

## Research output

### **A randomized controlled trial of the effects of dog-assisted versus robot dog-assisted therapy for children with autism or Down syndrome**

van der Steen, S., Kamphorst, E. & Griffioen, R. E., 19-Mar-2025, In: PLoS ONE. 20, 3, 22 p., e0319939.

### **Teacher-student interactions of autistic adolescents: Relationships between teacher autonomy support, structure, involvement and student engagement**

Esqueda Villegas, F., van der Steen, S., van Dijk, M., Esqueda Villegas, D. A. & Minnaert, A., 14-Feb-2025, (E-pub ahead of print) In: Journal of Autism and Developmental Disorders.

### **The Relationship Between Parent-Child Movement Synchrony and Social Behavior of Children Diagnosed with Autism Spectrum Disorder and Children Diagnosed with Down Syndrome**

Steen, S. V. D., Hill, Y. & Cox, R. F. A., Oct-2024, In: Journal of developmental and physical disabilities. 36, p. 843-863 21 p.

### **Children's multimodal coordination during collaborative problem solving**

de Jonge-Hoekstra, L., Pouw, W., Dixon, J. A., van der Steen, S. & Cox, R. F. A., 25-Jul-2024.

### **Interactions between teachers and students with autism spectrum disorder in mainstream secondary education: Fundamental, yet under-researched**

Esqueda Villegas, F., van der Steen, S. & Minnaert, A., Jun-2024, In: Review Journal of Autism and Developmental Disorders. 11, p. 442-457 16 p.

### **Observational Behaviors and Emotions to Assess Welfare of Dogs: A Systematic Review**

De Winkel, T., van der Steen, S., Enders-Slegers, M.-J., Griffioen, R., Haverbeke, A., Groenewoud, D. & Hediger, K., Mar-2024, In: Journal of Veterinary Behavior. 72, p. 1-17 17 p.

### **Effects of a reading dog programme on reading skills and task-related behaviour in special needs education**

Van Der Steen, S., Douma, I. & Snippe, I., 2024, In: European Journal of Special Needs Education. 39, 4, p. 648-657 10 p.

### **What do we currently know about the development of talent? A systematic review in the soccer context**

Verbeek, J., van der Steen, S., Van Yperen, N. W. & den Hartigh, R., 21-Nov-2023, (E-pub ahead of print) In: International Review of Sport and Exercise Psychology.

### **Group Changes in Cortisol and Heart Rate Variability of Children with Down Syndrome and Children with Autism Spectrum Disorder during Dog-Assisted Therapy**

Griffioen, R. E., van Boxtel, G. J. M., Verheggen, T., Enders-Slegers, M. J. & Van Der Steen, S., Jul-2023, In: Children. 10, 7, 12 p., 1200.

### **Easier Said Than Done? Task Difficulty's Influence on Temporal Alignment, Semantic Similarity, and Complexity Matching Between Gestures and Speech**

de Jonge-Hoekstra, L., Cox, R. F. A., van der Steen, S. & Dixon, J. A., Jun-2021, In: Cognitive Science. 45, 6, 35 p., e12989.

### **Is de Jeugdzorg gebaat bij meer 'paardenkracht'?**

Harder, A. & van der Steen, S., 11-May-2021, Berghauser Pont Publishing.

### **Het werkende dier**

van der Steen, S., 28-Apr-2021

### **On the bright side: Young people's most positive memories of family foster care**

Steenbakkens, A., van der Steen, S. & Grietens, H., 1-Apr-2021, In: Clinical Child Psychology and Psychiatry. 26, 2, p. 544-555 12 p., 1359104520978691.

**Therapie met dieren, is dat wat?**

van der Steen, S., Dec-2020, In: De Pedagoog. 21, 4, p. 24-26 3 p.

**Movers and shakers of cognition: Hand movements, speech, task properties, and variability**

de Jonge - Hoekstra, L., van der Steen, S. & Cox, R. F. A., Nov-2020, In: Acta Psychologica. 211, 14 p., 103187.

**Social Development of Adults with Autism Spectrum Disorder During Dog-Assisted Therapy: A Detailed Observational Analysis**

Wijker, C., van der Steen, S., Spek, A., Leontjevas, R. & Enders-Slegers, M.-J., 14-Aug-2020, In: International Journal of Environmental Research and Public Health. 17, 16, p. 1-18 17 p., 5922.

**Zó ontwikkel je succesvolle interacties met leerlingen met ASS: Project om leerkrachten te ondersteunen en bewuster te maken**

Geveke, C., Steenbeek, H. & van der Steen, S., Jun-2020, In: Kind en Adolescent Praktijk. 19, 2, p. 6-12 7 p.

**Changes in behavioural synchrony during dog-assisted therapy for children with autism spectrum disorder and children with Down syndrome**

Griffioen, R. E., van der Steen, S., Verheggen, T., Enders-Slegers, M.-J. & Cox, R., May-2020, In: Journal of Applied Research in Intellectual Disabilities. 33, 3, p. 398-408 11 p.

**Teaching students with Autism Spectrum Disorders: What are the needs of educational professionals?**

Steen, van der, S., Geveke, C., Steenbakkens, A. & Steenbeek, H., Apr-2020, In: Teaching and Teacher Education. 90, 103036.

**Verbal Interactional Synchronization between Therapist and Children with Autism Spectrum Disorder during Dolphin Assisted Therapy: Five Case Studies**

Griffioen, R., van der Steen, S., Cox, R. F. A., Verheggen, T. & Enders-Slegers, M.-J., 24-Sept-2019, In: Animals. 9, 10, 15 p.

**Evaluating Animal-Assisted Interventions: An Empirical Illustration of Differences between Outcome Measures**

van der Steen, S., Heineman, M. M. .. P. & Ernst, M. J. A., 3-Sept-2019, In: Animals. 9, 9, 17 p., 645.

**How do youth in foster care view the impact of traumatic experiences?**

Steenbakkens, A., van der Steen, S. & Grietens, H., Aug-2019, In: Children and Youth Services Review. 103, p. 42-50 9 p.

**Dierondersteunde interventies voor mensen met Downsyndroom: (hoe) werken ze?**

van der Steen, S., 2019, In: Down+Up . 125, update, p. 44-51 8 p.

**The Link between Microdevelopment and Long-Term Learning Trajectories in Science Learning**

van der Steen, S., Steenbeek, H., den Hartigh, J. R. & van Geert, P., 2019, In: Human Development. 63, 1, p. 4-32 29 p.

**Visualizing individual dynamics: The case of a talented adolescent**

van der Sluis, J. K., van der Steen, S., Stulp, G. & den Hartigh, R. J. R., 2019, *Psychosocial Development in Adolescence: Insights from the Dynamic Systems Approach*. Kunnen, E. S., De Ruiter, N. N. P., Jeronimus, B. F. & Van der Gaag, M. A. E. (eds.). Routledge, p. 209-222 14 p. (Studies in Adolescent Development).

**Psychosocial Needs of Children in Foster Care and the Impact of Sexual Abuse**

Steenbakkens, A., Ellingsen, I., van der Steen, S. & Grietens, H., Apr-2018, In: Journal of Child and Family Studies. 27, 4, p. 1324-1335 12 p.

**The needs of foster children and how to satisfy them: A systematic review of the literature**

Steenbakkens, A., van der Steen, S. & Grietens, H., Mar-2018, In: Clinical Child and Family Psychology Review. 21, 1, p. 1-12 12 p.

**Differences in game reading between selected and non-selected youth soccer players**

Den Hartigh, R. J. R., Van der Steen, S., Hakvoort, B., Frencken, W. G. P. & Lemmink, K. A. P. M., 2018, In: Journal of Sports Sciences. 36, 4, p. 422-428 7 p.

**Do Foster Parents and Care Workers Recognize the Needs of Youth in Family Foster Care with a History of Sexual Abuse?**

Steenbakkens, A., Ellingsen, I. T., van der Steen, S. & Grietens, H., 2018, In: Journal of Child Sexual Abuse. 27, 7, p. 811-831 21 p.

**Using a Complex Dynamic Systems Approach to interaction research in education: The case of autism interventions**

Steenbeek, H., van Geert, P. & van der Steen, S., 30-Oct-2017, *Mind, Brain and Education : How science unfolds in an emerging field* . p. 182-207 25 p.

**Capturing moment-to-moment changes in multivariate human experience**

De Ruiter, N. M. P., Van der Steen, S., Den Hartigh, R. J. R. & Van Geert, P. L. C., 1-Sept-2017, In: International Journal of Behavioral Development. 41, 5, p. 611-620 10 p.

**The Effect of Keyboard-Based Word Processing on Students With Different Working Memory Capacity During the Process of Academic Writing**

Van der Steen, S., Samuelson, D. & Thomson, J. M., Jul-2017, In: Written Communication. 34, 3, p. 280-305 26 p.

**Learning as grounded: How children's gestures and speech are coupled to task properties**

de Jonge-Hoekstra, L., Cox, R., van der Steen, S. & van Geert, P., Apr-2017.

**How do foster youth experience the impact of adverse childhood events?**

Steenbakkens, A., van der Steen, S. & Grietens, H., 2017.

**The psychosocial needs of children in foster care with a history of sexual abuse: Are they recognized?**

Steenbakkens, A., Ellingsen, I., van der Steen, S. & Grietens, H., 2017.

**'To talk or not to talk?': Foster youth's experiences of sharing stories about their past and being in foster care**

Steenbakkens, A., van der Steen, S. & Grietens, H., Dec-2016, In: Children and Youth Services Review. 71, p. 2-9 8 p.

**The needs of children in foster care: A Q methodological study**

Steenbakkens, A., Ellingsen, I. T., van der Steen, S. & Grietens, H., 11-Nov-2016.

**The needs of foster children: A Q-sort study on the differences between the psychosocial needs of foster children with and without a history of sexual abuse**

Steenbakkens, A., van der Steen, S., Ellingsen, I. T. & Grietens, H., 15-Sept-2016.

**Asymmetric dynamic attunement of speech and gestures as children learn: competing synergies?**

de Jonge-Hoekstra, L., van der Steen, S., van Geert, P. & Cox, R., 8-Jul-2016.

**Foreign language learning as a complex dynamic process: A microgenetic case study of a Chinese child's English learning trajectory**

Sun, H., Steinkrauss, R., van der Steen, S., Cox, R. & de Bot, K., Jul-2016, In: Learning and Individual Differences. 49, p. 287-296 10 p.

**Chromatic and anisotropic cross-recurrence quantification analysis of interpersonal behavior**

Cox, R. F. A., van der Steen, S., Guevara Guerrero, M., Hoekstra, L. & van Dijk, M., Jun-2016, *Recurrence Plots and Their Quantifications: Expanding Horizons: Proceedings of the 6th International Symposium on Recurrence Plots, Grenoble, France, 17-19 June 2015*. Webber, C., Ioana, C. & Marwan, N. (eds.). Springer, Vol. 180. p. 209-225 19 p. (Springer Proceedings in Physics; vol. 180).

**Asymmetric dynamic attunement of speech and gestures in the construction of children's understanding**  
de Jonge-Hoekstra, L., van der Steen, S., van Geert, P. & Cox, R., 17-May-2016.

**Asymmetric Dynamic Attunement of Speech and Gestures in the Construction of Children's Understanding**  
De Jonge-Hoekstra, L., Van der Steen, S., Van Geert, P. & Cox, R. F. A., 31-Mar-2016, In: *Frontiers in Psychology*. 7, 19 p., 473.

**Children's understanding of scientific concepts: Combining a micro-developmental approach with a longitudinal study**  
van der Steen, S., 6-Jun-2015.

**A 'SKILL THEORY' APPLICATION TO LEARNING AND ITS IMPLICATIONS FOR SPORTS**  
van der Steen, S. & den Hartigh, R., 31-Oct-2014.

**Characterising expert representations during real-time action: A Skill Theory application to soccer**  
Den Hartigh, R. J. R., Van Der Steen, S., De Meij, M., Van Yperen, N. W., Gernigon, C. & Van Geert, P. L. C., 3-Oct-2014 , In: *Journal of cognitive psychology*. 26, 7, p. 754-767 14 p.

**How context can help and hinder special needs students**  
van der Steen, S., 21-May-2014.

**Exploring the dynamics of gestures in the construction of cognitive understanding.**  
Hoekstra, L., van der Steen, S., van Geert, P. & Cox, R., May-2014.

**A process approach to children's understanding of scientific concepts: A longitudinal case study**  
van der Steen, S., Steenbeek, H., van Dijk, M. & van Geert, P., Feb-2014, In: *Learning and Individual Differences*. 30, p. 84-91 8 p.

**"How does it work?" A longitudinal microgenetic study on the development of young children's understanding of scientific concepts**  
van der Steen, S., 2014, [S.l.]: s.n.. 247 p.

**Science education and the dynamics of talent and inquiry learning**  
van Geert, P. & van der Steen, S., 2013.

**A Comparison between Young Students with and without Special Needs on Their Understanding of Scientific Concepts**  
van der Steen, S., Steenbeek, H., Wielinski, J. & van Geert, P., 25-Oct-2012, In: *Education Research International*. 2012, 12 p., 260403.

**Analysis of dialogues in education: Applying the dynamic systems theory to teacher-student interactions**  
van der Steen, S. & Steenbeek, H. W., 2012.

**Children's understanding of scientific concepts: Combining a micro-developmental approach with a longitudinal study**  
Steenbeek, H. W. & van der Steen, S., 2012.

**Children's understanding of scientific concepts: Combining a micro-developmental approach with a longitudinal study: Measuring children's understanding of scientific concepts using Skill Theory**  
van der Steen, S. & Steenbeek, H. W., 2012.

**Special needs students' understanding of scientific concepts under a condition of optimal scaffolding**  
van der Steen, S., Steenbeek, H. W. & van Geert, P. L. C., 2012.

### **Using the dynamics of a person context system to describe children's understanding of air pressure**

Van der Steen, S., Steenbeek, H. & Van Geert, P. L. C., 2012, *Current Topics in Children's Learning and Cognition*. Kloos, H., Morris, B. J. & Amaral, J. L. (eds.). Rijeka, Croatia: InTech, p. 21-44 24 p.

### **A dynamic approach to scientific talent**

van der Steen, S., Meindertsma, H. B., Steenbeek, H. W., van Dijk, M. W. G. & van Geert, P. L. C., 2011.

### **Curious Minds: The role of scaffolding in scientific reasoning talents of young children**

Steenbeek, H. W. & van der Steen, S., 2011.

## **Activities**

### **Guest lecture on observations and research in animal assisted interventions**

van der Steen, S. (Speaker)

23-Dec-2023

### **Journal of Research in Special Educational Needs (Journal)**

van der Steen, S. (Editor)

1-Dec-2023 → ...

### **Behoeften en uitdagingen van leerlingen met een autisme spectrum stoornis in het regulier voortgezet onderwijs**

van der Steen, S. (Speaker)

2-Jun-2023

### **Frontiers in Developmental Psychology (Journal)**

van der Steen, S. (Editor)

1-Apr-2023 → ...

### **Introduction Lectureship (lectoraat) animal assisted interventions**

van der Steen, S. (Speaker)

12-May-2022

### **Guest lecture Noorderpoort college**

van der Steen, S. (Invited speaker)

30-Mar-2022

### **Doing research on animal-assisted interventions, how does this work?**

van der Steen, S. (Keynote speaker)

12-Sept-2021

### **Measuring synchrony in animal-assisted interventions**

van der Steen, S. (Speaker)

22-Jun-2021

### **Dierondersteunde interventies bij autisme**

van der Steen, S. (Speaker)

8-Sept-2020

### **Theory and Research Methods in Animal-Assisted Interventions**

Steen, van der, S. (Keynote speaker)

25-Oct-2018

### **Junior council of animal affairs (raad voor dieraangelegenheden) (External organisation)**

van der Steen, S. (Please select a role)

1-Sept-2018 → 1-Sept-2021

**Early Childhood (0-7 years) in Research and Practice Symposium**

van der Steen, S. (Organiser), Houwen, S. (Organiser) & Cantell, M. H. (Organiser)  
4-Apr-2017

**Presentation**

Steen, van der, S. (Consultant)  
1-Nov-2013

**Press / Media**

**Activiteiten in de natuur hebben positieve impact op kinderen met autisme**

van der Steen, S.

03/01/2024

1 item of Media coverage

**Benefits of a school dog**

van der Steen, S.

28/09/2023

1 item of Media coverage

**Coordination in development: Caregiver-child synchrony**

de Jonge-Hoekstra, L. & van der Steen, S.

11/01/2019

1 Media contribution

**De opmars van de Schoolhond (F. Smit)**

van der Steen, S.

01/02/2022

1 Media contribution

**Dier-ondersteunde interventies voor mensen met Downsyndroom: (hoe) werken ze?**

Steen, van der, S.

01/03/2019

1 Media contribution

**Groep 3 voor de speelse onderzoeker**

Steen, van der, S.

01/11/2016

1 item of Media coverage

**Het wetenschappelijk inzicht van een kleuter Taal- en rekentoetsen zeggen niets over inzicht in wetenschappelijke verbanden**

Steen, van der, S.

13/05/2014

1 item of Media coverage

**Hulphond helpt Kim (25) uit haar nachtmerrie**

van der Steen, S.

04/03/2024

1 Media contribution

**Hulphond kan jongere met mentale problemen veel brengen**

van der Steen, S.

22/09/2024

1 Media contribution

**Investigadora hermosillense busca la inclusión de niños con autismo en escuelas**

van der Steen, S. & Esqueda Villegas, F.

29/04/2022

1 item of Media coverage

**Kids are the ideal scientists**

Steen, van der, S.

01/05/2014

1 item of Media coverage

**L1 Radio, interview**

Steen, van der, S.

26/11/2013

1 item of Media coverage

**Podcast interview 'Inside Education'**

van der Steen, S.

29/05/2021

1 Media contribution

**RUG nomineert robothond en wiskundige formules voor Klokhuis Wetenschapsprijs**

van der Steen, S.

22/01/2024

1 item of Media coverage

**Speciaal onderwijs-kinderen kunnen meer dan gedacht**

Steen, van der, S.

02/05/2014

1 item of Media coverage

**Veni, Vidi, Vici Hondentherapie**

Kindermans, G. & van der Steen, S.

07/05/2021

1 Media contribution

**Wetenschappers en jongeren onderzoeken samen hoe aanvraag psychosociale hulphond beter kan**

van der Steen, S.

21/08/2023

1 item of Media coverage