Gökhan Gönül, Dr.

Curriculum Vitae

PERSONAL INFORMATION

Date & Place of Birth: 13.03.1986, Muğla/Turkey
Address : Pierre-à-Mazel 7, CH-2000 Neuchâtel
Téléphone : +41 32 718 16 87
E-mail: gokhan.gonul@unine.ch

Competences: Cognitive science, cognitive development, statistical analyses and data structuring, experimental designs for human subjects, basic neuroimaging techniques, research in psychophysics, experimental research, eye-tracking methodology (Tobii, Eye-Link), and basic neuroimaging techniques (e.g., EEG).

WORK EXPERIENCE

01 August 2020 – Ongoing: Post-Doctoral Researcher in University of Neuchâtel, Cognitive Science Centre.

01 October 2019 – 31 June 2020: Post-Doctoral Researcher in Ludwig-Maximilians-Universität München, Faculty of Psychology and Educational Sciences, Developmental Psychology Chair.

01 August 2018 – 30 September 2019: DAAD Post-Doctoral Fellow in Ludwig-Maximilians-Universität München, Faculty of Psychology and Educational Sciences, Developmental Psychology Chair.

01 November 2015 – 20 June 2016: Visiting Doctorate Researcher in University of Auckland - School of Psychology, Auckland, New Zealand**.**

2011- 2018: Research and Teaching Assistant: Middle East Technical University, Graduate School of Informatics, Department of Cognitive Science, Ankara, Turkey.

Assisted with the following courses: Research Methods and Statistics for Cognitive Science; Topics, Research Methods and Ethics in Cognitive Science; Human Memory; Cognitive Development; Language and Cognition; Cognition, Perception & Action; Visual Cognition; Psychology of Reading; Language Acquisition; Cognitive Semantics.

EDUCATION

2013 – 2018 Ph.D. in Cognitive Science, Middle East Technical University, Ankara, Turkey.

Title: Cognitive, Perceptual-Motor and Social Factors in Tool Making in Children
Advisors: Assoc. Prof. Dr. Annette Hohenberger, Assist. Prof. Dr. Murat Perit Çakır).

2010 – 2013 M.Sc. in Cognitive Science, Middle East Technical University, Ankara, Turkey.

Title: From Lexical and Conjunctive Cohesion to Coherence: Reading, Recalling and Comprehending High Cohesive and Low Cohesive Clauses
Advisor: Prof. Dr. Deniz Zeyrek Bozşahin

2005 – 2010 B.Sc. in Psychology, Uludağ University, Bursa, Turkey**.**

2007 – 2010 B.Sc. in Sociology (double major), Uludağ University, Bursa, Turkey.

ACHIEVEMENTS and SUMMER/SPRING SCHOOLS

Thesis award: Best PhD thesis, 2018, by Middle East Technical University.

Research Grant: 2018-2019 DAAD Research Grants for Doctoral Candidates and Young Academics and Scientists (57381410).

Scholarship: Graduate Scholarship by Council of Higher Education, Turkey, Faculty Development Program (**Salary and project support** through MSc and PhD, 2010-2018).

Project Grant: Visiting Doctorate Researcher in University of Auckland - School of Psychology (**Funded by** The Scientific and Technological Research Council of Turkey, 2015-2016; TUBİTAK-2214-A, 2015-1, 1059B141500520, 14.400 $ + travel expenses)

- **Project Name:** Joint tool making in 5-6 years of children: From cognitive to social factors
- **Project Advisors:** Prof. Dr. Michael Corballis, Dr. Annette Henderson

Summer School Participation and Grant: The Initiative for a Synthesis in Studies of Awareness Summer School, 22 May – 5 June 2017, Osaka, Japan (**Granted by** The Okinawa Institute of Science and Technology, travel and accommodation expenses).

Conference Travel Grant: International Convention of Psychological Science (ICPS), 23 – 25 March 2017, Vienna, Austria (**Granted by** Association for Psychological Science, 700 $).

Spring School Participation and Grant: Spring School: Social Cognition, Emotion and Joint Action, 6 – 10 March 2017, Bochum, Germany (**Granted by** Ruhr-Universität, 250 €).

Summer School Participation and Grant: Amsterdam Brain and Cognition Summer School 2014: From genes to Cognition, Netherland: Amsterdam (**Funded by** The Scientific and Technological Research Council of Turkey, 1500$).

Summer School: 21st International Summer School in Cognitive Science, 30 June – 11 July 2014, Sofia, Bulgaria.

PAPERS AND PREREGISTERED ONGOING STUDIES

Gönül, G. & Paulus, M. (**accepted**). Children's reasoning about the efficiency of others' actions: The development of rational action prediction.

Gönül, G., Hohenberger, A., Corballis, M., & Henderson, A. (**2019**). Joint and individual tool making in preschoolers: from social to cognitive processes. *Social Development*, *28*(4), 1037-1053. https://doi.org/10.1111/sode.12373

Gönül, G., Takmaz, E., Hohenberger, A., & Corballis, M. (**2018**). The cognitive ontogeny of tool making in Children: The role of inhibition and hierarchical structuring. *Journal of Experimental Child Psychology*, *173*, 222-238. https://doi.org/10.1016/j.jecp.2018.03.017

Gönül, G. & Zeyrek, D. (**2014**). Discourse connectives and lexical cohesion: An experimental investigation of sentence processing in Turkish. *Proceedings of the 36th Annual Conference of the Cognitive Science Society* (pp. 2281-2287). Quebec City, Canada: Cognitive Science Society. https://mindmodeling.org/cogsci2014/papers/397/paper397.pdf

Nijstad, B. A. (**2018**). Grup problem çözme ve grup yargı (**G. Gönül**, **Translator**). In *Grup performansı* (pp. 149-164, Trans. Eds. H. Coşkun & A. Y. Şenyurt). Ankara: Nobel Akademik Yayincilik. [Original work: Nijstad, B. A. (2009). Group problem-solving and group judgement. In *Group Performance*. East Sussex, UK: Psychology Press.]

Gönül, G., Nike, T. & Paulus, M. (**under review)**. Metacognitive control in untimed and timed learning: A developmental study with children, adolescents, and adults.

Gökhan, G., Karabulut, A. & Hohenberger, A. (**preregistered study, in preparation for submission**). To nap or to gap? The role of day sleep or task break on preschoolers' insight into tool innovation. https://osf.io/7962p/?view_only=94f7d6c84eb74af4b3d2ef5993e56b74

Gökhan, G. & Paulus, M. (**preregistered ongoing study**). Does mental simulation precede physical manipulation in tool innovation? https://osf.io/hcuze/?view_only=c3c65d3bb93d4cdb9fb1f62dbf94a248

Gönül, G., Takmaz, E., Hohenberger, A., & Corballis, M. (**in preparation**). Tool making in preschool children: the effect of familiarity and novelty.

Gönül, G. & Paulus, M. (**in preparation**). Ontogeny of hierarchical representation in the visuo-spatial domain

Paulus, M., **Gönül, G.** & Kammermeier, M. **(in preparation).** Infants' understanding of goal directed actions.

Gönül, G. (**in preparation**). Tool innovation in human children and other animals.

CONFERENCE PRESENTATIONS

Gönül. G., (9-12 September 2019) Tool making, hierarchical representation, and imagination in preschool children. *paEpsy 2019,* University of Leipzig, Leipzig, Germany. [Symposium talk "Ontogeny of hierarchical cognition: variations and commonalities between domains" with **Annette Hohenberger, Laura Maffongelli - Moritz Daum, Mauricio J. D. Martins, Saskia Tobias**].

Gönül. G., Hohenberger, A., & Karabulut, A. (5-8 September 2019) To nap or to gap? The role of day sleep or task break on preschoolers' insight into tool innovation. *27th Conference of the European Society for Philosophy and Psychology (ESPP)*, Athens, Greece.

Gönül. G., & Hohenberger, A. (10-13 September 2018) Co-development of hierarchical structuring and tool making in children. *26th Conference of the European Society for Philosophy and Psychology (ESPP)*, Rijeka, Croatia. [Symposium talk "Tool innovation, manufacture, and use in evolutionary, ontogenetic, and neurocognitive perspectives" with **Alice Auersperg, François Osiurak and Sarah Beck**].

Gönül, G., Hohenberger, A., Corballis, M. & Henderson, A. (4-5 January/2018). The ontogeny of tool innovation: Cognitive, social and cultural processes. *Budapest Central European University Conference on Cognitive Development (BCCCD18),* Budapest, Hungary.

Gönül, G., Hohenberger, A., Henderson, A. & Corballis, M. (23-25 March/2017). Emergence of tool innovation in individual and dyadic contexts: Comparing Turkish and New Zealand preschool children. *International Convention of Psychological Science*, Vienna, Austria.

Gönül, G., Hohenberger, A., Henderson, A. & Corballis, M. (6-10 March/2017). The ontogeny of tool-making in dyadic settings: Cultural, cognitive, and social processes in Turkish and New Zealand preschoolers. *Spring School: Social Cognition, Emotion and Joint Action,* Bochum, Germany.

Gönül, G., Hohenberger, A. & Takmaz, E. (2016). Tool innovation in 5-6-year-old Turkish pre-school children: The effect of familiarity and salience of affordances. *24th Biennial Meeting of the International Society for the Study of Behavioural Development,* Vilnius, Lithuania.

Gönül, G. & Hohenberger, A. (2015). Predicting the tool innovation ability of children: Hierarchical object manipulation and executive functioning. *17th European Conference on Developmental Psychology,* Braga, Portugal.

Gönül, G. & Hohenberger, A. (2015). Tool making and object manipulation in children: Cognitive Factors. *2nd International Symposium on Brain and Cognitive Science, Middle East Technical University,* Ankara, Turkey.

Gönül, G. & Hohenberger, A. (2015). The role of hierarchical structuring and executive functioning in tool innovation processes of pre-school children. *The Nature and Origins of Human Cognition Conference.* Berlin, Germany.

Gönül, G. & Hohenberger, A. (2015). Individual and joint tool making in preschoolers: from cognitive to social processes. *9th Annual Conference on the Evolutionary Behavioral Sciences.* Boston, USA.

THESES TITLES:

Ph.D. (in cognitive science, developmental psychology): Cognitive, Perceptual-Motor and Social Factors in Tool Making in Children (Advisors: Assoc. Prof. Dr. Annette Hohenberger, Assist. Prof. Dr. Murat Perit Çakır).

M.Sc. (in cognitive science and psycholinguistics): From Lexical and Conjunctive Cohesion to Coherence: Reading, Recalling and Comprehending High Cohesive and Low Cohesive Clauses http://etd.lib.metu.edu.tr/upload/12616539/index.pdf

PROJECTS

Project researcher (ongoing project). MentalState (a side project of "NCCR Evolving Language: Exploring the past, present, and future of language"). **Project Group: Fabrice Clement (PI), Klaus Zuberbühler (PI), Hans-Johann Glock (PI), Gökhan Gönül, Derry Taylor.**

Project PI (ongoing project). Does mental simulation precede physical manipulation in tool innovation? (Ludwig-Maximilians-Universität München, supported by DAAD scholarship; **co-PI**, Prof. Dr. Markus Paulus).

Project researcher (completed project). 2-Wege: Infants' understanding of goal directed actions. **Project Group: Gökhan Gönül, Markus Paulus, Marina Kammermeier.**

Project researcher (completed project). The understanding of nested structures in the action and language domain: Underlying neurocognitive mechanisms. **Project Group: Gökhan Gönül, Markus Paulus, Saskia Tobias, Carolina Pletti, Angela D. Friederici.**

Project member (completed project). Insight or social learning? The effect of napping and task breaking on the innovative problem-solving ability of children (Middle East Technical University Scientific Investigation Project, 2700**; Project Group: Gökhan Gönül, Assoc. Prof. Annette Hohenberger, Anıl Karabulut)**

Project member (completed project): An experimental investigation of cognitive, language and social processes in tool making and tool innovation in children (Middle East Technical University Scientific Investigation Project, BAP-07-04-2015-001; **Project Manager: Assoc. Prof. Annette Hohenberger**)

Project Assistant (completed project): Effects of post-traumatic stress disorder on the eye movement patterns: An experimental investigation with analysis of eye movements (Middle East Technical University Scientific Investigation Project, BAP-08-11-2013-003; **Project Manager: Assist. Prof. Cengiz Acartürk**)

Project Assistant (completed project): Inter-language discourse structure and enriching Turkish Discourse Bank (Middle East Technical University Scientific Investigation Project, BAP-07-04-2014-005; **Project Manager: Prof. Dr. Deniz Zeyrek**)

LANGUAGE SKILLS

- Turkish (mother tongue)
- English (C2)
- German (A2)
- French (A1)

RESEARCH SKILLS, TOOLS AND PROGRAMS

- **Experimental design**: Designing experimental and semi-experimental designs for behavioral, sensory and perceptual, and performance data
- **Data analyses**: Beyond simple models, analyzing data with General Linear Models, Generalized Linear Models, Mixed Models, Generalized Linear Mixed Models, Generalized Estimating Equations, longitudinal data analyses
- **SuperLab**: Experiment design program
- **Tobii**: Eye tracking device and software
- **SPSS**: Statistical Package for the Social Sciences
- **Eye-Link**: Eye tracking device and software
- **E-Prime:** Experiment design program
- **Functional Near-Infrared Spectroscopy** (practical experience)
- **Electroencephalogram (EEG)** (practical experience)
- **R:** Statistical computing program
- **SQL:** Programming language for data design and data management
- **Microsoft Office tools**
- **Python** (elementary)