

Gender Differences: Finding the Measure for Multitasking Talent

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Praise is due to the child who brings home an A on their school report card, but new research suggests the microwave oven and the clothes dryer may also deserve an encouraging pat. This message emerges from a study that shows the presence of white goods in a household can have a significant impact on children's outcomes. The finding is featured in economic modelling by [Gigi Foster](#), a lecturer at the Australian School of Business, and her US-based colleague, [Charlene Kalenkoski](#), who are attempting to modernise the pioneering work of Nobel Prize-winning US economist [Gary Becker](#).

In the 1960s, Becker ascribed a value to housework. He theorised that while the efforts in the house might not lead to a monetary gain, they still had an economic value. In Becker's informal economy, there is no real price attached to goods; rather, the focus is on costs and benefits of different potential uses of time. "It is about weighing up investments. For example, will an hour spent doing activity A give you more things you care about than an hour spent doing activity B?" asks Foster.

Becker's [economic models of household production](#) were revolutionary when published in 1965, but the world then was a very different place. Man had yet to walk on the moon and society was just grappling with the implications of feminist frontrunner [Betty Friedan's discovery](#) that rather than revelling in domesticity, many women led lives of quiet desperation. His theory and models literally came as the times were a' changing and the "traditional" family that informed this research was evolving. Women were moving out of the kitchen and into the workplace and the gender delineation in household tasks was blurring. Forty years later, the modern household is filled with appliances and people juggling the demands of work and parenting. Yet as domestic life has changed and gender roles have evolved over the past 40 years, the way in which household production is measured has remained relatively faithful to Becker's model.

It's no surprise then that some economists believe Becker's time has come. But as Kalenkoski notes, "Becker's model assumes that people do not multitask. Yet, the data show that there is quite a bit of multitasking within the household." Children in the home cannot be "turned off" while parents do other things, Foster points out. Under Becker's framework a mother supervising her child while washing the dishes must break the moment into two clear partitions – time spent on childcare and time spent washing.

Benefits of Switched on Mothers

The reality of modern life is that clothes are folded while toddlers play underfoot; dishwashers are packed while helping with homework. Creating formulae that reflect this has presented a challenge that Foster and Kalenkoski have readily accepted. Importantly, however, their work in this field, published in a recent working paper, also shows the decisions made around multitasking have a direct impact on child development outcomes because it impacts on the quality and quantity of time that parents spend with children in the home. "Our results suggest that the better a mother is at multitasking childcare and housework, the better are her child's outcomes," says Foster.

The researchers draw on data collected by the Australian Bureau of Statistics and the [Australian Institute of Family Studies](#) as part of the [Longitudinal Study of Australian Children](#) and the [Australian Time Use Surveys](#). Only households with children were included in the study, and the views, time use, and household circumstances of 1,996 fathers and 2,418 mothers were reflected in the results.



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The results show that multitasking is not random and that parents make conscious decisions as to what household chores to undertake while caring for young children, Foster says. "Many households today are time poor, and because of this people choose which things they multitask and which things they don't. [Parents] make their choices based on preferences and productivity," Kalenkoski says.

This is where labour-saving devices may also play a role in children's development. The researchers have discovered that certain appliances free up parental time or make it easier to do two jobs at once. "A microwave might increase sole tasking if it reduces the time it takes to cook. You can focus on that briefly, freeing up time for other things, like talking with your child," Kalenkoski points out. "A dishwasher might increase multitasking if you can talk to your child while loading the dishes, or perhaps the child is even helping load or unload while you talk."

For the study, the researchers looked at actual time spent by parents in a variety of household tasks, and also used self-reported data on whether females and males felt rushed; believed they were good at keeping a child busy while doing housework; and how they viewed themselves as a parent. Not unexpectedly, Foster says the statistics show mothers spend more time on every type of household activity being modelled than fathers. However, the study also shows a steep rise in multitasked housework and childcare from 1997 to 2006 for both genders, and an associated decline in sole-tasked childcare. The impacts found on child outcomes are rated in terms of children's physical development, their social and emotional development, and their continuous outcomes. These are all significantly higher with increases in mothers' self-perceived multitasking productivity.

Fathers and Focus

Interestingly one factor can have counterintuitive impacts on productivity. For women, says Foster, feeling rushed is associated with better child outcomes because it results in less sole tasking and more multitasking. However, for fathers being rushed does not result in more multitasking and instead is associated with a decline in child outcomes and their view of themselves as parents. Foster says this supports the belief that fathers are more effective in producing positive child outcomes when they sole-task than when they multitask their children's care.

The researchers also found wide variation in the impact of white goods and other domestic aids on parental time with children. They show that microwaves are associated with less multitasked childcare and more sole-tasked childcare for mothers, while for men the presence of a clothes dryer reduces sole-tasked child care time and increases multitasked time. "Perhaps this is because they can load and unload the dryer and fold and sort clothes inside, while looking after a child playing indoors, rather than having to go outside (potentially leaving the child unsupervised) to hang up laundry on a line," says Foster.

The results of the discussion paper, along with much popular belief, suggest women are better at multitasking than men, according to Foster. This theory is now being tested with a series of laboratory experiments. In the pilot study, participants will be given a housework-type task to complete on a computer while "caring for a baby". The baby will require fairly continuous attention to stop it crying, and without such attention the level of crying, or demand, will increase. Through the experiment the researchers will be able to track how effective male and female respondents are at dealing with the stress of calming a child and continuing to complete the housework-type tasks. "If we can estimate average multitasking and sole-tasking productivities of men and women in childcare and housework, then we can value their time and perhaps even make recommendations as to who should be doing which tasks," says Kalenkoski.

Understanding gender differences in multitasking productivity can also have implications for business, adds Foster. "If women are shown to be more effective at multitasking – as our modelling suggests – then this may show that they are better at certain roles in the workplace," she says. Conversely, it may add to the stereotype view that women are better in the home because they can manage the competing demands there more effectively, Foster says. But before the women's movement beats down her door, Foster stresses that adeptness at multitasking is not the only factor in determining economic benefit. "If we find women have a superior ability to multitask, then potentially it would make economic sense to have women doing more of this," she says. "But maybe women don't enjoy it as much. There are many other

factors to consider and our work is very preliminary – we are heading in the direction of determining the most productive use of everyone's time."

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