Raising a child in America is more expensive today than it has ever been—more than $245,000, not including college tuition, according to the USDA—and supporting a family often requires two incomes. Even when it is not necessarily required of them, many women wish to use their educations to pursue lucrative, fulfilling careers. It should not be surprising that the majority of parents work outside the home, including the majority of mothers. Among married women, 57% with a child under the age of three worked at least part time in 2014, and nearly 74% of those women worked full time.

While there are obviously many good things to be said about the professional progress of women and the significant contributions they have made in their fields, good things tend to come with tradeoffs. More women in the workforce means that more children need some form of child care. (A small but growing minority of fathers in the United States stay at home with their children: 2 million fathers, or 16% of stay-at-home parents, in 2012. Over half of these men were either unemployed or disabled.) For many parents, decisions about work and child care are among the most difficult choices they must make.

These decisions are made all the more difficult by a lack of reliable research on daycare. There is more research than anyone needs on the dangers of certain fabrics used in car seats and backpacks or the risks of drinking from a garden hose or eating conventionally grown fruit. And sober examination of the actual findings of these studies consistently
reveals that the risks are being exaggerated; unless a child eats the fabric on his backpack, he isn’t really at risk.

But when it comes to daycare — something that instinctively worries many parents — few are willing to take a hard look. The media, which seemingly report constantly on alarming new risks to children, rarely present the public with information from studies on the impact of daycare, especially when the findings suggest that daycare is associated with significant negative outcomes.

The reasons for this are several, and are understandable. Many reporters may be reluctant to highlight such studies because of the politically charged nature of the issue. Some may worry that acknowledging any downsides to daycare would impede the cause of women’s equality, by inviting people to conclude that children would be better off if mothers dropped out of the workforce. And many journalists send their kids to daycare, and therefore may be predisposed to overlook negative findings about a choice they have already made for their own children.

A deeper reason may be that the psychologists who study daycare have attempted to downplay or put a comforting spin on troubling findings. Just last year, an important study found that the culturally liberal outlook of almost all social psychologists had biased the studies and conclusions they reached. It is likely that a similar outlook, and in particular an unwillingness to present findings that may interfere with women’s progress in the workplace, has similarly harmed the work of developmental psychologists regarding daycare.

This bias and lack of information does a serious disservice to parents, who need to know about the best research in order to make fully informed choices for their families — even, and especially, if that research does not validate their biases. Politicians also need to know what the full range of research shows, especially as they consider policy reforms that could lead many families to change their decisions about how their children are cared for. President Barack Obama and presidential candidate Hillary Clinton have both called for increasing government’s financial support of paid child care, but it is not at all clear that increased use of child care would produce better results for children.

In fact, the available research suggests that heavy use of commercial daycare leads to some poor outcomes for many children. Subsidizing this form of child care effectively discourages the use of other arrangements that have not shown these negative effects. A better policy would
help parents in a broader way, providing financial help regardless of families’ child-care choices.

Acknowledging evidence that daycare may have drawbacks is not meant to demonize parents using daycare. One of the authors of this essay, a mother of five, currently uses part-time daycare for her own children. Like millions of other parents, she believes it is the best option for her family in balancing different considerations such as cost, convenience, and the desire to support a work life as well as ensure the well-being of her children.

Instead, by presenting research that deserves more attention from psychologists, the media, public-policy analysts, and the public, we hope to help parents and policymakers make better, more informed decisions about daycare and child-care policies.

THE CONVENTIONAL WISDOM

The narrative accepted by the vast majority of current researchers has solidified in just the past decade or so. Earlier studies of daycare, even in the early 2000s, raised serious concerns about the greater risk of “externalizing” behavior—such as neediness, disobedience, and bullying—from children’s early and prolonged exposure to commercial daycare. Researchers now tend to emphasize how negative outcomes fade over time and are balanced out by cognitive gains for daycare children compared to those cared for at home.

One of the largest of the more recent studies, “First-Year Maternal Employment and Child Development in the First Seven Years,” was led by Jeanne Brooks-Gunn and Jane Waldfogel of Columbia University and Wen-Jui Han of New York University and published in 2010. As the title suggests, this study focused on maternal employment, not paid daycare per se, but the two subjects are clearly related, since women often use paid daycare when they return to work after the birth of a child. The report closes with this reassuring conclusion regarding the effects of first-year maternal employment on child well-being:

[Our results] indicate that, on average, the associations between first-year maternal employment and later cognitive, social, and emotional outcomes are neutral, because negative effects, where present, are offset by positive effects. These results confirm that maternal employment in the first year of life may confer both
advantages and disadvantages and that for the average non-Hispanic white child, those effects balance each other.

This finding— that babies and young children essentially enjoy no benefit from being cared for full time by mothers— was reported by the press as good news. The Washington Post write-up of the study quoted Greg Duncan, then-president of the Society for Research in Child Development, explaining the new study’s importance: “[It] is ‘every bit as important as you might think,’ because it suggests mothers can decide, without guilt, ‘whether they want to stay home with their children.’”

Yet the details of the study paint a more complicated picture. The authors’ summary conclusions focus on the effects of any “maternal employment” in the “first year.” But the data in the report suggest that when mothers went back to work made a difference: Starting work in the first three months of the baby’s life (and, in some analyses, in the first six or nine months) led to more externalizing behavior. Since 70% of mothers in the sample who worked at all in the first year went back to work in the first three months, highlighting the risks for mothers who go back to work early seems important.

It also mattered whether mothers worked full time as opposed to part time. The authors write, “When we contrast the effects of [full-time] vs. [part-time] employment in the first year, we find that in several instances, [part-time] employment is associated with significantly lower levels of child externalizing behavior problems at 36 months, 54 months, and first grade.”

These findings would support the results of earlier studies on the impact of maternal employment and daycare on externalizing behavior. In a 2002 study titled “Quantity Counts: Amount of Child Care and Children’s Socioemotional Development,” Jay Belsky concluded that “early” and “extensive” non-maternal care posed “developmental risks for young children.” Much of the evidence in the 2010 report seems to support Belsky, though, as presented, the general conclusions of the report seem to suggest the opposite.

When asked what he thought, Belsky was quite critical of both the study and the reporting:

All investigators have to make decisions when it comes to analyzing data, but so many of theirs were questionable. What to me
was striking was that while the Post and other papers played up this report, they virtually ignored the one we published 2 months earlier showing both good and bad child care effects on adolescent functioning at age 15 years, including more time in child care through the first 54 months of life, irrespective of quality or type of care, predicting more risk taking behavior and impulsivity.

Both Belsky’s 2002 study and his more recent report on daycare’s lingering consequences contradict popular assumptions about daycare’s neutral or fading effects—and have been largely ignored. In fact, many of the most interesting, persuasive, and methodologically sound studies get very little attention.

**Research Challenges and Opportunities**

The problem is due in part to the methodological challenges presented by the subject matter. It is difficult to get reliable data about the effects of child care: Researchers will never be able to perform controlled experiments because parents will never agree to randomly assign their children to home care or institutional daycare. Therefore, most American psychologists use data provided by the Study of Early Child Care and Youth Development (SECCYD), which is funded by the National Institute of Child Health and Human Development. The SECCYD is a prospective, longitudinal study that includes detailed assessments of child care—including the amount and timing, quality, and types of care settings—for more than 1,300 children who have been studied from birth through their teens.

Much time and money has gone into the SECCYD research, which is impressive in many ways. Nonetheless, what results from the use of this data set are observational studies, which are unfortunately not very strong methodologically. For example, the Washington Post recently reported that observational studies seemingly showing that eating breakfast helps one lose weight have been overturned by more controlled experiments. As reporter Peter Whoriskey explains, this is a common phenomenon:

Relying on observational studies has drawn fierce criticism from many in the field, particularly statisticians.

S. Stanley Young, former director of bioinformatics at the
National Institute of Statistical Sciences has estimated that for observational studies in the medical field, “over 90 percent of the claims fail to replicate”—that is they cannot be replicated later by more exacting experiments.

Because of the unreliability of observational studies like those based on the SECCYD data, scientists prefer randomized, controlled trials. But, as mentioned above, such experiments on daycare will never occur because parents will never agree to subject their own children to a randomized trial for child care. But there is research that, while not randomized, yields many of the benefits of strict experimental design, and those studies deserve serious attention.

For example, nearly two decades ago, Quebec instituted a major shift in child-care policy, which created an opportunity for researchers to examine the impact of the policy change and resulting changes in daycare use on children and families. In 1997, Quebec introduced full-day kindergarten for all five-year-olds and heavily subsidized daycare for four-year-olds, so that parents only had to pay $5 per day out of pocket. The provision of $5-a-day child care was extended to three-year-olds in 1998, two-year-olds in 1999, and all babies up to age two in 2000. The program increased child-care use in Quebec by more than one-third.

There have been several studies assessing the impact of this program. The first article, “Universal Childcare, Maternal Labor Supply, and Family Well-Being,” went on to win the 2009 Doug Purvis Memorial Prize for the most significant written contribution to Canadian economic policy. The article concludes as follows:

We report striking evidence that children’s outcomes have worsened since the program was introduced. We also find suggestive evidence that families we study became more stressed with the introduction of the program. This is manifested in increased aggressiveness and anxiety for the children; more hostile, less consistent parenting for the adults; and worse adult mental health and relationship satisfaction.

The 2010 study on first-year maternal employment and child development, discussed earlier, which concluded that early maternal employment had a neutral effect on children, cited 250 articles. It
is remarkable — and suggestive of a disturbing selectivity by the researchers — that this article on Quebec daycare published in 2008, and disseminated as a National Bureau of Economic Research paper in 2005, was not among the 250.

More recent studies confirm the profound negative effects of the Quebec child-care program. For example, a March 2014 study published by the Canadian Labour Market and Skills Researcher Network explored how age factored into the negative effects observed from Quebec’s daycare program. These researchers (like others) uncovered widespread negative consequences, but they emphasized that earlier exposure to the child-care system resulted in larger problems. They wrote:

The estimates indicate that on average, children who gain access to subsidized child care at earlier ages experience significantly larger negative impacts on motor-social developmental scores, self-reported health status and behavioral outcomes including physical aggression and emotional anxiety.

Only children from lower socio-economic backgrounds who started child care at age three appeared to benefit in terms of development scores; the authors note that this suggests society would benefit from targeting assistance for early-education and care programs at less-advantaged children especially after age three, rather than universal daycare subsidies.

The results of the first of these two Quebec studies were confirmed by a 2015 follow-up study by the same authors, which found that some of the negative effects observed among younger children exposed to the Quebec system persisted and even increased into the teen years. While the researchers found that the introduction of the Quebec daycare program had “little impact on cognitive test scores,” they found that the program’s negative effects on non-cognitive skills appear to strongly persist into school years, and in many instances grow larger as children get older. Problems such as anxiety, aggression, and hyperactivity were worse in older children than younger ones exposed to the Quebec system. Moreover, there was “a worsening of both health and life satisfaction among those older youths exposed to the Quebec child care program.”

The study’s most startling discovery is that the program appears to have driven an increase in criminal behavior among teens:
As cohorts in Quebec were more exposed to the program, their crime rates rose relative to the rest of Canada. More exposed cohorts have higher differential crime rates at every age. The estimates indicate sizeable effects on crime rates. For accused, we estimate a rise of 300 crimes per 100,000 children, compared to a mean of 7,970 crimes. This is a rise of 3.7 percent. The result is slightly higher in percentage terms for convictions per 100,000 (4.6 percent).

These troubling findings from rigorous, scientific research should not be ignored, especially as politicians in the United States consider instituting daycare subsidies for everyone. It is clear that there is something about daycare, especially for very young children, that is not as neutral as we’d like to think.

The Biological Dimension

So what could explain these profound, lasting negative effects of daycare? One potential explanation comes from studies of the stress hormone cortisol.

Professors Harriet Vermeer and Marinus van IJzendoorn conducted a meta-analysis of nine daycare studies examining trajectories in the stress hormone cortisol. Their article concludes:

Our main finding was that at daycare children display higher cortisol levels compared to the home setting. Diurnal patterns revealed significant increases from morning to afternoon, but at daycare only. Age appeared to be the most significant moderator of this relation. It was shown that the effect of daycare attendance on cortisol excretion was especially notable in children younger than 36 months. We speculate that children in center daycare show elevated cortisol levels because of their stressful interactions in a group setting.

Further discussion of one of these nine studies shows why cortisol may help explain the worrying findings on stress, behavior, and daycare. A group of researchers at the University of Minnesota studied 55 children in full-day daycare centers. They monitored the levels of cortisol in children’s saliva when they spent the day at the daycare center and when
they spent the day at home. The authors found a “significant effect of setting (home vs. child care),” with cortisol rising significantly when children were in daycare, while no similar increase was seen among children at home. Toddlers appeared particularly vulnerable, as the authors found: “Among the infants (3-16 months), 35% showed a rise in cortisol across the child care day, whereas among the toddlers (16-38 months), 71% showed a rise.”

Should we be worried by these findings? On the one hand, the authors note,

Elevated cortisol levels are often interpreted as boding ill for physical and emotional health. During periods of rapid brain development, contact with parents prevents elevations in cortisol, and this has been interpreted as nature’s way of protecting the developing brain from the potentially deleterious effects of this steroid.

Moreover, in research on animals, “there is strong evidence that early experiences shape the reactivity and regulation of neurobiological systems underlying fear, anxiety, and stress reactivity.” Daily exposure to even relatively minor stressors in infant animals leads to adult animals who exhibit heightened fearfulness and greater vulnerability to stressors.

On the other hand, the authors find it somewhat reassuring that the older daycare toddlers show smaller increases in cortisol throughout the day than do younger toddlers and older preschool children, and that when daycare kids are at home on the weekend their cortisol does not rise throughout the day. Disturbingly, the authors are also reassured by the misleading conclusions of the many published reports claiming that daycare provides cognitive and social benefits. They write:

Potential negative impacts on social or cognitive development seem unlikely given the overwhelming evidence from studies of center-based child care showing that these settings, when of good quality, stimulate cognitive and social development.

On balance, the authors conclude that “we do not know if there are adverse effects from chronic but small context-dependent elevations in cortisol for young children.” They call for more empirical research.
Taken together, the studies on the Quebec child-care program and on cortisol levels show negative effects from daycare at the time of children’s daycare experience as well as lasting negative outcomes that persist into the teen years, which certainly calls into question the commonly offered conclusion that daycare appears to be “neutral,” with positive and negative effects cancelling each other out. Rather, this research suggests that younger children in particular are vulnerable to lasting harm from daycare, especially when exposed early. That is something parents and policymakers deserve to know.

OPTIONS FOR PARENTS AND POLICYMAKERS

The Washington Post opened an August 2015 article with the following finding: “More than three-quarters of mothers and half of fathers in the United States say they’ve passed up work opportunities, switched jobs or quit to tend to their kids, according to a new Washington Post poll.” Readers are invited to view these facts as evidence of a crisis rather than a description of parents making work-family decisions that best meet their needs and those of their children.

Mothers and fathers value time spent with their families, and they think the time spent together is good for their children’s well-being. They are also skeptical about daycare. For example, a 2014 Pew survey found that 60% of Americans think it is best for children if one parent stays home. And a March 2013 Pew study found that just 16% of parents say having a mother who works full-time is best for children. In 2000, Public Agenda surveyed parents with children five and under, and 63% disagreed with the following statement: “A top-notch day care center can provide care as good as what a child would get from a stay-at-home parent.” Public Agenda also found that 80% of young mothers ages 18-29 — women who grew up when mothers worked outside the home and nonparental child care became more commonplace — say that they themselves would prefer to stay at home to care for their young children rather than work full-time.

Rather than incentivizing the use of paid child care, policymakers ought to focus on providing more support for parents, particularly those with lower incomes, to make it easier for them to raise their children based
on their own preferences, whether that means keeping a parent at home or paying for child care.

Robert Stein has argued persuasively in these pages that parents currently receive too little tax relief, given the expenses that they incur in raising a child and the importance of that investment for society. He estimates that the average middle-class household gets about a $1,550 tax reduction for each child, which is a small fraction of the considerable expenses associated with childrearing. A substantial increase in the dependent-child tax credit would help parents across the board, regardless of the type of child-care arrangement they prefer. This financial relief may make it possible for some parents working full-time to switch to part-time work or even stay home, while also providing financial assistance to those paying for daycare.

Since the odds of the aggressive behavior that can result from time in daycare go up as the hours of daycare increase, this movement toward more part-time work would not just please the parents directly involved. As more full-time working parents become part-time working parents, the stress, anxiety, and aggression in some children may ease, and classroom disruption later on should become less likely.

An increase in the dependent tax credit would also support stay-at-home mothers—a group that has grown from 23% of all mothers in 1999 to 29% of mothers in 2012. Since two-parent, single-earner families make substantially less income than two-earner families, and since these families are making financial sacrifices to make possible what they think and what the public thinks is the best child care for young children, why should they not benefit from any increased subsidies for families with children?

Increasing the dependent tax credit substantially would be expensive, and policymakers should consider how to further target that relief to those who need it most. Under current law, most of the working poor do not benefit from the existing dependent tax credit because they do not earn enough to pay income taxes. Making the credit apply to Social Security taxes, as well as income taxes, as has been proposed by Senators Marco Rubio and Mike Lee, would support the needs of the working poor. Moreover, since concerns about daycare are focused on children under the age of three and the youngest children often require the most financial sacrifices, the dependent deduction could be increased solely for families with children under age three.
There are many forms such new policies could take to create significant benefits for families, especially those with young children. But it is clear that any good policy should offer flexible assistance to families so they can make their own decisions about work and child care.

**Honesty is the Best Policy**

Parents care about their children’s well-being and must balance the benefits associated with more income against the benefits of staying home to take care of them. But good decision-making on the part of both families and policymakers depends on clear-eyed, honest assessments of the best scientific research—no matter how difficult the conclusions may be. Researchers must be honest with themselves and with their readers about what their data really show, especially when the results contradict popular opinion. The well-being of future generations is too important to continue making individual decisions and public policies with skewed information.

The media have an important role to play in this, and shouldn’t shy away from presenting reliable research, even if the findings make them and their readers uncomfortable. Ignoring studies like those we’ve highlighted here is a disservice to policymakers, the public, parents, and—most importantly—the children themselves. The public deserves to have a robust debate about the best ways to help parents and create an environment for children to thrive.