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Universitatea Babeș-Bolyai

## Lucrări relevante pentru realizările profesionale

### I. Lucrări relevante

- Costescu, C.**, Roșan, R., & Carmen, D. (2023). Executive functions and emotion regulation in children with autism spectrum disorders. *European Journal of Special Needs Education*, 1-10.
- Costescu, C.**, Roșan, A., David, C., Cozma, L., & Calota, A. (2023). The Relation between Cognitive and Emotional Processes in Children and Adolescents with Neurodevelopmental Disorders—A Meta-Analysis. *European Journal of Investigation in Health, Psychology and Education*, 13(12), 2811-2826.
- David, C. V., **Costescu, C.** A., & Roșan, A. M. (2023). Factors That Support Technology Integration Practices in the Math Education of Children with Intellectual Disabilities. *Children*, 10(6), 918.
- Costescu C.**, & Carmen B. (2021) Abilități sociale în tulburarea din spectrul autismului. *Abilități sociale în tulburarea din spectrul autismului. Evaluare și intervenții psihopedagogice*. pag 13-30 Cluj Napoca, Editura Polirom.
- Costescu C.**, (2021) Modele de scenarii sociale pentru dezvoltarea abilităților sociale. *Abilități sociale în tulburarea din spectrul autismului. Evaluare și intervenții psihopedagogice* pag. 153-159. Cluj Napoca, Editura Polirom.
- Costescu, C.**, Șogor, M., Thill, S., & Roșan, A. (2021). Emotional Dysregulation in Preschoolers with Autism Spectrum Disorder—A Sample of Romanian Children. *International Journal of Environmental Research and Public Health*, 18(20), 10683.
- David, O. A., **Costescu, C.**, Cardos, R., & Mogoase, C. (2020, July). How effective are serious games for promoting mental health and health behavioral change in children and adolescents? A systematic review and meta-analysis. In *Child & Youth Care Forum* (pp. 1-22). Springer US.
- David, D. O., **Costescu, C.** A., Matu, S., Szentagotai, A., & Dobrean, A. (2019). Effects of a Robot-Enhanced Intervention for Children with ASD on Teaching Turn-Taking Skills. *Journal of Educational Computing Research*, 0735633119830344.
- Costescu, C.**, Vanderborght, B., & David, D. (2014) Reversal learning task in autism spectrum disorder: A robot-based approach. *Journal of Autism and Developmental Disorders*, 45(11), 3715-3725.
- Costescu, C.** A., Vanderborght, B., & David, D. O. (2014). The effects of robot-enhanced psychotherapy: A meta-analysis. *Review of General Psychology*, 18(2), 127-136.

## II. Cărți și capitole de cărți

- Costescu C.**, (coordonator) (2021) Abilități sociale în tulburarea din spectrul autismului. *Evaluare și intervenții psihopedagogice* Cluj Napoca, Editura Polirom.
- Costescu, C.**, David, C., Roșan, A., Ferreira, P., Ferreira, A., Vera, L., & Herrera, G. (2023). Mushroom Hunters: A Digital Game for Assessing and Training Sustained Attention in Children with Neurodevelopmental Disorders. In *Methodologies and intelligent Systems for Techhnology Enhanced Learning* (pp. 78-86). Cham: Springer Nature Switzerland.
- Costescu & Roșan** (2023) Practici incluzive pentru studenții cu tulburare din spectrul autismului și cei cu deficit de atenție și hiperactivitate In Dizabilitate și incluziune în mediul universitar. Acceptare, înțelegere, comunicare. Editura Academiei Române
- Costescu C.**, & Carmen B. (2021) Abilități sociale în tulburarea din spectrul autismului. *Abilități sociale în tulburarea din spectrul autismului. Evaluare și intervenții psihopedagogice.* pag 13-30 Cluj Napoca, Editura Polirom.
- Simion M.D. & **Costescu C.** (2021) Atitudini ale specialiștilor cu privire la utilizarea poveștilor sociale. *Abilități sociale în tulburarea din spectrul autismului. Evaluare și intervenții psihopedagogice.* pag. 87-103. Cluj Napoca, Editura Polirom.
- Costescu C.**, & Nagy (2021) Modalități de testare a eficienței poveștilor sociale. *Abilități sociale în tulburarea din spectrul autismului. Evaluare și intervenții psihopedagogice.* pag. 109-128. Cluj Napoca, Editura Polirom.
- Costescu C.** (2021) Modele de scenarii sociale pentru dezvoltarea abilităților sociale. *Abilități sociale în tulburarea din spectrul autismului. Evaluare și intervenții psihopedagogice* pag. 153-159. Cluj Napoca, Editura Polirom.
- Costescu C.**, Rosan A., Petru A., Thill S., Stefanut T., Heldal I., Attila Kovari A., Katona J., & Demeter R.,(2020) Development of a technological screening platform for children In Cognitive Infocommunications (pp. 431-437) IEEE Philadelphia, PA, USA
- Baconschi C., **Costescu C.**, & Anton A. (2019) Reducing disruptive behaviors in children with ASD through behavioral techniques. Studies and research in the field of socio-human sciences. pag. 66-80, Vol. 32, Cluj Napoca, Editura Limes & Argonaut.
- Matu S., **Costescu C.**, Szentagotai A., Dobrean A., & David D (2016) The use of robots in psychotherapy: theoretical foundations and clinical applications. Research in psychology and education sciences,pag. 101-126, Vol 3, Cluj Napoca, Editura Argonaut.
- Simut, R. Vanderborgh, B., **Pop, C.**, David, D., Vanderfaellie, J. & Vanderborgh, B. (2015) Social robots as mediators for social story intervention: can the robot Probo encourage children with ASD to ask questions during playtime. In S. Douglas & L. Stirling (Eds.), Children's play, pretense, and story: Studies in culture, context, and ASD (pp. 96–115). London: Routledge

### **III. Teza de doctorat**

2011-2014: Titlul tezei: *Dezvoltarea abilităților socio-emoționale la copiii cu tulburare din spectrul autist cu ajutorul psihoterapiei bazate pe roboți*, Universitatea Babeș-Bolyai, Facultatea de Psihologie și Științe ale Educației, Școala Doctorală “Psihodiagnostic și Intervenții Psihologice Validate Științific” Coordonator științific: Prof.univ.dr. Daniel David

### **IV. Articole publicate în reviste din fluxul științific internațional principal**

- Costescu, C.**, Roșan, R., & Carmen, D. (2023). Executive functions and emotion regulation in children with autism spectrum disorders. *European Journal of Special Needs Education*, 1-10.
- Costescu, C.**, Roșan, A., David, C., Cozma, L., & Calota, A. (2023). The Relation between Cognitive and Emotional Processes in Children and Adolescents with Neurodevelopmental Disorders—A Meta-Analysis. *European Journal of Investigation in Health, Psychology and Education*, 13(12), 2811-2826.
- David, C. V., **Costescu, C. A.**, & Roșan, A. M. (2023). Factors That Support Technology Integration Practices in the Math Education of Children with Intellectual Disabilities. *Children*, 10(6), 918.
- Costescu, C., Podina, I. R., & Voinescu, A. (2022). Digital mental health: Interventions and assessment. *Frontiers in Psychology*, 13.
- Costescu, C.**, Pitariu, D., David, C., & Rosan, A. (2022). Social Communication Predictors in Autism Spectrum Disorder. Theoretical Review. *Journal of Experimental Psychopathology*, 13(3), 20438087221106955.
- Costescu, C.**, Șogor, M., Thill, S., & Roșan, A. (2021). Emotional Dysregulation in Preschoolers with Autism Spectrum Disorder—A Sample of Romanian Children. *International Journal of Environmental Research and Public Health*, 18(20), 10683.
- Costescu, C.**, Chelba, I., Roșan, A., Kovari, A., & Katona, J. (2021). Cognitive Patterns and Coping Mechanisms in the Context of Internet Use. *Applied Sciences*, 11(3), 1302.
- David, O. A., Cîmpean, A., **Costescu, C.**, DiGiuseppe, R., Doyle, K., Hickey, M., & David, D. (2021). Effectiveness of Outpatient Rational Emotive Behavior Therapy Over One Decade. *American Journal of Psychotherapy*, appi-psychotherapy.
- Ali, Q., Heldal, I., Helgesen, C. G., Krumina, G., **Costescu, C.**, Kovari, A., ... & Thill, S. (2021). Current challenges supporting school-aged children with vision problems: A rapid review. *Applied Sciences*, 11(20), 9673.
- David, O. A., **Costescu, C.**, Cardos, R., & Mogoase, C. (2020, July). How effective are serious games for promoting mental health and health behavioral change in children and adolescents? A systematic review and meta-analysis. In *Child & Youth Care Forum* (pp. 1-22). Springer US.

Kovari, A., Katona, J., & **Costescu, C.** (2020). Quantitative Analysis of Relationship Between Visual Attention and Eye-Hand Coordination. *Acta Polytechnica Hungarica*, 17(2).

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**Costescu, C.**, Rosan, A., Hathazi, A., Pădure, M., Brigitta, N., Kovari, A., ... & Heldal, I. (2020). Educational tool for testing emotion recognition abilities in adolescents. *Acta Polytechnica Hungarica*, 17(2).

Kovari, A., Katona, J., & **Costescu, C.** (2020). Evaluation of Eye-Movement Metrics in a Software DebuggingTask using GP3 Eye Tracker. *Acta Polytechnica Hungarica*, 17(2).

Bartlett, M. E., **Costescu, C.**, Baxter, P., & Thill, S. (2020). Requirements for Robotic Interpretation of Social Signals “in the Wild”: Insights from Diagnostic Criteria of Autism Spectrum Disorder. *Information*, 11(2), 81.

Billing, E., Belpaeme, T., Cai, H., Cao, H. L., Ciocan, A., **Costescu, C.**, ... & Ziemke, T. (2020). The DREAM Dataset: Supporting a data-driven study of autism spectrum disorder and robot enhanced therapy. *PloS one*, 15(8), e0236939.

**Costescu, C.**, & Rosan, A. (2019). Developing an assessment protocol to identify the characteristics of ASD using eye-tracking for educational purpose. *Journal of Applied Technical and Educational Sciences*, 9(4), 70-87.

Cao, H. L., Esteban, P., Bartlett, M., Baxter, P. E., Belpaeme, T., **Costescu, C.**, ... & David, D. (2019). Robot-enhanced therapy: development and validation of a supervised autonomous robotic system for autism spectrum disorders therapy. *IEEE Robotics and Automation Magazine*.

David, D. O., **Costescu, C. A.**, Matu, S., Szentagotai, A., & Dobrean, A. (2019). Effects of a Robot-Enhanced Intervention for Children With ASD on Teaching Turn-Taking Skills. *Journal of Educational Computing Research*, 0735633119830344.

Cai, H., Fang, Y., Ju, Z., **Costescu, C.**, David, D., Billing, E., ... & Vernon, D. (2018). Sensing-enhanced therapy system for assessing children with autism spectrum disorders: a feasibility study. *IEEE Sensors Journal*, 19(4), 1508-1518.

David, D. O., **Costescu, C. A.**, Matu, S., Szentagotai, A., & Dobrean, A. (2018). Developing Joint Attention for Children with Autism in Robot-Enhanced Therapy. *International Journal of Social Robotics*, 1-11.

**Costescu, C. A.**, Vanderborght, B., & David, D. O. (2017). Robot-Enhanced CBT for dysfunctional emotions in social situations for children with ASD. *Journal of Evidence-Based Psychotherapies*,

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Coeckelbergh, M., **Pop, C.**, Simut, R., Peca, A., Pintea, S., David, D., & Vanderborgh, B. (2016). A survey of expectations about the role of robots in robot-assisted therapy for children with ASD: Ethical acceptability, trust, sociability, appearance, and attachment. *Science and engineering ethics*, 22(1), 47-65.

Coeckelbergh, M., **Pop, C.**, Simut, R., Peca, A., Pintea, S., David, D., & Vanderborgh, B. (2015). A survey of expectations about the role of robots in robot-assisted therapy for children with ASD: Ethical acceptability, trust, sociability, appearance, and attachment. *Science and engineering ethics*, 22(1), 47–65.

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**Pop, C.**, Pintea, S., Vanderborgh, B., & David, D. (2014). Enhancing play skills, engagement and social skills in a play task in ASD children by using robot-based interventions: A pilot study. *Interaction Studies*, 15(2), 292–320.

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**Pop, C.**, Simut, R., Pintea, S., Saldien, J., Rusu, A.S., Vanderfaellie, J., ... Vanderborght, B. (2013). Social robots vs. computer display: Does the way social stories are delivered make a difference for their effectiveness on ASD children? *Journal of Educational Computing Research*, 49(3), 381–401.

**Pop, C. A.**, Simut, R., Pintea, S., Saldien, J., Rusu, A., David D., ... Vanderborght, B., (2013). Can the social robot Probo help children with autism to identify situation-based emotions? A series of single case experiments. *International Journal of Humanoid Robotics*, 10(3).

Vanderborght, B., Simut, R., Saldien, J., **Pop, C.**, Rusu, A. S., Pintea, S., ... David, D. O. (2012). Using the social robot Probo as a social story telling agent for children with ASD. *Interaction Studies*, 13(3), 348–372.

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#### V. Publicații în extenso apărute în lucrări ale principalelor conferințe internaționale de specialitate

12th IEEE International Conference on Cognitive Infocommunications , September 2021, *Comparison of 2D and 3D environments by Eye Tracking based evaluation* Authors: Tibor Ujbanyi, Attila Kovari, Jozsef Katona, Robert Demeter, Serge Thill, Ilona Heldal, Cristina Costescu, Adrian Rosan, and Teodor Stefanut

11th IEEE International Conference on Cognitive Infocommunications , September 2020, *Relationship between Education 4.0 and Cognitive InfoCommunications* Authors: Attila Kovari, Jozsef Katona, Ilona Heldal, Robert Demeter, Cristina Costescu, Adrian Rosan, Serge Thill and Teodor Stefanut

11th IEEE International Conference on Cognitive Infocommunications , September 2020, *Using Eye-Tracking to Examine Query Syntax and Method Syntax Comprehension in LINQ* Authors: Jozsef Katona, Attila Kővári, Ilona Heldal, Cristina Costescu, Adrian Rosan, Robert Demeter, Serge Thill and Teodor Stefanut

11th IEEE International Conference on Cognitive Infocommunications , September 2020, *Cognitive robotics software development aspects based on experiments of future software engineers* Authors: Robert Demeter, Attila Kovari, Jozsef Katona, Ilona Heldal, Cristina Costescu, Adrian Rosan, Serge Thill and Teodor Stefanut

Eide, M. G., Heldal, I., Helgesen, C. G., Wilhelmsen, G. B., Watanabe, R., Geitung, A., & Costescu, C. (2019, November). Eye-tracking complementing manual vision screening for detecting oculomotor dysfunction. In 2019 E-Health and Bioengineering Conference (EHB) (pp. 1-5). IEEE

10th IEEE International Conference on Cognitive Infocommunications , October 2019, Nepal, Italy, *Assessing Visual Attention in Children Using GP3 Eye Tracker*. Authors: Cristina Costescu,

Adrian Rosan, Nagy Brigitta Andrea Hathazi, Attila Kovari, Jozsef Katona, Ilona Heldal, Carsten Helgesen, Serge Thill, Robert Demeter

10th IEEE International Conference on Cognitive Infocommunications , October 2019, Nepal, Italy.

*Emotion recognition in typical and atypical development – a technology-based paradigm.*

Authors: Cristina Costescu, Adrian Rosan, Nagy Brigitta Andrea Hathazi, Attila Kovari, Jozsef Katona, Ilona Heldal, Carsten Helgesen, Serge Thill, Robert Demeter

10th IEEE International Conference on Cognitive Infocommunications , October 2019, Nepal, Italy,

*Examination of Gaze Fixations Recorded during the Trail Making Test* Authors: Attila Kovari, Jozsef Katona, Ilona Heldal, Carsten Helgesen, Cristina Costescu, Adrian Rosan, Andrea Hathazi Serge Thill, Robert Demeter

10th IEEE International Conference on Cognitive Infocommunications , October 2019, Nepal, Italy,

*Analysis of Gaze Fixations Using an Open-source Software* Authors: Attila Kovari, Jozsef Katona, Ilona Heldal, Carsten Helgesen, Cristina Costescu, Adrian Rosan, Andrea Hathazi Serge Thill, Robert Demeter

10th IEEE International Conference on Cognitive Infocommunications , October 2019, Nepal, Italy,

*Examination the Task of Source-code Debugging Using GP3 Eye Tracker.* Authors: Attila Kovari, Jozsef Katona, Ilona Heldal, Carsten Helgesen, Cristina Costescu, Adrian Rosan, Andrea Hathazi Serge Thill, Robert Demeter

10th IEEE International Conference on Cognitive Infocommunications , October 2019, Nepal, Italy,

*Recording Eye-tracking Parameters during a Program Source-code Debugging Example.* Authors: Attila Kovari, Jozsef Katona, Ilona Heldal, Carsten Helgesen, Cristina Costescu, Adrian Rosan, Andrea Hathazi Serge Thill, Robert Demeter

10th IEEE International Conference on Cognitive Infocommunications , October 2019, Nepal, Italy.

*Mobile Application Helps Planning Activities during Pregnancy* Authors: Igor Efrem, Magnar Høyvik, Attila Kovari, Jozsef Katona, Ilona Heldal, Carsten Helgesen, Cristina Costescu, Adrian Rosan, Andrea Hathazi Serge Thill, Robert Demeter

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*Effects of simulation software on students' creativity and outcomes* Authors: Robert Demeter, Attila Kovari, Jozsef Katona, Ilona Heldal, Carsten Helgesen, Cristina Costescu, Adrian Rosan, Andrea Hathazi Serge Thill,

10th IEEE International Conference on Cognitive Infocommunications , October 2019, Nepal, Italy,

*The use of cognitive maps in product development .* Authors: Robert Demeter, Attila Kovari, Jozsef Katona, Ilona Heldal, Carsten Helgesen, Cristina Costescu, Adrian Rosan, Andrea Hathazi Serge Thill,

10th IEEE International Conference on Cognitive InfocommunicationsList of , October 2019, Nepal,

Italy. *mStikk – A Mobile Application for Learning Phlebotomy.* Authors: Tord Hettervik Frøland, Elisabeth Ersvær, Gry Sjøholt<sup>[ES]</sup>, Ilona Heldal, Anne Hjellbrekke Frøyen, Shangavi Logeswaran, Attila Kovari, Jozsef Katona,Cristina Costescu, Adrian Rosan, Andrea Hathazi

IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN), 2014,

*Enhancing My Keepon robot: A simple and low-cost solution for robot platform in Human-Robot Interaction studies,* Proceedings of the 2014, pp.555 – 560. Authors: Cao Hoang, L., Van

De Perre, G., Simut, R., **Pop, C.**, Peca, A., Lefeber, D., Vanderborght, B  
IROS13 workshop: Towards Social Humanoid Robots: What makes interaction human-like? 2013, *The social robot Probo as interaction partner for autistic children* pp.1 – 4. Authors: Vanderborght, B., Simut, R., Van De Perre, G., **Pop, C.**, David, D., Vanderfaeillie, J., Lefeber, D.  
7th annual ACM/IEEE International Conference on Human-Robot Interaction, 2012, Is *the social robot probo an added value for social story intervention for children with autism spectrum disorders?* pp. 235-236. Authors: Simut, R., **Pop, C.**, Saldien, J., Rusu, A., Pintea, S., Vanderfaeillie, J., ... & Vanderborght, B.