

AUTISM AND REGRESSION

What Parents Need to Know

Kourtney Christopher, M.Ed.

Christina Toolan, Ph.D.

Catherine Lord, Ph.D.



It is amazing to watch toddlers grow and gain new skills. They have a seemingly effortless ability to learn and develop. When the opposite occurs, however, and previously obtained skills are lost, it can be a terrifying experience for parents. Such a loss is known as “regression” and refers to the loss of skills that had previously been reliably established. While there are normal ups and downs in children’s development as they grow, a consistent loss in skills for at least one month is cause for concern. In autism spectrum disorder (ASD), a regression can occur in many different areas, including language, social, self-help, or motor skills. Parents most often report losses in children’s language and social skills. While regression is not common in typically developing children, it is reported to occur in about one-third of children diagnosed with ASD.¹

The When and Why of Regression

Rather than following one path, regression appears to have several trajectories. In most cases of autistic regression, parents report that the loss begins mid-way through their child's second year of life.¹ While cases of sudden loss of skills have been noted, it is more common for children to gradually lose social interest over time. This loss plateaus in the first few years of life.² Since the onset of regression coincides with the time when children typically receive the measles, mumps, and rubella (MMR) vaccine, some have wondered if there is a causal connection between the two. A great deal of evidence, however, has shown that the MMR vaccine does not cause autism.³ The cause of regression in ASD is not well understood at this time, but it is likely linked to interactions between biological and environmental factors.⁴

There are very rare situations in which regression is noted in children at around three to four years of age. These cases tend to be related to losses in motor functioning, such as hand coordination, and can involve the loss of other skills, including toileting. If children experience a loss of motor skills around that age, especially the purposeful use of their hands, parents are strongly advised to seek assistance from a neurologist. The loss could be related to a number of very rare disorders, such as Rett syndrome, Landau-Kleffner syndrome, or other degenerative conditions.⁴

What to Do if Children Regress

We know that children should learn, grow and develop new skills. At the same time, it is important to remember that children are undergoing significant changes, and that their skills can vary from day to day or week to week. However, if parents feel that their child is consistently losing skills, particularly those related to social interaction or communication, they should recognize that this is not part of typical development and seek medical advice immediately. Parents may wish to track skills they are concerned about by writing down examples or recording videos to share at upcoming visits with their pediatrician or family physician. They could also request a referral to a specialized provider, such as a developmental-behavioral pediatrician.

Supporting Children Who Regress

Parents of children who regress should seek out behavioral treatments that address the areas of need. These could be interventions such as naturalistic developmental behavioral interventions (NDBIs), which are play-based and mediated by therapists or parents. NDBIs are behavioral treatments that are child-led, implemented in natural settings, and use contingent reinforcement to teach children developmentally and behaviorally appropriate skills, such as joint attention, play, and social communication.⁵



Children who experience a regression, particularly in language, do not necessarily have worse developmental outcomes than children without regression.⁶ It is important to note that children with regression can regain some, if not all, of their lost skills. For example, one study found that over 75 percent of the children who regressed did regain their lost skills.⁷ Children who lose their skills early in life and regain them quickly also tend to have better outcomes.⁸ However, in the case of later regression between three and four years of age, children are less likely to regain their skills. Though it is rare, some children will never regain lost skills.⁹

It can be very challenging and stressful for parents if their child is experiencing a regression. That's why it is critical to address and support parent well-being and mental health. Practitioners should be aware of these needs and prepared to help both children and other family members find the appropriate resources and manage expectations. Parents who are supported are more likely to be able to help their children access much-needed resources.

References

1. Barger, B. D., Campbell, J. M., & McDonough, J. D. (2013). Prevalence and onset of regression within autism spectrum disorders: A meta-analytic review. *Journal of Autism and Developmental Disorders*, 43(4), 817–828.
2. Luyster, R., Richler, J., Risi, S., Hsu, W.-L., Dawson, G., Bernier, R., Dunn, M., Hepburn, S., Hyman, S. L., McMahon, W. M., Goudie-Nice, J., Minshew, N., Rogers, S., Sigman, M., Spence, M. A., Goldberg, W. A., Tager-Flusberg, H., Volkmar, F. R., & Lord, C. (2005). Early regression in social communication in autism spectrum disorders: A CPEA study. *Developmental Neuropsychology*, 27(3), 311–336.
3. DeStefano, F., & Shimabukuro, T. T. (2019). The MMR vaccine and autism. *Annual Review of Virology*, 6(1), 585–600.
4. Boterberg, S., Charman, T., Marschik, P. B., Bölte, S., & Roeyers, H. (2019). Regression in autism spectrum disorder: A critical overview of retrospective findings and recommendations for future research. *Neuroscience and Biobehavioral Reviews*, 102, 24–55.
5. Schreibman, L., Dawson, G., Stahmer, A. C., Landa, R., Rogers, S. J., McGee, G. G., ... & Halladay, A. (2015). Naturalistic developmental behavioral interventions: Empirically validated treatments for autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 45(8), 2411–2428.
6. Pickles, A., Wright, N., Bedford, R., Steiman, M., Duku, E., Bennett, T., ... & Pathways in ASD Study Team. (2022). Predictors of language regression and its association with subsequent communication development in children with autism. *Journal of Child Psychology and Psychiatry*. Advance online publication.
7. Boterberg, S., Van Coster, R., & Roeyers, H. (2019). Characteristics, early development and outcome of parent-reported regression in autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 49(11), 4603–4625.
8. Simonoff, E., Kent, R., Stringer, D., Lord, C., Briskman, J., Lukito, S., Pickles, A., Charman, T., & Baird, G. (2020). Trajectories in symptoms of autism and cognitive ability in autism from childhood to adult life: Findings from a longitudinal epidemiological cohort. *Journal of the American Academy of Child & Adolescent Psychiatry*, 59(12), 1342–1352.
9. Lord, C., Shulman, C., & DiLavore, P. (2004). Regression and word loss in autistic spectrum disorders. *Journal of Child Psychology and Psychiatry*, 45(5), 936–955.



Kourtney Christopher, M.Ed., is a doctoral student in the Human Development and Psychology program at UCLA under the supervision of Dr. Catherine Lord. She has worked in the field of autism for over fifteen years, beginning at Thompson Center for Autism and Neurodevelopmental Disorders at the University of Missouri-Columbia. There, she engaged with families through research and diagnostic clinics, managed a team of autism assessment specialists, and trained professionals nationwide. Kourtney also co-developed Global Autism Interactive Network (GAIN), an online community for continual training in autism. Now at UCLA, Kourtney works on an ongoing longitudinal study examining the development of autism across a lifespan. In addition, she currently works on the continued development of autism assessment instruments. Kourtney's passion and research interests include early identification of autism through phenotyping and creating meaningful assessments for both clinicians and families.



Christina Toolan, Ph.D., is a postdoctoral scholar at the UCLA Center for Autism Research and Treatment under the supervision of Dr. Catherine Lord. She received her Ph.D. in Human Development and Psychology from the Graduate School of Education at UCLA. She has expertise in interventions and assessments with minimally verbal children with ASD. Her current work examines the development and utility of social communication assessment tools. Her research interests include parent-child interactions, children with limited language, and applying research-based assessments to real-world settings.



Catherine Lord, Ph.D., is the George Tarjan Distinguished Professor of Psychiatry in the David Geffen School of Medicine at UCLA. She is a practicing clinical psychologist whose primary focus is autism and related disorders across the lifespan from toddlers through adulthood. Her research and clinical work are aimed at improving methods of identifying strengths and difficulties in individuals with possible ASD and working with families and individuals to maximize independence and well-being for all concerned. This has involved the development of diagnostic instruments (Autism Diagnostic Observation Schedule — ADOS, Autism Diagnostic Interview-Revised — ADI-R, and Social Communication Questionnaire — SCQ) and carrying out longitudinal studies from age 15 months up to 30 years with the goal of identifying protective and risk factors that influence milestones of progress over the years. A current priority is to develop better ways of measuring changes in social behavior and communication to monitor progress without bias. Another priority has been to participate in large scale studies where researchers share data about both behavior and neurobiology. She is a member of the National Academy of Medicine and a fellow of the American Association of Arts and Sciences, as well as a former chair of a National Academy of Sciences committee on the effectiveness of early intervention in ASD, a co-chair of the New York Board of Health committee on ASD and a member of the DSM-5 American Psychiatry Association's neurodevelopmental disorders committee. She is the recipient of numerous awards, including the Lifetime Achievement Award from the International Society for Autism Research. She has over 300 referred journal publications and has been funded by NIH, Autism Speaks, and the Simons Foundation for numerous research grants.

For information only. Views, recommendations, findings and opinions are those of the author and do not necessarily reflect the opinion of Autism Advocate Parenting Magazine Inc. or anyone otherwise involved in the magazine. The magazine and others are not responsible for any errors, inaccuracies or omissions in this content. The magazine provides no guarantees, warranties, conditions or representations, and will not be liable with respect to this content. Please read our full terms [here](#).

AUTISM ADVOCATE

PARENTING MAGAZINE



- ✓ No more wondering if you are accessing the best information for your child.
- ✓ No more mindless scrolling or searching where to look for answers.

Autism Advocate Parenting Magazine is a Power-Packed magazine that will transform the way you learn about autism!

- ✓ Access relevant and current information from Top Experts, Professionals and Researchers in the field of autism that can serve your family!

ADHD Aggressive Behavior Art Therapy
 Affection Amygdalas in ASD Electronic Addiction
 DIR/Floortime Anxiety Apraxia Communication
 Autism in Young Children ASD Severity Over Time Diagnosis
 Developing Skills Cerebral Foliate Abnormalities
 Cognitive Behavioral Therapy Dating/Romantic Relationships
 Fragile X Detox Family Enzymes
 Employment Embracing Differences Gastro Intestinal Issues
 Financial Resources/Planning Tics Genetics of Autism Gut-Brain Axis
 Gender Differences Feeding/Oral Development GI and Behavior
 Therapy and Meditation

Is there valuable Autism information you are missing?

Theory of Mind Visual Schedules Hyperbarics
 Global Perspective Happiness Teaching
 Integration Hygiene Mindfulness Healthy Lifestyle at Home
 Medication Independence Learning Difficulties Yoga Hypersensitivity
 Lyme Disease Microbiome Sibling Support
 Nutrigenomics Literacy Mitochondrial Dysfunction Self-Care
 Neurobiology of Autism Mycotoxins Music/Sound Therapy
 Play Therapy Safety Occupational Therapy PANS/PANDAS
 Positive Reinforcement Sensory Processing
 Probiotics Pre-Diagnosis Checklists Selective Eating
 Relationships Self-Determination Self-Injury Thinking Traps
 Sexual Abuse Self-Esteem School/IEP
 Supplements Severity of Autism Over Time
 Sports Stress Regulation Taking Turns Toilet Training
 Transition to Adulthood Visual Strategies

And so much more!

IS THERE VALUABLE AUTISM INFORMATION YOU ARE MISSING AS A PARENT?

Monthly

\$5.99 USD/mth

- ✓ Access to monthly digital issues
- ✓ Insightful articles by experts and professionals in the field of autism
- ✓ Current autism research
- ✓ Stories of hope, advocacy and inspiration
- ✓ Printable resources
- ✓ Downloadable PDF issues
- ✓ Access to Member's Area
- ✓ Renews Monthly

Annual

was \$59.88 USD/yr
NOW ONLY \$49 USD/yr
 Most Popular

- ✓ Access to monthly digital issues
- ✓ Insightful articles by experts and professionals in the field of autism
- ✓ Current autism research
- ✓ Stories of hope, advocacy and inspiration
- ✓ Printable resources
- ✓ Downloadable PDF issues
- ✓ Access to Member's Area

EXCLUSIVE EXTRAS

- ✓ Access to bonus digital content throughout the year
- ✓ A Kid-Friendly Gluten-free/Casein-free Recipe e-book
- ✓ Access to exclusive webinars with autism experts from around the world
- ✓ Renews Annually

Premium

was \$107.88 USD/yr
NOW ONLY \$97 USD/yr
 Unlimited Access

- ✓ Access to monthly digital issues
- ✓ Insightful articles by experts and professionals in the field of autism
- ✓ Current autism research
- ✓ Stories of hope, advocacy and inspiration
- ✓ Printable resources
- ✓ Downloadable PDF issues
- ✓ Access to Member's Area

EXCLUSIVE EXTRAS

- ✓ Access to all past issues of AUTISM ADVOCATE Parenting Magazine
- ✓ Access to all past articles, searchable by topic in the Article Directory
- ✓ Access to bonus digital content throughout the year
- ✓ A Kid-Friendly Gluten-free/Casein-free Recipe e-book
- ✓ Access to exclusive webinars with autism experts from around the world
- ✓ Renews Annually

Use Coupon Code:
AUTISMLITTLELEARNERS
 for an incredible
 discount on an
 Annual or Premium
 Subscription!

<https://www.autismadvocateparentingmagazine.com/autismlittlelearners>
 Follow AAPM on Instagram: @autismadvocateparentingmag

ADHD Aggressive Behavior Art Therapy
Affection Amygdalas in ASD Electronic Addiction
DIR/Floortime Anxiety Apraxia Communication
Autism in Young Children ASD Severity Over Time College/University Transition Diagnosis
Developing Skills Cerebral Folate Abnormalities
Cognitive Behavioral Therapy Dating/Romantic Relationships
Fragile X Detox Embracing Differences Executive Function
Employment Family Enzymes
Financial Resources/Planning Tics
Gender Differences Genetics of Autism Gut-Brain Axis
Feeding/Oral Development GI and Behavior
Therapy and Medication

Topics Covered

IN AUTISM ADVOCATE PARENTING MAGAZINE

Theory of Mind Visual Schedules Hyperbarics
Global Perspective Gluten-Free & Casein-Free Happiness
Integration Hygiene Mindfulness Healthy Lifestyle Teaching
Medication Independence Learning Difficulties Yoga Hypersensitivity
Motivation PECS Microbiome Sibling Support
Nutrigenomics Literacy Mitochondrial Dysfunction Self-Care
Neurobiology of Autism Mycotoxins Music/Sound Therapy
Play Therapy Safety Occupational Therapy PANS/PANDAS
Probiotics Pre-Diagnosis Checklists Positive Reinforcement Sensory Processing
Relationships Self-Determination Self-Injury Thinking Traps
Sexual Abuse Self-Esteem School/IEP
Sports Supplements Severity of Autism Over Time
Transition to Adulthood Taking Turns Toilet Training
Visual Strategies

And so much more!