Different experiences aid brain development

Patricia Falter knew at a very early age that her son Matthew was different than her older son. Matthew has autism, a neurodevelopmental disorder that causes him to have a short attention span and obsession over objects, activities and places.

From the time Matthew was very young he had to have a visual schedule of the day's events in a step-by-step process to keep him focused. Every morning Matthew would need to check his schedule, which would include activities he enjoyed doing and those he did not, to show him that not everything in life is fun.

"You have to get him to zone into the conversation," said Mrs. Falter, a parishioner of St. Mark, Fallston. "We do everything as a family, so if Matthew can't do it we don't do it."

Mrs. Falter said her now 22 year-old son is working a few different jobs, one at a Rite Aid warehouse and another with The Arc, an advocate for people with intellectual and developmental disabilities.

"The brain is a complex set of networks that need to be integrated," said Dr. Paul Lipkin, research scientist and director of the Center for Development and Learning at Kennedy Krieger Institute in Baltimore. "If one set is underdeveloped the other areas may become that way as well."

Dr. Lipkin said when a child is developmentally disabled it is because there has been some area of the brain that has been injured or damaged. Other parts of the brain do not compensate for those damaged areas.

"Beginning at fetal life and on to teen life there is continual growth of nerve cells and their connections," said Dr. Lipkin. "The brain will adapt to new experiences and into the child's general understanding.

A child who does not have a learning or developmental disability is able to learn second languages and other important life skills faster than an adult can. How much a child learns is based on the child's environment and genetic makeup. For example, when a child hears a new song, new memories are created and integrated into old ones, said Dr. Lipkin.

"The progression of brain development involves nerve connections and pruning of those nerves," said Dr. Lipkin. "This process is completed in adults."

Each activity a child experiences helps the brain to develop, and it is best for a child to have a wide variety of interactions. It is important to find the ideal experience to help a developmentally disabled child's brain develop.

At this time there are no medications that will help with the recovery of the disabled brain cells, said Dr. Lipkin.

Matthew has finished his education and has become very social. He joined a cheer dance program with the Special Olympics and has become very "obsessed with church." He and his parents attend Mass each week and according to his mother, "he knows all of the priest's parts." He has become involved with a church group and knows a great deal of information about the saints and popes. Matthew has been baptized, received reconciliation and holy Communion.

"He is the link in the family. Everyone in the family knows and deals with Matthew," said Mrs. Falter. "Each generation does the Matty thing."

After Matthew's brother and sister grew too old to play with him, Matthew's younger cousin started to spend time with him.

"It's just a different way of life," said Mrs. Falter. "This is Matty's world, and we just live in it."