2016

Nudging Parents

Meredith J. Harbach
University of Richmond, mharbach@richmond.edu

Nudging Parents

*Meredith J. Harbach**

Abstract: Childcare quality matters, and parents intuitively understand that it does. Among the features of childcare parents most value, quality is regularly at the top of the list. Yet experts consistently rate childcare quality in the United States as mediocre at best. Why the disconnect? This Article argues that behavioral market failure is an important piece of the puzzle. Standard economic theory assumes parents are rational market actors, and even market failure theory cannot account for their imperfect rationality. But the paradox of poor childcare quality is not just market failure; it's behavioral market failure. This diagnosis not only helps us understand the market's dysfunction, but also enables us to think creatively about solutions. Armed with insights from behavioral economics, policymakers can identify, and in some cases capitalize on, parents' behavioral anomalies, "nudging" them toward their desired childcare goals. Nudging parents is an important step toward building a better network of childcare to care for, nurture, and develop America's children.

---

* Associate Professor of Law, University of Richmond School of Law. For helpful comments at various stages of the project, I thank Jim Gibson, Eric Johnson, Nina A. Kohn, Corinna Lain, Judith McMullen, Michael Pappas, Rachel Rebouché, Max Stearns, Carl Tobias, Sean Williams, and Adam Zimmerman. I also benefitted from fruitful conversations and feedback at the following workshops: Emerging Family Law Scholars and Teachers Conference, 2014; Richmond Law Summer Faculty Workshop; Second Annual Marquette University School of Law Junior Scholars Works-In-Progress Conference, 2014; Temple Law Faculty Workshop; the AALS Annual Meeting 2015, Section on Children and the Law, Call for Papers, the University of Maryland School of Law's Junior Faculty Workshop, and the Willamette Faculty Workshop Series. Sarah Bennett and Liz Tyler provided outstanding research assistance. I also thank Katherine Godich and the editorial board of the *Journal of Gender, Race & Justice* for their editing work on this Article. This project was supported by a grant from the Hunton & Williams Summer Research Fellowship Fund.

INTRODUCTION

In the United States the market, rather than family members, provides a significant percentage of the care for America's young children, especially from birth through age five, before most will begin formal elementary schooling.[1] The quality of that care matters, and parents understand that it does. They report quality is an important feature in weighing childcare options for their children,[2]

---

[1] In this Article, references to "childcare" mean care provided to children under age six provided by someone other than parents or legal guardians. *See* NAT'L ASS'N OF CHILD CARE RES. & REFERRAL AGENCIES, CHILD CARE: LIKE THE MILITARY, IS IT TIME FOR SHARED RESPONSIBILITY? 6 (2011), http://naccrra.com/sites/default/files/publications/naccrra_publications/2012/child_care_like_the_military.pdf [hereinafter LIKE THE MILITARY]. The primary categories of non-family care are childcare centers, group home childcare, family childcare, and in-home childcare. *See* Child Care and Development Fund, 45 C.F.R. § 98.2 (2014).

[2] *See* ALISON CLARKE-STEWART & VIRGINIA D. ALLHUSEN, WHAT WE KNOW ABOUT CHILDCARE 51–62, 179–87 (2005); ANGELA BROWNE MILLER, THE DAY CARE DILEMMA: CRITICAL CONCERNS FOR AMERICAN FAMILIES 198 (1990) (listing staff warmth as the most important feature of a child care program, followed by educational program and social activities); NAT'L ASS'N OF CHILD CARE RES. & REFFERAL AGENCIES, PARENTS' PERCEPTIONS OF CHILD CARE IN THE UNITED STATES, 5 (Nov. 2008), http://usa.childcareaware.org/wp-content/ uploads/2015/03/2009_parents_perception_report-r3.pdf [hereinafter NACCRRA, PARENTS' PERCEPTIONS]; Debby Cryer, et al., *Parents' Perceptions of their Children's Child Care: A Cross-National Comparison*, 17 EARLY CHILDHOOD RESEARCH Q. 259, 267 (2002) (giving high importance to aspects of childcare reflected in professional

and many report quality is the most important feature.[3] Likewise, many parents believe their children are in fact receiving high quality childcare.[4]

Yet the average quality of childcare nationwide is mediocre at best.[5] Childcare experts characterize the market as a "tragedy,"[6] a "national scandal,"

---

definitions of childcare quality); G. Anne Bogat & Leah K. Gensheimer, *Discrepancies Between the Attitudes and Actions of Parents Choosing Day Care*, 15 CHILD CARE Q. 159, 167 (1986); Katherine Kensinger Rose & James Elicker, *Parental Decision Making About Child Care*, 29 J. FAM. ISSUES 1161, 1177 (2008); Anne B. Shlay, *African American, White and Hispanic Child Care Preferences: A Factorial Survey Analysis of Welfare Leavers by Race and Ethnicity*, 39 SOC. SCI. RES. 125, 139 (2010).

[3] *See* CLARKE-STEWART & ALLHUSEN, *supra* note 2, at 51; NACCRRA, PARENTS' PERCEPTIONS, *supra* note 2, at 5 (quality was 40% of parents' biggest concern about child care); Ellen Kisker & Rebecca Maynard, *Quality, Cost, and Parental Choice of Child Care*, *in* THE ECONOMICS OF CHILD CARE 127, 136 (David M. Blau ed., 1991) ("Parents select their child care arrangements on the basis of quality, location, and cost considerations, in that order."); MILLER, *supra* note 2, at 198; Jinseok Kim & Maryah Stella Fram, *Profiles of Choice: Parents' Patterns of Priority in Child Care Decision-Making*, 24 EARLY CHILDHOOD RES. Q. 77, 88 (2009) (greatest proportion of parents in the study prioritized learning and quality); Vicki Peyton et al., *Reasons for Choosing Child Care: Associations with Family Factors, Quality, and Satisfaction*, 16 EARLY CHILDHOOD RES. Q. 191, 198 (2001) (55.9% of mothers rated quality as the most important factor in selecting care); Helen Raikes et al., *Parent Experiences with State Child Care Subsidy Systems and Their Perceptions of Choice and Quality in Care Selected*, 23 EARLY EDUC. & DEV. 558, 576 (2012) [hereinafter *Parent Experiences*]. Of course, the preference for quality varies according to a variety of demographic differences, including race, education, class, ethnicity, and sex. *See* Leigh A. Leslie, Richard Ettenson & Patricio Cumsille, *Selecting a Child Care Center: What Really Matters to Parents?*, 29 CHILD & YOUTH CARE F. 299, 303-04 (2000); Rose & Elicker, *supra* note 2, at 1177–80.

[4] *See* BROWNE MILLER, *supra* note 2, at 199–201; Debby Cryer & Margaret Burchinal, *Parents as Child Care Consumers*, 12 EARLY CHILDHOOD RES. Q. 35, 54 (1997) (parents overestimate quality and are unaware they are not obtaining high quality); *Parent Experiences*, *supra* note 3, at 577 (73.6% of parents rated the overall quality of the childcare arraignment as either "excellent" or "perfect"); Cryer, et al., *supra* note 2, at 269, 273 (strong tendency of parents to give high quality scores to children's preschool classrooms); LOUIS MANFRA ET AL., PARENT PERCEPTIONS ABOUT CHILDCARE QUALITY 15–16, dss.mo.gov/cbec/pdf/parent-perception-report.pdf (last visited Oct. 19, 2015) (parents generous with grades and ranking of childcare providers); Helen Raikes et al., *Parent Perceptions of Child Care Choice and Quality in Four States*, PUBLICATIONS CTR. ON CHILD., FAMILIES AND L. 4 (Oct, 31, 2005), https://digitalcommons.unl.edu/ccflpubs/14 (most parents in study rated provider quality highly) [hereinafter *Parent Perceptions*].

[5] *See* ELIZABETH PALLEY & COREY S. SHDAIMAH, IN OUR HANDS: THE STRUGGLE FOR U.S. CHILD CARE POLICY 131 (2014); *The NICHD Study of Early Child Care and Youth Development: Findings for Children Up to Age 4 ½ Years*, NATIONAL INSTITUTE OF CHILD HEALTH & HUMAN DEVELOPMENT 9–11 (2006), http://psycnet.apa.org.proxy.lib.uiowa.edu/journals/amp/61/2/99.pdf& product Code=pa [hereinafter NICHD]; EDWARD ZIGLER ET AL., THE TRAGEDY OF CHILD CARE IN AMERICA 10 (2009). *See also* AJAY CHAUDRY, JULIA HENLY & MARCIA MEYERS, CONCEPTUAL FRAMEWORKS FOR CHILD CARE DECISION-MAKING 1 (2010), http://www.acf.hhs.gov/sites/default/files/opre/conceptual_frameworks.pdf. Indeed, a recent study by the National Institute of Child Health and Human Development reports that "most child care settings in the United States provide care that is 'fair' (between 'poor' and 'good')." NICHD, *supra*, at 11. Similarly, Professor Edward F. Zigler, founder of the Edward Zigler Center in Child Development and Social Policy at the Yale School of Medicine, wrote in 2009: "the quality of child care in America remains woefully inadequate, averaging somewhere between poor and mediocre." ZIGLER ET AL., *supra*, at 10.

[6] ZIGLER ET AL., *supra* note 5, at ix.

and the "most serious problem for children in our society."[7] Notwithstanding parental preferences for high childcare quality, relatively few children are receiving it.[8]

How do we explain the disconnect? Perhaps the most pressing explanation is that many parents lack the resources to purchase quality childcare for their children.[9] And, as I have argued elsewhere, another explanation is classic market failure.[10] The childcare market is imperfect. Within this market, parental demand for quality is lower than optimal because of positive externalities and information problems.[11] But the answer is undoubtedly even more complex. Childcare decisions are deeply personal and involve some of our strongest affective ties. They often reflect an uneasy combination of emotion, pragmatism, and economics. And they are exercised in a market characterized by complexity, ambiguity, and diversity of options. These features of childcare decision-making create the conditions for error, sometimes based on completely irrelevant factors like the timing, framing, or number of options presented. In short, childcare decisions may not be perfectly rational—at least not in an economic sense.

This Article argues that behavioral market failure helps explain the dysfunction in our childcare market. Over the last several decades, behavioral economists have mined judgment and decision-making literature for insights into how people actually form judgments and make decisions, establishing that a broad array of mental shortcuts and cognitive biases impact them.[12] Behavioral law and economics scholars have translated these lessons into law reform proposals in a wide range of settings.[13] But although childcare is one of the United States' most complex, important, and opaque markets, to date no one has used the discipline's insights to argue in depth for reforms to childcare law and policy.[14]

---

[7] *See* Meredith Johnson, *Childcare Market Failure*, 2015 UTAH L. REV. 659, 669–72 [hereinafter Harbach, *Childcare Market Failure*].

[8] *Id.* at 670–71.

[9] *Id.* at 672.

[10] *See infra* notes 55–56 and accompanying text.

[11] Harbach, *Childcare Market Failure*, *supra* note 7, at 679–8.7.

[12] For some of the more recent explorations of this research, *see, e.g.,* DAN ARIELY, THE UPSIDE OF IRRATIONALITY (2011); DAN ARIELY, PREDICTABLY IRRATIONAL: THE HIDDEN FORCES THAT SHAPE OUR DECISIONS (2010); DANIEL KAHNEMAN, THINKING, FAST AND SLOW (2011).

[13] *See, e.g.*, CASS R. SUNSTEIN, SIMPLER: THE FUTURE OF GOVERNMENT (2013); OREN BAR-GILL, SEDUCTION BY CONTRACT: LAW, ECONOMICS, & PSYCHOLOGY IN CONSUMER MARKETS (2012); RICHARD H. THALER & CASS R. SUNSTEIN, NUDGE: IMPROVING DECISIONS ABOUT HEALTH, WEALTH, AND HAPPINESS 6 (2008) [hereinafter NUDGE].

[14] *See* CHAUDRY ET AL., *supra* note 5, at 10. *But see id.* at 9–17; Janneke Plantenga, *Local Providers and Loyal Parents: Competition and Consumer Choice in the Dutch Childcare*, *in* CHILDCARE MARKETS: CAN THEY DELIVER AN EQUITABLE SERVICE? 63, 70–72 (Eva Lloyd & Helen Penn eds., 2012).

This project fills that gap by arguing that behavioral economics helps to explain the discrepancies among what parents want from childcare, what they demand, and what their children ultimately receive. This diagnosis not only helps to explain the market's dysfunction, but also enables us to think creatively about solutions. Law- and policymakers can reform childcare law and policy to account for imperfect rationality in childcare decision-making. Borrowing a tag from others in behavioral law and economics,[15] I call this approach "nudging parents." Rather than overriding parental prerogatives, policymakers can identify, and in some cases capitalize on, parents' behavioral anomalies to enhance childcare judgments and decisions. Thus, just as behavioral market failure is this Article's partial diagnosis of our childcare problem, nudging parents is its prescription.

Part I provides an overview of childcare quality and our childcare market, first explaining the features and implications of childcare quality, and then exploring the current state of the market and its failings. Part I ends by explaining that the standard neoclassic diagnosis of market failure cannot fully account for the paradox of childcare preferences versus childcare realities. Part II complicates the traditional market failure model by explaining how the childcare market manifests aspects of behavioral market failure, and examines how a variety of heuristics and biases implicate childcare decision-making. Part III makes the case for nudging parents toward more authentic childcare choices, even in the face of concerns about state intrusion into such quintessentially private matters as the care of children. Carefully designed nudges can help empower parents to make more accurate childcare decisions for their children and their families, without overriding parental choice.

The drivers of dysfunction in our childcare market are complex and multifaceted. Although no single program or set of policies can alone resolve the problems that beset American childcare,[16] behavioral economics offers powerful methods to reshape and improve many areas of law and regulation. Incorporating those lessons in this context offers one promising avenue to enhance childcare decision-making and to develop a complementary, integrated approach to childcare law and policy.

I: THE CHILDCARE MARKET: A STUDY IN FAILURE

In this Part, I set the stage for the contributions of behavioral economics by reviewing conventional economic analysis of the childcare market, and the law's interaction with it. I begin with a brief description of childcare quality and its significance. I then set out the standard microeconomic diagnosis of our childcare market's problems: market failure. Finally, I explain why conventional market

---

[15] *See* NUDGE, *supra* note 13.

[16] *Cf.* ROBERTA WEBER, OFFICE OF PLANNING, RESEARCH & EVALUATION, ADMIN. FOR CHILDREN & FAMILIES, UNDERSTANDING PARENTS' CHILD CARE DECISION-MAKING: A FOUNDATION FOR POLICY MAKING 7 (2011), http://www.acf.hhs.gov/sites/default/files/opre/parents_childcare.pdf.

failure is an incomplete explanation for the problems at work in the childcare market.

A. The Significance of Quality

Decades of research have established a connection between childcare quality and child outcomes. Before proceeding to my analysis of the childcare market, I pause briefly to explain what quality childcare is, how it's measured, and what difference it makes.

For experts, the definition of quality is straightforward: Quality childcare should, at a minimum, meet children's social, cognitive, physical, and emotional needs.[17] "Developmental" childcare is characterized as providing "safe and healthful care, developmentally appropriate stimulation, positive interactions with adults, encouragement of the child's individual emotional growth, and promotion of positive relationships with other children."[18]

There are two separate measures of quality in the child development literature: process quality and structural quality.[19] Process quality looks to the dynamics of children's interactions with their caregivers and with other children in their childcare environments.[20] Structural quality refers to the specific features of a particular childcare environment, child-staff ratio, group size, teacher education and training, safety, staffing issues, program administration, and the like.[21]

Child development research indicates that the dynamic process quality of care is most determinative of child outcomes.[22] But process quality is difficult to measure. Structural features of care are more accessible barometers.[23] Accordingly, a standard measure of childcare quality is whether it meets the types of structural standards established by accreditation organizations or by state licensing authorities.[24]

---

[17] ZIGLER ET AL., *supra* note 5, at 67.

[18] *Id.* Dr. Edward Zigler and his colleagues view developmental care as a "pragmatic compromise" between custodial care that does nothing more than keep children safe while parents work, and comprehensive care, which works with children and parents to provide for a range of children's needs beyond standard care.

[19] DAVID M. BLAU, THE CHILD CARE PROBLEM: AN ECONOMIC ANALYSIS 126 (2001) [hereinafter CHILD CARE PROBLEM]; CLARKE-STEWART & ALLHUSEN, *supra* note 2, at 39–40.

[20] CHILD CARE PROBLEM, *supra* note 19, at 125–26; CLARKE-STEWART & ALLHUSEN, *supra* note 2, at 39–40.

[21] CHILD CARE PROBLEM, *supra* note 19, at 126; CLARKE-STEWART & ALLHUSEN, *supra* note 2, at 39–40.

[22] *See* Harbach, *Childcare Market Failure*, *supra* note 7, at 670 n.67.

[23] CHILD CARE PROBLEM, *supra* note 19, at 126–27.

[24] *Id.* at 126.

Beyond expert consensus, "childcare" can mean different things to different people, and that figures into notions of quality, too.[25] For some, childcare is little more than what child development expert Edward Zigler characterizes as a "container"—a place where children go while their parents work.[26] Others understand childcare as any group setting that provides paid caregiving.[27] Or childcare might be understood as care provided by anyone other than a parent.[28] Childcare also serves a variety of family needs, including parental work support, child safety, child development, and school readiness.[29] Perhaps not surprisingly, then, parents' definitions of childcare "quality" can vary, as do their childcare needs and goals.[30]

Despite this heterogeneity, overall parental[31] preferences and priorities regarding childcare are remarkably consistent: They place a high value on quality of care.[32] In a multitude of studies, parents rank safety, caregiver warmth, and educational development as the most important features of childcare.[33] Though parents might not be familiar with the child development literature, they care about both process quality features like the emotional tone of the setting and the

---

[25] MANFRA ET AL., *supra* note 4, at 37.

[26] ZIGLER ET AL., *supra* note 5, at xi, 1.

[27] *Id.* at 1.

[28] *Id.*

[29] WEBER, *supra* note 16, at 7.

[30] NICOLE FORRY ET AL., OFFICE OF PLANNING, RESEARCH & EVALUATION, ADMIN. FOR CHILDREN & FAMILIES, CHILD CARE DECISION-MAKING LITERATURE REVIEW 5, 15 (2013), http://www.acf.hhs.gov/sites/default/files/opre/child_care_decision_making_literature_review_pdf_version_v2.pdf; *Parent Perceptions*, *supra* note 4, at 3. Parents' preferences for childcare are dynamic, and may be affected by the available options. *See* WEBER, *supra* note 16, at 5.

[31] Although I characterize these preferences, judgments, and decisions as "parental," I do not intend to gloss over the reality that women remain primarily responsible for caring for, and procuring care for, children in the United States. Outsourced care generally is assumed to be essential to enable *mothers*, not fathers, to pursue paid employment. Mothers, and women more generally, continue to play the dominant role in childcare and childcare decisions. *See, e.g.*, UNITED STATES DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS, AMERICAN TIME USE SURVEY SUMMARY (2015), http://www.bls.gov/news.release/atus.nr0.htm (women spent more than twice as much time providing physical care to children than men); Brigid Schulte, *Mothers More Fatigued than Dads but Still Find Jobs and Child Care Meaningful, Report Finds*, WASH. POST (Oct. 8, 2013), http://www.washingtonpost.com/national/mothers-more-fatigued-than-dads-but-find-jobs-and-child-care-meaningful-report-finds/2013/10/08/37284b2c-2fc4-11e3-9ccc-2252bdb14df5_story.html (American Time Use Survey shows that mothers spend about twice as much time as fathers on childcare and housework); NAT'L ASS'N OF CHILD CARE RES. & REFERRAL AGENCIES, WHAT DO PARENTS THINK ABOUT CHILD CARE?: FINDINGS FROM A SERIES OF FOCUS GROUPS 3 (2008) [hereinafter, NACCRRA, WHAT DO PARENTS THINK?]. In an ideal world, of course, childcare decisions, like many other relating to the family, would reflect a more gender-equitable distribution of time and effort.

[32] FORRY ET AL., *supra* note 30, at 15.

[33] WEBER, *supra* note 16, at 5; ZIGLER ET AL., *supra* note 5, at 5, 15–16; NACCRRA, PARENTS' PERCEPTIONS, *supra* note 2, at 5.

caregiver-child relationship, and as structural features such as provider education, training, and adult-child ratios.[34] Overall, parents' preferences for quality care largely dovetail with child development priorities.[35]

Childcare quality is tremendously consequential. After family, childcare represents the most important developmental context for many American children. [36] Burgeoning child development literature confirms that childcare quality significantly affects child development, and higher quality care leads to improved cognitive and social development for children.[37] Children who receive high quality childcare fare better than those who don't in a multitude of contexts: the need for remedial education,[38] high school graduation,[39] commission of

---

[34] Forry et al., *supra* note 30, at 5, 15. *See generally* NACCRRA, Parents' Perceptions, *supra* note 2, at 6–7; Arthur C. Emlen, et al., A Packet of Scales for Measuring Quality of Child Care From a Parent's Point of View With Summary of Method and Findings 22 (2000).

[35] NACCRRA, Parents' Perceptions, *supra* note 2, at 5; *see, e.g.*, Cryer et al., *supra* note 2, at 273.

[36] Zigler et al., *supra* note 5, at 1–2. But as Laura Rosenbury has compellingly demonstrated, home and school are far from the only places in which children are socialized. *See* Laura A. Rosenbury, *Between Home and School*, 155 U Pa. L. Rev. 833, 840–46 (2007).

[37] *See* Blau, *supra* note 19, at 129–30; Child Care Aware of Am., Parents and the High Cost of Childcare 9–10 (2014), http://cca.worksmartsuite.com/UserContentStart.aspx?category=27 [hereinafter Parents]; J. Lee Kreader et al., Nat'l Center for Children in Poverty, Research-to-Policy Connections No. 2, Infant and Toddler Child Care Quality 2 (2005); Deborah Lowe Vandell & Barbara Wolfe, Inst. for Research on Poverty, Child Care Quality: Does It Matter and Does It Need to be Improved? 99–100 (2000); NICHD Early Child Care Research Network, *Child-Care Effect Sizes for the NICHD Study of Early Child Care and Youth Development*, 61 Am. Psychologist 99, 113 (2006) [hereinafter *Child-Care Effect Sizes*]. *See also* Harbach, *Childcare Market Failure*, *supra* note 7, at 680–82.

[38] *See generally* James J. Heckman, *Schools, Skills, and Synapses* 90 (Nat'l Bureau of Econ. Research, Working Paper No. 14064, 2008) (15% of participants enrolled in special education, compared to 34% of control group).

[39] *See generally id.* (66% of Perry Preschool (PPS) participants graduated from high school on time, versus 45% of control group); Frances A. Campbell et al., *Adult Outcomes as a Function of an Early Childhood Educational Program: An Abecedarian Project Follow-Up*, 48 DEV. PSYCHOL. 1033, 1038 (2012) (showing 83% of participants graduated as opposed to 72% of nonparticipants, and were also more likely to graduate from college).

crime, [40] abuse and neglect, [41] unemployment, [42] public assistance, [43] teen parenthood,[44] and overall health.[45]

Given parental preferences for high quality care and the significance of that quality for child development, we might expect a high level of quality care in the childcare market. Yet the childcare crisis persists.[46] The question becomes why, and what to do about it.

B. (Neo)Classic Childcare Market Failure

Because childcare is a market service for many families, it makes sense to begin an analysis of its performance with microeconomics. Although childcare has been infrequently discussed as a market phenomenon in the legal literature, economists and social scientists have recognized and examined childcare as a market service.[47] These scholars have determined that America's childcare market manifests multiple aspects of classic market failure.[48]

---

[40] *See generally* Heckman, *supra* note 38, at 90 (PPS participants had significantly fewer arrests and fewer months incarceration); David R. Katner, *Delinquency and Daycare*, 4 HARV. L. & POL'Y REV. 49, 57–58 (2010). Further, an intensive program directed at low-income, primarily African-American families at Syracuse University decreased the overall incidence, severity, and recurrence of later involvement with the juvenile justice system. Katner, *supra*, at 58.

[41] *See generally* Katner, *supra* note 40, at 56–57 (discussing how neglect and abuse can adversely affect development); COMM. FOR ECON. DEV., THE ECONOMIC PROMISE OF INVESTING IN HIGH-QUALITY PRESCHOOL: USING EARLY EDUCATION TO IMPROVE ECONOMIC GROWTH AND THE FISCAL SUSTAINABILITY OF STATES AND THE NATION 22 (2006), https://www.ced.org/pdf/Economic-Promise-of-Investing-in-High-Quality-Preschool.pdf [hereinafter CED] (explaining PPS participants were less likely to be unemployed).

[42] *See generally* CED, *supra* note 41, at 22 (explaining PPS participants were more likely to be employed at 40 and had higher incomes); LAWRENCE J. SCHWEINHART ET AL., THE HIGH/SCOPE PERRY PRESCHOOL STUDY THROUGH AGE 40: SUMMARY, CONCLUSIONS, AND FREQUENTLY ASKED QUESTIONS 2 (2005). The PPS students also performed better on other indicators of economic stability like home ownership, savings, and financial independence. *See* CED, *supra* note 41, at 22; *see generally* Heckman, *supra* note 38, at 90 (showing economic effects, including monthly income); SCHWEINHART ET AL., *supra*, at 2.

[43] Heckman, *supra* note 38, at 90.

[44] *See generally* CED, *supra* note 41, at 22 (explaining that CAP participants are less likely to become teenage parents).

[45] *See generally* CED, *supra* note 41, at 22 (explaining that PPS participants at 40 are less likely to use prescription and illegal drugs and less likely to have stopped work because of health issues). These "health gains are associated with improved access to screening, immunization, and nutrition through preschool." THE PRICE WE PAY: ECONOMIC AND SOCIAL CONSEQUENCES OF INADEQUATE EDUCATION 212 (Clive R. Belfield & Henry M. Levin eds., 2007).

[46] *See supra* text accompanying notes 5–7; *see also* Harbach, *Childcare Market Failure*, *supra* note 7, at 669–72.

[47] Harbach, *Childcare Market Failure*, *supra* note 7, at 678–85.

[48] *Id.* at 678–85.

Neoclassical economics deems markets inefficient (and therefore exhibiting market failure) when they produce less of a good or service than would be socially optimal.[49] The standard microeconomic diagnosis of problems in our childcare market is market failure in the form of suboptimal demand for quality.[50] Economists and social scientists have determined that two phenomena are causing low demand: externalities and information problems.[51]

First, quality childcare generates positive externalities.[52] Externalities occur when some costs or benefits of market transactions are not fully reflected in the transactions themselves, and are instead externalized to others.[53] As I explained above, children and their families certainly reap the rewards of high quality childcare. But they aren't the only ones. The benefits of high quality care spill over to society more broadly—to classmates, neighbors, partners, future children, colleagues, employers, and the taxpaying public.[54] Human capital research demonstrates the economic spillovers of childcare are abundant.[55] In the short term, society enjoys increased economic productivity from parental employment, a more profitable workforce, and increased economic activity in the childcare market.[56] In the longer term, we enjoy a more sophisticated future workforce and an augmented tax base.[57] We also save money on interventions in education, crime prevention, and public support services."[58] Because individual families don't themselves enjoy all of these broader benefits, they may be unwilling to pay a price commensurate with the overall value of childcare, and won't demand as much quality as would be socially optimal.[59] Market failure occurs because the individual transactions of families purchasing childcare don't reflect these broader social spillovers.

---

[49] *Id.* at 677–78.

[50] *Id.* at 678.

[51] *Id.*

[52] *Id.* at 679–84.

[53] Harbach, *Childcare Market Failure*, *supra* note 7, at 679–80.

[54] *Id.* at 682–84.

[55] *Id.* at 679–84.

[56] *Id.* at 683.

[57] *Id.*

[58] *Id.* at 683–84.

[59] *See* COUNCIL OF ECON. ADVISERS, EXEC. OFFICE OF THE PRESIDENT OF THE U.S., THE ECONOMICS OF EARLY CHILDHOOD INVESTMENTS 9–10 (2014), http://www.whitehouse.gov/sites/default/files/docs/early_childhood_report1.pdf; LOWE VANDELL & WOLFE, *supra* note 37, at 81; DIANE PAULSELL, MATHEMATICA POLICY RESEARCH, THE ECONOMIC RATIONALE FOR INVESTING IN CHILDREN: A FOCUS ON CHILD CARE 6, 89–90 (2001), http://www.mathematica-mpr.com/~/media/publications/PDFs/econrationale.pdf. For a more extensive discussion of the spillover problem in the childcare market, *see* Harbach, *Childcare Market Failure*, *supra* note 7, at 678–84.

Second, information imperfections also contribute to childcare market failure. Multiple studies confirm that childcare consumers lack important information about childcare.[60] Parents may have a fair conception of what childcare quality is in the abstract, but know little about what is actually required for high quality childcare.[61] They may assume that childcare providers are monitored for basic health, safety, and training, though in reality many are not.[62] They may also have little information about the actual quality of providers in their communities.[63] They lack information about the location and availability of childcare, its relative costs, the features and characteristics of particular providers, and the range of childcare alternatives.[64] And because outsourced childcare is not readily observed, parents also lack information as to whether the care they select *in fact* provides quality care to their children.[65] These information gaps frustrate families' attempts to secure the childcare they prefer.[66] When parents lack important information about quality, they may be unwilling to pay a premium for it.[67] Thus, information problems also drive down demand for high quality care.

If classic market failure is the problem, state intervention is part of the remedy. In fact, much contemporary regulation of economic activity is geared toward mitigating market failure.[68] Although the law interacts with the childcare market via subsidies, regulation, and the provision of information, existing law and policy have been poorly calibrated to correct for market failure.[69] The federal government and the states both provide subsidies for the purchase of childcare, primarily through the Child Care and Development Fund (a supplement to the Temporary Assistance to Needy Families Program), tax benefits, and some direct provision of services.[70] Except for direct provision, however, these subsidies have been aimed primarily at facilitating parental employment and do not condition

---

[60] Harbach, *Childcare Market Failure*, *supra* note 7, at 685.

[61] *See* Cryer et al., *supra* note 2, at 275.

[62] NACCRRA, PARENTS' PERCEPTIONS, *supra* note 2, at 6.

[63] CHAUDRY ET AL., *supra* note 5, at 1.

[64] *See* Naci Mocan, *Can Consumers Detect Lemons? An Empirical Analysis of Information Asymmetry in the Market for Child Care*, 20 J. POPULATION ECON. 743, 743–46 (2007); CHAUDRY ET AL., *supra* note 5, at 8.

[65] *See* CHILD CARE PROBLEM, *supra* note 19, at 9; Cryer et al., *supra* note 2, at 274.

[66] Harbach, *Childcare Market Failure*, *supra* note 7, at 684–85.

[67] *Id.* That's not to say, however, that information doesn't vary across the economic spectrum.

[68] DANIEL H. COLE & PETER Z. GROSSMAN, PRINCIPLES OF LAW AND ECONOMICS 27–28 (2d ed. 2011); ROBERT F. FRANK & BEN S. BERNANKE, PRINCIPLES OF MICRO ECONOMICS 428 (4th ed. 2009). One basic microeconomic text asserts, for example, "the need to deal with externalities is one of the most important rationales for the existence of government." *Id.* at 298; *see also id.* at 305, 408.

[69] Harbach, *Childcare Market Failure*, *supra* note 7, at 697–705.

[70] *Id.* at 697–700.

receipt on any particular level of quality.[71] The existing licensing and oversight framework in the United States is limited and uneven, with low standards, narrow applicability, and infrequent monitoring.[72] Finally, the information states provide on childcare quality and location is fractured and incomplete.[73]

A more robust state response to the externalities and information problems in the childcare market would represent a significant step toward enhancing the market's functioning. Elsewhere I have argued for enhanced subsidies, regulation, and information to counteract the failures in our childcare market.[74] Subsidy funding should be increased and tied to quality.[75] Regulation should be more expansive, apply to more providers, and be more vigorously enforced.[76] And states should provide more comprehensive information about the indicia and availability of childcare quality, through direct provision of information, screening of providers, and supporting private accreditation efforts that signal childcare quality.[77] These steps would not only lead to a healthier childcare market in practical terms, but would also prompt us to revisit and reinterpret the state's normative role vis-à-vis American childcare.[78]

By focusing our attention on spillovers and information problems, conventional market failure theory has much to offer in the way of shoring up our childcare market. The market failure lens brings the potential for new perspectives and innovative legal solutions to the childcare market. As it turns out, however, there is more to the childcare quality paradox than externalities and information deficits.

---

[71] *Id.*

[72] *Id.* at 700–703.

[73] *Id.* at 703–705. In late 2014, however, Congress took important steps to enhance the quality of childcare for families participating in the Child Care Development Fund program (CCDF) by passing the Child Care and Development Block Grant Act of 2014. Child Care and Development Block Grant Act of 2014, Pub. L. No. 113–186, 128 Stat. 1971. Among the 2014 Act's purposes is to assist states in "improving the overall quality of child care services" and improving "child care and development of participating children." 42 U.S.C. § 9857 (2014). This law sets forth a number of quality-based reforms to subsidies, regulations, and information provision for CCDF providers. For a more in-depth exploration of these reforms, see Harbach, *Childcare Market Failure*, *supra* note 7, at 712–18.

[74] Harbach, *Childcare Market Failure*, *supra* note 7, at 705–10.

[75] *Id.*

[76] *Id.*

[77] *Id.*

[78] *Id.* at 691.

C. Beyond Classic Market Failure

Despite its insights and contributions, conventional economic analysis alone cannot solve our childcare market problems altogether. Here, I consider the limits of classic market failure theory.

In this context, the model has at least two limitations. The first is the model's inattention to distributional issues and resource constraints: Many parents and families simply don't have the means to purchase the quality of care they desire.[79] High quality childcare is expensive and for some families, prohibitively so. It tends to be one of the highest budgeting items for working families, and is largely beyond the reach of low-income families.[80] Thus, although standard economic theory tends to be agnostic as to baseline distributions of resources, [81] distributional inequality in our childcare market is a central concern. But the resource question requires additional analysis and prescriptions.[82] And while resource constraints certainly interact with the market failures I discuss above and below, they are not my primary focus of inquiry here.[83]

---

[79] PARENTS, *supra* note 37, at 20–25; NACCRRA, PARENTS' PERCEPTIONS, *supra* note 2, at 5 (staying at home to care for children not an option because of financial concerns); NACCRRA, WHAT DO PARENTS THINK?, *supra* note 31, at 14, 18–19 (parents had difficulty finding level of quality desired that they could afford and was available during needed hours) (high price is main driver of parental compromise on childcare choices).

[80] NAT'L ASS'N OF CHILD CARE RES. & REFERRAL AGENCIES, PARENTS AND THE HIGH COST OF CHILDCARE: 2015 REPORT 22–36 (2015), http://www.usa.childcareaware.org/advocacy-public-policy/resources/reports-and-research/costofcare/.

[81] *See* Harbach, *Childare Market Failure*, *supra* note 7, at 676–77, fn.108.

[82] Indeed, our failure as a society to adequately invest in and ensure quality care for all of America's children is both a moral failing and its own type of behavioral failure, writ large. As a country, we are shortsighted, far too focused on initial outlays and costs for childcare, and thus make decisions that don't reflect our longer-term goals for children, families, and society. By investing too little in the short term, we collectively fall prey to present bias in ways that have significant consequences for our future. *See infra* text accompanying notes 215–225 (discussing present bias in more depth).

[83] I bracket the distribution question here, not because it is unworthy of sustained consideration, but because a more in depth discussion is beyond the scope of this Article. Resource inequality is an important component of my broader childcare market project. Although parents' chief concerns regarding childcare are safety and child development, too many of them struggle to afford it. NACCRRA, PARENTS' PERCEPTIONS, *supra* note 2, at 1; CHAUDRY ET AL., *supra* note 5, at 5, 30; MANFRA ET AL., *supra* note 4, at 26, 31 (noting low-income parents may choose lower quality because it is affordable and geographically accessible). Most feel that both parents must work in today's economy and that childcare is therefore a necessity. *Id.* In a recent survey, three-quarters of parents agreed that making affordable childcare available is the most important way to help working families. NACCRRA, PARENTS' PERCEPTIONS, *supra* note 2, at 1. In addition, data on childcare availability indicates that pockets of "childcare deserts" exist throughout the country, especially for infants, special needs children, and nontraditional hours. *See* MANFRA ET AL., *supra* note 4, at 37. More broadly, many contemporary American families are in transition or crisis in ways that make it more difficult for families to, in the words of Clare Huntington, flourish. *See* CLARE HUNTINGTON, FAILURE TO FLOURISH: HOW LAW UNDERMINES FAMILY RELATIONSHIPS 27–54 (2014). Many of these changes are associated with resources and family income. *See* JUNE CARBONE & NAOMI CAHN, MARRIAGE MARKETS: HOW INEQUALITY IS REMAKING THE AMERICAN FAMILY 83 (2014).

Instead, my focus in this project is on a second limitation: the ways in which rational choice theory oversimplifies market judgments and decision-making. Neoclassical economic theory uses economic modeling to predict and explain market behavior, and provides models for enhancing efficiency.[84] The starting point for neoclassical theory is the rational preference-maximizer (*homo economicus*) who exercises rational judgment and decision-making to maximize benefits.[85] But this prototype is necessarily abstract – less complex and varied than the realities of market (or other) behavior in the real world.[86]

Thus, in the context of childcare, standard economic modeling would assume that parents armed with sufficient means, information, and proper incentives would act with perfect rationality and self-control to pursue their preferences for higher-quality childcare.[87] And in the absence of market failure, the childcare market should operate efficiently and reflect parents' demand for high-quality care. But as I explore below, data on childcare judgment and decision-making demonstrates that while this may be consistent with market theory, it emphatically does not represent reality.

The childcare decision-making process is complex rather than linear—dynamic and multidimensional.[88] Childcare decisions are multi-party decisions, reflecting attempts to optimize outcomes for parents, children, and families as a whole.[89] Most parents "choose"[90] childcare, in part, to facilitate their own employment.[91] Many also elect to use childcare for child development purposes.[92] More broadly, parents outsource childcare as part of larger family management

---

[84] COLE & GROSSMAN, *supra* note 68, at 1; Harbach, *Childcare Market Failure*, *supra* note 7, at 677–78.

[85] COLE & GROSSMAN, supra note 68, at 72; Colin Camerer et al., Regulation for Conservatives: Behavioral Economics and the Case for "Asymmetric Paternalism," 151 U. PA. L. REV. 1211, 1218 (2003).

[86] KLAUS MATHIS & DEBORAH SHANNON, EFFICIENCY INSTEAD OF JUSTICE?: SEARCHING FOR THE PHILOSOPHICAL FOUNDATIONS OF THE ECONOMIC ANALYSIS OF LAW 7, 14 (2009).

[87] CHAUDRY ET AL., supra note 5, at 6–9.

[88] Id. at 1–2; WEBER, supra note 16, at 3.

[89] See WEBER, supra note 16, at 3. See generally CHAUDRY ET AL., supra note 5, at 8 n.3, 21–22.

[90] I place choose in quotations because for many parents, using childcare is much more an imperative than choice. For many, working outside the home isn't optional, and childcare is, thus, essential. See Meredith Johnson Harbach, Outsourcing Childcare, 24 YALE J.L. & FEMINISM 254, 263–68 (2012) [hereinafter Harbach, Outsourcing Childcare]. Reflecting the complexity and constraints of childcare decision-making, Marcia Meyers and Lucy Jordan argue that these decisions are better understood as "accommodations—to family and employment demands, social and cultural expectations, available information, and financial, social and other resources—that often reproduce other forms of economic and social stratification." Marcia K. Meyers & Lucy P. Jordan, Choice Accommodation in Parental Child Care Decisions, 37 J. of the Comm. Dev. Soc'y 53, 63–67 (Summer 2006).

[91] WEBER, supra note 16, at 3.

[92] Id.

decisions, benefitting all family members and enhancing overall family functioning.[93] Parents may be imperfect agents for their children because the needs of these three "decision targets,"[94] (parent, child, and family) may vary and sometimes even conflict. These decisions are also constrained by time, work schedules, availability, accessibility, and—significantly—financial resources and cost.[95] In the end, the childcare selected may not be ideal for the child(ren), parent(s), or the larger family, but may nevertheless be selected because it was perceived to be the best of available options, given the opportunities, constraints, and barriers.[96]

In the face of this complexity, parents' childcare decisions often are paradoxical.[97] Studies document discrepancies between parental preferences concerning childcare quality on the one hand, and their process for choosing childcare and ultimate choices on the other.[98] One recent survey on parental perceptions of childcare characterizes these decisions as a "gut check" for many parents.[99] Despite their stated preferences, the childcare search for most parents "tends to be limited, informal, and unlikely to involve systematic data-gathering and assessment of pertinent information."[100] In another recent focus group, few parents checked to determine whether their childcare was licensed, had infractions, or had been recently inspected.[101]

Yet there is a strong tendency by parents to rate their children's care highly[102]—significantly higher than trained, external observers rate the same

---

[93] See Harbach, Outsourcing Childcare, supra note 90, at 263–68; WEBER, supra note 16, at 3–5.

[94] In the psychology literature, a "decision target" is the person for whom a decision is made. Jingyi Lu et al., *Desirability or Feasibility: Self-Other Decision-Making Differences*, 39 PERSONALITY & SOC. PSYCHOL. BULL. 144, 145 (2012).

[95] CHAUDRY, ET AL., *supra* note 5, at 9; FORRY ET AL., *supra* note 30, at 22; WEBER, *supra* note 16, at 6.

[96] WEBER, *supra* note 16, at 6.

[97] CHAUDRY ET AL., *supra* note 5, at 25–26.

[98] Bogat & Gensheimer, *supra* note 2, at 167. In this study, the parents surveyed placed importance on "vague, yet positive, qualities of the caregiver[,]" but during the actual childcare search "called only three providers, over one-fourth did not visit any facilities, and of those who did visit, most only visited one facility." *Id.* Further, while all the parents in the study specifically received a childcare checklist to help their selection of a quality childcare arrangement, few actually completed it. *Id.*

[99] NACCRRA, PARENTS' PERCEPTIONS, *supra* note 2, at 8.

[100] CLARKE-STEWART & ALLHUSEN, *supra* note 2, at 52. One study documented that some parents spend more time shopping for a car than for childcare. ZIGLER ET AL., *supra* note 5, at 79 ("Sharon Lynn Kagan, one of the lead authors of the Cost, Quality and Outcomes study, notes that parents spend more time shopping for cars than for child care and are 'more likely to look under the hood' of a car than to examine a child care setting.").

[101] NACCRRA, WHAT DO PARENTS THINK?, *supra* note 31, at 23.

[102] Cryer, et al., *supra* note 2, at 269, 273; Cryer & Burchinal, *supra* note 4, at 54.

care.[103] Some individuals rate childcare quality as high even in the face of indications to the contrary.[104] In the same focus group study, for example, parents rated the quality of their own childcare almost twice as highly as experts had determined was in fact available within their communities.[105]

What's more, despite perceptions and preferences for high quality care, relatively few report they would be willing to pay more for the care their children are receiving.[106] Some families appear to respond to price effects and the availability of financial resources by increasing their demand for the *quantity* of childcare, but not increased *quality*.[107] In other words, families who might have the means to purchase higher quality care or pay more aren't always doing so.[108]

How do we make sense of these anomalies? By challenging standard economic assumptions about rationality and willpower, behavioral economics suggests the realities of childcare judgment and decision-making are more complex than conventional economics might assume, and that *behavioral* market failure is also at work. My discussion turns to these insights next.

II. BEHAVIORAL ECONOMICS & THE CHILDCARE MARKET

Behavioral economics supplements traditional economic theory with more accurate models of socioeconomic behavior.[109] Behavioral *law* and economics is credited with bringing a more realistic assessment of human decision-making to neoclassical law and economics analysis, and more practical prescriptions for law and policy initiatives.[110] In this Part, I survey the literature, explaining how behavioral economics has refined certain aspects of neoclassical economics. I then use a behaviorally-informed lens to examine how parents make childcare

---

[103] Cryer, et al., *supra* note 2, at 271.

[104] BROWNE MILLER, *supra* note 2, at 199–201.

[105] NACCRRA, WHAT DO PARENTS THINK?, *supra* note 31, at 20.

[106] Raikes et al., *Parent Perceptions*, *supra* note 4, at 24.

[107] David Blau observes:

> [A] decrease in the price of child care increases the quantity of child care demanded and the employment rate of mothers, but does not increase the quality of care demanded; an increase in the mother's wage rate increases the mother's employment and the demand for center care and paid care, but does not increase the quality of care demanded; and an increase in family income other than the mother's earnings increases the quality of care demanded, but by a very small amount.

CHILD CARE PROBLEM, *supra* note 19, at 83.

[108] CHILD CARE PROBLEM, *supra* note 19, at 7–8; *see* Mocan, *supra* note 64, at 744–45.

[109] COLE & GROSSMAN, *supra* note 68, at 81.

[110] *See* Christine Jolls, Cass R. Sunstein & Richard Thaler, *A Behavioral Approach to Law and Economics*, 50 STAN. L. REV. 1471, 1484 (1998).

decisions, theorizing that behavioral market failure is at work. I conclude by suggesting that given this behavioral market failure, parents would benefit from "nudges" in the direction of their true preferences and priorities.

A. From Homo Economicus to Behavioral Economics

The most basic economic models for predicting market behavior rely on a number of simplifying assumptions: perfect competition, perfect information, and perfectly efficient markets that maximize social benefit and generate zero waste.[111] Market failure results when market conditions and transactions diverge from these idealized background assumptions. But the "invisible hand" of perfectly functioning markets depends on more than perfect market conditions. It also depends on perfect market *actors*.

Neoclassical economic theory models market behavior on *homo economicus*, or "economic man,"[112] who is assumed to be fully, perfectly rational.[113] Rational choice theory relies on multiple assumptions about the psychology and decision-making capacity of *homo economicus*:[114] *Homo economicus* has well-formed preferences that accurately reflect the costs and benefits of available options.[115] *Homo economicus* responds to incentives by accurately conducting a cost-benefit analysis of competing options, and then selecting the option that maximizes expected benefits and minimizes expected costs.[116] *Homo economicus* processes information optimally,[117] and in cases of uncertainty has well-formed views on how such uncertainty will resolve, accurately updating these views based on probabilistic assessments.[118]

But while standard neoclassical models of rationality may work as predictive and explanatory tools in a number of contexts,[119] it's clear that these assumptions aren't as a rule realistic descriptions of how economic actors make decisions in the real world. As Professors Cole and Grossman put it: "People are not human

---

[111] Camerer et al., *supra* note 85, at 1218; Harbach, *Childcare Market Failure*, *supra* note 7, at 677.

[112] NUDGE, *supra* note 13, at 6; Sendhil Mullainathan & Richard H. Thaler, *Behavioral Economics* 2 (Nat'l Bureau of Econ. Research, Working Paper No. 7948, 2000), http://www.nber.org/papers/w7948.pdf.

[113] NUDGE, *supra* note 13, at 6; Camerer et al., *supra* note 85, at 1214–15; Russell B. Korobkin & Thomas S. Ulen, *Law and Behavioral Science: Removing the Rationality Assumption from Law and Economics*, 88 CAL. L. REV. 1051, 1053 (2000); Mullainathan & Thaler, *supra* note 112, at 2.

[114] Colin F. Camerer & George Loewenstein, *Behavioral Economics: Past, Present, Future*, *in* ADVANCES IN BEHAVIORAL ECONOMICS 3, 4 (Colin F. Camerer et al. eds., 2004).

[115] Camerer et al., *supra* note 85, at 1215; Jolls et al., *supra* note 110, at 1476.

[116] Jolls et al., *supra* note 110, at 1476; Korobkin & Ulen, *supra* note 113, at 1055, 1063.

[117] Jolls et al., *supra* note 110, at 1476.

[118] Camerer et al., *supra* note 85, at 1215.

[119] *See* COLE & GROSSMAN, *supra* note 68, at 81; KLAUS & SHANNON, *supra* note 85, at 25–26.

calculators, constantly processing every single bit of information they receive and estimating the costs and benefits of the several thousand discrete decisions they make every day."[120] Instead, *homo economicus* is a "heuristic fiction: . . . a mere assumption made for the purpose of analyzing economic problems."[121]

In contrast to neoclassical economic theory, behavioral economics takes the reality of human imperfection as the new background assumption.[122] Behavioral economists have mined the judgment and decision-making literature from cognitive psychology, uncovering data that complicates neoclassical assumptions about rationality in market behavior.[123] The literature makes clear we are *im*perfectly—rather than perfectly—rational.[124] Real people display bounded—rather than perfect—rationality.[125] They also have bounded self-control.[126] Frequently, our preferences are ill-defined, and are constructed rather than simply elicited by social situations.[127] We often fail to maximize our expected utility, neglecting to make choices that are most consistent with our preferences and goals.[128] Real people make systematic mispredictions about the costs and benefits of particular choices.[129] Cognitive limitations constrain our ability to process information optimally.[130] We fail to update information rationally in uncertain

---

[120] COLE & GROSSMAN, *supra* note 68, at 81.

[121] KLAUS & SHANNON, *supra* note 85, at 14 (internal quotations and citation omitted).

[122] Jolls et al., *supra* note 110, at 1477; Mullainathan & Thaler, *supra* note 112, at 3. Of course, Behavioral Law and Economics has been the subject of critique on a variety of axes. *See, e.g.*, Richard A. Posner, *Rational Choice, Behavioral Economics, and the Law*, 50 STAN. L. REV. 1551, 1552 (1998); Jeffrey J. Rachlinski, *Selling Heuristics*, 64 ALA. L. REV. 389, 394–96 (2012) [hereinafter Rachlinski, *Selling Heuristics*]; Joshua D. Wright & Douglas H. Ginsburg, *Behavioral Law and Economics: Its Origins, Fatal Flaws, and Implications for Liberty*, 106 Nw. L. Rev. 1033, (2012).

[123] Jonathan Baron, *Heuristics and Biases*, *in* THE OXFORD HANDBOOK OF BEHAVIORAL ECONOMICS AND THE LAW 3, 3 (Eyal Zamir & Doron Teichman eds., 2014); Korobkin & Ulen, *supra* note 113, at 1055–56; Cass R. Sunstein & Richard H. Thaler, *Libertarian Paternalism Is Not an Oxymoron*, 70 U. CHI. L. REV. 1159, 1168 (2003).

[124] Other scholars characterize this phenomenon as "extra-rational." *See* Michael P. Vandenbergh, Amanda R. Carrico, & Lisa Schultz Bressman, *Regulation in the Behavioral Era*, 95 MINN. L. REV. 715, 720 (2011).

[125] Korobkin & Ulen, *supra* note 113, at 1075.

[126] Christine Jolls, *Behavioral Law and Economics* 12 (Nat'l Bureau of Econ. Research, Working Paper No. 12879, 2007), http://www.nber.org/papers/w12879; Jolls et al., *supra* note 110, at 1476; Mullainathan & Thaler, *supra* note 112, at 4 (stating the third bound that deviates from standard economic models is that of bounded self-control or willpower).

[127] On Amir & Orly Lobel, *Stumble, Predict, Nudge: How Behavioral Economics Informs Law and Policy*, 108 COLUM. L. REV. 2098, 2122 (2008); Sunstein & Thaler, *supra* note 123, at 1161.

[128] Korobkin & Ulen, *supra* note 113, at 1069.

[129] *Id.*

[130] Jolls et al., *supra* note 110, at 1476.

situations.[131] In all these ways, real people frequently act in ways that deviate from the predictions of rational choice theory for *homo economicus*.[132]

Thus, behavioral economics establishes that rather than making flawless decisions that accurately reflect our preferences and optimize our goals, we often diverge from perfect rationality in systematic ways.[133] Building on these insights, behavioral economics seeks to supplement traditional economic modeling and predictions with more realistic and accurate assumptions about human behavior gleaned from social science.[134] In other words, behavioral economics is concerned with the ways in which humans differ from *homo economicus*.[135] Behavioral economics looks to cognitive psychology to help unpack the mechanics of our imperfect rationality, examining the contexts in which these missteps play out, why we are prone to make them, and how we commit them.

In what contexts do we deviate from perfect rationality? Behavioral economics classifies bounded rationality into one of two basic categories: judgment errors, and choices or decisions that deviate from expected utility.[136] Estimating the frequency, magnitude, and/or probability of uncertain events is a central component of economic decision-making.[137] Judgment is the process by which people estimate the likelihood of various outcomes,[138] thereby forming beliefs about probability.[139] We then use judgments to value different outcomes and ultimately make choices, or decisions.[140] Choice or decision-making is the

---

[131] *See infra* notes 133–135 and accompanying text.

[132] BEHAVIORAL LAW & ECONOMICS 1 (Cass R. Sunstein ed., 2000); Camerer et al., *supra* note 85, at 1217–18; Christine Jolls & Cass Sunstein, *Debiasing Through Law*, 35 J. LEGAL STUD. 199, 199–200, 203 (2006); Jolls et al., *supra* note 110, at 1474.

[133] NUDGE, *supra* note 13, at 5; Jeffrey J. Rachlinski, *The Uncertain Psychological Case for Paternalism*, 97 NW. U. L. REV. 1165, 1165 (2003) [hereinafter Rachlinski, *Uncertain*]; Cass R. Sunstein, *The Storrs Lectures: Behavioral Economics and Paternalism*, 122 YALE L. J. 1826, 1831 (2013); Sunstein & Thaler, *supra* note 123, at 1162. *But see* Rachlinski, *Uncertain*, *supra* note 133, at 1168 (counseling against over application of judgment errors).

[134] NUDGE, *supra* note 13, at 7; Jolls et al., *supra* note 110, at 1473–74, 1487; Camerer et al., *supra* note 85, at 1215; Korobkin & Ulen, *supra* note 113, at 1057; Jolls, *supra* note 126, at 2.

[135] *See* Mullainathan & Thaler, *supra* note 112, at 1–2 (discussing the relationship between homo economicus and real people).

[136] *See* Jolls, *supra* note 126, at 10; Jolls et al., *supra* note 110, at 1447; Mullainathan & Thaler, *supra* note 112, at 4; Sunstein & Thaler, *supra* note 123, at 1168. Camerer & Loewenstein, *supra* note 114, at 22; Rachlinski, *Uncertain*, *supra* note 133, at 1170. (discussing how likewise, Behavioral Decision theory classifies its research into the categories of judgment and choice.).

[137] REID HASTIE & ROBYN M. DAWES, RATIONAL CHOICE IN AN UNCERTAIN WORLD: THE PSYCHOLOGY OF JUDGMENT AND DECISION-MAKING 88 (2009); Camerer & Loewenstein, *supra* note 114, at 9.

[138] Camerer & Loewenstein, *supra* note 114, at 9; Jolls et al., *supra* note 110, at 1480.

[139] Jolls et al., *supra* note 110, at 1480; Mullainathan & Thaler, *supra* note 112, at 4.

[140] Jolls et al., *supra* note 110, at 1477–78.

process by which we value different outcomes and select from among various paths,[141] taking into account any relevant judgments we may have formed.[142] When people make systematic judgment errors, poor choices are likely to result, even if they have the information and incentives to make good ones.[143]

Why do we deviate from perfect rationality? We have limited cognitive capacities and live in a complicated world.[144] We often face judgments and decisions fraught with complexity, ambiguity, and uncertainty.[145] As they become more complex, acting according to our predicted utility requires increasing cognitive effort.[146] Yet we are limited in our attention spans, calculation capabilities, and memories. We are further limited in time, willpower, and emotional capacity.[147] We are incapable of optimally processing information in all contexts.[148]

How do we deviate from perfect rationality? Our cognitive response to this complexity is to develop simplifying strategies. We develop what we might think of as a cognitive toolbox of shortcuts.[149] When confronted with a decision for which judgment is required, people select a tool suited to that judgment.[150] In the judgment and decision-making literature, these simplifying tools are known as heuristics.[151] The etiology of the term derives from mathematics and computer science, which distinguish between the complex and often inefficient algorithms that guarantee accurate results, and heuristics, which are more efficient methods of answering the same problems, but with greater likelihood of inaccuracy.[152] Heuristics are best understood as mental shortcuts or "rules of thumb"[153]—hard-

---

[141] *Id.*

[142] Camerer & Loewenstein, *supra* note 114, at 9–10.

[143] Rachlinski, *Uncertain*, *supra* note 133, at 1166.

[144] Amir & Lobel, *supra* note 127, at 2136; Korobkin & Ulen, *supra* note 113, at 1069 (arguing bounded rationality stems from the high costs of processing information, limited cognition, or both).

[145] Korobkin & Ulen, *supra* note 113, at 1076.

[146] *See* NUDGE, *supra* note 13, at 22; Korobkin & Ulen, *supra* note 113, at 1078; Rachlinski, *Selling Heuristics*, *supra* note 122, at 394.

[147] Amir & Lobel, *supra* note 127, at 2136.

[148] *See* NUDGE, *supra* note 13, at 7, 37; Korobkin & Ulen, *supra* note 113, at 1076; *see also* KAHNEMAN, *supra* note 12, at 19-105 (expanding these insights by identifying two separate decision-making processes: System 1 (which is intuitive, emotional, and simplistic) and System 2 (which is deliberative, rule-based, and rational)).

[149] HASTIE & DAWES, *supra* note 137, at 88; Korobkin & Ulen, *supra* note 113, at 1143.

[150] HASTIE & DAWES, *supra* note 137, at 73.

[151] Korobkin & Ulen, *supra* note 113, at 1143; Rachlinski, *Uncertain*, *supra* note 133, at 1165.

[152] HASTIE & DAWES, *supra* note 137, at 88.

[153] BEHAVIORAL LAW & ECONOMICS, *supra* note 132, at 3; Korobkin & Ulen, *supra* note 113, at 1076; Rachlinski, *Selling Heuristics*, *supra* note 122, at 390.

wired processes that are virtually automatic and occur with little conscious effort.[154] Some common examples include our ability to recognize a previously experienced situation (the availability heuristic) and our ability to judge similarities between situations (the representativeness heuristic).[155] Heuristics are often useful and effective, providing fast, rough-and-ready approximations when time and cognition are limited.[156] But like the mathematic processes on which they are based, heuristics can also lead to systematic miscalculations.[157]

At the same time, escalating complexity increases the potential for us to fall prey to bias in our cognitive tasks, leading to inaccurate judgments and decisions.[158] Biases are deviations from the normative predictions of utility maximization.[159] And because they are systematic and predictable in certain circumstances, behavioral economics have given them diagnostic labels.[160] Examples of cognitive bias include our tendency to believe our risk of a poor outcome is lower than it actually is (optimism bias), our impatience for short-term as opposed to long-term rewards (time inconsistency), our tendency to select the status quo or default option (status quo bias), and our tendency to place a greater negative value on losses than we place positive value on equivalent gains (loss aversion). Relatedly, prospect theory predicts that when making decisions about uncertain outcomes, we are more likely to evaluate those outcomes based on their predicted departure from an initial reference point, rather than on the costs and benefits of the outcomes themselves.[161] We are thus "biased" in favor of initial reference points, which renders our ultimate decisions less accurate. Our proclivity toward bias can color our judgments and muddle our decisions.

In sum, behavioral economics posits that because of our reliance on heuristics and our vulnerability to bias, we will form judgments and make decisions in imperfectly rational ways, exhibiting decision-making anomalies—patterns of judgment and choice that are inconsistent with rational choice theory. This insight broadens the universe of potential market failure considerably. As is the case when market conditions diverge from standard assumptions, when human

---

[154] HASTIE & DAWES, *supra* note 137, at 87; NUDGE, *supra* note 13, at 44.

[155] HASTIE & DAWES, *supra* note 137, at 87.

[156] *Id.* at 88; Camerer & Loewenstein, *supra* note 114, at 11.

[157] NUDGE, *supra* note 13, at 23; Camerer & Loewenstein, *supra* note 114, at 11; Jolls, Sunstein, & Thaler, *supra* note 110, at 1477; Korobkin & Ulen, *supra* note 113, at 1076.

[158] BEHAVIORAL LAW & ECONOMICS, *supra* note 132, at 3; Jolls & Sunstein, *supra* note 132, at 204; Korobkin & Ulen, *supra* note 113, at 1085.

[159] KAHNEMAN, *supra* note 12, at 4; Baron, *supra* note 123, at 5–6.

[160] KAHNEMAN, *supra* note 12, at 4.

[161] *See generally* Daniel Kahneman & Amos Tversky, *Prospect Theory: An Analysis of Decision Under Risk*, 47 ECONOMETRICA 263 (1979); *see also* Jolls & Sunstein, *supra* note 132, at 205; Korobkin & Ulen, *supra* note 113, at 1069.

behavior diverges from the assumptions of perfect rationality, the market operates sub-optimally,[162] leading to a sort of *behavioral* market failure.[163] Similar to our understanding of conventional market failure, behavioral market failure represents a departure from market efficiency, but this time driven by the ways in which assumptions about human behavior, rather than market conditions, prove to be imprecise.[164]

Once we recognize many of our judgments and decisions are imperfectly rational, it becomes clear that market failure is far more pervasive than conventional economic modeling would predict.[165] I now turn to examine the operation of heuristics and biases in the childcare market, and offer a theory of the behavioral market failure that results.

B. Theorizing Behavioral Failures in the Childcare Market

Behavioral economics provides insight into how and why people, including parents, miscalculate in market and non-market settings.[166] Of course, to say that parents are imperfect isn't news to anyone with children. For present purposes, the important point is that in forming judgments and making decisions about childcare, parents will likely be prone to the same types of departures from rationality that others make in other contexts.

A central contribution of behavioral economics is to theoretically predict and empirically confirm that people often experience a difference between their "decision utility" and "experienced utility,"—that is to say, a difference between the welfare they think they will reap from a particular decision, and the welfare they actually receive after making this decision.[167] Given the disconnect between the statistically high number of parents who rate childcare quality as a central priority[168] and the overall low quality of care demanded in the market, it seems

---

[162] *See* Brigitte C. Madrian, *Applying Insights From Behavioral Economics to Policy Design*, 6 ANN. REV. ECON. 663, 664–65 (2014).

[163] Sunstein, *supra* note 133, at 1832, 1842. Professor Sunstein has developed a helpful taxonomy of behavioral market failures that act as adjuncts to the standard market failures of traditional economic theory. *Id.* at 1842. In exercising judgment and making decisions, people are prone to commit four basic types of mistakes: (1) we exhibit a bias toward present action and make short-term decisions that are inconsistent with long-terms goals; (2) we overlook important information in making decisions; (3) we exhibit unrealistic optimism regarding the possibility of poor outcomes; and (4) we have difficulty assessing the probability of alternative outcomes. *Id.* at 1842–1852. *But see* Amir & Lobel, *supra* note 127, at 2125 (explaining that many problems diagnosed in *Nudge* can be explained by externalities and third-party effects).

[164] Camerer et al., *supra* note 85, at 1215.

[165] Jolls et al., *supra* note 110, at 1484.

[166] NUDGE, *supra* note 13, at 19.

[167] Sunstein, *supra* note 133, at 1875; *see generally* ARIELY, *supra* note 12; NUDGE, *supra* note 13.

[168] *See supra* notes 2–3, and accompanying text.

likely that at least some parents' childcare judgments and decisions are not maximizing their expected utility.[169] Although the empirical data on childcare decision-making is still developing,[170] the information we *do* have suggests this is the case. But before exploring these findings in detail, I first consider a unique feature of childcare decision-making: the fact that there are multiple "decision targets" for childcare choices.

1. Decisions for Self versus Others

As discussed above, childcare decisions are at once intended to benefit children, parents, and the family as a whole. In other words, the decision targets are multiple—parents are choosing not only for their children, but also for themselves, and for their families overall. Thus, childcare decisions differ in important ways from judgments and decisions individuals make only for themselves.

Psychologists have only recently begun to study the differences between decisions for self versus others, and the literature on "self-other" decision-making and its implications for cognitive bias is nascent.[171] But scholars have established that cognitive biases often operate differently when deciding for someone other than oneself,[172] with some cognitive biases amplified[173] and others diminished.[174]

---

[169] *See supra* note 5. Other forces are also at work. Parents reports themselves may be inaccurate. For example, their reported preferences may have already been altered to conform to social norms, or parents may respond to hypothetical questions by incorporating assumptions that affect their reported preferences. *See* Justine S. Hastings, Richard Van Weelden, & Jeffrey Weinstein, *Preferences, Information, and Parental Choice Behavior in Public School Choice* 5 (Nat'l Bureau of Econ. Research, Working Paper No. 12995, 2007), http://www.nber.org/papers/w12995.

[170] Indeed, one of the implications of my work here is that childcare decision-making warrants increased empirical study in the social sciences, so that we can best design law and policy initiatives to enhance and support parental decision-making. *See* CHAUDRY, ET AL., *supra* note 5, at 2 (outlining potential areas of new research and synthesis of existing research on childcare decision-making); FORRY ET AL., *supra* note 30, at 12 (describing how literature on childcare decision-making is underdeveloped); *id.* at 31–32 (suggesting potential studies to consider the operation of heuristics and biases in childcare decision-making).

[171] Evan Polman, *Effects of Self-Other Decision Making on Regulatory Focus and Choice Overload*, 102 J. PERSONALITY AND SOC. PSYCHOL. 980, 990 (2012) [hereinafter Polman, *Regulatory Focus*]; Evan Polman, *Information Distortion in Self-Other Decision Making*, 46 J. EXPERIMENTAL SOC. PSYCHOL. 432, 435 (2010) [hereinafter Polman, *Information Distortion*].

[172] Chung-Chau Chang et al., *The Compromise Effect in Choosing for Others*, 25 J. BEHAV. DECISION MAKING 109, 110–11 (2012); Lu et al., *supra* note 94, at 145; Polman, *Information Distortion*, *supra* note 171, at 432; Peter A. Ubel et al., *Physicians Recommend Different Treatments for Patients Than They Would Choose for Themselves*, 17 ARCHIVES INTERNAL MED. 630, 630 (2011).

[173] Polman, *Regulatory Focus*, *supra* note 171, at 980 (describing omission bias, confirmation bias, lexicographic weighting, and predecisional distortion as greater when deciding for another; greater risk aversion in some contexts).

[174] *Id.* at 980 (describing the decreased risk aversion in some contexts); Evan Polman, *Self-Other Decision Making And Loss Aversion* 119 ORG. BEHAV. & HUM. DECISION PROCESSES 141, 143, 148

Still other biases may be more or less prevalent depending on context.[175] The variability of cognitive biases in self-other decision-making isn't yet fully understood.[176] What is more, the operation of self-other decision-making likely differs depending on whom the decision target is, and how psychologically proximate or distant that target is from the decider.[177] Parents are psychologically close to their children, but no research has systematically examined how parents' decisions for their children differ from decisions for themselves.[178] And of special interest here, childcare decisions are made *both* for parents themselves *and* for others (their children and families).

A full exploration of the implications of self-other decision-making is beyond the scope of this Article, and would be premature given the still-evolving research. For the purposes of this project, the important point is that despite these variances, research on childcare decision-making suggests that parents are, indeed, vulnerable to heuristics and biases, and exhibit them in childcare judgments and decisions. Having flagged the issue of self-other decision-making, I now turn to explore prominent heuristics and biases that likely interact with childcare judgments and decisions, and theorize how they might lead to behavioral market failure in the childcare market.

2. Childcare Quality Judgments

Before making childcare decisions, parents and families form judgments about the likelihood that particular providers will supply quality childcare. This isn't unusual; people frequently are called upon to form judgments based on the likelihood that one or another eventuality will come to pass.[179] But when heuristics and biases interact with judgment tasks, people sometimes make too of

---

(2012) [hereinafter Polman, *Loss Aversion*] (describing decreased omissions bias and reduced loss aversion, respectively).

[175] Chang et al., *supra* note 172, at 110; Polman, *Regulatory Focus*, *supra* note 171, at 980 (noting the level of risk aversion in choosing for others varies by context); Polman, *Information Distortion*, *supra* note 171, at 432.

[176] Polman, *Loss Aversion*, *supra* note 174, at 148; Polman, *Regulatory Focus*, *supra* note 171, at 980.

[177] Chang et al., *supra* note 172, at 111; Christopher K. Hsee & Elke U. Weber, *A Fundamental Prediction Error: Self-Others Discrepancies in Risk Preference*, 126 J. EXPERIMENTAL PSYCHOL. 45, 52 (1997); Lu et al., *supra* note 94, at 145; Polman, *Regulatory Focus*, *supra* note 171, at 990; Fenja V. Ziegler & Richard J. Tunney, *Decisions for Others Become Less Impulsive the Further Away They Are on the Family Tree*, 7 PLOS ONE 1, 2, 4 (2012) (describing the relationship between decision-maker and decision target can affect optimality of decisions).

[178] Rebecca A. Dore et al., *A Social Values Analysis of Parental Decision Making*, 148 J. PSYCHOL.: INTERDISCIPLINARY AND APPLIED 477, 478 (2014).

[179] Korobkin & Ulen, *supra* note 113, at 1085. "To accurately predict the probability of future events, actors must consider the statistical probability that an event will occur and 'update' (adjust) this 'base rate' with any available particularized information about a specific situation." *Id.*

much certain information while overlooking or ignoring other important data.[180] This distorts judgments of likelihood and probability and can dramatically slant people's appreciation of risk.[181] Here, I survey several of the most common heuristics and biases, and consider their potential impact on childcare quality judgments.

a. Availability and Representativeness

The availability heuristic affects how easily certain events come to mind.[182] Relying on availability, we access information that is easily recalled, forming a judgment of likelihood based on salience.[183] People tend to access and use information that is recent, well-known, and vivid.[184] Thus, we base our assessments of frequency or likelihood on the ease with which we can retrieve examples from memory.[185] When it goes awry, this heuristic can lead us to overestimate the frequency or likelihood of the most vivid events while underestimating others.[186]

The representativeness heuristic works similarly. Using this rule of thumb, people make judgments of frequency or likelihood based on observed similarities between the subject of judgment and a reference or target category.[187] In lockstep with availability, the representativeness heuristic may cause people to overestimate the likelihood that something actually is what it appears to be.[188]

As a result of these two heuristics, data that is vivid, salient, common, or familiar is more easily recalled and compared.[189] Excessive reliance on available or representative data causes people to overlook or ignore other, less salient (but important) information.[190] Rather than optimal processing of information, availability and representativeness can lead to faulty estimations of likelihood, resulting in inaccurate judgments about risk.[191] When market actors make

---

[180] Sunstein, *supra* note 133, at 1846.

[181] *Id.* at 1851.

[182] Jolls & Sunstein, *supra* note 132, at 203–04.

[183] *Id.*; Rachlinski, *Selling Heuristics*, *supra* note 122, at 392–93, 400; Rachlinski, *Uncertain*, *supra* note 133, at 1170.

[184] NUDGE, *supra* note 13, at 25; Rachlinski, *Selling Heuristics*, *supra* note 122, at 400; Rachlinski, *Uncertain*, *supra* note 133, at 1170.

[185] HASTIE & DAWES, *supra* note 137, at 89; Camerer et al., *supra* note 85, at 10.

[186] Rachlinski, *Selling Heuristics*, *supra* note 122, at 392–93.

[187] NUDGE, *supra* note 13, at 26; Rachlinski, *Uncertain*, *supra* note 133, at 1171.

[188] Camerer et al., *supra* note 85, at 10; Korobkin & Ulen, *supra* note 113, at 1086.

[189] Korobkin & Ulen, *supra* note 113, at 1086–87.

[190] Sunstein, *supra* note 133, at 1846.

[191] BEHAVIORAL LAW & ECONOMICS, *supra* note 132, at 5.

systematic miscalculations of risk, the market itself becomes distorted because it does not reflect the true preferences of these actors.[192]

When confronting childcare options, parents must make assessments about the likelihood that their children will receive high quality care, low quality care, or even experience harm. In predicting these eventualities, availability and representativeness may come into play. For example, based on a highly publicized event of harm at an institutional childcare center, parents might judge the risk of harm to be higher at childcare centers, as opposed to, say, smaller, childcare home environments.[193] In reality, studies show that on average, center-based care is much more likely to be licensed, is safer, and is of higher quality than childcare homes.[194]

Parents may also make categorical judgments about quality based on perceived similarities to a reference or target category. Relying on representativeness, they may judge quality using other proxies like orderliness, cleanliness, or resemblance to another provider known to be of high quality.[195] Some parents value providers who are "'parent-like"' and seem to "'love children"'[196]—providers who exhibit similar values and discipline styles.[197] Or they might judge childcare homes to be of higher quality because they're more "home-like,"—intimate, nurturing, and therefore of higher quality than larger, institutional childcare centers.[198] In one recent survey, for example, parents reported basing childcare decisions on their perceptions of the aspects of care they could recognize easily through observation and conversations with the caregiver, such as warmth and cleanliness.[199] Parents may use these features to gauge quality rather than the more formal measures used by experts.[200] (Of course, cleanliness and warmth can be consistent with higher-quality care, but their existence is no

---

[192] NUDGE, *supra* note 13, at 25; Rachlinski, *Uncertain*, *supra* note 133, at 1191–92.

[193] CHAUDRY ET AL., *supra* note 5, at 12.

[194] *See* CLARKE-STEWART & ALLHUSEN, *supra* note 2, 51–62. In a different situation, however, the opposite might be true.

[195] *See* CHAUDRY ET AL., *supra* note 5, at 13; Laura Stout Sosinsky, *Childcare Markets in the US: Supply and Demand, Quality and Cost, and Public Policy*, *in* CHILDCARE MARKETS: CAN THEY DELIVER AN EQUITABLE SERVICE? 131, 142 (Eva Lloyd & Helen Penn, eds., 2012);*see also* MANFRA ET AL., *supra* note 4, at 8 (parents see foam ground covers beneath playground equipment and perceive safety; experts see danger because the equipment has no mechanism for preventing falls); NACCRRA, WHAT DO PARENTS THINK?, *supra* note 31, at 9 (clean and friendly heard repeatedly in focus groups investigating what parents look for in childcare arrangements).

[196] MANFRA ET AL., *supra* note 4, at 31.

[197] Raikes et al., *Parent Perceptions*, *supra* note 4, at 18.

[198] *Cf.* Plantenga, *supra* note 14, at 70.

[199] *See, e.g.*, NACCRRA, PARENTS' PERCEPTIONS, *supra* note 2, at 8–9, 13–14.

[200] Plantenga, *supra* note 14, at 70.

guarantee.) Similarly, high demand may act as a proxy for quality. One study found parents viewed providers with substantial waitlist to be of high quality.[201]

At the other end of the spectrum, some parents underestimate quality simply because of the neighborhood in which a childcare provider is situated, assuming quality must be low.[202] Or parents might associate childcare centers with lower quality because they are for profit, judging them to be "supermarket childcare," as opposed to non-profit and/or community linked providers.[203] And finally, parents' judgments are further complicated because the measures of quality most frequently relied upon by experts—structural quality—are *themselves* proxies for the more predictive but elusive quality measure: process quality.[204]

b. Overoptimism and Self-serving Bias

People tend to make cognitive inferences that are self-serving.[205] Often, we will interpret information or form judgments in ways that either confirm preconceptions or otherwise serve our interests.[206] When subject to these biases, we will respond more readily to desired, rather than unwanted, information.[207] This in turn distorts appreciation of risk and estimations of probability, leading us to take unjustifiable risks.[208]

Unrealistic optimism is one of the most recognized self-serving biases. Most of us believe we're "above average,"[209] less likely to suffer from poor choices or bad outcomes than are others.[210] Yet, as Professors Korobkin and Ulen wryly observe, "[n]otwithstanding Garrison Keillor's report, all the children in Lake Wobegon cannot really be above average."[211] When people are overly optimistic,

---

[201] MANFRA ET AL., *supra* note 4, at 32 (citing an Australian study).

[202] CHAUDRY ET AL., *supra* note 5, at 25.

[203] MANFRA ET AL., *supra* note 4, at 32–33 (citing an Australian study).

[204] *See supra* notes 17-24 and accompanying text.

[205] Rachlinski, *Uncertain*, *supra* note 133, at 1172.

[206] *See* Jolls, *supra* note 126, at 14; Korobkin & Ulen, *supra* note 113, at 1093; Sunstein, *supra* note 133, at 1849; BEHAVIORAL LAW & ECONOMICS, *supra* note 132, at 8; Sean Hannon Williams, *Sticky Expectations: Responses to Persistent Over-Optimism in Marriage, Employment Contracts, and Credit Card Use*, 84 NOTRE DAME L. REV. 733, 746–47 (2009).

[207] Sunstein, *supra* note 133, at 1851; Williams, *supra* note 206, at 746–47.

[208] Jolls, *supra* note 126, at 13–14; Jolls & Sunstein, *supra* note 132, at 204–05; Korobkin & Ulen, *supra* note 113, at 1086–87; Williams, *supra* note 206, at 742–45.

[209] NUDGE, *supra* note 13, at 32; Sunstein, *supra* note 133, at 1849.

[210] *See* BEHAVIORAL LAW & ECONOMICS, *supra* note 132, at 4; Jolls, *supra* note 126, at 13; Jolls & Sunstein, *supra* note 132, at 204; Jolls et al., *supra* note 110, at 1524, 1541; Korobkin & Ulen, *supra* note 113, at 1091; Rachlinski, *Uncertain*, *supra* note 133, at 1172–73; Sunstein, *supra* note 133, at 1848–49.

[211] Korobkin & Ulen, *supra* note 113, at 1091.

they underestimate risk and fail to take sufficient care to protect against poor outcomes.[212] Thus, overoptimism is at the root of individual risk-taking, particularly in the context of life and health.[213] Related to overoptimism is overconfidence: we overestimate our ability to make accurate judgments.[214] This can exacerbate the effects of our flawed judgments.[215]

These biases appear to impact judgments about childcare quality. There is a tendency among parents to rate the care their children receive highly—much more so than expert observers.[216] In one study of parents as childcare consumers, for example, authors hypothesized something like overoptimism was at work:

> It is possible that parents rate the quality of their children's programs not according to their assessment of reality, but according to their hopes and desires for their much loved children. Not knowing the whole story about what actually happens to their children in child care, since they are rarely present to find out, parents might assume that the most important things are really being provided for their children.[217]

A later study found that in addition to overestimating their children's care, parents assign higher quality scores to aspects of care they believe to be more important.[218] Still another sociologist studying childcare surmised that consumers' propensity to assess social services favorably may explain the tendency of parents to judge childcare quality as high, despite indications to the contrary.[219] These judgments tend to confirm parents' beliefs about quality and serve their interests by reassuring themselves that their children are well cared for.

As a result of these bias, parents, like other consumers, may underestimate the risk that a childcare provider might not provide quality care.[220] Consequently, parents may pay insufficient attention to issues of quality and safety, opting for

---

[212] NUDGE, *supra* note 13, at 32–33; Jolls & Sunstein, *supra* note 132, at 207; Sunstein, *supra* note 133, at 1849.

[213] NUDGE, *supra* note 13, at 32; Rachlinski, *Uncertain*, *supra* note 133, at 1187.

[214] NUDGE, *supra* note 13, at 32; Rachlinski, *Uncertain*, *supra* note 133, at 1172–73.

[215] Rachlinski, *Uncertain*, *supra* note 133, at 1211.

[216] *See* Cryer, et al., *supra* note 2, at 274; MANFRA ET AL., *supra* note 4, at 19; NACCRRA, PARENTS' PERCEPTIONS, *supra* note 2, at 15.

[217] Cryer & Burchinal, *supra* note 4, at 55.

[218] *See* Cryer et al., *supra* note 2, at 274–75. Study authors conclude that parents' trust may be subjective, making it difficult to judge the level of care their children actually receive. *Id.* at 275.

[219] BROWNE MILLER, *supra* note 2, at 199–201.

[220] Rachlinski, *Uncertain*, *supra* note 133, at 1179–80.

unlicensed or subpar care but reassuring themselves that nothing bad will happen to their children.

In sum, the operation of heuristics and biases in childcare judgment creates opportunities for parents to overlook important data and misjudge the quality of providers.[221] And errors in judgment can prejudice their decision-making process.

3. Childcare Decisions

After forming judgments about the available quality from various providers, parents must weigh their options and choose among them. As just discussed, parents' use of heuristics may lead them to form inaccurate judgments about the quality provided by particular caregivers. And as they begin the decision-making process, additional interactions with heuristics and biases may further complicate things. What's more, heuristics and biases not only impact initial decisions from among competing options, but also subsequent decisions that weigh whether to make a change. Below, I consider these phenomena in the context of the childcare market.

a. Present Bias

People often make decisions that have consequences over time, requiring them to compare short- and long-term costs and benefits.[222] Many important life decisions—educational investments, labor supply, health and diet—exhibit this characteristic.[223] According to the standard economic account, people should make these decisions in ways that reflect their long-term preferences and goals.[224] Behavioral economics demonstrates that to the contrary, because of bias and bounded self-control, people exhibit behavior that is "dynamically inconsistent":[225] They sometimes make short-term decisions that are actually *in*consistent with their long-term goals.[226]

When making decisions about investment goods like education, labor, health, and diet, people tend to invest too little in the short term.[227] These problems are especially acute when there exists the possibility of a small short-term gain at the expense of longer-term losses.[228] People are biased toward present rewards, and

---

[221] When availability, representativeness, and over-optimism work in tandem, people may underestimate risk significantly. NUDGE, *supra* note 13, at 31–32.

[222] Korobkin & Ulen, *supra* note 113, at 1119.

[223] Camerer & Loewenstein, *supra* note 114, at 26.

[224] *See supra* notes 71–78 and accompanying text.

[225] NUDGE, *supra* note 13, at 41.

[226] Sunstein, *supra* note 133, at 1843.

[227] NUDGE, *supra* note 13, at 73.

[228] Sunstein, *supra* note 133, at 1843.

discount the potential longer-term benefits of alternative choices.[229] A primary driver of this time inconsistency is "hyperbolic discounting."[230] This bias leads people to make shortsighted decisions in favor of immediate costs or benefits rather than those that are more remote.[231]

Problems of present bias and time inconsistency seem likely to be a partial cause of the low demand for quality childcare. Many of childcare's short-term benefits are related to affordability, convenience, and facilitating parental work outside the home. By contrast, quality-related costs and benefits tend to be cumulative and more apparent in the longer-term.[232] Because so many parents desperately need childcare in order to work, market demand that privileges availability and convenience over quality suggests present bias may be at work. In the absence of such bias, and assuming adequate resources, some parents might channel more financial resources toward investments in quality care. For yet another cohort of parents, present bias is eclipsed by economic reality: notwithstanding their preferences for higher quality care, their choices ultimately are constrained by what they can afford.

b. Salience

Recall that one of the central insights of prospect theory is that, rather than evaluating choices based on costs and benefits, we often evaluate them according to their relationship to a fixed reference point.[233] In other words, choices are made in context and through a process of comparison.[234] When making comparisons to a reference point, a cognitive process similar to the availability heuristic plays out. As with forming judgments, when making decisions, cognitive limitations prevent people from fully accounting for all available information in making comparisons. Instead, people direct their attention to what their minds focus on—what is most salient.[235] People may respond more strongly to salient data and overlook less prominent, but still important, data.[236] Consumers may thus place too much

---

[229] Amir & Lobel, *supra* note 127, at 2115.

[230] Jolls et al., *supra* note 110, at 1539; Mullainathan & Thaler, *supra* note 112, at 11.

[231] Camerer & Loewenstein, *supra* note 114, at 23; NUDGE, *supra* note 13, at 73; Jolls et al., *supra* note 110, at 1539.

[232] Sosinsky, *supra* note 195, at 144.

[233] *See supra* text accompanying note 155.

[234] Pedro Bordalo et al., *Salience and Consumer Choice* 40 (Nat'l Bureau of Econ. Research, Working Paper No. 17947, 2012) [hereinafter Bordalo, *Consumer Choice*].

[235] *See* BAR-GILL, *supra* note 13, at 91; Bordalo, *Consumer Choice*, *supra* note 234, at 3; Pedro Bordalo et al., *Salience Theory of Choice Under Risk* 1–2 (Nat'l Bureau of Econ. Research, Working Paper No. 16387, 2010) [hereinafter Bordalo, *Salience Theory*]; Sunstein, *supra* note 133, at 1846.

[236] *See* Bordalo, *Consumer Choice*, *supra* note 234, at 1, 40.

weight on the most salient attributes of a service, overlooking other important features.[237]

Childcare decision-making is a complex task and presents a number of variables for parents to weigh: location, hours, price, licensing, type of provider, and quality. Yet parents may have limited time during which to select childcare.[238] Certain features of childcare may be more salient, namely price and convenience, because those are the aspects of childcare with which parents interact most frequently, and because many families struggle to afford childcare.[239] By contrast, the positive and negative externalities generated by childcare quality are frequently hidden or not realized until later, making them less visible for parents to consider when selecting childcare.[240] Further, the aspects of choice can vary depending on whether the decision target is the parent (in which case, they are more likely to focus on feasibility—whether the means of achieving a particular choice are relatively easy) or the child (in which case, they are more likely to focus on desirability—the value of a choice's end state).[241] These salience effects may cause some parents to over-emphasize some prominent features of childcare while overlooking more critical indicia of quality, leading them to select childcare that doesn't necessarily reflect the quality they desire.

c. Conformity and Social Norms

People have a tendency to conform—to do as others do.[242] They are influenced by information about the choices others are making.[243] Especially when people lack sufficient information, they may simply follow what other people seem to think—whatever appears to be the most common or desirable option.[244] Thus, social networks can be important sources of information and can have normative influence over individual preferences and decisions.[245] Moreover, in the context of deciding for others, social values theory predicts that such decisions will be affected by a social norm expressing how people *should* decide

---

[237] *Id.* at 2–3.

[238] *See* CHAUDRY ET AL., *supra* note 5, at 12.

[239] For a significant number of parents, of course, price moves beyond being simply salient to being ultimately determinative of the quality they demand.

[240] *See, e.g.*, Deborah Lowe Vandell et. al., *Do Effects of Early Child Care Extend to Age 15 Years? Results from the NICHD Study of Early Child Care and Youth Development*, 81 CHILD DEV. 737, 737–55 (2010) (tracking effects of childcare quality ten years after completion of that care).

[241] Lu et al., *supra* note 94, at 144–46.

[242] NUDGE, *supra* note 13, at 55.

[243] *Id.* at 288.

[244] BEHAVIORAL LAW & ECONOMICS, *supra* note 132, at 9; NUDGE, *supra* note 13, at 59.

[245] CHAUDRY ET AL., *supra* note 5, at 17, 19, 26.

for others.[246] Research on parental decision-making for children has found that parental decisions are in fact influenced by what they perceive their peer groups to value.[247]

In the context of childcare decision-making, social networks and communities play a significant role in childcare choice. With little information about childcare, generally, or their children's care, specifically, parents may simply go with what they know rather than engaging in a careful weighing of options, costs, and benefits.[248] When facing these challenges, the default or status quo exerts a powerful pull.[249] Parents are likely to go with what they know, focusing on their own experiences, that of friends and family, and whatever is prevalent in their communities.[250] Indeed, personal referrals are one of the most common methods of locating childcare.[251] Particular communities may have established norms preferring particular types of childcare, which will in turn influence individual families in those communities to choose what they perceive others in their community to be choosing. One could imagine any number of community norms, *e.g.*: infants should always be cared for in small, home-like environments; institutional care is important for toddlers because of socialization and cognitive development; Head Start is an important precursor of school readiness; or family members are always the best choice for childcare.[252]

Studies confirm this intuition: Most parents begin childcare searches with information from informal sources such as friends, family, and neighbors, and ninety percent of them report learning about childcare from sources other than formal resource and referral agencies.[253] Similarly, immigrant populations tend to prefer childcare that is consistent with the culture and values represented by their countries of origin, rather than American childcare norms and preferences.[254]

Conforming to social norms and relying on communities for information makes sense as a strategy for gathering information about childcare, and may enhance childcare decisions and channel parents toward quality care. But, as is the case more generally, reliance on these proxies may also cause parents to

---

[246] Dore et al., *supra* note 178, at 478–79.

[247] *Id.* at 481.

[248] NUDGE, *supra* note 13, at 201.

[249] *See id.* at 200–01.

[250] CHAUDRY ET AL., *supra* note 5, at 12–13. So, for example, if many friends and family rely on a local YMCA for care, parents in the selection process may be more likely to enroll their children in the same facility because it is more salient and well-known to them. *Id.* at 12.

[251] *Parent Perceptions*, *supra* note 4, at 4, 19.

[252] *See, e.g.*, CHAUDRY ET AL., *supra* note 5, at 19.

[253] FORRY ET AL., *supra* note 30, at 13, 25; Sosinsky, *supra* note 195, at 142.

[254] FORRY ET AL., *supra* note 30, at 20–21.

overlook more reliable data on quality or simplify their searches in ways that undercut their ultimate goals.

d. Status Quo Bias

Cognitive biases also deter people from making changes that would maximize their expected utility. Because of status quo bias, people are much more likely adhere to existing choices than to make changes.[255]

In part, this is because we are loss averse—reluctant to surrender things we already have.[256] We tend to place a greater negative value on losses than we would place positive value on equivalent gains.[257] Like the status quo bias, loss aversion may impede us from making changes, even when those changes would increase our utility. Status quo bias and loss aversion contribute to inertia, a reluctance to make changes even when in our interests.[258] People also tend to procrastinate, incorrectly assuming they will take beneficial actions in the future. [259] Complicating these biases, people have bounded willpower.[260] Consequently, they either put off or fail to take steps that would further their long-term goals.[261]

Status quo bias, loss aversion, and procrastination may discourage parents from changing childcare providers, even in the face concerns about safety or quality. Parents will tend to prefer what they already have, or persist with the default arrangement.[262] Indeed, several studies report that in general, parents have little interest in changing providers. [263] When weighing a change, a parent exhibiting loss aversion would give more weight to what she might miss about the existing arrangement than what she might gain from a new one.[264] This may be the case even if the existing arrangement is of marginal quality and the prospective provider has the potential for better quality.[265] Complicating status quo bias,

---

[255] BEHAVIORAL LAW & ECONOMICS, *supra* note 132; NUDGE, *supra* note 13, at 7–8, 34; Camerer et al., *supra* note 85, at 1224.

[256] NUDGE, *supra* note 13, at 33–34.

[257] BEHAVIORAL LAW & ECONOMICS, *supra* note 132, at 6; Camerer & Loewenstein, *supra* note 114, at 3; Korobkin & Ulen, *supra* note 113, at 1111.

[258] NUDGE, *supra* note 13, at 7–8, 35; Camerer et al., *supra* note 85, at 1224.

[259] Camerer et al., *supra* note 85, at 1225; Sunstein, *supra* note 133, at 1843.

[260] NUDGE, *supra* note 13, at 41–42; Jolls, *supra* note 126, at 15–16; Jolls et al., *supra* note 110, at 1539.

[261] Sunstein, *supra* note 133, at 1845.

[262] CHAUDRY ET AL., *supra* note 5, at 14–15.

[263] *See* MANFRA ET AL., *supra* note 4, at 16.

[264] CHAUDRY ET AL., *supra* note 5, at 14.

[265] *Id.* at 14–15.

parents may be resistant to change because of countervailing concerns about stability for their children or their families.[266]

In sum, it appears that in some instances heuristics and biases work together to distort initial judgments and ultimate decisions in the childcare market, likely causing some parents' childcare decisions to diverge from the predictions of rational choice theory. Imperfect rationality leads to distorted market behavior and, consequently, distorts the childcare market in which that behavior takes place. Thus, behavioral market failure is one explanation for the low demand for quality in our childcare market.

An important insight from behavioral economics is that the existence of behavioral market failure can inform the state's role. Enter the "nudge."

C. Behavioral Market Failure and the State: Introducing Nudges

When markets are inefficient, most economic theorists acknowledge that government intervention can enhance efficiency.[267] This is true for behavioral, as well as standard, market failure.[268]

This reality necessarily has implications for state intervention. Legal rules and policies can influence behavior and affect the production of social resources and their efficient allocation.[269] Behavioralists argue that to the extent legal rules and policies are designed in part based on their anticipated effects on behavior, they ought to be informed by the contexts in which people *actually* form judgments and make decisions.[270] Considering the contexts in which people form judgements and make decision ought to facilitate a closer nexus between people's ends and means,[271] enhancing market efficiency and overall welfare.[272] When grounded in a more sophisticated account of how people actually make decisions, public policy, governance, and lawmaking can be improved.[273]

---

[266] Plantenga, *supra* note 14, at 72.

[267] *See* NUDGE, *supra* note 13, at 184–86; Amir & Lobel, *supra* note 127, 2109–10; Harbach, *Childcare Market Failure*, *supra* note 7, at 686–87.

[268] *See* Sunstein, *supra* note 133, at 1888. Indeed, some scholars argue that many of the interventions prescribed in books like *Nudge* can be explained in terms of externalities and third-party effects. Amir & Lobel, *supra* note 127, at 2125.

[269] Korobkin & Ulen, *supra* note 113, at 1054, 1074–75.

[270] *See* BEHAVIORAL LAW & ECONOMICS, *supra* note 132, at 2; Amir & Lobel, *supra* note 127, at 2099; Jolls, *supra* note 126, at 5; Jolls & Sunstein, *supra* note 132, at 200; Jolls et al., *supra* note 110, at 1522; Korobkin & Ulen, *supra* note 113, at 1054, 1099, 1104.

[271] Korobkin & Ulen, *supra* note 113, at 1104.

[272] *See* Rachlinski, *Uncertain*, *supra* note 133, at 1195 ("To the extent that private preferences reflect systematic miscalculations and mistakes, however, the aggregation of these preferences will create undesirable results."); Sunstein, *supra* note 133, at 1836.

[273] Amir & Lobel, *supra* note 127, at 2127.

Armed with an understanding of the limits of human cognition in judgment and decision-making, law and policy can be formulated to "debias" people's imperfect rationality[274] and steer them in welfare-promoting directions,[275] thereby increasing efficiency. [276] In perhaps the most prominent and accessible characterization of this approach, Cass Sunstein and Richard Thaler have introduced the concept of the nudge.[277] Nudges readjust the decision-making context (a/k/a "choice architecture") so as to steer people toward decisions that better reflect their true preferences.[278] "Choice architects" (i.e., policymakers) structure the contexts in which people make decisions in ways that account for imperfect rationality and self-control, improving efficiency and, ideally, maximizing welfare.[279] Nudges are intended to be modest and inexpensive, leaving room for individual agency and choice.[280] Importantly, nudges are never compulsory. As defined by Sunstein and Thaler, a nudge is "any aspect of choice architecture that alters people's behaviors in a predictable way without forbidding any options or significantly changing their economic incentives."[281]

Certain features of judgment and decision-making contexts make it more or less likely that they will be affected by bounded rationality and bounded self-control. Most broadly, people fall prey to cognitive errors when decisions are complex, ambiguous, and difficult, and information is lacking.[282] Experience, frequency, and feedback also matter, because difficult decisions become easier with practice and people can learn from mistakes when feedback is clear and immediate.[283] Bounded self-control is most likely to pose problems when people

---

[274] Jolls, *supra* note 126, at 34; Jolls & Sunstein, *supra* note 132, at 200, 202.

[275] *See* BEHAVIORAL LAW & ECONOMICS, *supra* note 132, at 10; Jolls, *supra* note 126, at 1–2; Jolls & Sunstein, *supra* note 132, at 199; Sunstein & Thaler, *supra* note 123, at 1159, 1162.

[276] Camerer et al., *supra* note 85, at 1223.

[277] *See generally* NUDGE, *supra* note 13.

[278] NUDGE, *supra* note 13, at 10; *see also* Baron, *supra* note 123, at 5.

[279] NUDGE, *supra* note 13, at 3, 6; Amir & Lobel, *supra* note 127, at 2106–07.

[280] NUDGE, *supra* note 13, at 6; Amir & Lobel, *supra* note 127, at 2106–08, 2118; Jolls & Sunstein, *supra* note 132, at 234.

[281] *See* NUDGE, *supra* note 13, at 6; Amir & Lobel, *supra* note 127, at 2118. *But see* Ryan Bubb & Richard Pildes, *How Behavioral Economics Trims its Sails and Why*, 127 HARV. L. REV. 1593, 1599 (2014) (critiquing Behavioral Law and Economics's restriction to choice-preserving policy interventions).

[282] NUDGE, *supra* note 13, at 74; Korobkin & Ulen, *supra* note 113, at 1076–78, 1083; Rachlinski, *Selling Heuristics*, *supra* note 122, at 393.

[283] NUDGE, *supra* note 13, at 74–75; Mullainathan & Thaler, *supra* note 112, at 4; Rachlinski, *Uncertain*, *supra* note 133, at 1220; Sunstein & Thaler, *supra* note 123, at 1163. Earlier experiences and decisions with childcare thus become part of the context in which parents make subsequent childcare choices. WEBER, *supra* note 16, at 7.

experience some benefits immediately and other consequences later,[284] and they may also arise when people are in a "hot" state.[285]

The context and characteristics of the childcare market create the background conditions for imperfect rationality. First, childcare decisions are complex ones in which parents must evaluate, among other things, the type of care, availability, cost, convenience, and quality. Quality is one factor among many they must weigh. The average parent has little information about how to locate quality childcare.[286] Moreover, information about quality is hidden and sometimes ambiguous.[287] As discussed above, parents are unlikely to receive substantial feedback concerning quality because they are unable to observe directly whether the care their children are receiving is, in fact, of high quality. Childcare quality is also notoriously difficult to measure and report. We may know what poor or unsafe childcare looks like when we see it, but assessing high quality is more difficult.

Second, many first time parents will have little to no experience choosing childcare, and are unlikely to accumulate significant information moving forward. Families will likely face childcare decisions with relative infrequency because of status quo bias and a tendency to prefer stability and consistency in childcare arrangements.[288]

And finally, the short-term benefits of childcare tend to be basic safety, convenience, facilitation of parental work, and affordability. By contrast, the most significant benefits and costs of childcare quality tend to accumulate over time. In all these ways, childcare decision-making presents a powerful case for debiasing: Parents could use a nudge toward higher-quality care.[289]

---

[284] NUDGE, *supra* note 13, at 73.

[285] NUDGE, *supra* note 13, at 41–42, 76–77; Sunstein & Thaler, *supra* note 123, at 1188.

[286] Harbach, *Childcare Market Failure*, *supra* note 7, at 671, 684–85.

[287] *See* Plantenga, *supra* note 14, at 70.

[288] *See id.* at 72. Of course, most families will make childcare decisions more than once—when they change jobs or work schedules, when children age out of particular categories of care, or when changes in subsidy policy necessitate a switch. WEBER, *supra* note 16, at 7.

[289] Recognizing valuable insights of behavioral economics for law and policymaking, the Administration for Children and Families (a division of the United States Department of Health and Human Services), has begun initial, theoretical work to study the potential for behavioral reforms to enhance structural family law and policy in the context of childcare policymaking, child support, Temporary Assistance to Needy Families policy, and domestic violence. *See* CHAUDRY ET AL., *supra* note 5, at 9–17; FORRY ET AL., *supra* note 30, at 28–29; Lawhawn Richburg-Hayes et al., *Behavioral Economics & Social Policy: Designing Innovative Solutions for Programs Supported by the Administration for Children and Families* 13–22, 23–28, 29–35 (OPRE Report 2014-16a, April 2014), http://www.acf.hhs.gov/programs/opre/resource/behavioral-economics-and-social-policy-designing-innovative-solutions-for-programs-supported-by-the-administration-for; WEBER, *supra* note 16, at 7–8.

III. NUDGING PARENTS

Having made the theoretical case for nudging parents, the task of this final Part is a more pragmatic one. In the discussion that follows, I consider how we might translate insights from behavioral economics into concrete law and policy initiatives for the childcare market. As in Part II, the discussion begins with behavioral theory, exploring implications for the institutional design of nudges. It then considers how these insights might inform childcare law and policy. Finally, it considers potential objections.

A. Behavioral Law & Economics: Designing Nudges

One of the primary contributions of behavioral law and economics is the recognition that in the face of behavioral market failure, law and policy can be carefully structured to nudge decision-makers in welfare-enhancing directions. Armed with an understanding of the complexity and fallibility of human judgment and decision-making, "behavioral bureaucrats"[290] or choice architects [291] can deliberately shape the environments in which people make decisions and thereby counteract behavioral market failure. [292] Taking a behaviorally-informed perspective, law and policy deliberately account for the broader contexts in which individuals make decisions.[293] As a backdrop to the recommendations below, this Section explores how behavioral insights inform state interventions in behavioral market failure, considering the overall goals, guiding principles, and methodology for designing nudges.[294] I begin this exploration by considering what the overall goals of such design should be, and I then examine the design process.

To suggest that an appropriate counter to behavioral market failure is to nudge individuals' raises a central normative question: Nudge toward what? In general, the overarching goal is to facilitate realization of an individuals' own, true preferences[295]—the ones they would pursue themselves, but for the foibles of human judgment and decision-making. Consequently, a central premise of behaviorally-informed market interventions is that choice architects should, as

---

[290] Jolls et al., *supra* note 110, at 1543.

[291] NUDGE, *supra* note 13, at 10.

[292] *Id.* at 3, 6.

[293] Amir & Lobel, *supra* note 127, at 2100.

[294] Despite strong theoretical work to develop a richer understanding of human behavior by incorporating behavioral science, behavioral law and economics has done much less work in the form of developing a framework or taxonomy for translating behavioral insights systematically into policy and regulation. *See* Vandenbergh et al., *supra* note 124, at 721–22. For a behavioral framework proposal in the regulatory context, *see generally id.*; *see also* Eric J. Johnson et al., *Beyond Nudges: Tools of a Choice Architecture*, 23 MARKETING LETTERS 487, 488 (2012) (providing roadmap of the tools of choice architecture and illustrations of their application); Madrian, *supra* note 162, at 11–38 (cataloging and evaluating a variety of behaviorally-informed policy tools).

[295] *See* Amir & Lobel, *supra* note 127, at 2107.

much as possible, worry about means rather than ends.[296] Nudges aim to leverage choice architecture to counteract bounded rationality and self-control without overriding personal choice or dramatically changing economic incentives.[297] In most cases, then, the normative goal of nudges and choice architecture should reflect the aggregate preferences of individuals themselves.

Of course, when designing law and policy, it isn't possible to discern the preferences of each relevant individual.[298] This concern is even more pronounced given that many of our preferences are ill-defined. For the purposes of this project, I return to my initial observations in Part I. As discussed there, most parents report desiring high quality childcare and understand quality in ways that largely overlap with expert definitions. I will therefore consider developmentally-appropriate quality as the lodestar for designing childcare nudges.[299]

Moving from design goals to the design process, nudges will only be effective to the extent they are informed by what we know about imperfect rationality.[300] Armed with an awareness of why people deviate from perfect rationality, we can structure choice architecture so as to counteract the heuristics and biases that lead to imperfect rationality.[301] Some nudges are best understood as efforts to curb heuristics and biases, while others actively deploy heuristics and biases to re-direct human judgment and decision-making.[302]

In this regard, behavioral economics offers several general observations. First, contrary to rational choice theory, in a variety of contexts people's preferences are unclear and ill-formed rather than fixed.[303] When this is the case, their choices will *inevitably* be affected by the context, process, and environment in which they make decisions, whether constructed deliberately or not.[304] This being the case, nudges should be strategically designed to facilitate welfare-

---

[296] Sunstein, *supra* note 133, at 1835.

[297] NUDGE, *supra* note 13, at 6.

[298] Korobkin & Ulen, *supra* note 113, at 1126.

[299] To the extent that childcare nudges will move parents in directions that are both individually and socially optimal, they should be Pareto improving: Everyone should be better off without making anyone worse off. Madrian, *supra* note 162, at 682. Indeed, especially because higher quality care generates significant social spillovers, nudges may be justified even when they push parents to choose care that might be *in*consistent with maximizing their subjective expected utility. Professor Russell Korobkin has labeled this particular use of nudges "libertarian welfarism." Russell Korobkin, *Libertarian Welfarism*, 97 CAL. L. REV. 1651, 1653 (2009).

[300] Amir & Lobel, *supra* note 127, at 2107; Sunstein, *supra* note 133, at 1832; Sunstein & Thaler, *supra* note 123, at 1166.

[301] CHAUDRY ET AL., *supra* note 5, at 16; NUDGE, *supra* note 13, at 13.

[302] Amir & Lobel, *supra* note 127, at 2114.

[303] CHAUDRY ET AL., *supra* note 5, at 7; Sunstein & Thaler, *supra* note 123, at 1159, 1161, 1164.

[304] Sunstein & Thaler, *supra* note 123, at 1159, 1164.

enhancing choices. Second, because of what we know about imperfect rationality, we should expect error.[305] Choice architecture must therefore be designed to account for such missteps and accommodate change. Third, for the complex choices that most frequently cause people to stumble, we should structure them to make it easier for people to map their preferences onto available options by, for example, making information about various alternatives more accessible.[306] Finally, policy interventions should be designed to provide feedback, which, as discussed above,[307] enables people to learn from past missteps and to make more consistent decisions going forward.[308]

But well-designed nudges can do more than simply blunt the effects of heuristics and biases. Instead, one task of behavioral law and economics is to consider how to affirmatively *leverage* heuristics and biases, because although they are certainly at the root of some judgment and decision-making errors, they can also be promising part of the solution.[309] Strategic use of heuristics and biases can counteract imperfect rationality. In particular, the availability heuristic, framing effects, anchors, and social norms can be co-opted to assist people in forming more accurate judgments and decisions.

First, the availability heuristic that sometimes leads people astray can also work to improve judgment and decision-making. Strategically designing law and policy such that certain information or features of a choice are more vivid and salient can offset behavioral market failure.[310] Choice architects can become "availability entrepreneurs."[311] Making long-term benefits more easily recalled and accessible can help people overcome present bias and time inconsistency by reminding them of the significance and desirability of these longer-term benefits. Via availability, choice architects can also ensure that overlooked information is more prominent and therefore factored into decision-making. Availability can also counteract optimism bias by exposing decision-makers to concrete instances of those circumstances that they underestimate.[312] And with both overoptimism and probability problems, availability can make negative outcomes more

---

[305] NUDGE, *supra* note 13, at 87–84. Several of these guidelines derive from Sunstein and Thaler's "nudge" mnemonic: iNcentives, Understanding mappings, Defaults, Give feedback, Expect errors, and the Structure complex choices. *Id.* at 100; *see* Amir & Lobel, *supra* note 127, at 2107.

[306] NUDGE, *supra* note 13, at 94–97; Amir & Lobel, *supra* note 127, at 2108.

[307] *See supra* note 187 and accompanying text.

[308] NUDGE, *supra* note 13, at 90, 97; Rachlinski, *Uncertain*, *supra* note 133, at 1212–13.

[309] Amir & Lobel, *supra* note 127, at 2115–16; Jolls & Sunstein, *supra* note 132, at 227.

[310] Jolls et al., *supra* note 110, at 1537.

[311] *Id.* at 1521.

[312] *See* Jolls & Sunstein, *supra* note 132, at 210 (providing an example that shows that smokers are more likely to believe that smoking will harm them, and less likely to be overly optimistic, when they are aware of specific instances of such harm).

cognitively accessible when people assess risk, leading them to more accurate assessments.[313]

Second, framing effects can positively influence judgment and decision-making. Choices depend in part on how they are presented.[314] Because we are generally loss averse, framing consequences in terms of losses rather than gains can have significant effects on decision-making.[315] Framing can be especially helpful in addressing optimism bias by pressing decision-makers to confront the potential negative consequences of their decisions.[316] Similarly, framing a choice so as to highlights potential losses can facilitate more accurate assessments of risk.[317]

Third and relatedly, anchors and defaults can improve judgments and decisions.[318] As discussed above, people frequently make probability judgments with reference to a starting point, or anchor.[319] They then make adjustments in the direction that seems appropriate.[320] Using this heuristic can have dramatic results. People will adjust an estimate from the anchor, but will nevertheless remain close to it.[321] The status quo, or default, can thus act as a powerful anchor, influencing contemplated changes in the direction of existing plans or policies, which come to mind more easily than do new ones.[322] But the fact that anchors are so influential for judgment and choice need not be a negative.[323] In fact, anchors can serve as helpful nudges, correcting biased judgments and steering people toward their true preferences. Simply by suggesting a starting point, choice architects can influence decisions.[324]

---

[313] NUDGE, *supra* note 13, at 26; Jolls & Sunstein, *supra* note 132, at 212, 213 n.11; Jolls et al., *supra* note 110, at 1537.

[314] NUDGE, *supra* note 13, at 36.

[315] Jolls et al., *supra* note 110, at 1537.

[316] Jolls & Sunstein, *supra* note 132, at 216.

[317] Jolls & Sunstein, *supra* note 132, at 216; Jolls et al., *supra* note 110, at 1537.

[318] NUDGE, *supra* note 13, at 23 (explaining that we know that especially when people are uncertain and making assessments of probability, anchors can distort probabilistic judgment. In conditions of uncertainty, people use anchors as a starting point, and then adjust in the direction they deem appropriate).

[319] BEHAVIORAL LAW & ECONOMICS, *supra* note 132, at 5.

[320] NUDGE, *supra* note 13, at 23.

[321] HASTIE & DAWES, *supra* note 137, at 72; NUDGE, *supra* note 13, at 23.

[322] HASTIE & DAWES, *supra* note 137, at 76.

[323] Sunstein & Thaler, *supra* note 123, at 1178.

[324] NUDGE, *supra* note 13, at 24, 69–70.

Fourth and finally, heuristics and biases operate within the broader context of social norms, which themselves can act as powerful nudges.[325] Individual behavior frequently is influenced by more general social views and attitudes.[326] Because we internalize social norms[327] and seek social approval, social norms can in turn affect individual construction of preferences.[328] Social norms impact individuals, telling them what to value.[329] This ability to affect preferences and behaviors makes social norms a potentially powerful tool in countering imperfect rationality.[330] Peer pressure can influence choice and change minds. Likewise, simply having information about what others are doing can impact choice.[331] Law can be self-consciously designed to either support or counteract social norms; it may also be deployed to create and influence their development in the first place.[332]

With these general lessons from Behavioral Law and Economics in hand, I turn now to apply them in the context of childcare market interventions.

B. Childcare Market Nudges

A central lesson of this project is that conventional market failure interventions can address some, but not all, of the childcare market's dysfunctions. When we supplement our understanding of conventional market failure with an account of parents' imperfect rationality, it becomes clear that the impact of conventional remedies like subsidies, information, and regulation will be limited at best. From a behaviorally-informed perspective, simply providing subsidies to encourage the purchase of higher-quality care is a band-aid. Subsidies may increase demand for quality by altering parents' incentives, but do nothing to re-calibrate the way parents actually form judgments and make decisions about childcare.[333] Regulation can act as a backstop against poor quality care, but as currently configured does little to inform parental decision-making.[334] And once we understand that parents will filter information about childcare through a

---

[325] *Id.* at 43.

[326] Korobkin & Ulen, *supra* note 113, at 1127.

[327] *Id.* at 1130.

[328] *Id.* at 1130–31.

[329] CHAUDRY ET AL., *supra* note 5, at 19.

[330] Korobkin & Ulen, *supra* note 113, at 1131.

[331] NUDGE, *supra* note 13, at 54, 59–60, 65–68.

[332] Korobkin & Ulen, *supra* note 113, at 1131–32.

[333] Jolls & Sunstein, *supra* note 132, at 211–12.

[334] Through the lens of behavioral economics, regulation is an "insulating" strategy that protects market actors from the effects of boundedly-rational choices. Jolls & Sunstein, *supra* note 132, at 225.

cognitive process complicated by heuristics and biases, we recognize that simply providing information, without more, is likely to be inadequate.[335]

Having now theorized behavioral market failure in our childcare market, the practical task is to translate theory into law and policy prescriptions. Rather than somehow insulating parents from poor choices and bad outcomes *ex post*,[336] a behaviorally informed response would target imperfect rationality head-on.[337]

In the discussion that follows, I draw on lessons from behavioral law and economics to sketch out potential enhancements to our childcare law and policy.[338] Choice architects have a broad menu of nudges from which to choose. Here, I discuss those most apposite to the childcare market: strategic information disclosures, social norms, warnings, and procedural nudges.[339]

1. Strategic Information Disclosures

To the extent people's imperfect rationality and self-control can lead them to ignore long-term benefits and overlook important information, the strategic provision of information is one antidote to behavioral market failure.[340]

Consequently, an important task for choice architects is to move beyond the straightforward provision of information to prescribing how it should be provided.

---

[335] *See* Jolls et al., *supra* note 110, at 1533–34; Sunstein & Thaler, *supra* note 123, at 1182.

[336] Jolls, *supra* note 126, at 18, 34.

[337] Jolls & Sunstein, *supra* note 132, at 208. "It is not enough to make lots of choices available and then hope parents choose wisely. School systems need to put parents in a position to think through their choices, and to exercise their freedom rather than to rely on the default option. Both parents and children need the right incentives." NUDGE, *supra* note 13, at 206.

[338] Although theoretical and empirical scholarship on the behavioral economics of childcare choices is just beginning, scholars have begun applying lessons of behavioral economics to primary, secondary, and college education. *See, e.g.*, Hastings et al., *supra* note 169; Philip Oreopoulos, *Behavioral Economics of Education: Progress and Possibilities* (IZA, Discussion Paper No. 8853, Feb. 2015); Huriya Jabbar, *The Behavioral Economics of Education: New Directions for Research*, 40 EDUC. RESEARCHER 446 (2011).

[339] *See* Sunstein, *supra* note 133, at 1832, 1835; Sunstein & Thaler, *supra* note 123, at 1189. Defaults are another popular nudging device, but one which is not especially apposite for the childcare market. Defaults can be especially effective in counteracting present bias. Amir & Lobel, *supra* note 127, at 2120.

[340] *See* Jolls & Sunstein, *supra* note 132, at 202–03; Korobkin & Ulen, *supra* note 113, at 132; Rachlinski, *Uncertain*, *supra* note 133, at 1176. This intervention is not unique to behavioral market failure. Recall that one response to the information deficits in the childcare market—a conventional market failure—is the provision of missing information about the features and benefits of quality care, how to discern it, and where to find it. *See supra* Part I.B. But because the behavioral economics diagnosis is different, the purpose of using information strategically as a nudge is related, but distinct. From a behavioral perspective, the problem is that parents suffer from excessive complexity and pay insufficient *attention* to the information they have about quality. Consequently, the purpose of using information as a nudge is to make childcare quality more salient and accessible.

The *manner* in which information is provided is critically important.[341] By leveraging availability, choice architects can highlight overlooked information in ways that make it more vivid and salient.[342] Strategic information disclosures can refocus individuals on overlooked information. Better information and disclosures can improve feedback, empowering people to learn from past decisions and to improve their decision-making process.[343] They can also help mitigate cognitive overload by simplifying information to facilitate a more straightforward choice.[344]

These insights have led to the development of "targeted transparency" nudges, which provide targeted, simplified disclosures at the time of decision-making to move parties toward better decisions and providers toward improved services.[345] In the analogous context of primary and secondary public school choice, for example, targeted transparency has been shown to reduce the costs of acquiring and processing comparative information on school options, thereby increasing demand for higher-achieving schools and ultimately enhancing student achievement.[346] These nudges also have the potential to pressure lower-quality providers to increase quality or lose students.[347]

Thus, perhaps the most useful—and least intrusive—childcare market nudges would come in the form of information. One of the most promising avenues for enhancing and refining the information parents have about childcare quality is to build on existing and proposed Quality Rating Improvement Systems (QRIS). State-administered QRIS systems are "a framework for organizing, guiding, and

---

[341] Jolls et al., *supra* note 110, at 1535.

[342] *Id.* at 1520–21.

[343] NUDGE, *supra* note 13, at 189.

[344] Madrian, *supra* note 162, at 16–19.

[345] Daniel E. Ho, *Fudging the Nudge: Information Disclosure and Restaurant Grading*, 122 YALE L.J. 574, 578–79 (2012). Restaurant sanitation grading is the most common example of targeted transparency. *Id.* at 582. The goal is to make information on health risks more accessible and salient, which in turn should lead consumers to select restaurants accordingly, and incentivize under-performing restaurants to improve. *Id.* As Professor Daniel Ho's exhaustive empirical study of restaurant grades has illustrated, however, existing grading systems are far from a panacea, and suffer from a variety of flaws as currently designed and implemented. *Id.* at 586–88.

[346] Justine S. Hastings & Jeffrey M. Weinstein, *Information, School Choice, and Academic Achievement: Evidence from Two Experiments*, 123 Q.J. ECON. 1373, 1374 (2008). Providing simplified information to parents about school quality (in the form of academic achievement) significantly increased their demand for academic achievement. *See* Hastings et al., *supra* note 169, at 24, 26–27 (finding that simplified information impacts parental choice and preferences, primarily by lowering information and decision-making costs); *see also* NUDGE, *supra* note 13, at 202–03 (discussing same study).

[347] Hastings & Weinstein, *supra* note 346, at 1376. Of course, even with simplified and more accessible information, studies also suggest that parents must in fact have a range of high-quality, available options from which to actually choose. *Id.*

gauging the progress of early care and education initiatives."[348] Via QRIS programs, states collect information about childcare quality and then communicate that information to childcare consumers, enabling them to distinguish among providers in their communities according to the level of quality care provided.[349] About half of the states have implemented QRIS systems and most of the remaining states have pilot programs or plans for implementation.[350]

QRIS programs and other, similar approaches can present information strategically to counteract bounded rationality in the childcare market. First, these programs can help ensure that parents are mindful of important but often overlooked information—information about childcare quality in addition to, say, cost, location, hours, etc. These systems highlight this neglected information, describing standards used to assess childcare quality such as provider qualifications, learning environment, curricula, and activities, as well as explaining how childcare quality is assessed. Second, through broad accessibility, these programs use availability to make developmentally significant quality more salient for parents and families. And there may be also opportunities to nudge parents toward particular childcare arrangements of high quality by framing programs in particular ways.[351]

Third, these systems can enhance the accuracy of probabilistic judgments and decisions about quality by keying them to evidence-based quality indicators. Fourth, the QRIS approach can help parents structure complex choices by enabling them to map their preferences onto the menu of available options.[352] Finally, to the extent parents have already made childcare decisions, QRIS information can provide them with feedback on the level of quality care they have selected in the form of a quality rating for their selected childcare provider.

2. Information Campaigns and Social Norms

Broader public information campaigns about the significance and features of childcare quality could similarly counteract behavioral market failure.[353] These campaigns could suggest characteristics to seek in initial placements, as well as

---

[348] *See* Child Care and Development Fund (CCDF) Program, 78 Fed. Reg. 29, 442, 29462 (May 20, 2013) (to be codified at 45 C.F.R. pt. 98). *See also* SMART BEGINNINGS, http://www.smartbeginnings.org/home/star-quality-initiative/about-virginia-quality.aspx (last visited Oct. 22, 2015) (providing an example of a QRIS system, specifically the Virginia initiative "Virginia Quality.").

[349] *See* 78 Fed. Reg. at 29,460.

[350] *See* Child Care and Development Fund (CCDF) Program, 78 Fed. Reg. at 29,442, 29,446.

[351] CHAUDRY ET AL., *supra* note 5, at 16.

[352] *Cf.* NUDGE, *supra* note 13, at 93–94 (describing smart disclosure program "RECAP": Record, Evaluate, and Compare Alternative Prices).

[353] *See* Rachlinski, *Uncertain*, *supra* note 133, at 1224; Sunstein, *supra* note 133, at 1888–90.

what to expect from such placements.[354] First, by making the features and cumulative effects of quality childcare more salient, these campaigns would highlight overlooked information and help to blunt present bias by emphasizing the longer-term benefits of quality care. Second, using loss aversion and framing to focus on potential losses associated with unlicensed, unsafe, and lower-quality care could help counteract excessive optimism and recalibrate probability assessments.[355] Finally, to the extent some families' preferences concerning childcare quality are ill-formed, information campaigns might nudge families toward higher-quality care. Such campaigns would, again, use availability to make quality more salient.

Information campaigns might take a variety of forms. Federal agencies like the Administration for Children and Families' Office of Child Care could initiate a national-level conversation about childcare quality. State agencies might also devise state-wide initiatives aimed at increasing the salience of quality care. Or campaigns might be geared more narrowly toward particular sources of information, like QRIS programs. Most parents are unaware of existing state and local QRIS systems,[356] and researchers and agency actors are still working to understand how to make QRIS programming more family friendly.[357] States might devise public awareness campaigns for QRIS in ways that emphasize particular features of quality care.[358] Finally, local, community-based initiatives—yard signs, open houses, and the like—could be used to make quality more salient.[359]

Information campaigns can also go beyond simply informing to attempts at persuasion via social norms.[360] Importantly, strategic information disclosures can provide information about family priorities in choosing childcare (highlighting multiple studies indicating that parents rate quality as important, e.g.), thereby communicating a social norm of selecting quality childcare, potentially enhancing and solidifying that norm.[361] In turn, social networks would communicate this norm to individual community members, signaling particular choices for quality

---

[354] Indeed, information campaigns are especially important for initial decisions, given that endowment effects and status quo bias may discourage parents from leaving suboptimal childcare settings. *See supra* notes 245, 256, 269 and accompanying text.

[355] Vandenbergh et al., *supra* note 124, at 749.

[356] FORRY ET AL., *supra* note 30, at 25.

[357] *Id.* at 28.

[358] *Id.* at 26 (explaining how a recent public awareness project in Utah led to fewer children in informal childcare arrangements, and increased parental awareness of quality provided in their existing care arrangements).

[359] *Id.* at 30.

[360] Sunstein, *supra* note 133, at 1888.

[361] Korobkin & Ulen, *supra* note 113, at 1131.

childcare.[362] We know that parents receive most of their information about childcare from informal sources in their community—friends, family, and neighbors.[363] Thus, to the extent particular quality childcare arrangements become a community norm, more parents may be nudged toward selecting them.

3. Required Warnings

Especially the face of overoptimism and probability miscalculations, information disclosures alone may be insufficient to check bounded rationality. In this context, translating information into more assertive warnings can nudge people toward their desired ends.[364] Warnings counteract excessive optimism and thus lead to more accurate risk assessments by highlighting risk factors and explaining how negative outcomes might occur.[365] Consumer safety regulations requiring information disclosures and warnings employ these types of nudges because consumers often do not adequately appreciate the risks posed by using certain products.[366]

Warnings hold promise as an effective counter to overoptimism and probability mistakes in the childcare context. Like information disclosures, warnings can make information on the incidence and effects of low-quality childcare more salient. Warning leverage loss aversion: By directing attention to potential dangers and losses, they can help steer families toward higher-quality childcare. For example, in conjunction with licensing efforts, states might establish childcare "blacklists" highlighting the most egregious examples of unsafe and low quality childcare. When childcare advocates and the media target these providers, the blacklist can serve as a useful social nudge.[367]

4. Procedural Nudges

State law and policy can also address imperfect rationality by including certain procedural mechanisms within choice architecture. When people confront complex choices, these mechanisms are designed to ensure that those choices are

---

[362] CHAUDRY ET AL., *supra* note 5, at 17.

[363] FORRY ET AL., *supra* note 30, at 13.

[364] *See generally* Sunstein, *supra* note 133, at 1851.

[365] Jolls & Sunstein, *supra* note 132, at 209; Rachlinski, *Uncertain*, *supra* note 133, at 1190; Sunstein, *supra* note 133, at 1952.

[366] Jolls & Sunstein, *supra* note 132, at 207.

[367] NUDGE, *supra* note 13, at 191 (explaining that providers will want to avoid the consequences of bad publicity and will be motivated to avoid making the blacklist, creating a sort of competition to "race to the top"). Policymakers must take care, however, to focus on providers and avoid inadvertently creating a new front for the "Mommy Wars" or otherwise stigmatize the children and families using suboptimal care.

rational, voluntary, and pursue expected utility.[368] They might include defaults in the event that no choice is made, with the default based on an estimation of expected goals.[369] They might force people to actively choose so as to avoid inertia and status quo bias.[370] They might require individuals to confirm their receipt and understanding of certain information before making a choice. Or they might simply ensure that material information is salient by priming decision makers.

In the childcare market, the state could use procedural constraints via the documentation required when parents interact with the state to seek childcare subsidies through the CCDF or the federal income tax system. Subsidy applications and paperwork could anchor licensed and/or accredited care as the default or starting point choice, e.g., by soliciting or requiring licensing information before subsidies will be provided. If, by contrast, parents have opted for unlicensed care, procedural nudges might require active disclosure of this fact and an explanation. Similarly, this documentation could request information about public and private accreditation via QRIS ratings or organizations like the National Association for Education of Young Children.

Regardless of the type or quality of care ultimately selected, the presence of these constraints would prime parents to consider quality in their decision-making calculus, and make quality proxies like licensing more salient. In one study of childcare preferences, for example, simply asking parents to complete a questionnaire gave them a clearer perspective on childcare quality: "Completing the questionnaire linked the concept [of quality] to their experience, gave articulation to their perceptions, or reinforced what they privately observed and hesitantly believed."[371] In other words, simply completing a survey can nudge parents to consider childcare features they may have overlooked.[372]

For subsidies, yet another option would be to employ "hard" paternalism through financial incentives by keying or conditioning subsidy payments to the use of higher-quality providers.[373] Indeed, the Office of Child Care encourages states to account for quality in determining subsidy rates.[374] Proponents of a more

---

[368] Sunstein & Thaler, *supra* note 123, at 1189.

[369] *Id.* at 1188.

[370] Madrian, *supra* note 162, at 15.

[371] EMLEN ET AL., *supra* note 34, at 5–6.

[372] MANFRA ET AL., *supra* note 4, at 36.

[373] *See* Jolls & Sunstein, *supra* note 132, at 211; Korobkin & Ulen, *supra* note 113, at 1116. More assertive pressure on CCDF parents must be weighed against the reality that family law for the poor all too frequently constrains family decision-making rather than supporting it. *See* JILL ELAINE HASDAY, FAMILY LAW REIMAGINED 196–97 (2014).

[374] *See* Child Care and Development Fund Program, 78 Fed. Reg. 29,442, 29,478 (proposed May 20, 2013) (to be codified at 45 C.F.R. pt. 98).

narrow or conservative understanding of nudges would respond, however, that financial incentives would change individuals' motivation for making particular choices, but not necessarily the actual process by which they make those choices.[375]

Finally, an important lesson from behavioral law and economics is that we should expect parents to make mistakes.[376] Subsidy architects should anticipate these errors by putting mechanisms in place to facilitate changes to childcare arrangements, ensuring such changes can be effected expeditiously and without risk of losing substantial subsidy monies.

Armed with what we know from behavioral economics, these enhancements have the potential to better support parental decision-making and facilitate parents' pursuit and realization of their childcare goals. Because the effects of behaviorally informed law and policy in the childcare context have not yet been studied empirically, these are, necessarily, a preliminary set of recommendations. Going forward, it will be important to carefully test new initiatives for their efficacy and ensure that their benefits outweigh any experienced costs.[377]

In conclusion, using behavioral law and economics to reform childcare law and policy holds promise in mitigating behavioral market failure. But of course, actively exploiting law to influence individual judgment and decisions is not without controversy and risk. In the discussion below, I anticipate and respond to important concerns about nudging parents.

C. Objections: Nudging Parents?

As the concept of nudging makes plain, the argument of behavioral law and economics analysis is that it is legitimate—and indeed desirable—for government to attempt to influence choice.[378] Those who advocate nudging are unapologetic in their call for self-conscious efforts by the state to steer people toward their desired ends.[379] But these prescriptions raise important questions about individual autonomy and the legitimacy of state intervention.[380] Some of the most important objections to nudges concern paternalism, pluralism, and the risk of government error. Each of these objections has special significance in the family context. Below I explore these critiques and then respond to them.

---

[375] Jolls & Sunstein, *supra* note 132, at 211–12.

[376] *See supra* text accompanying note 245.

[377] Amir & Lobel, *supra* note 127, at 2122–23; Jolls & Sunstein, *supra* note 132, at 230; *see, e.g.*, CHAUDRY ET AL., *supra* note 5, at 31–32 (suggesting testing whether public information campaigns are more effective when designed in light of social norms).

[378] *See, e.g.*, Rachlinski, *Uncertain*, *supra* note 133, at 1178, 1192; Sunstein & Thaler, *supra* note 123, at 1162.

[379] NUDGE, *supra* note 13, at 5.

[380] Amir & Lobel, *supra* note 127, at 2117.

1. Paternalism

The paternalism critique centers around the legitimacy of state efforts to influence choice and behavior,[381] which potentially interferes with individual autonomy and agency.[382] For many, freedom of choice is an important component of individual welfare, at the least, or more broadly an end in itself—a bedrock principle of libertarianism.[383] Though the paternalism critique takes on a different cast in this context (after all, there are third parties involved in childcare decisions), there is another, related source of resistance as least as powerful: family liberty and autonomy.

This objection is especially sharp in the context of the state role in parental decision-making. Privacy and nonintervention norms predominate both family law and social ideology around the state's relationship to families.[384] Broadly, the family privacy doctrine provides a backstop against government interference, protecting private family decisions.[385] More specifically, the right of fit parents to make decisions concerning the care, custody, and control of their children is "an enduring American tradition," [386] and "perhaps the oldest of the fundamental liberty interests."[387] Parental decisions concerning childrearing are central to this right, especially in the face of second-guessing or overriding by the state.[388] To carry the critique forward, surely nudges have the potential to be especially worrisome in the context of parental decision-making about childcare.

As conceptualized, nudges are deliberately designed to include checks against undue paternalism. First, the primary goal of nudges is to tweak individuals' means but not their ends—enhancing their welfare as the individuals themselves see it, not the state.[389] The idea is to facilitate the maximization of individuals' own preferences. Second, the paternalism envisioned by nudges is *libertarian* in that it preserves freedom of choice and allows individuals to opt

---

[381] Sunstein & Thaler, *supra* note 123, at 1162.

[382] Camerer et al., *supra* note 85, at 1211–12; Jolls & Sunstein, *supra* note 132, at 231; Sunstein, *supra* note 133, at 1881.

[383] NUDGE, *supra* note 13, at 6; Sunstein, *supra* note 133, at 1881–83.

[384] These norms are part of the "canon" of family law for intact, affluent families, but often are not observed in family law's interaction with the poor. HASDAY, *supra* note 373, at 196–97.

[385] Harbach, *Childcare Market Failure*, *supra* note 7, at 687–89.

[386] Wisconsin v. Yoder, 406 U.S. 205, 232 (1972).

[387] Troxel v. Granville, 530 U.S. 57, 65–66 (2000).

[388] *See, e.g.*, *id.*

[389] NUDGE, *supra* note 13, at 5; Amir & Lobel, *supra* note 127, at 2126; Sunstein, *supra* note 133, at 1855.

out.[390] Thus, nudges may steer toward or encourage a particular choice, but they don't mandate it. Third, nudges constitute "soft" or "asymmetric" paternalism. They avoid material costs on individual choice,[391] and impose minimal costs on those decision-makers who are more closely aligned with the *homo economicus* model of rationality and self-control.[392] Thus, like other market actors, parents would ultimately be free to turn in different directions.

More broadly, in many domains, some sort of influence is unavoidable.[393] That is to say, choice architecture is inevitable.[394] As a result, the ways in which legal rules and policies are designed necessarily will influence people's choices.[395] For many choices, the government must at a minimum provide a starting point.[396] Likewise, as behavioral economics makes clear, there is no neutral way to provide information.[397] As discussed above, social norms are pervasive and powerfully influential.[398] In short, nudges—both intentional and unintentional—are everywhere.[399] That being the case, it is far better to deliberately structure them to maximize welfare, as reflected by aggregate preferences.[400]

A different response to these critiques comes from family law and policy itself: Family privacy, generally, and parental autonomy, specifically, are not monoliths.[401] Preferences favoring nonintervention and autonomy don't always

---

[390] *See* NUDGE, *supra* note 13, at 5; Jolls, *supra* note 126, at 39; Sunstein & Thaler, *supra* note 123, at 1201. Not all scholars, however, are sanguine about the choice-preserving limitations of nudging. Professors Bubb and Pildes, for example, have argued that Behavioral Law and Economics "trims its sails" unnecessarily by limiting behaviorally-informed regulation to choice-preserving interventions. *See* Bubb & Pildes, *supra* note 281, at 1599–1600.

[391] Sunstein, *supra* note 133, at 1860.

[392] NUDGE, *supra* note 13, at 249; Camerer et al., *supra* note 85, at 1212, 1219; Jolls & Sunstein, *supra* note 132, at 203, 226.

[393] Sunstein & Thaler, *supra* note 123, at 1159.

[394] Sunstein, *supra* note 133, at 1879; *see also* NUDGE, *supra* note 13, at 237; Sunstein & Thaler, *supra* note 123, at 1199.

[395] Sunstein & Thaler, *supra* note 123, at 1164.

[396] Sunstein & Thaler, *supra* note 123, at 1165.

[397] NUDGE, *supra* note 13, at 243; Jolls & Sunstein, *supra* note 132, at 232.

[398] NUDGE, *supra* note 13, at 246; Sunstein, *supra* note 133, at 1879.

[399] NUDGE, *supra* note 13, at 246.

[400] Sunstein & Thaler, *supra* note 123, at 1161.

[401] Indeed, a number of prominent family law scholars reject the family-state binary as far too simplistic, overshadowing the ways in which the state affirmatively *ought* to support families. *See, e.g.*, MAXINE EICHNER, THE SUPPORTIVE STATE: FAMILIES, GOVERNMENT, AND AMERICA'S POLITICAL IDEALS 3, 77–80 (2010); MARTHA ALBERTSON FINEMAN, THE AUTONOMY MYTH: A THEORY OF DEPENDENCY (2005).

trump the state's separate and independent interest in child wellbeing.[402] In fact, the state intervenes regularly in questions of child custody, support, and child welfare to override parental decisions when they aren't in the best interests of children. These interventions are justified by the state's role as *parens patriae*—to protect those who are legally incapable of protecting themselves.[403] Indeed, such interventions, even going so far as to override ends or goals, are consistent with economic interventions that are justified when third party effects are apparent.[404] To the extent these interventions are steering parents toward their children' interests rather than their own, perhaps they are not paternalistic at all.

2. Pluralism

A second concern with nudging is that to the extent government seeks proxies for welfare in designing policy, nudging toward a one-size-fits-all solution will reduce welfare.[405] Different people have different circumstances and preferences, and will balance them in different ways.[406] In any number of contexts, people may simply disagree as to what best advances their welfare.[407]

As with paternalism, this concern takes on a special dimension in the family law context. Indeed, the genesis of the family liberty cases arose in an era in which concerns about state totalitarianism were manifest, and families were linked countervailing democratic values.[408] Concerns about standardizing children were explicit in these debates.[409] Family pluralism and parental autonomy in the face of state hegemony acted as a check against a homogenized population.[410] Studies confirm that childcare preferences vary according to a number of family characteristics: the child(ren), parental employment, parental stress and beliefs, family income, socioeconomic status, family structure, and community.[411] In the view of the pluralism critique, the concern is that when choice architects make generalizations about what most parents "want," they will not only override some individual choices but also tend to standardize childcare decisions in ways that are troubling from a pluralism perspective.

---

[402] Harbach, *Childcare Market Failure*, *supra* note 7, at 687–89.

[403] *See id.*

[404] *Cf.* NUDGE, *supra* note 13, at 221 ("When a child's interests are involved, mandates are perfectly appropriate."); Sunstein, *supra* note 133, at 1863; Sunstein & Thaler, *supra* note 123, at 1193, 1202.

[405] Sunstein, *supra* note 133, at 1870.

[406] *Id.*

[407] *Id.* at 1898.

[408] Harbach, *Childcare Market Failure*, *supra* note 7, at 662–64.

[409] *Id.*

[410] *Id.* at 664; Harbach, *Outsourcing Childcare*, *supra* note 90, at 284.

[411] FORRY ET AL., *supra* note 30, at 17–20.

Again, translated for the childcare decision-making context, childcare nudges would seek to advance parents' *own* goals vis-à-vis childcare: to locate and secure *quality* childcare for their children.[412] Parents would be free ultimately to make individualized decisions about childcare, even in the face of nudges in different directions. Additionally, parents who are acting rationally would not suffer materially for making choices that depart from the direction of nudges. Retaining this ultimate autonomy would ensure that to the extent that families have pluralistic preferences and values as to childcare, they continue to be expressed. What is more, nudges will operate in a childcare market that will continue to respond to consumer preferences, therefore presenting a range of childcare alternatives from which parents can choose.[413]

3. Error and Bias

A third critique worries about government error and bias.[414] Public choice theory posits that public officials have agendas and biases just like the rest of us.[415] First, they are no less human than others, and are unlikely to be immune to the same heuristics and biases that can lead to errors in judgment and decision-making.[416] Second, public officials and agencies are susceptible to capture by powerful private interest groups and may therefore not make decisions to further the public's own goals.[417] And finally, critics worry that rather than working to facilitate the achievement of individuals' goals, government will act to further its own in ways that don't prioritize the general welfare.[418] Because nudges often are subtle, overreach is a special concern.[419]

As above, concerns about government error and bias take on a special character in the case of the family. Not infrequently, the state has stepped in to substitute its own judgments and values for those of parents and family members, to the harm of both families and children. Indeed, the presumption that fit parents act in the best interests of their children is intended to guard against just these sorts of harmful substitute judgments. To permit the state to nudge parental

---

[412] *See* LIKE THE MILITARY, *supra* note 1.

[413] *Cf.* FORRY ET AL., *supra* note 30, at 31.

[414] NUDGE, *supra* note 13, at 10.

[415] Sunstein, *supra* note 133, at 1871.

[416] Jolls & Sunstein, *supra* note 132, at 233; Jolls et al., *supra* note 110, at 1543; Korobkin & Ulen, *supra* note 113, at 1099–1100; Sunstein, *supra* note 133, at 1871–72.

[417] Jolls & Sunstein, *supra* note 132, at 231–33; Sunstein, *supra* note 133, at 1871.

[418] NUDGE, *supra* note 13, at 237, 244; Sunstein, *supra* note 133, at 1897–98; Sunstein & Thaler, *supra* note 123, at 1165. For example, government officials could "'sell heuristics'—as a way of furthering public support for their positions and mobilizing public support." Rachlinski, *Selling Heuristics*, *supra* note 122, at 392, 405.

[419] Sunstein, *supra* note 133, at 1892.

childcare decisions is to raise the specter of a government influenced by its own biases—both cognitive and cultural—nudging parents in its own desired directions rather than parents'.

The primary response to the error and bias problem is to again observe that nudges preserve freedom of choice and so to the extent that choice architects err, those errors need not necessarily be visited on the choosers.[420] A second response to concerns about error and bias extols the virtues of technocrats. These specialists in particular disciplines can work to overcome error in judgments and decisions.[421] Because technocrats will be well-versed in behavioral economics, they will be in a better position than most to self-correct for imperfect rationality and bounded self-control. And indeed, one aim of the regulatory agency model is to insulate these technocrats from political and popular pressure.[422] A third response is to line up the incentives of choice architects so that they put aside their own agendas and look to facilitate the general welfare.[423] Fourth and finally, behavioral law and economics makes explicit that nudges and choice architecture should be designed to ensure transparency and enable monitoring to guard against error, bias, and overreach.[424] The constitutional framework, and in particular judicial review of agency action, can help to counteract error in choice architecture.[425]

In sum, childcare nudges and choice architecture would seek to balance concerns about imperfect rationality on the one hand, and parental agency on the other. By definition, nudges are not shoves.[426] Instead, they seek to insulate judgment and choice from the most detrimental effects of heuristics and biases, while empowering parents to maximize their utility by choosing the quality and category of care they desire.

CONCLUSION

While most all parents would concede they're far from perfect, they strive to do right by their children. Studies confirm that parents endeavor to act in the best interests of their children when selecting childcare: Quality is one of their top priorities—often *the* top priority. Yet we also know that parents, like the rest of us, will be influenced by heuristics and biases when they make decisions—often to their benefit, but sometimes to their detriment. Taking a behaviorally informed

---

[420] *See* NUDGE, *supra* note 13, at 20.

[421] Sunstein, *supra* note 133, at 1872.

[422] Jolls et al., *supra* note 110, at 1544.

[423] NUDGE, *supra* note 13, at 239.

[424] *Id.* at 239–40, 244–45. At the administrative level, notice and comment rulemaking is a good example of how this might be accomplished. *See* Sunstein, *supra* note 133, at 1892.

[425] Rachlinski, *Uncertain*, *supra* note 133, at 1206.

[426] *Cf.* Cass Sunstein, *Nudges vs. Shoves*, 127 HARV. L. REV. F. 210 (2014) (making the case for preserving choice over mandates).

approach to childcare market interventions can help parents overcome imperfect rationality when selecting and securing quality care for their children.

In the end, no single analytical frame alone can adequately respond to the childcare market's failings.[427] Indeed, many families will be unable to access the quality they seek unless or until they have the resources to do so. But adding behavioral insights to the childcare law and policy toolkit is one step toward a better functioning childcare market and a better network to care for, develop, and nurture America's children.

[427] As a society we must confront our collective shortsightedness as reflected in the country's overall level of childcare funding; greater investments now would yield considerable long-term benefits for America's children, families, communities, and society at large.