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[Commentary] It seems that after years, the norms related to emerging patterns of children's behavior need to be revised

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Abstract

This commentary highlights the discrepancy between traditional norms of emerging patterns of behavior and the evolved abilities exhibited by children in modern societies, accentuated by technological advancements. The author suggests a global reassessment of pediatric behavioral and developmental norms to provide more accurate references for pediatricians when evaluating child development and behavior.

Dear Academic Editor

Pediatricians need to understand normal growth, development, and behavior to monitor children's progress, identify delays or abnormalities in development and behavior, obtain needed services, and counsel parents. On the other hand, these physicians have been learning about emerging patterns of behavior, such as the following:

In terms of language behavior, a 48-month-old child can count 4 coins; adaptively, he can imitate two crossed lines and a square, among the two lines he knows the longer line. ^[1]

In terms of language behavior, a 60-month-old child can name four colors; adaptively, he can copy the triangle, between two objects he knows which one is heavier, ^[1] etc.

Emerging patterns of behavior from 1-5 yr of age^[1]

15 MO

Motor: Walks alone; crawls up stairs

Adaptive: Makes tower of 3 cubes; makes a line with crayon; inserts raisin in bottle

Language: Jargon; follows simple commands; may name a familiar object (e.g., ball); responds to his/her name

Social: Indicates some desires or needs by pointing; hugs parents

18 MO

Motor: Runs stiffly; sits on small chair; walks up stairs with 1 hand held; explores drawers and wastebaskets

Adaptive: Makes tower of 4 cubes; imitates scribbling; imitates vertical stroke; dumps raisin from bottle

Language: 10 words (average); names pictures; identifies 1 or more parts of body

Social: Feeds self; seeks help when in trouble; may complain when wet or soiled; kisses parent with pucker

24 MO

Motor: Runs well, walks up and down stairs, 1 step at a time; opens doors; climbs on furniture; jumps

Adaptive: Makes tower of 7 cubes (6 at 21 mo); scribbles in circular pattern; imitates horizontal stroke; folds paper once imitatively

Language: Puts 3 words together (subject, verb, object)

Social: Handles spoon well; often tells about immediate experiences; helps to undress; listens to stories when shown pictures

30 MO

Motor: Goes up stairs alternating feet

Adaptive: Makes tower of 9 cubes; makes vertical and horizontal strokes, but generally will not join them to make cross; imitates circular stroke, forming closed figure

Language: Refers to self by pronoun "I"; knows full name

Social: Helps put things away; pretends in play

36 MO

Motor: Rides tricycle; stands momentarily on 1 foot

Adaptive: Makes tower of 10 cubes; imitates construction of "bridge" of 3 cubes; copies circle; imitates cross

Language: Knows age and sex; counts 3 objects correctly; repeats 3 numbers or a sentence of 6 syllables; most of speech intelligible to strangers

Social: Plays simple games (in "parallel" with other children); helps in dressing (unbuttons clothing and puts on shoes); washes hands

48 MO

Motor: Hops on 1 foot; throws ball overhand; uses scissors to cut out pictures; climbs well

Adaptive: Copies bridge from model; imitates construction of "gate" of 5 cubes; copies cross and square; draws man with 2-4 parts besides head; identifies longer of 2 lines

Language: Counts 4 pennies accurately; tells story

Social: Plays with several children, with beginning of social interaction and role-playing; goes to toilet alone

60 MO

Motor: Skips

Adaptive: Draws triangle from copy; names heavier of 2 weights

Language: Names 4 colors; repeats sentence of 10 syllables; counts 10 pennies correctly

Social: Dresses and undresses; asks questions about meaning of words; engages in domestic role-playing

While it seems that with the modernization of human societies on one hand and the advancement of science and the

creation of new technologies on the other hand, in many societies, even in developing countries, these abilities of children have progressed. As we could see, a 4-5-year-old child can work very well with a mobile phone and computer system, he plays internet games with his peers and even downloads games and movies from Messenger such as YouTube, etc. Some children are also learning a language other than their mother's language from the age of 3-4 years. So that if a pediatrician wants to examine the child in terms of behavior based on the framework given in the current pediatric references, he will realize that the child knows more abilities. And even the child's parents may remind the doctor about this. Therefore, isn't it more appropriate to revise the norms related to pediatric development and behavior so that pediatricians have a more practical reference for comparison when examining children in terms of development and behavior?

Anyway, I expressed my opinion that the patterns of children's growth and development need to be reviewed; and I don't know more about whether other pediatricians agree with my claim or not. I suggest that responsible organizations such as American Academy of Pediatrics (AAP) and world health organization (WHO) get in touch with pediatricians in the US, and even around the world and prepare a questionnaire about emerging patterns of behavior in children and provide them with it and ask them to complete this questionnaire and declare their evidence and opinions.

References

1. [a](#), [b](#), [c](#) Robert M. Kliegman, Joseph St. Geme, Nathan J Blum, Robert C. Tasker, Shawn L Ralston, and Matthew Deardorff. *Nelson textbook of pediatrics*. Philadelphia, USA: Elsevier; 18th, 19th, and 21st Editions.