

# “The jury is still out on this!”

A conversation with Frederick J. Zimmerman\*

## How much do US-American toddlers watch?

My team and I recently conducted a telephone survey of 1,009 parents of children aged 2 to 24 months old. We found a stunning amount of TV viewing in this group. Already at age 3 months, 40 % of the children regularly watch either television or videos (or DVDs) and most of these children are watching both television and videos. By the time they hit their 2<sup>nd</sup> birthday, 90 % are regular viewers. Those who watch TV or videos start at about 1 hour a day on average, increasing to 1.5 hours by 2 years. So it is a tremendous amount of exposure to a medium whose effects at this age are really not known.

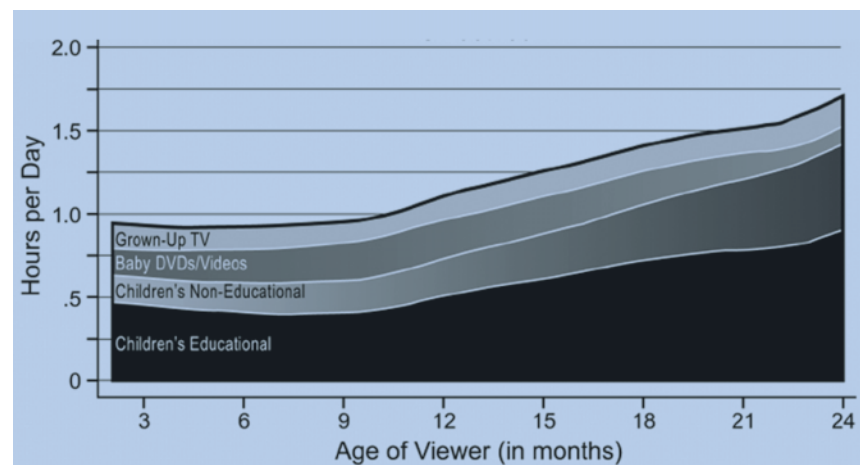
I don't blame parents for this heavy viewing, though. A lot of the viewing (about half) is of high-quality educational shows pitched at much older kids. *Sesame Street*, for example, is a great show for preschoolers, but there is nothing productive that a 3-month-old can get from it. The rest of the viewing is about evenly divided between non-educational children's shows, baby videos, and grown-up TV like sports (see Ill. 1). What's more, parents are coping with some mixed messages concerning educational content. They are hearing from the marketers of baby videos that these can help children's brain development. Strangely specific claims are made about videos that will promote special reasoning or enhance maths ability and so on. The pro-

ducers of these videos work very hard to give parents the impression that viewing them will provide their child with whatever skills and talents the parents want – “buy this one and your child will become a musical prodigy; buy that one to get a maths genius”. There is no solid research supporting any of the claims that are made for the videos. Instead, they rely on parent testimonials, like “Ever since my little Johnny started watching your *Baby Nobel* videos 18 months ago, he's learnt to count, learnt his colours, and he's 4 inches taller!” That's the kind of anecdotal evidence that drives researchers nuts, but seems to work with a lot of parents.

## Can TV viewing harm children?

Other work I have done and that others have done has shown that children who watch a lot of television before age 3 have a higher risk

of problems of attention regulation, of aggressive behaviour, and of slower reading and maths skill development by the time they get to elementary school. In addition to these risks, there is some reason to believe that TV viewing at an early age may also create problems for sleep, for obesity, and for slower language development. That said, this research has been observational, meaning that we look at natural variation in TV viewing and test associations with developmental outcomes. The problem with this approach is that there might be other factors that lead both to heavy TV viewing on the part of the child and also poor outcomes for the child. We have tried to statistically control for that possibility as much as possible, but when you look at natural variation you can never be entirely sure why the associations are there.



Ill. 1: 4 categories of content that 2- to 24-months-old children watch – and which part of their daily TV intake they represent (average hours per day spent viewing TV and DVDs/videos)

### What is the role of content in TV programmes?

Although there is not yet definitive research on the role of content, most experts in the field agree that at least starting at age 2 or 3 years old, content becomes absolutely critical in how television influences children's development and behaviour. Before age 2, I think there is some division in the ranks as to how much content matters. Some people think that high-quality, educational content, such as *Sesame Street*, is harmless. Others believe that any content delivered by screen media before age 2 may adversely affect brain development. However, because the evidence base is lacking, these differences are usually offered respectfully, in recognition of the fact that they are only informed guess. There is also a lot of commonality: Everyone agrees that too much loud violent content is bad for children (at any age, but especially before age 2), and everyone agrees that the best stimuli for children under 2 is from caring adults. Personally, I am on the fence as to whether educational content early on can be harmless as opposed to harmful, and I am actively researching this area now [Prof. Zimmerman's article will appear in *Pediatrics*]. Like a lot of researchers in this field, I feel that it is better for parents to be safe than sorry. There is most likely no large benefit from having children watch TV before age 2, and there may be some harm, so if at all possible, I would urge parents to avoid it.

### What is a good educational programme for preschoolers?

In the United States, we have some superb TV shows for preschoolers (that is, kids aged 3 to 5), my favourites for my own two sons (aged 3 and 5) are *Peep and the Big Wide World*, *Blue's Clues*, and *Postcards from Buster*. Each very cleverly uses the

medium of television to expand not only the child's understanding of, but also his or her interaction with the real world. Usually each segment within each show has an identifiable learning objective that is carefully thought out and age-appropriate. So each show starts with a frame of solid learning objectives rooted in child development theory. The producers then give this frame over to some highly creative and talented people who obviously have a sense of mission about creating entertaining content that reaches the learning objectives.

*Sesame Street* is the granddaddy of this approach, and they're still at it. They won't air any segment that doesn't both teach kids and entertain them. Those are some very tough standards, but they are part of what makes *Sesame Street* one of the most beloved children's shows the world over. The newer shows have taken the *Sesame Street* model and extended it. Not always as much as I would like, but some have done a great job. And it is not the case that kids will rather watch programmes that are 'entertaining' such as *Teenage Mutant Ninja Turtles* or *Bugs Bunny*. Think about how such shows keep kids' attention: it is all plot-driven. Things start off okay, then something threatening happens, then a whole bunch of scary action ensues, and finally the good guys win. I question whether

that is really entertaining: Preschoolers don't really understand plots. They have little sense of good triumphing over evil. Instead it is a bunch of fast action and things to worry about. Or laugh at in the case of older cartoons. Kids will watch this stuff for a long time because they are programmed by evolutionary necessity to pay attention to loud noises, to conflict, to rapid changes in their visual field. So it is gripping, yes, but entertaining? I am not convinced. When you keep kids' attention with a plot-driven action and drama, you

don't have to be very creative about it, or have very high production values.

One huge gap that I see in the educational television landscape is for a children's food and cooking show. So many of the food messages that children get on television are terrible – ads for poor nutritional-quality foods and so on – that TV viewing is a major source of the obesity epidemic among children, at least in the United States. It would be great to balance that with some pro-nutritional content, and while I believe that parents and grandparents are the best teachers, I think TV could help. ■



\*A shortened version of a conversation of Elke Schlotte (IZI) with Frederick J. Zimmerman, Associate

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