



About Children's Physical Growth



by Damaris Pease

“HIGHER! Higher! Push me higher!” sings out Jeanne, as her father, laughing, runs under the swing seat. Jeanne is one of a group of 6-year-olds on their Sunday school picnic at the park. As Jeanne’s father “lets the old cat die,” he looks about the playground at the other children. Some are using the big slide; others are on the teeter-totters; still others are running wildly around in what appears to him to be aimless abandon. The Sunday school picnic looks like a box full of very active Mexican jumping beans! This is truly the age of activity.

Perpetual Motion?

Jeanne and her friends are in a stage of development often referred to as a period of *explosive bipolarity*. Six-year-old behavior is characterized by extremes—by wide swings from extensive activity to quiet moodiness and by an almost compulsive drive to be in perpetual motion. Six-year-olds climb, jump, hop, skip and run in high gear. Growth in the basic motor skills of walking, running and balancing is reaching a peak during this period. There’s a tendency for these children to spend much of their waking hours in play involving the use of motor skills.

Much of the time, the 6-year-

old plays by himself or in small groups of two or three children. Social development hasn’t progressed to the point where organized group games can be tolerated for any length of time. The 6-year-old practices and perfects his basic skills during this time.

Now, instead of riding a tricycle just for the sake of riding as he did when he was 3-4 years old, he begins to use this skill as a tool for more imaginative play. The wagon is tied to the tricycle, and dirt is hauled from one place to another. Suddenly the tricycle becomes a fire engine, and numerous imaginary fires are extinguished by the quick-thinking actions of the 6-year-old fireman.

Jeanne’s father sits down to rest. He chuckles as he thinks about his 4-year-old son. Yesterday Johnny helped him wash the car, and he did a pretty good job of it, too. Johnny did, of course, get interested in washing the lawn furniture, but, with a little encouragement, Mr. Black was able to keep him at the task at hand. When the car was finished, they went to work on the furniture and finished that job, too. Johnny ran into the house and swaggered out with his mother so that she could be properly impressed with the industriousness of the “men of the house.”

Johnny rides his tricycle by the hour—sometimes peddling swiftly down the sidewalk, other times sitting on the seat and staring into space for minutes at a time. He can go to the bathroom by him-

self and wash his hands and face with some semblance of maturity. He dresses himself except for the hard-to-reach buttons and shoelaces. He eats with a fork (but spills less if he uses a spoon). Johnny still prefers to use his hands for food that’s difficult to keep on utensils. He delights in climbing small trees or low-hanging branches. He runs well but still stumbles and falls some. “This,” thought Mr. Black, “is because he’s busy looking somewhere other than where his feet are taking him.”

A warm feeling went through Mr. Black as he thought of how Johnny passed the cookies to some guests who’d come in for coffee. You’d have thought Johnny was the host—even though the plate wavered a bit, he managed to keep the cookies from sliding off. Yes, Johnny was growing up.

Fast Pace . . .

Now 9-year-old Bill, Mr. Black’s oldest child, was quite a different matter. Bill can be grown up when he wants to be, but he certainly does need to be reminded all of the time.

One of Bill’s household tasks is to empty the wastepaper baskets each morning. But sometimes he has to be reminded three or four times before the job is finished. Then there’ll be days at a time when Bill does it without a word from his parents.

Right now, Bill, when he’s home, spends most of his time bouncing a ball off the garage

DAMARIS PEASE is associate professor of child development and a member of the staff of the Child Development Research Laboratories at Iowa State.

door — throwing and catching, throwing and catching. Everything he does is at a fast pace. He talks rapidly, bolts his food, and never, never walks but runs to the nearest exit. He runs in and out of the doors so much the hinges are about to fall off.

He has become very capable at almost anything involving physical activity. He walks the back fence with surprising agility. The other day he easily climbed to the highest branch of the tree after the family cat. To the surprise of his parents, he occasionally shows his physical skills in a social way.

Last week when the family was going for a ride, he held the door for his sister; ordinarily he thinks her beneath his notice. When the family eats out, Bill is very skillful at the table—though he fails to display this ability when they're home.

Bill likes to spend time with the neighborhood boys. He joins the gang, and they go on expeditions to find rocks, arrowheads or butterflies. It seems to Mr. Black that Bill collects everything. The other day, Mrs. Black gave Bill's room a thorough cleaning and discovered a drawer full of dead and dying "things," rocks of various shapes and sizes, matchbook covers, marbles and baseball cards.

All Different . . .

The children in the Black family all show typical behavior for their ages. Of course, there are individual differences at all ages. Some 6-year-olds are less physically active; some 4-year-olds are more capable at eating; and some 9-year-olds are less interested in collecting. In general, however, physical growth tends to follow the pattern of developing skills, perfecting and practicing them and, finally, using these skills to gain social acceptance.

Not all areas of growth develop at the same rate at the same time. While one child is gaining in physical skill, another may be perfecting his intellectual or social development. Interestingly enough, within any one area of development, *growth is not even*.

As a child gains control over his body, he does so at an uneven rate. Motor control tends to develop *from the center of the body outward*. A child, for example, can do large motor activities like walking, running and climbing before he can string beads, manipulate pieces of a puzzle or cut with a scissors.

Four-year-old Johnny is an example of this principle. He's very capable of riding his tricycle, running and jumping. He has difficulty fastening small buttons and has somewhat-less-than-perfect motor control when eating with a fork.

It's usual in the growth process for one area of development to dominate the growth of the child at any given time. For instance, the child who's just beginning to walk will often seem to stop learning new words—in fact, he may seem to forget the few words that he knew. At this time, all of his energies seem to go into learning to walk. When he has perfected his walking, so that it no longer demands all of his attention, he'll begin again to increase his vocabulary. This apparent regression pattern is characteristic of the total growth process.

As Jeanne learns to swing, she's illustrating the fact that *growth also proceeds from the head downward*. Swinging requires that the upper and lower portions of the body be so coordinated that they pull in opposite directions at the same time. Jeanne has to be able to "pump" with the upper part of her body and to push with her legs. She could control her arms and shoulders long before she could coordinate her legs with this movement.

An excellent example of growth proceeding from the head downward is the infant who can raise his head and even rest his body on his elbows long before he can draw his legs up under his body and crawl.

Interrelated . . .

Nine-year-old Bill is beginning to show how physical growth and some of the other areas of development are interrelated. Bill uses his physical skill, at which he's

fairly proficient, to gain social recognition. He no longer climbs trees just to climb but uses his skill as a tool. In this case, Bill wanted to help the cat out of the tree.

Bill, of course, still needs to develop specific skills. Bouncing the ball off the garage door leads to perfecting this activity to the point that he'll be able to play ball with the gang and, thus, increase his social acceptance with his friends.

Children go through many stages of growth as they develop. Each child does this in his own time and in his own way. No two children are exactly alike in their growth. The unevenness of development and the tendency to "slip back" into more immature behavior cause parents some concern. If it's recognized that growth itself means that children seem to concentrate on one area of development and then another, there's less need to become worried by their behavior.

Recognize Behavior . . .

Understanding behavior doesn't mean that the behavior is always something that parents want to ignore. If Bill dashes out the door and lets it slam, his mother and father may understand why he does it but won't necessarily let him continue to behave in this manner. Bill forgets to empty the wastepaper baskets because he wants to play ball with the other boys in the gang. Mr. Black recognizes Bill's need to be with the other boys, but he may insist that Bill accept his family responsibility by emptying the baskets first.

In this way, Bill is given time to concentrate on the type of behavior that is dominant at the moment, but he's also helped to recognize some of the behavior that he'll ultimately have to learn.

Perfecting and developing motor skills are a very important part of childhood. Children have to learn to cope with their own bodies and to adjust to an ever-widening environment. It requires a long time for children to grow and a lot of help and understanding from their parents.