As a practising child and adolescent psychiatrist for the past 25 years, I am observing a disturbing trend in children. I got the idea for the title of this paper from my two and a half year old grandniece, who was very upset when a store clerk prevented her from playing with a display computer. In her anger she complained to her mother, "He won't let me do www.com.!") Recently, when I intervened to stop some unwanted behavior, she dissolved into a crying rage. A delightful, highly verbal child, who is technology savvy for her age, she is not recovering well when she is not immediately gratified. The problem I see emerging in children is one of decreasing frustration tolerance. In lay language, this translates into a lack of patience, that old-fashioned virtue that people of my generation had preached to us repeatedly, "Patience is virtue." I have spent some time pondering this matter, and I have some thoughts I would like to share, hoping to stimulate some serious thinking about this issue.

Psychiatrists are taught that frustration tolerance is an ego strength that human beings need in order to make a successful adaptation to life. While the newborn is entitled to have all its needs met promptly and unconditionally, the developing child is expected to
gradually learn to delay gratification as s/he must wait for the parent to produce food, remove a wet diaper, soothe aching gums, play a game, etc. The exponential technological advancements of recent years have afforded the possibility for young children to achieve instant gratification at the touch of a button. An 18 month old can turn on the TV and instantly be entertained by music, dance, interesting shapes and colors, adults, cartoon characters etc. What power for a child who is already in the throes of egocentrism and omnipotence! Technology meets magical thinking and enhances it by making it real. This type of experience is further facilitated by doting parents, who are awed by what their children hear and repeat to them. Every child seems to be a budding genius! No self respecting parent wants his/her child to be left behind, so the child gets the computer toys and a personal computer with all the "intelligence enhancing" software that is peddled to parents nowadays. Parents provide increasingly more elaborate video games, TV's and entertainment centers in their children's rooms, where the kids can cocoon themselves in their multimedia environment. Those same kids go to the ATM with the parent and sees real money emerge from a machine with the use of a plastic card and the touch of some buttons. While most children cannot appreciate the fact that many work hours are needed to provide the money so easily retrieved from the ATM, the easy availability and accessibility of cash distance them even further from that concept.

Many children are now on the Internet receiving almost instant responses to queries. Groups can form instant "chat rooms," creating rapid virtual social gatherings. A recent cartoon by Mike Twohy in the Washington Post (1/11/00) depicted a young boy leaving the family dinner table in anger while shouting "Fine- I'll go talk to my chat room family!" This indeed captures the sense that he no longer has to tolerate whatever discomfort and frustration he experienced with his family. The instant solution is available through the capability of technology to readily substitute a new social entity and gratify his perceived needs. The emerging mantra of this technological era is "wait no more!" The ubiquitous cell phone can provide instant communication with each other. I recall that as a child, I would wait about one month with heightened anticipation to receive a reply from my pen pal in England. Now E-mail and instant
messaging have created an expectation of rapid communication. What has ensued is the experience of impatience (poor frustration tolerance) when the response does not come in the anticipated brief turnaround time. We must concede that the rapidity of these technological changes, and their impact on our youngsters must have significant influence upon the ways kids perceive, experience and adapt to their world. Of course, most of the effect of modern day technology is beneficial, but we must give pause to at least be mindful of potential long term negative impacts upon the psychological and social development of our children.

It is only 50 years since Erik Erickson wrote *Childhood and Society*, in which he discussed the stages of child development. The family played a major role in filtering and modulating the interplay between the developing child and society's influences. With technology, that role has not only changed, but it has definitely diminished. The protected "autosphere" of the child's early world in the home nursery has now been invaded and bombarded by TV images and computer software. Children now live in an ecology of technology. The gradual transition described by Erickson from the child's autosphere to the social macrosphere no longer exists. The brain of the young child is overstimulated by the new multimedia environment with its sound effects, and rapidly changing, attention grabbing images. I do wonder about the effect on the attention span of the developing brain. Could the rise in case finding of Attention Deficit Hyperactivity Disorder be related to children's constant exposure to rapid-fire stimuli on their brains? (As I write, I am impressed by my use of war related terminology: invaded, bombarded, rapid-fire. Has war been declared on the brain? And have parents, as protectors, abdicated?) Is it possible that, (given our new insights into brain development and brain and behavior), that different neural pathways and changing neurotransmitter levels and combinations are developing?

It is intriguing that the very parents who expose their children to the new technologies, in an effort to provide the best for them, seem oblivious to the possible impact on the developing child's mind and his/her social behavior. If one has been raised to have instant gratification, is it then surprising that at those times when one has to wait one's turn, be left out, or not get a
desired object, that explosive rage is the result?
Frustration is a feeling state that emanates from our innate aggression. If it cannot be tolerated, aggression in words or in deeds is the result. In the developing child, frustration tolerance increases as the parents withhold instant gratification in "doses" that are manageable for the child’s level of development. This allows the child the opportunity to learn to manage his/her feelings of frustration, and develop coping skills to manage them. The child learns to do without some things, and to be patient and wait for others. S/he also learns to give up his/her egocentrism and magical thinking during the process. Primary narcissism is tamed. S/he has to then take in the bigger world around him/her and develop tolerance of people and of situations. Tolerance requires the development of empathy. And empathy requires time to think about another person while putting aside one's own needs or wishes. Children's early use of the new technologies is causing a profound change in how they experience the passage of time, and they are less willing to wait for what they perceive as long periods of time.

I am impressed by the apparent link between technology, instant gratification, poor frustration tolerance, lack of empathy and aggression. While I do not propose that technology is the "cause" of the episodes of horrific violence we have seen in young people in recent years, I do think that we should be mindful of some of the negative impacts of our new technologies. As with all technological advances, these are unintended consequences which should raise some concern, especially at a time in our history when parents are spending less time with their children, and do not serve as much of a protective function as they once did. Psychiatry teaches that it is both nurturing and limit setting from parents that neutralize aggression in the young child. I contend that the combination of decreased parental protection and increased instant gratification changes the psychology and undermines the socialization of the developing child. When frustration tolerance is not acquired, modulation and management of aggression is compromised, and we see children like those who are now labeled "explosive" children. Excluding those children with neurobiological deficits, psychiatry describes such children as "narcissistic" and their explosiveness as "narcissistic rage." They are children who are unable to cope with the slightest of frustrations,
and lash out aggressively. They are entitled, demanding, impatient, disrespectful of authority, often contemptuous of their peers, unempathic and easily "wounded." Their numbers are increasing. We must take note of this disturbing trend and intervene with some urgency if we are to raise children who will care about others in society.

I have been fascinated by the role nature can play in developing frustration tolerance. Perhaps we can temper the negative technological impacts by taking children on excursions into nature where they can spend time observing the plants and animals, pondering the rivers and lakes, and marveling at the ocean. What frustration tolerance it takes to go fishing or to do birdwatching! With all our technological advancements, the sun still rises and sets in a twenty-four hour cycle, we must wait out the drought or the hurricane, contend with snow storms shutting down airports and the nation's capital, wait for crops to grow, for flowers to bloom, for seasons to change. For all of those, indeed "Patience is virtue!"