young children face the stresses of midnight feedings, temper tantrums, discipline problems, and homework battles, all of which may negatively influence parents' well-being. Not surprisingly, studies show that parents of young children (up to age 7) report spending more time doing housework and show lower levels of

self-efficacy than nonparents (Nomaguchi & Milkie, 2003). In addition, in a sample of mothers, the difficulties involved with parenting young children (e.g., continually cleaning up their messes) were associated with decreased satisfaction with parenting (Crnic & Greenberg, 1990), suggesting one reason that parents' well-being may increase with child age. Mirroring these data, the negative association between motherhood and marital satisfaction observed in Twenge and colleagues' (2003) meta-analysis was significantly moderated by child's age: Although all mothers experienced lower marital satisfaction than childless women, this negative association was strongest for mothers of children 2 years old or younger. Furthermore, in a study of the transition to parenthood using the German Socioeconomic Panel, parents experienced a boost in life satisfaction during pregnancy and immediately after childbirth, followed by a decline through around age 5, at which point life satisfaction returned to prepregnancy levels (A. E. Clark et al., 2008).

Sleep disturbance may be an additional underlying factor that explains the decreases in well-being among parents with young children. As previously noted, new parents list sleep issues as their biggest problem following the birth of their child (Chalmers & Meyer, 1996), and studies using both self-report and objective measures find that parents experience more sleep problems after childbirth (Gay et al., 2004; K. A. Lee et al., 2000; Yamazaki et al., 2005). Additional work has indicated that new parents experience greater fatigue after childbirth than during pregnancy, which is associated with subsequent rises in rates of depression (Elek et al., 2002). Together, these studies provide persuasive evidence that sleep disturbance and fatigue explain, in part, lower well-being among parents with young children.

Other investigations suggest that children do not have to be very young to lower their parents' well-being. For example, parents with children of any age living in the home (a group that includes both toddlers and teenagers) reported higher levels of distress than adults without children in the home (Bird, 1997); however, in this study, the latter group could include empty-nest or noncustodial parents, limiting interpretations of these effects. Consistent with these findings, research shows that parents' well-being remains relatively low until the child leaves the home (see McLanahan & Adams, 1987, for a review).

By contrast, parents of grown children benefit when they receive social support from their children and have positive relationships with their adult children (Fingerman, Pitzer, Lefkowitz, Birditt, & Mroczek, 2008)—both of which are indicators of enhanced connectedness (Spitze & Logan, 1990; Umberson, 1989)—and when they become grandparents (Robertson, 1977). This evidence suggests that if parents can weather the stresses of raising young children, they will reap benefits when their children are relatively older.

This conclusion is consistent with the evolutionary perspective on parenting as the highest human need (Kenrick et al., 2010). As described earlier, the hedonic reward may not necessarily come from working toward the satisfaction of one's needs but from the actual satisfaction of those needs (Schaller et al., 2010). Indeed, evolutionary pressures to ensure the survival of one's biological offspring may be particularly strong when the child is young and vulnerable, leading to the experience of more negative emotions during the process of raising a young child. From this perspective, although parents may experience some hedonic benefits as they are

raising their children—especially when their children are meeting the milestones of becoming a successful adult (e.g., becoming more independent)—parents should reap the biggest hedonic benefits after successfully raising children to be able to reproduce themselves. Thus, parents' well-being is expected to increase when (and if) the children become productive members of society (i.e., when the children are older) and especially when the children bear offspring themselves, which is consistent with findings that being a grandparent is often associated with added benefits to well-being (Robertson, 1977).

In sum, the evidence regarding child age clearly supports the conclusion that parents of younger children experience lower well-being than parents of older children. We propose that these differences are primarily explained by the relatively greater negative emotions, greater sleep disturbances, and lower marital satisfaction experienced by parents of young children (cf. Bird, 1997), as well as by the enhanced feelings of closeness, connectedness, and basic evolutionary need satisfaction experienced by parents of relatively older children (cf. Spitze & Logan, 1990).

Parent gender. Both psychological theory and anecdotal evidence suggest that parenthood may differentially influence the well-being of men and women. Research has consistently shown that fatherhood is associated with benefits to well-being, whereas the findings for motherhood have been mixed. For men, for example, firstborn sons (but not daughters) were associated with relatively more happiness (although subsequent children had no effect; Kohler, Behrman, & Skytthe, 2005). More recent research is consistent with these findings for men, suggesting that fathers with children in the home report higher life satisfaction than childless men and nonresident fathers (Keizer et al., 2010). A recent study also revealed parenthood to be more consistently linked to well-being among men than women: Fathers reported experiencing greater life satisfaction, happiness, positive affect, and meaning and less depression than did childless men, but mothers only reported less depression (Nelson et al., 2013).²

Findings for women have been much less consistent. One cross-sectional study, for example, found that women with children reported greater life satisfaction and self-esteem compared to women without children (Hansen et al., 2009). Experience sampling and DRM studies, however, have generally shown more negative effects of having children for women. In one study, women reported greater anxiety and less positive affect when engaged in housework and child care than when engaged in other activities (Zuzanek & Mannell, 1993), and another study showed that women reported less positive affect when engaged in child-related activities than did men (Larson, Richards, & Perry-Jenkins, 1994). Consistent with these findings, in an investigation of working women, child care was rated to be about as positive as doing housework (Kahneman et al., 2004). Finally, an experience sampling study found that women reported relatively more positive affect when in the public sphere, whereas men reported relatively more positive affect when in the family sphere (Larson et al., 1994).

The mixed findings for women may at least partially be explained by the type of well-being measure—global cognitive evaluations versus daily emotional ratings—used in each study. On the one hand, because having children may be fulfilling a central life goal for many women, parenthood may be associated with greater

life satisfaction, happiness with life in general, and self-esteem, especially when the responsibilities of child rearing are not overwhelming. On the other hand, although women have evidenced greater participation in the workforce (Bianchi, Milkie, Sayer, & Robinson, 2000; Blair & Lichter, 1991; England, 2010), mothers are paid less than childless women (Budig & England, 2001), and they still bear the brunt of child rearing (Milkie, Bianchi, Mattingly, & Robinson, 2002; Nock & Kingston, 1988; Nomaguchi & Milkie, 2003), which may engender lower day-to-day well-being. Consistent with this idea, research has shown that specifically among women, firstborn children are associated with relatively greater happiness (compared to women without children), but subsequent children are associated with relatively less happiness (Aassve et al., 2012; Kohler et al., 2005). In other words, as the number of children increases and, presumably, women's child-rearing responsibilities rise, the stresses of parenthood may overwhelm the positive effects of fulfilling an important life goal—but only for women. Indeed, relative to fathers, mothers report relatively more time strain (Nomaguchi, Milkie, & Bianchi, 2005) and distress (Bird, 1997).

In contrast to the time strain and negative emotions that may be more characteristic of motherhood, fathers' time with children typically consists of play and leisure (Yeung, Sandberg, Davis-Kean, & Hofferth, 2001), activities that are likely to be characterized by positive emotions, thus making fatherhood more strongly associated with well-being. In sum, it appears that parenthood is consistently linked to greater well-being among men but not among women in part because fathers experience relatively more positive emotion (e.g., Larson et al., 1994; Nelson et al., 2013) and mothers experience more negative emotion (e.g., Ross & Van Willigen, 1996; Zuzanek & Mannell, 1993).

Marital status. Relationship status has important implications for parents' well-being. Married parents report fewer depressive symptoms and lower rates of alcohol abuse than do single parents (Cunningham & Knoester, 2007; Evenson & Simon, 2005). In addition, continuously single (i.e., never-married) parents report lower levels of happiness and self-esteem and higher levels of depression than do married parents (Demo & Acock, 1996; Lansford, Ceballos, Abbey, & Stewart, 2001; see also Hansen et al., 2009). Finally, marital status has been found to moderate the link between parenthood and well-being, with married parents reporting higher (Aassve et al., 2012) or similar (Nelson et al., 2013, Study 1) levels of well-being overall than married nonparents, and single parents reporting lower well-being than single nonparents (Aassve et al., 2012; Nelson et al., 2013, Study 1). These findings can be interpreted in at least three ways, which are not necessarily mutually exclusive: (a) Becoming a parent magnifies the happiness gained from marriage (e.g., Aassve et al., 2012), (b) not having a partner to share the experience of child rearing diminishes the well-being gains and heightens the stress from having children (e.g., Nelson et al., 2013, Study 1), or (c) unhappy parents are more likely to become single through divorce, separation, or failure to attract a long-term partner.

² Notably, however, mothers in this study indicated similar levels of happiness, satisfaction, and meaning to fathers, but childless men reported lower levels of well-being than mothers, fathers, and childless women. Thus, these effects are likely due to relatively low well-being among childless men, rather than to differences between mothers and fathers.

Unfortunately, understanding the literature on single parenthood is complicated, as the definition of *single* differs in each study. In some cases, single status includes previously married individuals who became single via divorce, separation, or widowhood, and in others, single status is reserved only for individuals who have never been married. Furthermore, in light of rising rates of cohabitation outside of marriage (Kennedy & Bumpass, 2008), other studies examine partnership status rather than marital status. Despite confusion regarding the definition of single, however, the message from this research is clear: Married parents are more likely to experience high well-being than their unmarried counterparts.

Numerous studies provide evidence that marital status influences parents' well-being via its effect on stress and negative emotions, as well as on financial strain. Single parents face many stressors that married parents do not (Avison, Ali, & Walters, 2007; Nomaguchi & Milkie, 2003). Two major benefits of marriage include enhanced social support and greater economic security and stability (Ross, Mirowsky, & Goldsteen, 1990). Furthermore, single parents are often entirely responsible for housework and child care, in addition to working full-time (Richards & Schmiede, 1993), and are more likely to face economic strain than married parents (Garfinkel & McLanahan, 1986; Hilton, Desrochers, & Devall, 2001).

A basic need satisfaction perspective is also consistent with the findings that parents' well-being depends on marital status. Evolutionary theorists have postulated that mate retention is a basic need that humans are compelled to satisfy (Kenrick et al., 2010). Because people's psychological well-being is thought to be partly determined by their least satisfied need, single parents' well-being should be constrained by their failure to satisfy the need for mate retention—regardless of the satisfaction of other needs, including parenting. In short, raising children without the presence of a partner is consistently linked to lower well-being, a finding that can be explained by its influence on several important mediators of parents' well-being, including negative emotions, financial strain, and basic need satisfaction.

Future researchers could do more to disentangle the effects of marital status on a parent's happiness. For example, to fully understand why marital status moderates parents' well-being, investigators may wish to determine whether its effects are due to the benefits of marriage, the costs of singlehood, or something specific about parenting with or without a partner (i.e., the interaction between parenthood and marital status). Furthermore, it would be illuminating to examine the interaction of parenthood with various classifications of single (e.g., never-married, divorced) or partnership status (e.g., married, cohabiting). Similarly, as same-sex marriage becomes more widely accepted, investigators could compare the happiness of parents in traditional and nontraditional households. This work will not only clarify the conditions under which parenthood is likely to be associated with greater well-being but also provide evidence for the effects of modern cohabitation trends on well-being more broadly.

Socioeconomic status. SES, as indicated by income, education, and occupation, is related to many important life outcomes, including both well-being and health (Adler & Rehkopf, 2008; Diener & Biswas-Diener, 2002). Low-SES individuals, for example, are prone to experiencing more anger and anxiety and are at greater risk for depression than are high-SES individuals (Barefoot

et al., 1991; Lynch, Kaplan, & Salonen, 1997). Surprisingly little research, however, has directly examined the role of SES in parents' well-being. Indeed, investigations that measure SES typically treat it as a control variable and ignore it in their interpretations. However, the results of the few existing studies are consistent: They suggest that high-SES parents derive fewer subjective benefits from parenthood. Higher educational attainment, for example, has been associated both with having less positive attitudes toward motherhood among women (Hoffman, 1978) and with finding less value and fulfillment in parenthood among both genders (Veroff, Douvan, & Kulka, 1981).

Recent research using the DRM supports these earlier findings. In one study, parents with relatively high SES reported less meaning and purpose during episodes of the day when they were taking care of their children than did parents with low SES (Kushlev, Dunn, & Ashton-James, 2012, Study 1). Notably, no relationship between SES and meaning was observed during the rest of the day, suggesting that SES is associated with a reduced sense of meaning specifically during child care. Furthermore, simply priming the concept of wealth prompted parents to report less meaning in life during a time spent with their children at a festival (Kushlev et al., 2012, Study 2), providing a hint for a causal adverse effect of SES on the experience of meaning during child care. In sum, evidence supports the notion that SES may impact parents' well-being via its influence on their experience of meaning in life.

Previous work suggests that high-SES parents may also experience heightened negative emotions. Higher SES has been associated with greater time stress, or the extent to which people perceive time as a limited resource (DeVoe & Pfeffer, 2011; Hamermesh & Lee, 2007). High-SES parents, therefore, may experience fewer well-being benefits when spending time with their children because the opportunity costs of child care for them are relatively high. Preliminary support for this prediction comes from a DRM study in which SES was positively related to a measure of opportunity costs: the extent to which parents reported wanting or needing to be doing other activities when they were spending time with their children (Kushlev, 2011). Furthermore, theory suggests that high-SES individuals may place more importance on roles other than being a parent (e.g., professional, breadwinner, philanthropist), thus increasing their likelihood of experiencing goal conflict (Emmons & King, 1988; Heiss, 1976). For example, high-SES parents may prioritize agentic goals of achievement and personal promotion, which may conflict with the communal nature of parenting (Kushlev et al., 2012).

The findings linking SES with reduced well-being among parents should, however, be interpreted with caution. For example, research has yet to examine global well-being—as well as its association with meaning—among high- and low-SES parents. Future work in this area would be highly informative, as meaning in life has been found to be an important predictor of well-being (e.g., Steger, 2009). Furthermore, some of the conclusions above were drawn from comparisons within a sample that was relatively well-off (median household income: \$70,000–\$80,000; Kushlev et al., 2012). Future research that includes lower SES participants would shed light on the influence of poverty on parents' well-being. Very low-SES parents, for example, may have tremendous worries about their kids' safety, quality of education, and access to health care, and they may have to sacrifice their own needs to pay for their children's expenses or send them to college—problems

less likely faced by low-SES nonparents or high-SES parents. Thus, studies incorporating a wider range of SES levels may find an inverse U-shaped relationship between SES and well-being among parents.

Employment status. To our knowledge, very few investigations have examined how the relation of parenthood to well-being varies by employment status. Despite the limited direct research on this topic, a number of studies provide suggestive evidence that employment status may enhance parents' well-being through its effects on social roles and reduced financial strain, and it may diminish well-being by generating additional stress and negative emotions (particularly related to work-life conflict).

Past research on social roles indicates that having more roles buttressing one's identity is beneficial for both mental and physical health, including depression and disease risk (Barnett & Hyde, 2001; Thoits, 1992). Furthermore, research on work-family interactions has suggested that experiences in one role can enrich one's experiences in another role via gains in resources (e.g., skills, social support, self-esteem; Greenhaus & Powell, 2006; Wayne, Grzywacz, Carlson, & Kacmar, 2007). To the extent that parenthood and employment each substantively enrich a person's identity, employed parents are likely to experience greater well-being. In addition, full-time employment may alleviate some of the economic strain produced by having children in the home (McLanahan & Adams, 1987; Umberson & Gove, 1989), thus indirectly increasing the well-being of employed parents.

On the other hand, more than half of working parents report difficulties balancing the responsibilities of work and family (Aumann, Galinsky, & Matos, 2011). Pressure at work is linked to parents' feelings of overload and stress, which in turn predicts higher family conflict (Crouter & Bumpus, 2001). Furthermore, work-family conflict, primarily identified as work interfering with time spent with family, is more commonly experienced by women (Frone, Russell, & Cooper, 1992) and thus may negatively influence the well-being of working mothers compared to working women without children. Indeed, working mothers worry more than working women without children (McLanahan & Adams, 1989) and are more emotionally withdrawn from their children on days when they report more work stress (Repetti & Wood, 1997). Moreover, these effects are likely to be bidirectional and may produce downward spirals, such that the greater stress and anxiety experienced by parents may compromise work-family balance, which magnifies the stress and decreases overall well-being even further, and so on. In addition to the effects of work stress on the family, managing family obligations may impact work outcomes. Studies indicate, for example, that work productivity among professors declines after the birth of a child, and this effect is particularly strong for women (e.g., Hunter & Leahey, 2010).

Although childless individuals may also experience conflict between their work and personal lives, parents report relatively higher levels of work-life conflict, more stress, and less effective coping (Galinsky, Bond, & Friedman, 1996). In addition, the negative spillover from work to family in parents is associated with job exhaustion and higher levels of psychological distress, and the negative spillover from family to work is associated with low marital satisfaction (Kinnunen, Feldt, Geurts, & Pulkkinen, 2006; Simon, 1992). Consistent with these findings, a meta-analysis revealed that work-family conflict is negatively related to

job and life satisfaction regardless of parental status (Ernst Kossek & Ozeki, 1998).

Investigations of stay-at-home parents are also informative regarding how parents' employment status may affect their well-being. Stay-at-home parents may experience higher well-being because they believe their investment of time greatly benefits their children and because they do not face the role strain and work-family conflict that many working parents experience. On the other hand, they may also miss out on some of the benefits of employment, such as an enriched identity, social support, and increased income (Barnett & Hyde, 2001). Consistent with this latter possibility, a recent study found that stay-at-home moms who wanted to work outside the home showed higher rates of depression than working moms or stay-at-home moms who embraced their role (Holmes, Erickson, & Hill, 2012). By contrast, stay-at-home dads reported generally relatively high levels of life satisfaction (Rochlen, McKelley, Suizzo, & Scaringi, 2008). These findings highlight the potential role that the decision to work outside the home or to stay at home with one's children plays in differentially impacting the well-being of men and women, suggesting an interaction between the moderating factors of gender and employment status. Specifically, although many mothers may stay at home and forgo a career because of social norms and expectations of the role women should play in childrearing, fathers might experience their decision to stay at home as more autonomous. Thus, the benefits of forgoing a career to look after one's children may on average be greater for fathers than for mothers.

In short, being an employed or a stay-at-home parent may both enhance and compromise well-being depending on a variety of other factors, including work-family conflict and the extent to which the decision to stay at home is self-determined. The limited research on this topic warrants future investigations of how employment status may alter parents' overall well-being. Although we have provided suggestive evidence that parents' well-being may be influenced by their employment status via its effect on social roles and reduced financial stress or by enhancing negative emotions related to work-family conflict, to our knowledge, no research has directly addressed these questions with any of our recommended methodologies. Studies comparing these outcomes in parents and nonparents, across the transition to parenthood, and when parents are spending time with their children versus other activities would be highly informative.

Based on evolutionary theory's suggestion that esteem is one of the basic human needs (Kenrick et al., 2010; cf. Maslow, 1943), we propose that being employed contributes to well-being insofar as it enhances feelings of worth and provides a sense of fulfillment and enriched identity. Integrating this perspective with our analyses of the other mediators that are likely to be influenced by employment status, we further propose that employed parents experience improved well-being when the additional social role strengthens their identity and sense of worth, perhaps by allowing them to pursue valued goals and contribute materially to the household, but that they experience diminished well-being when the additional stresses and conflict contribute to decreases in sense of worth and increases in negative emotions.

Family structure. Whether the parent-child relationship is biological, step, or adoptive is another important variable to consider in investigations of parents' well-being. Consistent with predictions of evolutionary theory, cross-sectional comparisons

have generally found that biological parents are at least as happy as—and sometimes happier than—adoptive parents and stepparents. For example, in a study that matched adoptive and biological parents on demographic characteristics, no differences were detected in levels of happiness, depression, self-esteem, and overall health (Borders, Black, & Pasley, 1998). In another study, adoptive mothers, but not fathers, reported higher levels of depression than did biological parents, controlling for several demographic factors (Lansford et al., 2001). With regard to stepparents, some research has shown that stepmothers in their first marriages report less happiness and more depression than biological mothers in their first marriages (Demo & Acock, 1996), and stepparents report lower parenting satisfaction than married parents living with their biological children (Rogers & White, 1998). Another study, however, found no differences between stepparents and biological parents in depression, self-esteem, and life satisfaction (Lansford et al., 2001).

Notably, each of these studies used different methodological and statistical approaches (i.e., matching adoptive and biological families, controlling for demographic characteristics, or analyzing mothers and fathers separately), yet despite these differences, biological parents consistently demonstrated equal or greater happiness than nonparents. Moreover, it appears that family structure may differentially influence the well-being of mothers and fathers (e.g., Demo & Acock, 1996; Lansford et al., 2001), so future researchers should be particularly sensitive to gender differences in their samples when examining family structure and parents' well-being.

In addition to comparing biological parents with adoptive parents and stepparents in cross-sectional studies, researchers have examined changes in well-being across the transition to parenthood for each type of parent. Unlike the cross-sectional research, research with this type of design has indicated a somewhat negative effect of biological parenting and a more positive picture of step and adoptive parenting. One study, for example, showed that parents who adopted or gained a stepchild reported higher life satisfaction than parents who gained a biological child (Ceballos, Lansford, Abbey, & Stewart, 2004). Other studies of adoptive families have shown that adoptive parents do not experience adverse well-being outcomes during the transition to adoptive parenthood, despite the stressors associated with adoption (Brodzinsky & Huffman, 1988; Ishii-Kuntz & Ihinger-Tallman, 1991).

Although the finding that adoptive parents and stepparents are happier than biological parents after welcoming a child may seem somewhat surprising, several factors point to this very pattern. Adoptive families, for example, often experience great uncertainty while waiting for a child (Sandelowski, Harris, & Holditch-Davis, 1991) and may thus appreciate their good fortune more than biological parents. Accordingly, the burdens of adoption (e.g., financial strain, fertility challenges) may be offset by the joy, meaning, and relief sparked by the long anticipated arrival of the child. Thus, drawing on our model, we posit that the transition to adoptive parenthood is related to greater well-being due to its associated increases in positive emotions and life meaning.

Regarding the positive effects of stepparenting, the transition to parenthood for stepparents may be associated with relatively less stress because stepchildren are almost always older and presumably less challenging to take care of than newborn biological children. Another explanation invokes a possible confound: Par-

ents who acquire a stepchild are also usually newly married, and getting married is linked with increases in well-being (Lucas et al., 2003). These explanations also shed light on why cross-sectional studies have generally found greater benefits of parenthood for biological parents than stepparents, whereas transition-to-parenthood studies have suggested the reverse.

In sum, cross-sectional studies show either null findings or more positive effects for biological parents, whereas transition-to-parenthood designs show either null findings or more negative effects for biological parents. Because this work is often characterized by small effect sizes, issues with power and sample size in some studies may partially explain the inconsistencies. The studies described above had sample sizes ranging from under 150 to over 2,000, and at least one of the studies that found no difference between biological and adoptive parents had a sample size of only 144 participants (Borders et al., 1998). Additional differences among studies involve the gender composition of samples. For example, Demo and Acock (1996) used a sample of mothers, whereas other studies described above included both mothers and fathers (Borders et al., 1998; Lansford et al., 2001; Rogers & White, 1998). Given that gender is an important moderator of parents' well-being, gender composition is likely to affect group differences in well-being.

Few studies have investigated the mechanisms by which family structure influences parents' well-being. On the basis of the extant evidence, we posit that differences among adoptive, step, and biological parenthood can be explained by their differential impact on several factors. After becoming parents, adoptive mothers and fathers appear to experience greater positive emotions and meaning in life; stepparents experience greater relationship satisfaction and fewer negative emotions; and biological parents experience more negative emotions and greater sleep disturbance. Exploring the direct links between these proposed mechanisms and parents' well-being could be a fruitful area for future research aiming to understand when and why parenthood may be associated with different well-being outcomes for biological, adoptive, and stepparents.

Residence. Two areas of research speak to the influence of a child's residence on parents' well-being. The first compares parents of minor children living in the home (custodial or resident parents) to parents of minor children living elsewhere (noncustodial or nonresident parents), and the second compares empty-nest parents to parents with children still living in the home. Both cross-sectional and transition-to-parenthood studies have shown that noncustodial parents report lower levels of well-being than custodial parents (Knoester & Eggebeen, 2006; Menaghan, 1989; Minton & Pasley, 1996). Cross-sectional research demonstrates that nonresident parents experience more severe symptoms of depression and anxiety than resident parents (Menaghan, 1989), and noncustodial divorced fathers report lower levels of parenting satisfaction and competence than married fathers living with their children (Minton & Pasley, 1996). In one study of fathers' transition to parenthood, having a nonresident child was associated with increases in depression, compared to having no new children, controlling for demographic factors (Knoester & Eggebeen, 2006). This work suggests that the stress of not having one's own children at home and missing out on the pleasures of parenting may outweigh the stress of taking active care of one's children. Alternatively, low levels of well-being may plausibly precede noncus-

todial parenthood, such that parents who are not mentally healthy are less likely to be granted custody of their children. To our knowledge, however, no studies have tested this possibility.

Noncustodial parents have fewer responsibilities yet may face a variety of additional external stressors (e.g., missing their children, lack of control over decision making) that can decrease well-being. Following our model, we propose that noncustodial parents are less likely to experience the advantages of parenthood (i.e., meaning in life, connectedness with their children, positive emotions, and enhanced social roles) and more likely to experience some factors that inhibit parents' well-being (e.g., negative emotions). These differences in themselves can explain the relatively low well-being of noncustodial parents.

The second relevant area of research compares empty-nest parents (i.e., those whose children have grown and left the home) to parents who have children residing in the home. Children in the household place an economic burden on families and interfere with the time parents can spend with one another (Ross et al., 1990). In fact, parents with minor children living in the home report greater distress than parents without children in the home and nonparents (Bird, 1997). Other longitudinal work has revealed that emptying the nest improves marital quality for all parents but only improves overall life satisfaction when parents have frequent contact with their adult child (Gorchoff, John, & Helson, 2008; L. K. White & Edwards, 1990; see, however, VanLaningham, Johnson, & Amato, 2001). Finally, empty-nest parents report greater social support than parents with children living in the home (Ishii-Kuntz & Seccombe, 1989). Notably, by definition, empty-nest parenthood means having relatively older children. These studies suggest that in the absence of the daily strains and hassles of child rearing (i.e., economic burden, strained partner relationships, and negative emotions), parenthood may be particularly beneficial to well-being. The findings are also compatible with the evolutionary basic need perspective because leaving the nest marks a watershed moment indicating that parents have successfully managed to raise their children to relative independence.

The results of studies on noncustodial parenthood and empty-nest parenthood lead to vastly different conclusions: Noncustodial parents report relatively low well-being, whereas empty-nest parents report relatively high well-being. These contrasting findings suggest that the technical residence of the child is not as important as other factors. Noncustodial parents may be relatively unhappy because having their children live elsewhere is usually an imposed situation and not the normative or expected experience of parents. In addition, noncustodial parents are missing opportunities to build relationships with their children while they are young, whereas empty-nest parents have had many years to build strong relationships that can continue when the children voluntarily leave the home. These possibilities highlight the relative importance of connectedness with children as predictors of parents' well-being and represent fruitful directions for future research. Finally, the differences between noncustodial and empty-nest parents shed new light on the evolutionary basic need perspective. Specifically, findings in this area indicate that although working toward fulfilling the parenting need (custodial parents) may not feel as good as having fulfilled that need (empty-nest parents), not being able to work toward it at all (noncustodial parents) is worse than both.

Culture. Views about parenthood and child-rearing practices differ across cultures. Cultures vary widely regarding norms for

the timing of parenthood, typical number of children per family, centrality of children in parents' lives, gender roles, availability of health care and parental leave, and motives to have children or remain childless (Jones & Brayfield, 1997; Nauck, 2007; Purewal & Van Den Akker, 2007). Each of these cultural differences has important implications for parents' well-being. For example, gender differences in the effects of parenthood on well-being may be amplified in gender-stratified cultures, and employment and marital status differences may be diminished in nations with generous parental leave policies and subsidized child care.

Very few studies have directly examined culture as a moderator of parents' well-being; indeed, most of the findings reviewed in this article are based on studies with Western, primarily North American samples. We can, however, piece together evidence for the moderating role of culture in parents' happiness from a few accounts. In a DRM study conducted in France and the United States, for example, U.S. mothers reported spending a higher proportion of time in an unpleasant emotional state during child care than did French mothers (Krueger et al., 2009). Another study showed that relative to holding a Eurocentric worldview, holding an Afrocentric worldview (characterized by optimism, holistic orientation, idealized order, internal sense of worth, and spirituality) was associated with an easier transition to single motherhood, as indicated by lower levels of anxiety and depression and higher satisfaction with motherhood (Fine, Schwebel, & Myers, 1985). Finally, one study examined how cultural variations in the appreciation of parenthood moderated parents' well-being. In countries with a greater overall appreciation of parenthood, fathers of young children, but not mothers or fathers of relatively older children, reported greater happiness than nonparents (Vanassche, Swicegood, & Matthijs, 2013).

In sum, cultural and national differences in the effects of parental status on well-being clearly exist, but many more studies are needed to understand these differences. As indicated by the research above, culture may play a role in parents' emotional experiences (e.g., Fine et al., 1985; Krueger et al., 2009). Furthermore, cultural differences in the appreciation of parenthood may impact the relative amount of meaning that parents derive from parenting. Future work is needed to test these three mechanisms (positive emotions, negative emotions, and meaning in life) underlying cultural differences in parents' well-being, as well as explore the role of cultural differences in the norms surrounding the parental role and the financial burden (or lack thereof) placed on parents.

Psychological Factors

Social support. Consistent with the African proverb that "it takes a village to raise a child," parents often rely on the support of their friends and family. When parents have less leisure time to nurture their relationships with others (e.g., Claxton & Perry-Jenkins, 2008; Delle Fave & Massimini, 2004), experience declines in the size of their social networks (e.g., Munch, McPherson, & Smith-Lovin, 1997; Wrzus, Hanel, Wagner, & Neyer, 2013), and therefore receive less social support, they may suffer diminished well-being. On the other hand, some parents may experience enhanced social support from their extended families and from fellow parents (cf. Ishii-Kuntz & Seccombe, 1989).

Indeed, research indicates that social support and social affiliation are important predictors of parents' well-being (Koeske &

Koeske, 1990; Pittman & Lloyd, 1988; Rizzo, Schiffrin, & Liss, 2013; Wandersman, Wandersman, & Kahn, 1980). In an investigation of social support and well-being across the transition to parenthood, parents' social networks, support, depression, and adjustment scores were assessed during pregnancy and at three time points after the birth of their child (ending at age 2). The results revealed that the degree to which parents had supportive relationships was an important predictor of less parental depression and greater psychological adjustment after the birth of their child (Bost, Cox, & Payne, 2002). In another investigation of social support among mothers of infants, the amount of support received from the spouse was a predictor of mothers' affect and life satisfaction (Levitt, Weber, & Clark, 1986). In sum, the extent to which parents have an adequate support system amid the trials of parenting predicts how happy they are. These findings are consistent with the evolutionary perspective: When parenting does not interfere with the basic need of affiliation, it is associated with relatively higher well-being.

In sum, as indicated by the above studies, the amount of support parents receive appears to promote well-being by increasing positive emotions (e.g., Levitt et al., 1986), decreasing negative emotions associated with stress and strain (e.g., Bost et al., 2002), and improving partner relationships (e.g., Levitt et al., 1986). Future researchers may wish to investigate these and other pathways by which social support enhances parents' happiness.

Parenting style. Although a large literature explores the implications of parenting style and parenting behaviors for child outcomes (e.g., Darling & Steinberg, 1993), very few studies examine how parenting style—and an intensive versus relaxed style in particular—might relate to the parents' own well-being. In recent decades, Western parents have become increasingly pressured to adopt a parenting style that demands a great deal of time with their children and involvement in the minutiae of their children's daily lives (Bianchi, 2000). Parents are pushed by such norms to engage in labor-intensive hyperparenting, involving an endless stream of child-enriching activities (Bianchi, Robinson, & Milkie, 2006; Furedi, 2002; Warner, 2005). American mothers, for example, report feeling pressured to focus on their children's needs to the near exclusion of everything else (E. J. Lee, 2008).

To the extent that parents engage in such intensive parenting styles, they may experience escalating feelings of anxiety and decreases in well-being as they try to be perfect parents to their children. From an evolutionary perspective, putting the needs of one's children to the detriment of one's own needs may decrease well-being because other basic needs (e.g., affiliation) may be compromised. Furthermore, parents' anxiety may be amplified when their children are young and require more vigilance and effort to ensure survival. Supporting these arguments, endorsement of intensive parenting and child-centrism predicts greater stress and depression and lower life satisfaction among mothers of children 5 years old or younger (Rizzo et al., 2013).

By contrast, an evolutionary perspective also suggests that investing more in one's children should be rewarding to parents because such investment may increase the survival of one's genes, thus providing theoretical support for child-centrism—prioritizing the needs of one's children—as a predictor of greater well-being. Indeed, a DRM study with a sample of mothers and fathers with children under age 19 found that child-centric parents experienced

relatively more meaning and positive affect and less negative affect during child care (Ashton-James, Kushlev, & Dunn, 2013).

We believe that the conflicting conclusions yielded by these studies are due to sample differences—namely, mothers of children ages 5 or younger (Rizzo et al., 2013) versus both mothers and fathers of children younger than age 19 (Ashton-James et al., 2013). Accordingly, the impact of parenting style on parents' well-being may depend on parent gender and the age of the family's youngest child. Future research exploring interactions of parent gender and child age with parenting style would be informative.

In short, although investigators have recently begun to focus on the relationship between parents' involvement and their well-being, this work is limited, and many more questions remain. The research conducted so far suggests that this relationship is likely complex and contingent on factors such as the children's ages, the parent's gender, and whether child-centric parenting impairs or supports the satisfaction of other basic needs. Accordingly, exploring the effect of parenting style—including different types of intensive parenting and their moderators—on parents' well-being promises to be a fertile area of future research. For example, being a "tiger mom" versus the mom of a "little emperor" represent very different types of intensive parenting that may impact parents' happiness in different ways. Moreover, work examining whether and how authoritarian, authoritative, and permissive parenting styles (Baumrind, 1989) are associated with parents' well-being would be informative.

Child problems. An old saying declares that "a mother is only as happy as her least happy child." Accordingly, children's problems (e.g., conduct problems, chronic illness, disability, depression, drug abuse) are likely to be an important predictor of their parents' happiness. Indeed, having one adult child with problems predicts poorer parent well-being, but having one successful child does not predict greater parent well-being (Birditt et al., 2010; Fingerman, Cheng, Birditt, & Zarit, 2012). Relative to parents of problem-free children or nonparents, parents of problematic or troubled children experience considerable stress and negative emotions in their lives (Webster-Stratton, 1990). Furthermore, children's problems may create tension between the parent and child (Birditt, Miller, Fingerman, & Lefkowitz, 2009), which has been linked with less happiness and greater intergenerational relationship ambivalence (i.e., the experience of both positive and negative sentiments within a relationship; Fingerman et al., 2008). These findings suggest two possible mechanisms by which children's problems may decrease parents' well-being—heightened negative emotions and decreased parent-child connectedness. Connectedness (or affiliation) is a basic human need that is associated with happiness when satisfied and unhappiness when unsatisfied (Deci & Ryan, 2000, 2008; Schaller et al., 2010). Additionally, from an evolutionary perspective, child problems should be related to lower well-being when they signal a barrier to the goal of raising children who will successfully pass on the parents' genes.

Child temperament. Children vary in their levels of sociability, negative mood, and behavioral inhibition, and these individual differences in temperament appear as early as infancy (Rothbart, 1981). Children's temperament may shift the interaction patterns between parents and children and, in turn, affect parents' happiness. For example, correlational studies demonstrate that high emotional intensity among preschoolers is associated with greater

parenting stress (McBride, Schoppe, & Rane, 2002), and mothers of temperamentally difficult children report more doubts about their parenting competence (Sheeber & Johnson, 1992), greater parenting stress (Gelfand, Teti, & Radin Fox, 1992), lower marital quality (Belsky & Rovine, 1990), and higher levels of depression (Cutrona & Troutman, 1986). Furthermore, frequent infant crying, which is one behavioral indicator of a difficult temperament, is associated with more negative emotions and higher depression among new parents (Wilkie & Ames, 1986). Finally, in one study, parents of infants with relatively easy temperaments reported experiencing more positive changes across the transition to parenthood than parents of infants with difficult temperaments (Wolfson Sirignano & Lachman, 1985). In this study, fathers in particular who perceived their infants as relatively adaptable and prone to positive moods showed reductions in anxiety levels compared to nonparents. Thus, to the extent that their children have a difficult or sensitive temperament, a stressor notably absent among nonparents, parents experience relatively low levels of well-being.

Because temperament is partially hereditary, however, an alternative explanation is that parents and their temperamentally difficult children may both be genetically predisposed to experience less happiness. Furthermore, the studies described above primarily focus on parents' well-being when their children are infants, leaving any long-term effects of child temperament unknown. However, because child temperament predicts later personality and psychopathology (L. A. Clark, 2005), parents of children with difficult temperaments may experience low levels of well-being beyond their child's infancy if their children continue to experience associated problems.

Previous work supports several mechanisms by which children's difficult temperament may influence well-being—by elevating negative emotions (e.g., McBride et al., 2002), by decreasing sense of competence (e.g., Sheeber & Johnson, 1992), and by decreasing marital satisfaction (e.g., Belsky & Rovine, 1990). By contrast, having a child with an easy temperament may provide parents with increased opportunities to experience positive emotions and feel competent (e.g., Wolfson Sirignano & Lachman, 1985).

Parent attachment style. Attachment security is thought to serve as a safeguard against depression and as an inner resource to cope with stressful life events (Mikulincer & Florian, 1998). Because of this buffering role, securely attached parents likely experience fewer threats to their well-being than parents who are not securely attached. Virtually no research, however, has explored the impact of parent attachment style on global evaluations of well-being such as life satisfaction. Despite this lack of direct evidence, a burgeoning literature indicates that parent attachment style is likely to impact well-being primarily via its influence on marital quality. Indeed, research suggests that the impact of parenthood on marital quality is moderated by the parent's attachment style (e.g., Belsky & Isabella, 1985). Such studies show, for example, that couples who recall greater acceptance and less rejection by their own parents during their childhoods are less susceptible to declines in marital quality following a child's birth (Belsky & Isabella, 1985).

Other research indicates that the transition to parenthood poses different challenges to parents depending on their attachment styles. New parents who are highly anxiously attached report declines in marital satisfaction when they perceive their partners as

relatively unsupportive, whereas new parents who are highly avoidant report declines in marital satisfaction when they perceive relatively more work–family conflict or higher demands from their families (Kohn et al., 2012). Highly ambivalently attached women who also perceive little support from their spouses report an increase in depressive symptoms during the transition to parenthood (Simpson, Rholes, Campbell, Tran, & Wilson, 2003). Finally, compared to other activities, interacting with one's children is associated with greater love, joy, and pride for women low in attachment avoidance; for women high in attachment avoidance, interacting with children is associated with relatively greater love but not with greater joy or pride (Impett et al., 2011).

In sum, attachment style may influence parents' well-being by shifting their experience of positive and negative emotions and by buffering (or compounding) the declines in marital quality after the birth of a child. Given the lack of research on the direct relationship between parent attachment style and global measures of well-being, incorporating global well-being measures (in addition to measures of the mediators proposed here) should be a priority for future work.

Summary

In sum, a number of demographic and psychological factors moderate the association between parenthood and well-being, primarily by their influence on the promoting and inhibiting pathways illustrated in Figure 1. Some parents, such as those who are young, are single, have relatively young children, have children with problems, or are non-custodial parents, experience relatively low levels of happiness. By contrast, fathers, married parents, and parents who are older at the birth of their first child experience relatively high levels of well-being (see Table 3 for an overview of the moderators of parents' well-being).

Implications for Children

Understanding the relationship between parenthood and well-being is critical because the question of whether parents are happier or less happy than their childless peers holds a number of important implications. Happiness is a central life goal for people around the world (Diener, 2000) and is associated with many positive outcomes for work, relationships, and health (Lyubomirsky, King, & Diener, 2005). Consequently, parents' happiness is likely to have benefits not only for the parents but also for their children.

Research suggests that parents' well-being is related to specific parenting behaviors (e.g., Dix, 1991). Mothers' and fathers' happy moods, for example, are positively related to their efforts to cognitively stimulate their children, and mothers' happy moods are inversely related to detachment and negative affect expressed toward the child (Belsky, Crnic, & Woodworth, 1995). In addition, parents who perceive more daily hassles are more likely to have irritable interactions with their children (Dumas, 1986; Patterson, 1983) and are less supportive and more controlling of their children (Pett, Vaughan-Cole, & Wampold, 1994). Similarly, parents who report more negative moods display more punishment and rejection toward their children (MacEwen & Barling, 1991). Finally, an experimental study showed that parents induced to experience negative moods directed fewer positive statements toward their children and less overall verbal interaction (Jouriles & O'Leary, 1991). In sum, these

studies suggest that lower parental well-being is related to more negative parenting behaviors.

Not only can a parent's well-being influence parenting behaviors, it may also affect children's outcomes, both contemporaneously and long-term. One study directly examined the link between mothers' life satisfaction and their children's outcomes and demonstrated that women who were relatively more satisfied had children with fewer socioemotional problems and higher verbal skills (Berger & Spiess, 2011). Furthermore, parents' expression of positive affect when interacting with their children promotes children's achievement by influencing the development of their skills and motivation (for a review, see Pomerantz, Moorman, & Litwack, 2007). In addition, parents' positive emotional expression toward their adolescent children is related to the adolescents' positive relationships with their peers 2 years later (Paley, Conger, & Harold, 2000). Another study followed a sample of new mothers and their infants and found that maternal positive emotional expression predicted infant positive emotional expression (Haviland & Lelwica, 1987). Positive emotional communication and affirmation are also associated with children's feelings of self-confidence and pride (Stipek, 1995). Finally, children's relationships with their mothers (identified by closeness to their mother and maternal involvement) predict life satisfaction in adulthood (Flouri, 2004). In sum, although future investigators need to explore alternate causal pathways (e.g., the effects of shared heredity on both parents' happiness and children's outcomes), parents' happiness appears to have critical implications for a wide range of children's outcomes.

Future Directions

Our review of the literature has aimed to provide a more nuanced understanding of parents' well-being. In particular, our examination of the relevant mediators and moderators of the association between parenthood and well-being challenges overgeneralizations that most parents are miserable or that most parents are joyful and, instead, leads us to conclude that parents can be happy under some conditions. Despite this progress, however, much more work is needed to fully understand why parents in some circumstances are happier than others, how various moderators interact with one another, and the benefits and ways of increasing parents' well-being. Using our parent well-being model, throughout this review, we have provided a number of specific novel hypotheses about how moderating factors indirectly influence parents' well-being by impacting our proposed mediators. Accordingly, rather than focusing on specific predictions, below we provide a big-picture assessment of the state of the literature and the gaps within it.

Psychological Mediators, Psychological Moderators, and Psychological Explanations

Our review has identified an important gap regarding the psychological factors, as opposed to demographic or circumstantial variables, that mediate and moderate parents' well-being. First, with respect to mediators, by highlighting promising future directions with our model (see Figure 1), we hope to promote new research on how psychological mechanisms may explain the association between parenthood and well-being. Indeed, more research is essential to test some of our proposed mediation hypotheses. Three mechanisms that have especially been understudied in this area include the importance of need

satisfaction, positive emotions, and social roles. Second, with regard to moderators, although some studies have directly examined psychological factors such as social support (e.g., Pittman & Lloyd, 1988), parenting style (e.g., Rizzo et al., 2013), parent-child relationships (e.g., Birditt et al., 2009), and parent attachment style (e.g., Impett et al., 2011), unpacking the psychological factors associated with parents' well-being should be a priority for the future.

Finally, it is worth noting that demographic moderators (e.g., child age, employment status, or marital status) primarily exert their effects through psychological processes. For example, as described above, plausible (but yet untested) hypotheses are that child age moderates parents' well-being by influencing sleep disturbance and negative emotions and that employment status and marital status do so by influencing social support and stress. Thus, future investigations examining the psychological explanations for particular demographic moderator variables by measuring or manipulating relevant psychological variables would be informative. Understanding the psychological processes associated with higher or lower parents' well-being could elucidate ways that parents in specific circumstances can improve their well-being, for example, by seeking more social support if they are unemployed or single.

Moderators of Parents' Well-Being

We have argued that investigators should continue to examine the circumstances under which parenthood is associated with more or less happiness. We have also identified many gaps in the literature—particularly regarding the moderating influence of parents' SES, employment status, and culture—on parents' well-being (see Table 3). We hope that future studies will explore these moderators, as well as others not discussed in this review (e.g., parents' personality and child gender), of parents' well-being.

On the other hand, research has made important advances in understanding the moderating influence of factors such as age, gender, and marital status. Older parents tend to be happier than their younger counterparts, fathers tend to reap more consistent benefits from parenthood than mothers, and married parents tend to experience higher well-being than single parents (see Table 3). In addition to exploring the psychological mechanisms behind these three moderators, determining how such moderators interact with other moderators of parents' well-being would be valuable in future work. For example, mothers may find parenting more rewarding in cultures where the father shares equally in the responsibilities of childrearing, and the stressors of single parenthood may be attenuated if the parent has the support of an extended family.

Increasing Parents' Well-Being

Although studies of children's outcomes cannot rule out the influence of shared parent and child genetics on children's well-being, findings regarding the potential costs of parents' unhappiness for children, not to mention the costs of unhappiness for the parents themselves, can motivate future interventions designed to improve parents' well-being. Experimental research suggests that people can intentionally increase their happiness and frequency of positive emotions by practicing a variety of positive activities (for a review and a meta-analysis, respectively, see Lyubomirsky & Layous, 2013; Sin & Lyubomirsky, 2009). Future investigators would do well to identify specific steps that parents can take to become happier. By identifying

parents who are particularly at risk for decreased well-being, we have provided a blueprint for targeted future interventions (see Table 3). For example, our review suggests that intervention studies aimed at enhancing happiness should target young or single parents more than their more mature or married counterparts (Conger et al., 1984; Frankel & Wise, 1992; Mirowsky & Ross, 2002; Nelson et al., 2013) and mothers more than fathers (Larson et al., 1994; Nelson et al., 2013; Zuzanek & Mannell, 1993).

Final Thoughts and Conclusions

Are parents more miserable than people without children, or do they instead enjoy greater happiness in their lives? Our review of the literature reveals the hazards of providing blanket answers regarding the association between parenthood and well-being at the broadest level, particularly when those answers involve comparing all types of parents with all types of nonparents. A more focused analysis suggests that the link between parenthood and well-being is influenced by a number of important variables, including both parent and child characteristics, as illustrated in Table 3. Our review highlights the importance of taking a detailed view of the experiences of parenthood and points to important avenues for future research.

The relationship between parenthood and well-being is undoubtedly complex. Scholarly and media attention on this topic often leads readers to conclude that all parents are miserable (e.g., Senior, 2010). We propose that parents are unhappy to the extent that they encounter greater negative emotions, magnified financial problems, more sleep disturbance, and troubled marriages. By contrast, when parents experience greater meaning in life, satisfaction of their basic needs, greater positive emotions, and enhanced social roles, they are met with happiness and joy. Only through systematic study and attention to these processes can we fully understand the banes and boons of parenthood.

References

References marked with an asterisk indicate studies reviewed in Table 2.

- *Aassve, A., Goisis, A., & Sironi, M. (2012). Happiness and childbearing across Europe. *Social Indicators Research, 108*, 65–86. doi:10.1007/s11205-011-9866-x
- *Aber, J., Belsky, J., Slade, A., & Crnic, K. (1999). Stability and change in mothers' representations of their relationship with their toddlers. *Developmental Psychology, 35*, 1038–1047. doi:10.1037/0012-1649.35.4.1038
- Acheson, A., Richards, J. B., & de Wit, H. (2007). Effects of sleep deprivation on impulsive behaviors in men and women. *Physiology & Behavior, 91*, 579–587. doi:10.1016/j.physbeh.2007.03.020
- Adler, N. E., & Rehkopf, D. H. (2008). U.S. disparities in health: Descriptions, causes, and mechanisms. *Annual Review of Public Health, 29*, 235–252. doi:10.1146/annurev.publhealth.29.020907.090852
- *Ashton-James, C., Kushlev, K., & Dunn, E. W. (2013). Parents reap what they sow: Child-centrism and parental well-being. *Social Psychological and Personality Science, 4*, 635–642. doi:10.1177/1948550613479804
- Aumann, K., Galinsky, E., & Matos, K. (2011). *The new male mystique*. New York, NY: Families and Work Institute.
- *Avison, W. R., Ali, J., & Walters, D. (2007). Family structure, stress, and psychological distress: A demonstration of the impact of differential exposure. *Journal of Health and Social Behavior, 48*, 301–317. doi:10.1177/002214650704800307
- *Ballas, D., & Dorling, D. (2007). Measuring the impact of major life events upon happiness. *International Journal of Epidemiology, 36*, 1244–1252. doi:10.1093/ije/dym182
- *Bandura, A., Caprara, G. V., Barbaranelli, C., Regalia, C., & Scabini, E. (2011). Impact of family efficacy beliefs on quality of family functioning and satisfaction with family life. *Applied Psychology, 60*, 421–448. doi:10.1111/j.1464-0597.2010.00442.x
- Barefoot, J. C., Peterson, B. L., Dahlstrom, W. G., Siegler, I. C., Anderson, N. B., & Williams, R. B. (1991). Hostility patterns and health implications: Correlates of Cook–Medley Hostility Scale scores in a national survey. *Health Psychology, 10*, 18–24. doi:10.1037/0278-6133.10.1.18
- Barnett, R. C., & Hyde, J. S. (2001). Women, men, work, and family: An expansionist theory. *American Psychologist, 56*, 781–796. doi:10.1037/0003-066X.56.10.781
- *Barnett, R. C., Marshall, N. L., & Pleck, J. H. (1992). Men's multiple roles and their relationship to men's psychological distress. *Journal of Marriage and the Family, 54*, 358–367. doi:10.2307/353067
- Baumeister, R. F. (1991). *Meanings of life*. New York, NY: Guilford Press.
- Baumrind, D. (1989). Rearing competent children. In W. Damon (Ed.), *Child development today and tomorrow* (pp. 349–378). San Francisco, CA: Jossey-Bass.
- Beck, A. T., Steer, R. A., & Carbin, M. G. (1988). Psychometric properties of the Beck Depression Inventory: Twenty-five years of evaluation. *Clinical Psychology Review, 8*, 77–100. doi:10.1016/0272-7358(88)90050-5
- Beck, A. T., Ward, C., & Mendelson, M. (1961). Beck Depression Inventory (BDI). *Archives of General Psychiatry, 4*, 561–571. doi:10.1001/archpsyc.1961.01710120031004
- Bellah, R. N., Madsen, R., Sullivan, W. M., Swidler, A., & Tipton, S. M. (1985). *Habits of the heart: Individualism and commitment in American life*. Berkeley: University of California Press.
- Bellows-Riecken, K. H., & Rhodes, R. E. (2008). A birth of inactivity? A review of physical activity and parenthood. *Preventive Medicine, 46*, 99–110. doi:10.1016/j.ypmed.2007.08.003
- *Belsky, J., Crnic, K., & Woodworth, S. (1995). Personality and parenting: Exploring the mediating role of transient mood and daily hassles. *Journal of Personality, 63*, 905–929. doi:10.1111/j.1467-6494.1995.tb00320.x
- *Belsky, J., & Isabella, R. A. (1985). Marital and parent–child relationships in family of origin and marital change following the birth of a baby: A retrospective analysis. *Child Development, 56*, 342–349. doi:10.2307/1129724
- Belsky, J., & Pensky, E. (1988). Marital change across the transition to parenthood. *Marriage & Family Review, 12*, 133–156. doi:10.1300/J002v12n03_08
- *Belsky, J., & Rovine, M. (1990). Patterns of marital change across the transition to parenthood: Pregnancy to three years postpartum. *Journal of Marriage and the Family, 52*, 5–19. doi:10.2307/352833
- Benson, J. E., & Furstenberg, F. F., Jr. (2006). Entry into adulthood: Are adult role transitions meaningful markers of adult identity? *Advances in Life Course Research, 11*, 199–224. doi:10.1016/S1040-2608(06)11008-4
- Berger, E. M., & Spiess, C. K. (2011). Maternal life satisfaction and child outcomes: Are they related? *Journal of Economic Psychology, 32*, 142–158. doi:10.1016/j.joep.2010.10.001
- Berntsen, D., Rubin, D. C., & Siegler, I. C. (2011). Two versions of life: Emotionally negative and positive life events have different roles in the organization of life story and identity. *Emotion, 11*, 1190–1201. doi:10.1037/a0024940
- Berwick, D. M., Murphy, J. M., Goldman, P. A., Ware, J. E., Barsky, A. J., & Weinstein, M. C. (1991). Performance of a five-item mental health screening test. *Medical Care, 29*, 169–176. doi:10.1097/00005650-199102000-00008
- Bhargava, S., Kassam, K. S., & Loewenstein, G. (in press). A reassessment of the “Defense of Parenthood.” *Psychological Science*.

- Bianchi, S. M. (2000). Maternal employment and time with children: Dramatic change or surprising continuity? *Demography*, *37*, 401–414. doi:10.1353/dem.2000.0001
- Bianchi, S. M., Milkie, M. A., Sayer, L. C., & Robinson, J. P. (2000). Is anyone doing the housework? Trends in the gender division of household labor. *Social Forces*, *79*, 191–228. doi:10.2307/2675569
- Bianchi, S. M., Robinson, J. P., & Milkie, M. A. (2006). *Changing rhythms of American family life*. New York, NY: Russell Sage Foundation.
- *Bird, C. E. (1997). Gender differences in the social and economic burdens of parenting and psychological distress. *Journal of Marriage and the Family*, *59*, 809–823. doi:10.2307/353784
- *Birditt, K. S., Fingerman, K. L., & Zarit, S. (2010). Adult children's problems and successes: Implications for intergenerational ambivalence. *Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*, *65*, 145–153. doi:10.1093/geronb/gbp125
- *Birditt, K. S., Miller, L. M., Fingerman, K. L., & Lefkowitz, E. S. (2009). Tensions in the parent and adult child relationship: Links to solidarity and ambivalence. *Psychology and Aging*, *24*, 287–295. doi:10.1037/a0015196
- Blair, S. L., & Lichter, D. T. (1991). Measuring the division of household labor: Gender segregation of housework among American couples. *Journal of Family Issues*, *12*, 91–113. doi:10.1177/019251391012001007
- *Blanchflower, D. G., & Oswald, A. (2004). Well-being over time in Britain and the USA. *Journal of Public Economics*, *88*, 1359–1386. doi:10.1016/S0047-2727(02)00168-8
- Booth, A., Amato, P. R., Johnson, D., & Edwards, J. (1993). *Marital instability over the life course: Methodology report for the fourth wave*. Lincoln, NE: University of Nebraska Bureau of Sociological Research.
- *Borders, D., Black, L. K., & Pasley, B. K. (1998). Are adopted children and their parents at greater risk for negative outcomes? *Family Relations*, *47*, 237–241. doi:10.2307/584972
- *Bost, K. K., Cox, M. J., & Payne, C. (2002). Structural and supportive changes in couples' family and friendship networks across the transition to parenthood. *Journal of Marriage and Family*, *64*, 517–531. doi:10.1111/j.1741-3737.2002.00517.x
- Bowlby, J. (1982). *Attachment and loss: Vol. 1. Attachment* (2nd ed.). New York, NY: Basic Books.
- Bradburn, N. M. (1969). *The structure of psychological well-being*. Chicago, IL: Aldine.
- Braiker, H., & Kelley, H. (1979). Conflict in the development of close relationships. In R. Burgess & T. Huston (Eds.), *Social exchange and developing relationships* (pp. 135–168). doi:10.1016/B978-0-12-143550-9.50011-2
- Brodzinsky, D. M., & Huffman, L. (1988). Transition to adoptive parenthood. *Marriage & Family Review*, *12*, 267–286. doi:10.1300/J002v12n03_13
- Budig, M. J., & England, P. (2001). The wage penalty for motherhood. *American Sociological Review*, *66*, 204–225. doi:10.2307/2657415
- Busseri, M. A., & Sadava, S. W. (2011). A review of the tripartite structure of subjective well-being: Implications for conceptualization, operationalization, analysis, and synthesis. *Personality and Social Psychology Review*, *15*, 290–314. doi:10.1177/1088868310391271
- *Callan, V. J. (1987). The personal and marital adjustment of mothers and voluntarily and involuntarily childless wives. *Journal of Marriage and the Family*, *49*, 847–856. doi:10.2307/351978
- Caplan, B. (2011). *Selfish reasons to have more kids: Why being a great parent is less work and more fun than you think*. New York, NY: Basic Books.
- *Caporale, G. M., Georgellis, Y., Tsitsianis, N., & Yin, Y. P. (2009). Income and happiness across Europe: Do reference values matter? *Journal of Economic Psychology*, *30*, 42–51. doi:10.1016/j.joep.2008.06.004
- Cattell, R. B. (1972). The nature and genesis of mood states. In C. B. Spielberger (Ed.), *Anxiety: Current trends in theory and research* (pp. 115–183). New York, NY: Academic Press.
- *Ceballos, R., Lansford, J. E., Abbey, A., & Stewart, A. J. (2004). Gaining a child: Comparing the experiences of biological parents, adoptive parents, and stepparents. *Family Relations*, *53*, 38–48. doi:10.1111/j.1741-3729.2004.00007.x
- Chadi, A. (2012). Employed but still unhappy? On the relevance of the social work norm. *Journal of Applied Social Science Studies*, *132*, 1–26. doi:10.3790/schm.132.1.1
- *Chalmers, B., & Meyer, D. (1996). What men say about pregnancy, birth and parenthood. *Journal of Psychosomatic Obstetrics and Gynecology*, *17*, 47–52. doi:10.3109/01674829609025663
- Child Trends. (2002). *Charting parenthood: A statistical portrait of fathers and mothers in America*. Washington, DC: Author.
- *Chou, K. L., & Chi, I. (2004). Childlessness and psychological well-being in Chinese older adults. *International Journal of Geriatric Psychiatry*, *19*, 449–457. doi:10.1002/gps.1111
- Clark, A. E., Diener, E., Georgellis, Y., & Lucas, R. E. (2008). Lags and leads in life satisfaction: A test of the baseline hypothesis. *Economic Journal*, *118*, F222–F243. doi:10.1111/j.1468-0297.2008.02150.x
- Clark, L. A. (2005). Temperament as a unifying basis for personality and psychopathology. *Journal of Abnormal Psychology*, *114*, 505–521. doi:10.1037/0021-843X.114.4.505
- *Claxton, A., & Perry-Jenkins, M. (2008). No fun anymore: Leisure and marital quality across the transition to parenthood. *Journal of Marriage and Family*, *70*, 28–43. doi:10.1111/j.1741-3737.2007.00459.x
- Cohen, J., & Cohen, P. (1983). *Applied multiple regression/correlation analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, *24*, 385–396. doi:10.2307/2136404
- *Conger, R. D., McCarty, J. A., Yang, R. K., Lahey, B. B., & Kropp, J. P. (1984). Perception of child, child-rearing values, and emotional distress as mediating links between environmental stressors and observed maternal behavior. *Child Development*, *55*, 2234–2247. doi:10.2307/1129795
- Coulson, J. C., Oades, L. G., & Stoyles, G. J. (2012). Parents' subjective sense of calling in childrearing: Measurement, development and initial findings. *Journal of Positive Psychology*, *7*, 83–94. doi:10.1080/17439760.2011.633547
- Cowan, C. P., & Cowan, P. A. (1992). *When partners become parents*. New York, NY: Basic Books.
- *Cmic, K. A., & Greenberg, M. T. (1990). Minor parenting stresses with young children. *Child Development*, *61*, 1628–1637. doi:10.2307/1130770
- Crouter, A. C., & Bumpus, M. F. (2001). Linking parents' work stress to children's and adolescents' psychological adjustment. *Current Directions in Psychological Science*, *10*, 156–159. doi:10.1111/1467-8721.00138
- Csikszentmihalyi, M. (1990). *Flow*. New York, NY: Harper & Row.
- Cui, M., & Donnellan, M. B. (2009). Trajectories of conflict over raising adolescent children and marital satisfaction. *Journal of Marriage and Family*, *71*, 478–494. doi:10.1111/j.1741-3737.2009.00614.x
- *Cunningham, A. M., & Knoester, C. (2007). Marital status, gender, and parents' psychological well-being. *Sociological Inquiry*, *77*, 264–287. doi:10.1111/j.1475-682X.2007.00190.x
- *Cutrona, C. E., & Troutman, B. R. (1986). Social support, infant temperament, and parenting self-efficacy: A mediational model of postpartum depression. *Child Development*, *57*, 1507–1518. doi:10.2307/1130428
- Darling, N., & Steinberg, L. (1993). Parenting style as context: An integrative model. *Psychological Bulletin*, *113*, 487–496. doi:10.1037/0033-2909.113.3.487
- Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, *11*, 227–268. doi:10.1207/S15327965PLI1104_01

- Deci, E. L., & Ryan, R. M. (2008). Self-determination theory: A macrotheory of human motivation, development, and health. *Canadian Psychology/Psychologie canadienne*, *49*, 182–185. doi:10.1037/a0012801
- *Delle Fave, A., & Massimini, F. (2004). Parenthood and the quality of experience in daily life: A longitudinal study. *Social Indicators Research*, *67*, 75–106. doi:10.1023/B:SOCI.0000007335.26602.59
- *Demo, D. H., & Acock, A. C. (1996). Singlehood, marriage, and remarriage: The effects of family structure and family relationships on mothers' well-being. *Journal of Family Issues*, *17*, 388–407. doi:10.1177/019251396017003005
- Derogatis, L. R. (1977). *SCL-90-R: Administration, Scoring and Procedures Manual I for the revised version of other instruments of the Psychopathology Rating Scale series*. Baltimore, MD: John Hopkins University.
- Derogatis, L. R., Lipman, R. S., Covi, L., & Rickles, K. (1971). Neurotic symptom dimensions: As perceived by psychiatrists and patients of various social classes. *Archives of General Psychiatry*, *24*, 454–464. doi:10.1001/archpsyc.1971.01750110066011
- Derogatis, L. R., & Melisaratos, N. (1983). The Brief Symptom Inventory: An introductory report. *Psychological Medicine*, *13*, 595–605. doi:10.1017/S0033291700048017
- Desmet, P. M. A., & Schifferstein, H. N. J. (2008). Sources of positive and negative emotions in food experience. *Appetite*, *50*, 290–301. doi:10.1016/j.appet.2007.08.003
- DeVoe, S. E., & Pfeffer, J. (2011). Time is tight: How higher economic value of time increases feelings of time pressure. *Journal of Applied Psychology*, *96*, 665–676. doi:10.1037/a0022148
- Diener, E. (1984). Subjective well-being. *Psychological Bulletin*, *95*, 542–575. doi:10.1037/0033-2909.95.3.542
- Diener, E. (2000). Subjective well-being: The science of happiness and a proposal for a national index. *American Psychologist*, *55*, 34–43. doi:10.1037/0003-066X.55.1.34
- Diener, E., & Biswas-Diener, R. (2002). Will money increase subjective well-being? A literature review and guide to needed research. *Social Indicators Research*, *57*, 119–169. doi:10.1023/A:1014411319119
- Diener, E., & Diener, M. (1995). Cross-cultural correlates of life satisfaction and self-esteem. *Journal of Personality and Social Psychology*, *68*, 653–663. doi:10.1037/0022-3514.68.4.653
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction With Life Scale. *Journal of Personality Assessment*, *49*, 71–75. doi:10.1207/s15327752jpa4901_13
- Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin*, *125*, 276–302. doi:10.1037/0033-2909.125.2.276
- Dix, T. (1991). The affective organization of parenting: Adaptive and maladaptive processes. *Psychological Bulletin*, *110*, 3–25. doi:10.1037/0033-2909.110.1.3
- Dolan, P., Peasgood, T., & White, M. (2008). Do we really know what makes us happy? A review of the economic literature on the factors associated with subjective well-being. *Journal of Economic Psychology*, *29*, 94–122. doi:10.1016/j.joep.2007.09.001
- Dumas, J. E. (1986). Indirect influence of maternal social contacts on mother-child interactions: A setting event analysis. *Journal of Abnormal Child Psychology*, *14*, 205–216. doi:10.1007/BF00915441
- Duncan, G. J., & Morgan, J. N. (1980). The incidence and some consequences of major life events. In G. J. Duncan & J. N. Morgan (Eds.), *Five thousand American families—Patterns of economic progress* (Vol. 8, pp. 183–240). Ann Arbor, MI: Institute for Social Research.
- Dunst, C. J., & Trivette, C. M. (1988). A family systems model of early intervention with handicapped and developmentally at-risk children. In D. P. Powell (Ed.), *Parent education as early childhood intervention: Emerging directions in theory, research, and practice* (pp. 131–179). Norwood, NJ: Ablex.
- *Dyrdal, G. M., & Lucas, R. E. (2013). Reaction and adaptation to the birth of a child: A couple-level analysis. *Developmental Psychology*, *49*, 749–761. doi:10.1037/a0028335
- Eibach, R. P., & Mock, S. E. (2011). Idealizing parenthood to rationalize parental investments. *Psychological Science*, *22*, 203–208. doi:10.1177/0956797610397057
- *Elek, S. M., Hudson, D. B., & Fleck, M. O. (2002). Couples' experiences with fatigue during the transition to parenthood. *Journal of Family Nursing*, *8*, 221–240. doi:10.1177/107484070200800305
- Emmons, R. A. (2003). Personal goals, life meaning, and virtue: Well-springs of a positive life. In C. L. M. Keyes (Ed.), *Flourishing: The positive person and the good life* (pp. 105–128). doi:10.1037/10594-005
- Emmons, R. A., & King, L. A. (1988). Conflict among personal strivings: Immediate and long-term implications for psychological and physical well-being. *Journal of Personality and Social Psychology*, *54*, 1040–1048. doi:10.1037/0022-3514.54.6.1040
- England, P. (2010). The gender revolution: Uneven and stalled. *Gender & Society*, *24*, 149–166. doi:10.1177/0891243210361475
- Ernst Kossek, E., & Ozeki, C. (1998). Work-family conflict, policies, and the job-life satisfaction relationship: A review and directions for organizational behavior-human resources research. *Journal of Applied Psychology*, *83*, 139–149. doi:10.1037/0021-9010.83.2.139
- *Evenson, R. J., & Simon, R. W. (2005). Clarifying the relationship between parenthood and depression. *Journal of Health and Social Behavior*, *46*, 341–358. doi:10.1177/002214650504600403
- Fazio, A. (1977). A concurrent validation study of the NCHS General Well-Being Schedule. In *Vital and Health Statistics Publications* (Series 2, No. 73). Washington, DC: Government Printing Office.
- *Feldman, S. S., & Nash, S. C. (1984). The transition from expectancy to parenthood: Impact of the firstborn child on men and women. *Sex Roles*, *11*, 61–78. doi:10.1007/BF00287441
- *Ferrer-i-Carbonell, A. (2005). Income and well-being: An empirical analysis of the comparison income effect. *Journal of Public Economics*, *89*, 997–1019. doi:10.1016/j.jpubeco.2004.06.003
- *Fine, M. A., Schwebel, A. I., & Myers, L. J. (1985). The effects of world view on adaptation to single parenthood among middle-class adult women. *Journal of Family Issues*, *6*, 107–127. doi:10.1177/019251385006001007
- *Fingerman, K. L., Cheng, Y.-P., Birditt, K., & Zarit, S. (2012). Only as happy as the least happy child: Multiple grown children's problems and successes and middle-aged parents' well-being. *Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*, *67*, 184–193. doi:10.1093/geronb/gbr086
- *Fingerman, K. L., Pitzer, L., Lefkowitz, E. S., Birditt, K. S., & Mroczek, D. (2008). Ambivalent relationship qualities between adults and their parents: Implications for both parties' well-being. *Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*, *63*, P362–P371. doi:10.1093/geronb/63.6.P362
- Flouri, E. (2004). Subjective well-being in midlife: The role of involvement and closeness to parents in childhood. *Journal of Happiness Studies*, *5*, 335–358. doi:10.1023/B:JOHS.0000048461.21694.92
- Frankel, S. A., & Wise, M. J. (1982). A view of delayed parenting: Some implications of a new trend. *Psychiatry*, *45*, 220–225.
- Frone, M. R., Russell, M., & Cooper, M. L. (1992). Prevalence of work-family conflict: Are work and family boundaries asymmetrically permeable? *Journal of Organizational Behavior*, *13*, 723–729. doi:10.1002/job.4030130708
- Furedi, F. (2002). *Paranoid parenting*. Chicago, IL: Chicago Review Press.
- *Galatzer-Levy, I. R., Mazursky, H., Mancini, A. D., & Bonanno, G. (2011). What we don't expect when expecting: Evidence for heterogeneity in subjective well-being in response to parenthood. *Journal of Family Psychology*, *25*, 384–392. doi:10.1037/a0023759

- *Galinsky, E., Bond, J. T., & Friedman, D. E. (1996). The role of employers in addressing the needs of employed parents. *Journal of Social Issues, 52*, 111–136. doi:10.1111/j.1540-4560.1996.tb01582.x
- Garfinkel, I., & McLanahan, S. S. (1986). *Single mothers and their children*. Washington, DC: Urban Institute.
- *Garrison, M. E. B., Blalock, L. B., Zarski, J. J., & Merritt, P. B. (1997). Delayed parenthood: An exploratory study of family functioning. *Family Relations, 46*, 281–290. doi:10.2307/585126
- Gay, C. L., Lee, K. A., & Lee, S. (2004). Sleep patterns and fatigue in new mothers and fathers. *Biological Research for Nursing, 5*, 311–318. doi:10.1177/1099800403262142
- *Gelfand, D. M., Teti, D. M., & Radin Fox, C. E. (1992). Sources of parenting stress for depressed and non-depressed mothers. *Journal of Clinical Child Psychology, 21*, 262–272. doi:10.1207/s15374424jccp2103_8
- Gerson, M.-J., Berman, L. S., & Morris, A. M. (1991). The value of having children as an aspect of adult development. *Journal of Genetic Psychology, 152*, 327–339. doi:10.1080/00221325.1991.9914690
- Gibaud-Wallston, J., & Wandersman, L. P. (1978, August). *Development and utility of the Parenting Sense of Competence Scale*. Paper presented at the meeting of the American Psychological Association, Toronto, Ontario, Canada.
- *Glenn, N. D., & McLanahan, S. (1981). The effects of offspring on the psychological well-being of older adults. *Journal of Marriage and the Family, 43*, 409–421. doi:10.2307/351391
- *Glenn, N. D., & Weaver, C. N. (1979). A note on family situation and global happiness. *Social Forces, 57*, 960–967. doi:10.2307/2577364
- Goldberg, D. P. (1972). *The detection of psychiatric illness by questionnaire*. London, England: Oxford University Press.
- *Gorchoff, S. M., John, O. P., & Helson, R. (2008). Marital satisfaction during middle age: An 18-year longitudinal study. *Psychological Science, 19*, 1194–1200. doi:10.1111/j.1467-9280.2008.02222.x
- Greenhaus, J. H., & Powell, G. N. (2006). When work and family are allies: A theory of work–family enrichment. *Academy of Management Review, 31*, 72–92. doi:10.5465/AMR.2006.19379625
- *Grossman, F. K., Pollack, W. S., Golding, E. R., & Fedele, N. M. (1987). Affiliation and autonomy in the transition to parenthood. *Family Relations, 36*, 263–269. doi:10.2307/583538
- Gurin, G., Veroff, J., & Feld, S. C. (1960). *Americans view their mental health*. Oxford, England: Basic Books.
- Hahn-Holbrook, J., Holbrook, C., & Haselton, M. G. (2011). Parental precaution: Neurobiological means and adaptive ends. *Neuroscience and Biobehavioral Reviews, 35*, 1052–1066. doi:10.1016/j.neubiorev.2010.09.015
- Hamermesh, D., & Lee, J. (2007). Stressed out on four continents: Time crunch or yuppie kvetch? *Review of Economics and Statistics, 89*, 374–383. doi:10.1162/rest.89.2.374
- Hansen, T. (2012). Parenthood and happiness: A review of folk theories versus empirical evidence. *Social Indicators Research, 108*, 29–64. doi:10.1007/s11205-011-9865-y
- *Hansen, T., Slagsvold, B., & Moum, T. (2009). Childlessness and psychological well-being in midlife and old age: An examination of parental status effects across a range of outcomes. *Social Indicators Research, 94*, 343–362. doi:10.1007/s11205-008-9426-1
- Hattiangadi, N., Medvec, V. H., & Gilovich, T. (1995). Failing to act: Regrets of Terman's geniuses. *International Journal of Aging & Human Development, 40*, 175–185. doi:10.2190/4U4E-N77B-PKJ2-CJXM
- Haviland, J. M., & Lelwica, M. (1987). The induced affective response: 10-week-old infants' responses to three emotion expressions. *Developmental Psychology, 23*, 97–104. doi:10.1037/0012-1649.23.1.97
- Heiss, J. (1976). *Family roles and interaction: An anthology*. Chicago, IL: Rand McNally.
- Hendrick, S. S., Dicke, A., & Hendrick, C. (1998). The Relationship Assessment Scale. *Journal of Social and Personal Relationships, 15*, 137–142. doi:10.1177/0265407598151009
- *Herbst, C. M., & Ifcher, J. (2013). *A bundle of joy: Does parenting really make us miserable?* Manuscript submitted for publication.
- Hilton, J., Desrochers, S., & Devall, E. (2001). Comparison of role demands, relationships, and child functioning in single-mother, single-father, and intact families. *Journal of Divorce & Remarriage, 35*, 29–56. doi:10.1300/J087v35n01_02
- Hoffman, L. W. (1978). Effects of the first child on the woman's role. In B. Miller & L. F. Newman (Eds.), *The first child and family formation* (pp. 340–367). Chapel Hill: University of North Carolina Press.
- *Holmes, E. K., Erickson, J. J., & Hill, E. J. (2012). Doing what she thinks best: Maternal psychological wellbeing and attaining desired work situations. *Human Relations, 65*, 501–522. doi:10.1177/0018726711431351
- Hunter, L. A., & Leahey, E. (2010). Parenting and research productivity: New evidence and methods. *Social Studies of Science, 40*, 433–451. doi:10.1177/0306312709358472
- *Impett, E. A., English, T., & John, O. P. (2011). Women's emotions during interactions with their grown children in later adulthood: The moderating role of attachment avoidance. *Social Psychological and Personality Science, 2*, 42–50. doi:10.1177/1948550610379505
- *Ishii-Kuntz, M., & Ihinger-Tallman, M. (1991). The subjective well-being of parents. *Journal of Family Issues, 12*, 58–68. doi:10.1177/019251391012001005
- Ishii-Kuntz, M., & Seccombe, K. (1989). The impact of children upon social support networks throughout the life course. *Journal of Marriage and the Family, 51*, 777–790. doi:10.2307/352176
- Jackson, A. P., Brooks-Gunn, J., Huang, C.-C., & Glassman, M. (2000). Single mothers in low-wage jobs: Financial strain, parenting, and preschoolers' outcomes. *Child Development, 71*, 1409–1423. doi:10.1111/1467-8624.00236
- Jones, R. K., & Brayfield, A. (1997). Life's greatest joy? European attitudes toward the centrality of children. *Social Forces, 75*, 1239–1270. doi:10.1093/sf/75.4.1239
- Jouriles, E., & O'Leary, K. (1991). Influences of parental mood on parent behavior. In E. Blechman (Ed.), *Emotions in the family* (pp. 181–199). Hillsdale, NJ: Erlbaum.
- *Kahneman, D., Krueger, A. B., Schkade, D. A., Schwarz, N., & Stone, A. A. (2004, December 3). A survey method for characterizing daily life experience: The day reconstruction method. *Science, 306*, 1776–1780. doi:10.1126/science.1103572
- Kanner, A. D., Coyne, J. C., Schaefer, C., & Lazarus, R. S. (1981). Comparison of two modes of stress measurement: Daily hassles and uplifts versus major life events. *Journal of Behavioral Medicine, 4*, 1–39. doi:10.1007/BF00844845
- *Keeton, C. P., Perry-Jenkins, M., & Sayer, A. G. (2008). Sense of control predicts depressive and anxious symptoms across the transition to parenthood. *Journal of Family Psychology, 22*, 212–221. doi:10.1037/0893-3200.22.2.212
- *Keizer, R., Dykstra, P. A., & Poortman, A. R. (2010). Life outcomes of childless men and fathers. *European Sociological Review, 26*, 1–15. doi:10.1093/esr/jcn080
- Kennedy, S., & Bumpass, L. (2008). Cohabitation and children's living arrangements: New estimates from the United States. *Demographic Research, 19*, 1663–1692. doi:10.4054/DemRes.2008.19.47
- Kenrick, D. T., Griskevicius, V., Neuberg, S. L., & Schaller, M. (2010). Renovating the pyramid of needs: Contemporary extensions built upon ancient foundations. *Perspectives on Psychological Science, 5*, 292–314. doi:10.1177/1745691610369469
- *Kiecolt, K. J., Blieszner, R., & Savla, J. (2011). Long-term influences of intergenerational ambivalence on midlife parents' psychological well-being. *Journal of Marriage and Family, 73*, 369–382. doi:10.1111/j.1741-3737.2010.00812.x
- *Kinnunen, U., Feldt, T., Geurts, S., & Pulkkinen, L. (2006). Types of work-family interface: Well-being correlates of negative and positive

- spillover between work and family. *Scandinavian Journal of Psychology*, 47, 149–162. doi:10.1111/j.1467-9450.2006.00502.x
- *Knoester, C., & Eggebeen, D. J. (2006). The effects of the transition to parenthood and subsequent children on men's well-being and social participation. *Journal of Family Issues*, 27, 1532–1560. doi:10.1177/0192513X06290802
- Knowles, M. L., & Gardner, W. L. (2008). Benefits of membership: The activation and amplification of group identities in response to social rejection. *Personality and Social Psychology Bulletin*, 34, 1200–1213. doi:10.1177/0146167208320062
- Koeske, G. F., & Koeske, R. D. (1990). The buffering effect of social support on parental stress. *American Journal of Orthopsychiatry*, 60, 440–451. doi:10.1037/h0079164
- Kohler, H. P., Behrman, J. R., & Skytthe, A. (2005). Partner + children = happiness? The effects of partnerships and fertility on well-being. *Population and Development Review*, 31, 407–445. doi:10.1111/j.1728-4457.2005.00078.x
- Kohn, J. L., Rholes, W. S., Simpson, J. A., Martin, A. M., Tran, S., & Wilson, C. L. (2012). Changes in marital satisfaction across the transition to parenthood: The role of adult attachment orientations. *Personality and Social Psychology Bulletin*, 38, 1506–1522. doi:10.1177/0146167212454548
- *Krueger, A. B., Kahneman, D., Fischler, C., Schkade, D., Schwarz, N., & Stone, A. A. (2009). Time use and subjective well-being in France and the U.S. *Social Indicators Research*, 93, 7–18. doi:10.1007/s11205-008-9415-4
- Krueger, A. B., & Schkade, D. A. (2008). The reliability of subjective well-being measures. *Journal of Public Economics*, 92, 1833–1845. doi:10.1016/j.jpubeco.2007.12.015
- Krug, S. E., & Laughlin, J. E. (1976). *Handbook for the IPAT Depression Scale*. Champaign, IL: Institute for Personality and Ability Testing.
- Krug, S. E., Scheier, I. H., & Cattell, R. B. (1976). *Handbook for the IPAT Anxiety Scale*. Champaign, IL: Institute for Personality and Ability Testing.
- Kushlev, K. (2011). *Exploring parental well-being: Is childcare associated with parental well-being and what factors can enhance it?* (Unpublished master's thesis.). University of British Columbia, Vancouver, British Columbia, Canada.
- *Kushlev, K., Dunn, E. W., & Ashton-James, C. (2012). Does affluence impoverish the experience of parenting? *Journal of Experimental Social Psychology*, 48, 1381–1384. doi:10.1016/j.jesp.2012.06.001
- *Lansford, J. E., Ceballo, R., Abbey, A., & Stewart, A. J. (2001). Does family structure matter? A comparison of adoptive, two-parent biological, single-mother, stepfather, and stepmother households. *Journal of Marriage and Family*, 63, 840–851. doi:10.1111/j.1741-3737.2001.00840.x
- *Larson, R. W., Richards, M. H., & Perry-Jenkins, M. (1994). Divergent worlds: The daily emotional experience of mothers and fathers in the domestic and public spheres. *Journal of Personality and Social Psychology*, 67, 1034–1046. doi:10.1037/0022-3514.67.6.1034
- *Lawrence, E., Rothman, A. D., Cobb, R. J., Rothman, M. T., & Bradbury, T. N. (2008). Marital satisfaction across the transition to parenthood. *Journal of Family Psychology*, 22, 41–50. doi:10.1037/0893-3200.22.1.41
- Lee, E. J. (2008). Living with risk in the age of “intensive motherhood”: Maternal identity and infant feeding. *Health, Risk & Society*, 10, 467–477. doi:10.1080/13698570802383432
- Lee, K. A., Hicks, G., & Nino-Murcia, G. (1991). Validity and reliability of a scale to assess fatigue. *Psychiatry Research*, 36, 291–298. doi:10.1016/0165-1781(91)90027-M
- *Lee, K. A., Zaffke, M. E., & McEnany, G. (2000). Parity and sleep patterns during and after pregnancy. *Obstetrics & Gynecology*, 95, 14–18. doi:10.1016/S0029-7844(99)00486-X
- Leonard, C., Fanning, N., Attwood, J., & Buckley, M. (1998). The effect of fatigue, sleep deprivation and onerous working hours on the physical and mental wellbeing of preregistration house officers. *Irish Journal of Medical Science*, 167, 22–25. doi:10.1007/BF02937548
- Levitt, M. J., Weber, R. A., & Clark, M. C. (1986). Social network relationships as sources of maternal support and well-being. *Developmental Psychology*, 22, 310–316. doi:10.1037/0012-1649.22.3.310
- Lipsey, M. W., & Wilson, D. B. (2001). *Practical meta-analysis*. London, England: Sage.
- Loewenstein, G., & Ubel, P. A. (2008). Hedonic adaptation and the role of decision and experience utility in public policy. *Journal of Public Economics*, 92, 1795–1810. doi:10.1016/j.jpubeco.2007.12.011
- Lucas, R. E., Clark, A. E., Georgellis, Y., & Diener, E. (2003). Re-examining adaptation and the set point model of happiness: Reactions to changes in marital status. *Journal of Personality and Social Psychology*, 84, 527–539. doi:10.1037/0022-3514.84.3.527
- Luhmann, M., Hofmann, W., Eid, M., & Lucas, R. E. (2012). Subjective well-being and adaptation to life events: A meta-analysis. *Journal of Personality and Social Psychology*, 102, 592–615. doi:10.1037/a0025948
- Luhmann, M., Lucas, R. E., Eid, M., & Diener, E. (2013). The prospective effect of life satisfaction on life events. *Social Psychological and Personality Science*, 4, 39–45. doi:10.1177/1948550612440105
- Lynam, D. R., Hoyle, R. H., & Newman, J. P. (2006). The perils of partialling: Cautionary tales from aggression and psychopathy. *Assessment*, 13, 328–341. doi:10.1177/1073191106290562
- Lynch, J. W., Kaplan, G. A., & Salonen, J. T. (1997). Why do poor people behave poorly? Variation in adult health behaviors and psychosocial characteristics by stages of the socioeconomic life-course. *Social Science & Medicine*, 44, 809–819. doi:10.1016/S0277-9536(96)00191-8
- Lyubomirsky, S., & Boehm, J. K. (2010). Human motives, happiness, and the puzzle of parenthood: Commentary on Kenrick et al. *Perspectives on Psychological Science*, 5, 327–334. doi:10.1177/1745691610369473
- Lyubomirsky, S., King, L. A., & Diener, E. (2005). The benefits of frequent positive affect: Does happiness lead to success? *Psychological Bulletin*, 131, 803–855. doi:10.1037/0033-2909.131.6.803
- Lyubomirsky, S., & Layous, K. (2013). How do simple positive activities increase well-being? *Current Directions in Psychological Science*, 22, 57–62. doi:10.1177/0963721412469809
- Lyubomirsky, S., & Lepper, H. S. (1999). A measure of subjective happiness: Preliminary reliability and construct validation. *Social Indicators Research*, 46, 137–155. doi:10.1023/A:1006824100041
- Lyubomirsky, S., Sheldon, K. M., & Schkade, D. (2005). Pursuing happiness: The architecture of sustainable change. *Review of General Psychology*, 9, 111–131. doi:10.1037/1089-2680.9.2.111
- *MacEwen, K., & Barling, J. (1991). Effects of maternal employment experiences on children's behavior via mood, cognitive difficulties, and parenting behavior. *Journal of Marriage and the Family*, 53, 635–644. doi:10.2307/352739
- Macht, M., & Dettmer, D. (2006). Everyday mood and emotions after eating a chocolate bar or an apple. *Appetite*, 46, 332–336. doi:10.1016/j.appet.2006.01.014
- MacPhee, D., Benson, J. B., & Bullock, D. (1986, April). *Influences on maternal self-perceptions*. Paper presented at the biennial International Conference on Infant Studies, Los Angeles, CA.
- Martinez, G. M., Chandra, A., Abma, J. C., Jones, J., & Mosher, W. D. (2006). Fertility, contraception, and fatherhood: Data on men and women from Cycle 6 (2002) of the 2002 National Survey of Family Growth. *National Center for Health Statistics Vital and Health Statistics*, 26, 1–142.
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50, 370–396. doi:10.1037/h0054346
- *McBride, B. A., Schoppe, S. J., & Rane, T. R. (2002). Child characteristics, parenting stress, and parental involvement: Fathers versus moth-

- ers. *Journal of Marriage and Family*, 64, 998–1011. doi:10.1111/j.1741-3737.2002.00998.x
- McLanahan, S., & Adams, J. (1987). Parenthood and psychological well-being. *Annual Review of Sociology*, 13, 237–257. doi:10.1146/annurev.so.13.080187.001321
- *McLanahan, S., & Adams, J. (1989). The effects of children on adults' psychological well-being: 1957–1976. *Social Forces*, 68, 124–146. doi:10.1093/sf/68.1.124
- Medina, A. M., Lederhos, C. L., & Lillis, T. A. (2009). Sleep disruption and decline in marital satisfaction across the transition to parenthood. *Families, Systems, & Health*, 27, 153–160. doi:10.1037/a0015762
- *Menaghan, E. G. (1989). Psychological well-being among parents and nonparents: The importance of normative expectedness. *Journal of Family Issues*, 10, 547–565. doi:10.1177/019251389010004007
- Mikulincer, M., & Florian, V. (1998). The relationship between adult attachment styles and emotional and cognitive reactions to stressful events. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 143–165). New York, NY: Guilford Press.
- *Milkie, M. A., Bianchi, S. M., Mattingly, M. J., & Robinson, J. P. (2002). Gendered division of childrearing: Ideals, realities, and the relationship to parental well-being. *Sex Roles*, 47, 21–38. doi:10.1023/A:1020627602889
- *Miller, B. C., & Sollie, D. L. (1980). Normal stresses during the transition to parenthood. *Family Relations*, 29, 459–465. doi:10.2307/584459
- *Minton, C., & Pasley, K. (1996). Fathers' parenting role identity and father involvement: A comparison of nondivorced and divorced, non-resident fathers. *Journal of Family Issues*, 17, 26–45. doi:10.1177/019251396017001003
- *Mirowsky, J., & Ross, C. E. (2002). Depression, parenthood, and age at first birth. *Social Science & Medicine*, 54, 1281–1298. doi:10.1016/S0277-9536(01)00096-X
- Mitchell, J., & Bradley, C. (2001). Psychometric evaluation of the 12-item Well-Being Questionnaire for use with people with macular disease. *Quality of Life Research*, 10, 465–473. doi:10.1023/A:1012540100613
- Mowder, B. A., Harvey, V. S., Moy, L., & Pedro, M. (1995). Parent role characteristics: Parent views and their implications for school psychologists. *Psychology in the Schools*, 32, 27–37. doi:10.1002/1520-6807(199501)32:1<27::AID-PITS2310320106>3.0.CO;2-M
- *Munch, A., McPherson, J. M., & Smith-Lovin, L. (1997). Gender, children, and social contact: The effects of childrearing for men and women. *American Sociological Review*, 62, 509–520. doi:10.2307/2657423
- Myrskylä, M., & Margolis, R. (2012). *Happiness: Before and after the kids* (MPIDR Working Paper No. WP 2012-013). Rostock, Germany: Max Planck Institute for Demographic Research.
- Nauck, B. (2007). Value of children and the framing of fertility: Results from a cross-cultural comparative survey in 10 societies. *European Sociological Review*, 23, 615–629. doi:10.1093/esr/jcm028
- Nelson, S. K., Kushlev, K., Dunn, E. W., & Lyubomirsky, S. (in press). Parents are slightly happier than nonparents, but causality still cannot be inferred: A reply to Bhargava, Kassam, and Loewenstein. *Psychological Science*.
- *Nelson, S. K., Kushlev, K., English, T., Dunn, E. W., & Lyubomirsky, S. (2013). In defense of parenthood: Children are associated with more joy than misery. *Psychological Science*, 24, 3–10. doi:10.1177/0956797612447798
- Nock, S. L., & Kingston, P. W. (1988). Time with children: The impact of couples' work-time commitments. *Social Forces*, 67, 59–85. doi:10.1093/sf/67.1.59
- *Nomaguchi, K. M., & Milkie, M. A. (2003). Costs and rewards of children: The effects of becoming a parent on adults' lives. *Journal of Marriage and Family*, 65, 356–374. doi:10.1111/j.1741-3737.2003.00356.x
- *Nomaguchi, K. M., Milkie, M. A., & Bianchi, S. M. (2005). Time strains and psychological well-being: Do dual-earner mothers and fathers differ? *Journal of Family Issues*, 26, 756–792. doi:10.1177/0192513X05277524
- Olson, D., & Wilson, R. (1982). Family Satisfaction Scale. In D. H. Olson, H. I. McCubbin, H. Barnes, A. Larsen, M. Muxen, & M. Wilson (Eds.), *Family inventories* (pp. 89–103). Minneapolis: University of Minnesota Press.
- Ortony, A., Clore, G. L., & Collins, A. (1988). *The cognitive structure of emotions*. New York, NY: Cambridge University Press. doi:10.1017/CBO9780511571299
- Paley, B., Conger, R. D., & Harold, G. T. (2000). Parents' affect, adolescent cognitive representations, and adolescent social development. *Journal of Marriage and Family*, 62, 761–776. doi:10.1111/j.1741-3737.2000.00761.x
- *Papp, L. M., Cummings, M., & Goeke-Morey, M. C. (2002). Marital conflicts in the home when children are present versus absent. *Developmental Psychology*, 38, 774–783. doi:10.1037/0012-1649.38.5.774
- Patterson, G. (1983). Stress: A change agent for family process. In N. Garnezy & M. Rutter (Eds.), *Stress, coping, and development in children* (pp. 235–264). New York, NY: McGraw-Hill.
- *Pett, M., Vaughan-Cole, B., & Wampold, B. (1994). Maternal employment and perceived stress. *Family Relations*, 43, 151–158. doi:10.2307/585317
- *Pittman, J. F., & Lloyd, S. A. (1988). Quality of family life, social support, and stress. *Journal of Marriage and the Family*, 50, 53–67. doi:10.2307/352427
- Pomerantz, E. M., Moorman, E. A., & Litwack, S. D. (2007). The how, whom, and why of parents' involvement in children's academic lives: More is not always better. *Review of Educational Research*, 77, 373–410. doi:10.3102/003465430305567
- Purewal, S., & Van Den Akker, O. (2007). The socio-cultural and biological meaning of parenthood. *Journal of Psychosomatic Obstetrics & Gynecology*, 28, 79–86. doi:10.1080/01674820701409918
- Radloff, L. S. (1977). The CES-D Scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*, 1, 385–401. doi:10.1177/014662167700100306
- Reis, H. T., Sheldon, K. M., Gable, S. L., Roscoe, J., & Ryan, R. M. (2000). Daily well-being: The role of autonomy, competence, and relatedness. *Personality and Social Psychology Bulletin*, 26, 419–435. doi:10.1177/0146167200266002
- Reker, G. T., & Wong, P. T. (1988). Aging and the individual process: Toward a theory of personal meaning. In J. E. Birren & V. L. Bengtson (Eds.), *Emergent theories of aging* (pp. 214–246). New York, NY: Springer.
- Repetti, R. L., & Wood, J. (1997). Daily stress at work on mothers' interactions with preschoolers. *Journal of Family Psychology*, 11, 90–108. doi:10.1037/0893-3200.11.1.90
- *Richards, L. N., & Schmiede, C. J. (1993). Problems and strengths of single-parent families: Implications for practice and policy. *Family Relations*, 42, 277–285. doi:10.2307/585557
- *Rizzo, K. M., Schiffrin, H. H., & Liss, M. (2013). Insight into the parenthood paradox: Mental health outcomes of intensive mothering. *Journal of Child and Family Studies*, 22, 614–620. doi:10.1007/s10826-012-9615-z
- Robertson, J. F. (1977). Grandmotherhood: A study of role conceptions. *Journal of Marriage and the Family*, 39, 165–174. doi:10.2307/351072
- *Rochlen, A. B., McKelley, R. A., Suizzo, M. A., & Scaringi, V. (2008). Predictors of relationship satisfaction, psychological well-being and life satisfaction among stay-at-home fathers. *Psychology of Men & Masculinity*, 9, 17–28. doi:10.1037/1524-9220.9.1.17
- *Rogers, S. J., & White, L. K. (1998). Satisfaction with parenting: The role of marital happiness, family structure, and gender. *Journal of Marriage and the Family*, 60, 293–308. doi:10.2307/353849
- Rosenberg, M. (1986). *Conceiving the self*. Malabar, FL: Krieger.
- Ross, C. E., Mirowsky, J., & Goldstein, K. (1990). The impact of the family on health: The decade in review. *Journal of Marriage and the Family*, 52, 1059–1078. doi:10.2307/353319

- Ross, C. E., & Van Willigen, M. (1996). Gender, parenthood, and anger. *Journal of Marriage and the Family*, *58*, 572–584. doi:10.2307/353718
- Rothbart, M. K. (1981). Measurement of temperament in infancy. *Child Development*, *52*, 569–578. doi:10.2307/1129176
- *Rothrauff, T., & Cooney, T. M. (2008). The role of generativity in psychological well-being: Does it differ for childless adults and parents? *Journal of Adult Development*, *15*, 148–159. doi:10.1007/s10804-008-9046-7
- Russell, D., & Cutrona, C. E. (1984, August). *The provisions of social relationships and adaptation to stress*. Paper presented at the annual meeting of the American Psychological Association, Anaheim, CA.
- Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, *52*, 141–166. doi:10.1146/annurev.psych.52.1.141
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, *57*, 1069–1081. doi:10.1037/0022-3514.57.6.1069
- Sandelowski, M., Harris, B. G., & Holditch-Davis, D. (1991). “The clock has been ticking, the calendar pages turning, and we are still waiting”: Infertile couples’ encounter with time in the adoption waiting period. *Qualitative Sociology*, *14*, 147–173. doi:10.1007/BF00992192
- Sandvik, E., Diener, E., & Siedlitz, L. (1993). Subjective well-being: The convergence and stability of self-report and non-self-report measures. *Journal of Personality*, *61*, 317–342. doi:10.1111/j.1467-6494.1993.tb00283.x
- Sarason, I. G., Johnson, J. H., & Siegel, J. M. (1978). Assessing the impact of life changes: Development of the Life Experiences Survey. *Journal of Consulting and Clinical Psychology*, *46*, 932–946. doi:10.1037/0022-006X.46.5.932
- Schaller, M., Neuberg, S. L., Griskevicius, V., & Kenrick, D. T. (2010). Pyramid power: A reply to commentaries. *Perspectives on Psychological Science*, *5*, 335–337. doi:10.1177/1745691610369474
- Scheer, N. S., & Snyder, D. K. (1984). Empirical validation of the Marital Satisfaction Inventory in a nonclinical sample. *Journal of Consulting and Clinical Psychology*, *52*, 88–96. doi:10.1037/0022-006X.52.1.88
- Schimmack, U., Diener, E., & Oishi, S. (2002). Life-satisfaction is a momentary judgment and a stable personality characteristic: The use of chronically accessible and stable sources. *Journal of Personality*, *70*, 345–384. doi:10.1111/1467-6494.05008
- Schotz, E., Paolantonio, B., & Linkletter, A. (Executive producers). (1998). *Kids say the darndest things!* [Television series]. Hollywood, CA: Columbia Broadcasting.
- Schwarz, N. (1999). Self-reports: How the questions shape the answers. *American Psychologist*, *54*, 93–105. doi:10.1037/0003-066X.54.2.93
- Schwarz, N., Strack, F., & Mai, H. (1991). Assimilation and contrast effects in part-whole question sequences: A conversational logic analysis. *Public Opinion Quarterly*, *55*, 3–23. doi:10.1086/269239
- Selvi, Y., Gulec, M., Agargun, M. Y., & Besiroglu, L. (2007). Mood changes after sleep deprivation in morningness–eveningness chronotypes in healthy individuals. *Journal of Sleep Research*, *16*, 241–244. doi:10.1111/j.1365-2869.2007.00596.x
- Senior, J. (2010, July). All joy and no fun: Why parents hate parenting. *New York Magazine*. Retrieved from <http://www.nymag.com>
- *Sheeber, L. B., & Johnson, J. H. (1992). Child temperament, maternal adjustment, and changes in family life style. *American Journal of Orthopsychiatry*, *62*, 178–185. doi:10.1037/h0079329
- Sheldon, K. M., Boehm, J. K., & Lyubomirsky, S. (2012). Variety is the spice of happiness: The hedonic adaptation prevention (HAP) model. In I. Boniwell & S. David (Eds.), *Oxford handbook of happiness* (pp. 901–914). Oxford, England: Oxford University Press.
- Sheldon, K. M., & Lyubomirsky, S. (2012). The challenge of staying happier: Testing the hedonic adaptation prevention model. *Personality and Social Psychology Bulletin*, *38*, 670–680. doi:10.1177/0146167212436400
- Shields, M., & Wooden, M. (2003, February). *Marriage, children, and subjective well-being*. Paper presented at the Australian Institute of Family Studies Conference, Melbourne, Australia.
- *Simon, R. W. (1992). Parental role strains, salience of parental identity and gender differences in psychological distress. *Journal of Health and Social Behavior*, *33*, 25–35. doi:10.2307/2136855
- Simon, R. W., & Nath, L. E. (2004). Gender and emotion in the United States: Do men and women differ in self-reports of feelings and expressive behavior? *American Journal of Sociology*, *109*, 1137–1176. doi:10.1086/382111
- *Simpson, J. A., Rholes, W. S., Campbell, L., Tran, S. T., & Wilson, C. L. (2003). Adult attachment, the transition to parenthood, and depressive symptoms. *Journal of Personality and Social Psychology*, *84*, 1172–1187. doi:10.1037/0022-3514.84.6.1172
- Sin, N. L., & Lyubomirsky, S. (2009). Enhancing well-being and alleviating depressive symptoms with positive psychology interventions: A practice-friendly meta-analysis. *Journal of Clinical Psychology*, *65*, 467–487. doi:10.1002/jclp.20593
- Smith, A., Kendrick, A., Maben, A., & Salmon, J. (1994). Effects of breakfast and caffeine on cognitive performance, mood, and cardiovascular functioning. *Appetite*, *22*, 39–55. doi:10.1006/appe.1994.1004
- Snyder, D. K. (1979). Multidimensional assessment of marital satisfaction. *Journal of Marriage and the Family*, *41*, 813–823. doi:10.2307/351481
- Spanier, G. B. (1976). Measuring dyadic adjustment: New scales for assessing the quality of marriage and similar dyads. *Journal of Marriage and the Family*, *38*, 15–28. doi:10.2307/350547
- Spielberger, C. D. (1972). *Anxiety: Current trends in theory and research*. doi:10.1016/B978-0-12-657401-2.50008-3
- Spitze, G., & Logan, J. (1990). Sons, daughters, and intergenerational social support. *Journal of Marriage and the Family*, *52*, 420–430. doi:10.2307/353036
- Steger, M. F. (2009). Meaning in life. In S. J. Lopez (Ed.), *Oxford handbook of positive psychology* (2nd ed., pp. 679–687). doi:10.1093/oxfordhb/9780195187243.013.0064
- Steger, M. F., Frazier, P., Oishi, S., & Kaler, M. (2006). The Meaning in Life Questionnaire: Assessing the presence of and search for meaning in life. *Journal of Counseling Psychology*, *53*, 80–93. doi:10.1037/0022-0167.53.1.80
- Steger, M. F., Oishi, S., & Kashdan, T. B. (2009). Meaning in life across the life span: Levels and correlates of meaning in life from emerging adulthood to older adulthood. *Journal of Positive Psychology*, *4*, 43–52. doi:10.1080/17439760802303127
- Stein, R. E. K., & Riessman, C. K. (1980). The development of an Impact-on-Family Scale: Preliminary findings. *Medical Care*, *18*, 465–472. doi:10.1097/00005650-198004000-00010
- Stickler, G. B., Salter, M., Broughton, D. D., & Alario, A. (1991). Parents’ worries about children compared to actual risks. *Clinical Pediatrics*, *30*, 522–528. doi:10.1177/000992289103000901
- Stipek, D. (1995). The development of pride and shame in toddlers. In J. P. Tangney & K. W. Fisher (Eds.), *Self-conscious emotions: The psychology of shame, guilt, embarrassment, and pride* (pp. 237–252). New York, NY: Guilford Press.
- Sweet, J., & Bumpass, L. (1996). *The National Survey of Families and Households—Waves 1 and 2*. Madison, WI: Center for Demography and Ecology, University of Wisconsin-Madison.
- *Thoits, P. A. (1992). Identity structures and psychological well-being: Gender and marital status comparisons. *Social Psychology Quarterly*, *55*, 236–256. doi:10.2307/2786794
- Totterdell, P., Reynolds, S., Parkinson, B., & Briner, R. B. (1994). Associations of sleep with everyday mood, minor symptoms and social interaction experience. *Sleep*, *17*, 466–475.
- *Twenge, J. M., Campbell, W. K., & Foster, C. A. (2003). Parenthood and marital satisfaction: A meta-analytic review. *Journal of Marriage and the Family*, *65*, 574–583. doi:10.1111/j.1741-3737.2003.00574.x

- *Umberson, D. (1989). Relationships with children: Explaining parents' psychological well-being. *Journal of Marriage and the Family*, *51*, 999–1012. doi:10.2307/353212
- *Umberson, D., & Gove, W. R. (1989). Parenthood and psychological well-being: Theory, measurement, and stage in the family life course. *Journal of Family Issues*, *10*, 440–462. doi:10.1177/019251389010004002
- *Vanassche, S., Swicegood, G., & Matthijs, K. (2013). Marriage and children as a key to happiness? Cross-national differences in the effects of marital status and children on well-being. *Journal of Happiness Studies*, *14*, 501–524. doi:10.1007/s10902-012-9340-8
- Van Dongen, H. P. A., Maislin, G., Mullington, J. M., & Dinges, D. F. (2003). The cumulative cost of additional wakefulness: Dose-response effects on neurobehavioral functions and sleep physiology from chronic sleep restriction and total sleep deprivation. *Sleep*, *26*, 117–126.
- VanLaningham, J., Johnson, D. R., & Amato, P. (2001). Marital happiness, marital duration, and the U-shaped curve: Evidence from a five-wave panel study. *Social Forces*, *79*, 1313–1341. doi:10.1353/sof.2001.0055
- Veroff, J., Douvan, E., & Kulka, R. A. (1981). *The inner American: A self-portrait from 1957 to 1976*. New York, NY: Basic Books.
- Wandersman, L., Wandersman, A., & Kahn, S. (1980). Social support in the transition to parenthood. *Journal of Community Psychology*, *8*, 332–342. doi:10.1002/1520-6629(198010)8:4<332::AID-JCOP2290080407>3.0.CO;2-H
- Warner, J. (2005). *Perfect madness*. New York, NY: Riverhead.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, *54*, 1063–1070. doi:10.1037/0022-3514.54.6.1063
- Wayne, J. H., Grzywacz, J. G., Carlson, D. S., & Kacmar, K. M. (2007). Work–family facilitation: A theoretical explanation and model of primary antecedents and consequences. *Human Resource Management Review*, *17*, 63–76. doi:10.1016/j.hrmr.2007.01.002
- Webster-Stratton, C. (1990). Stress: A potential disruptor of parent perceptions and family interactions. *Journal of Clinical Child Psychology*, *19*, 302–312. doi:10.1207/s15374424jccp1904_2
- *White, L. K., Booth, A., & Edwards, J. N. (1986). Children and marital happiness: Why the negative correlation? *Journal of Family Issues*, *7*, 131–147. doi:10.1177/019251386007002002
- *White, L. K., & Edwards, J. N. (1990). Emptying the nest and parental well-being: An analysis of national panel data. *American Sociological Review*, *55*, 235–242. doi:10.2307/2095629
- *White, M. P., & Dolan, P. (2009). Accounting for the richness of daily activities. *Psychological Science*, *20*, 1000–1008. doi:10.1111/j.1467-9280.2009.02392.x
- *Wilkie, C. F., & Ames, E. W. (1986). The relationship of infant crying to parental stress in the transition to parenthood. *Journal of Marriage and the Family*, *48*, 545–550. doi:10.2307/352040
- *Williams, T. M., Joy, L. A., Travis, L., Gotowiec, A., Blum-Steele, M., Aiken, L. S., . . . Davidson, S. M. (1987). Transition to motherhood: A longitudinal study. *Infant Mental Health Journal*, *8*, 251–265. doi:10.1002/1097-0355(198723)8:3<251::AID-IMHJ2280080308>3.0.CO;2-U
- *Wolfson Sirignano, S., & Lachman, M. E. (1985). Personality change during the transition to parenthood: The role of perceived infant temperament. *Developmental Psychology*, *21*, 558–567. doi:10.1037/0012-1649.21.3.558
- Wrzus, C., Hanel, M., Wagner, J., & Neyer, F. J. (2013). Social network changes and life events across the life span: A meta-analysis. *Psychological Bulletin*, *139*, 53–80. doi:10.1037/a0028601
- *Yamazaki, A., Lee, K., Kennedy, H., & Weiss, S. (2005). Sleep-wake cycles, social rhythms, and sleeping arrangements during Japanese childbearing family transition. *Journal of Obstetric, Gynecologic and Neonatal Nursing*, *34*, 342–348. doi:10.1177/0884217505276156
- Yesavage, J. A., Brink, T. L., Rose, T. L., Lum, O., Huang, V., Adey, M., & Leirer, V. O. (1983). Development and validation of a geriatric depression screening scale: A preliminary report. *Journal of Psychiatric Research*, *17*, 37–49. doi:10.1016/0022-3956(82)90033-4
- Yeung, W. J., Sandberg, J. F., Davis-Kean, P. E., & Hofferth, S. L. (2001). Children's time with fathers in intact families. *Journal of Marriage and Family*, *63*, 136–154. doi:10.1111/j.1741-3737.2001.00136.x
- *Zimmermann, A., & Easterlin, R. A. (2006). Happily ever after? Cohabitation, marriage, divorce and happiness in Germany. *Population and Development Review*, *32*, 511–528. doi:10.1111/j.1728-4457.2006.00135.x
- Zuzanek, J., & Mannell, R. (1993). Gender variations in the weekly rhythms of daily behaviour and experiences. *Journal of Occupational Science*, *1*, 25–37. doi:10.1080/14427591.1993.9686376

Received February 15, 2013

Revision received November 9, 2013

Accepted November 14, 2013 ■