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PROFESSIONAL APPOINTMENTS

- 2018 – present **University of Iowa**
Assistant Professor
Department of Psychological & Brain Sciences
- 2014 - 2017 **University of Chicago**
Research Scientist
Department of Psychology and Committee on Education

EDUCATION

- 2012 - 2014 **Northwestern University**
Postdoctoral Research Associate
Department of Communication Sciences and Disorders
- 2009 - 2012 **University of Chicago**
Postdoctoral Scholar
Department of Psychology
- 2009 **University of Chicago**
Ph.D., Cognition (Minor Area: Linguistics)
Department of Psychology
- 2004 **Koç University**
B.A., Psychology
Department of Psychology
Rank within Class of 2004: 2/269

HONORS AND AWARDS

- 2016 **Society of Postdoctoral Scholars Travel Award**, 6th Annual Beckman Institute
Postdoctoral Research Symposium, University of Illinois Urbana-Champaign
- 2015 **Fellow**, Committee on Education, University of Chicago
- 2013 **Fellow**, Maryland Neuroimaging Center Summer Institute, University of Maryland
Session: Developmental Neuroscience
- 2011 **Fellow**, Training Course in fMRI, University of Michigan
- 2009 **Starkey Duncan Graduate Student Award for Excellence in Undergraduate Teaching**,
University of Chicago
Awarded annually to a graduate student teaching assistant or instructor who have made significant contributions to their undergraduate students' learning and engagement in psychological science

- 2008 **John Dewey Prize Lectureship Award**, University of Chicago
Awarded annually to up to four graduate students in the Department of Psychology to support development and presentation of a one-quarter undergraduate course
- 2007 **Fellow**, Symposium on Early Education and Human Brain Development, University of Chile
- 2006, 2009 **Psychology Graduate Student Organization Research Award**, University of Chicago
- 2004 **College of Arts and Sciences Achievement Award**, Koç University
- 2004 **Top Ranking Student of the Psychology Class of 2004**, Koç University

RESEARCH SUPPORT

- 2020 **University of Iowa DeLTA Center Interdisciplinary Research Grant**
Neural correlates for successful spatial problem solving in chemistry education: A comparison between gesture-based and model-based learning strategy
Role: Co-Investigator (\$1000)
- 2019 **University of Iowa Old Gold Summer Grant**
Like Parent, Like Child: Intergenerational Transmission of Mathematical Proficiency
Role: Principal Investigator (\$6000)

MENTEE GRANTS/FUNDING FOR MENTORED RESEARCH

- 2019 Francesca Scheiber (Ph.D. Student) – Graduate Research Grant Award
University of Iowa Graduate and Professional Student Government
- 2019 Megan Schumer (Undergraduate) – Summer Research Fellow
University of Iowa Center for Research by Undergraduates

SCHOLARSHIP

(Mentee Roles: *Graduate Student, **Post-Bac, ***Other Mentees)

PEER-REVIEWED JOURNAL ARTICLES

Asaridou, S. S., **Demir-Lira, Ö. E.**, Goldin-Meadow, S., & Small, S. (accepted). Language development and brain reorganization in a child born without the left hemisphere. *Cortex*.

Demir-Lira, Ö. E., Aktan-Erciyes, A. & Göksun, T. (2019). New insights from children with early focal brain injury: Lessons to be learned from examining STEM-related skills. *Developmental Psychobiology*, 61(3), 477-490.

Demir-Lira, Ö. E., Suárez-Pellicioni, M. & Booth, J. R. (2019). Attitudes towards math differentially related to neural basis of multiplication depending on math skill. *Learning Disabilities Quarterly*, 0731948719846608

Demir-Lira, Ö. E., Applebaum, L., & Levine, S. (2019). Parents' early book-reading to children: A new look at the relation to later language and literacy outcomes. *Developmental Science*, 22(3), e12764.

Younger, J. W., Lee, K. **Demir-Lira, Ö. E.**, & Booth, J. R. (2019). The neural correlates of phonological awareness depend on socioeconomic status. *Developmental Science*, 22, e12807.

- Demir-Lira, Ö. E.**, Asaridou, S. S., Raja Beharelle, A., Holt, A. E., Goldin-Meadow, S., & Small, S. L. (2018). Functional neuroanatomy of gesture–speech integration in children varies with individual differences in gesture processing. *Developmental Science*, *21*(5), e12648.
- §Glenn, D., §**Demir-Lira, Ö. E.**, Congdon, E. Gibson, D., Levine, S. C. (2018). Resilience in mathematics after early brain injury: The role of parental input and brain plasticity. *Developmental Cognitive Neuroscience*, *30*, 304-313. § shared first authorship
- Uccelli, P., **Demir-Lira, Ö. E.**, Rowe M. L., Levine, S. C., & Goldin-Meadow, S. (2018). Children’s early decontextualized talk predicts academic language proficiency in mid-adolescence. *Child Development*, *90*(5), 1650-1663.
- Parrill, F., Lavanty, B., Bennett, A., Klco, A., & **Demir-Lira, Ö. E.** (2018). The relationship between character viewpoint gesture and narrative structure in children. *Language and Cognition*, *10*(3), 408-434.
- Asaridou, S. S., **Demir-Lira, Ö. E.**, Goldin-Meadow, S., & Small, S. (2017). The pace of vocabulary growth during preschool predicts cortical structure at school age. *Neuropsychologia*, *98*, 13-23.
- Demir-Lira, Ö. E.**, & Levine, S.C. (2016). Reading development in typically-developing children and children with early brain injury: Differential patterns of school year and summer growth. *Journal of Cognition and Development*, *4*(17), 596-619.
- Demir-Lira, Ö. E.**, Prado, J. & Booth, J. R. (2016). Neural predictors of math gains vary depending on parental socioeconomic status (SES). *Frontiers in Psychology, Cognition*, *7*, 892.
- Demir-Lira, Ö. E.**, Voss, J. T., O’Neil, J., Ewing-Cobbs, M., Wakschlag, L. & Booth, J. R. (2016). Early-life stress exposure associated with altered prefrontal resting-state fMRI connectivity in young children. *Developmental Cognitive Neuroscience*, *19*, 107-114.
- Gullick, M., **Demir-Lira, Ö. E.**, & Booth, J. R. (2016). Socio-economic status predicts divergent reading skill-fractional anisotropy relationships in visuospatial tracts. *Developmental Science*, *19*(4), 673-685.
- Demir, Ö. E.**, Prado, J. & Booth, J. R. (2015). The effect of socioeconomic status on the neural basis of arithmetic: Differential relations to verbal and spatial representations. *Developmental Science*, *18*(5), 799-814.
- Demir, Ö. E.**, Rowe, M., Heller, G., Goldin-Meadow, S., & Levine, S. C. (2015). Vocabulary, syntax and narrative development in children with and without early unilateral brain injury: Early parental talk about the there-and-then matters. *Developmental Psychology*, *51*(2), 161-175.
- Demir, Ö. E.**, Levine, S. C., & Goldin-Meadow, S. (2015). A tale of two hands: Children’s early gesture use in narrative production predicts later narrative structure in speech. *Journal of Child Language*, *42*(03), 662-681.
- Treiman, R., Schmidt, J., Decker, K., Robins, S., Levine, S. C., & **Demir, Ö. E.** (2015). Parent letter talk and the home literacy environment. *Child Development*, *86*(5), 1406-1418.
- Demir, Ö. E.**, Prado, J. & Booth, J. R. (2014). The differential role of spatial and verbal working memory in the neural basis of arithmetic. *Developmental Neuropsychology*, *39*(6), 440-458.
- Demir, Ö. E.**, & Küntay, A. (2014). Cognitive and neural mechanisms underlying socioeconomic gradients in language development: New answers to old questions. *Child Development Perspectives*, *8*(2), 113-118.

Demir, Ö. E., Fisher, J. A., Levine, S. C., & Goldin-Meadow, S. (2014). Narrative structure in typically developing children and children with early unilateral brain injury: Seeing gesture matters. *Developmental Psychology*, 50(3), 815-828.

Colletta, J.M., Kunene, R., Capirci, O., Cristilli, C., **Demir, Ö. E.**, Guidetti, M., & Levine, S. C. (2014). The effect of language, culture, and age on co-speech gesture production: An investigation of American, French, and Italian children's narratives. *Journal of Child Language*, 42(1), 122-145.

Demir, Ö. E., So, W. C., Goldin-Meadow, S., & Özyürek, A. (2012). Turkish- and English-speaking children display sensitivity to perceptual context in the referring expressions they produce in speech and gesture. *Journal of Language and Cognitive Processes*, 27(6), 844-867.

Vaish, A., **Demir, Ö. E.**, & Baldwin, D. (2011). Twelve- and 18-month old infants recognize when they need referential information. *Social Development*, 20(3), 431-449.

Capirci, O., Colletta, J.M., Cristilli, C., **Demir, Ö. E.**, Guidetti, M., & Levine, S. C. (2010). L'incidence de la culture et de la langue dans les récits parlés et les gestes d'enfants français, italiens et américains âgés de 6 et 10 ans. [The effect of culture and language on the spoken narratives and gestures of 6 to 10 years-old French, Italian and American children]. *Lidil*, 42, 139-158.

Demir, Ö. E., Levine, S. C., & Goldin-Meadow, S. (2010). Narrative skill in children with early unilateral brain injury: A possible limit to functional plasticity. *Developmental Science*, 13(4), 636-647.
- Media coverage: Science daily, Medical news today, eScienceNews

So, W. C., **Demir, Ö. E.**, & Goldin-Meadow, S. (2010). When speech is ambiguous gesture steps in: Sensitivity to discourse-pragmatic principles in early childhood. *Applied Psycholinguistics*, 31, 209-224.
- Top 10 most read articles in 2010.

BOOK CHAPTERS, CONFERENCE PROCEEDINGS, TECHNICAL REPORTS

Demir-Lira, Ö. E. (2020). Academic resilience: Relations between early parental input and the behavioral and neurocognitive basis of children's academic performance. In S.J. Lipina, M.S. Segretin (Eds.), *Exploraciones Neurocientíficas de la Pobreza*.

Demir-Lira, Ö. E., Asaridou, S. S., Levine, S. C., Goldin-Meadow, S., & Small, S. L. (2018). Parents' decontextualized talk during early childhood predicts the neural basis of narrative processing in later childhood. In Kay, J. and Luckin, R. (Eds.) *Rethinking Learning in the Digital Age: Making the Learning Sciences Count*, 13th International Conference of the Learning Sciences (ICLS) 2018, Volume 3. London, UK: International Society of the Learning Sciences.

Demir, Ö. E. (2016). Okul öncesi ve okul çağı donemlerinde okuma-yazma ve matematik gelişimi [Development of reading and mathematical skills in preschool and early school years]. In Ç. Aydın, T. Göksun, A. Küntay, and D. Tahiroğlu (Eds.), *Akılın Çocuk Hali*. Istanbul, Turkey: Koc University Press.

Ates-Sen, B., **Demir, Ö. E.**, & Küntay, A. (2016). Children's referential choices in Turkish: Experimentally elicited and conversationally occasioned determinants. In L. Serratrice and S. Allen (Eds.), *Trends in Language Acquisition Series – The Acquisition of Reference* (pp. 105-122). Amsterdam, Netherlands: John Benjamins Publishing Company.

- Ng, M. M., **Demir, Ö. E.**, & So, W. C. (2015). The role of gesture in referential communication: Taking a developmental perspective. In L. Serratrice and S. Allen (Eds.), *Trends in Language Acquisition Series – The Acquisition of Reference* (pp. 105-122). Amsterdam, Netherlands: John Benjamins Publishing Company.
- Demir, Ö. E.**, & Goldin-Meadow, S. (2015). The functional role of gesture in language learning and processing. In G. Hickok and S. L. Small (Eds.), *the Neurobiology of Language* (pp. 275-283). London, UK: Academic Press.
- Levine, S. C., Raja Beharelle, A., **Demir, Ö. E.**, & Small, S. (2015). Perinatal focal brain injury: Scope and limits of plasticity for language functions. In G. Hickok and S. L. Small (Eds.), *the Neurobiology of Language* (pp. 969-979). London, UK: Academic Press.
- Demir, Ö. E.**, & Küntay, A. (2014). Narrative development. In P. Brooks, V. Kempe, and G. J. Geoffrey (Eds.), *Encyclopedia of Language Development*. (Vol. 13, pp. 394-398). Thousand Oaks, CA: SAGE.
- Demir, Ö. E.**, & Küntay, A. (2013). Dil ve iletişim becerilerinin gelişiminde ebeveynlik etkileri [Effects of parental input on children's language development]. In M. Sayil and B. Yagmurlu (Eds.), *Ana Babalık: Kuram ve Araştırma [Parenting: Theory and Research]* (pp. 295-327). Istanbul, Turkey: Koç University Press.
- Demir, Ö. E.**, Levine, S. C., & Goldin-Meadow, S. (2012). *Getting on track early for school success: The STEP assessment system to support effective instruction (PreK-3rd). Creating an assessment of literacy skills for three and four year olds*. Foundation for Child Development. Retrieved from <http://fcd-us.org/sites/default/files/Lit%20Tech%20Report.pdf>
- ŞCartmill, E.*, **Demir, Ö. E.*** & Goldin-Meadow, S., (2012). Studying gesture. In E. Hoff (Ed.), *Research Methods in Child Language: A Practical Guide* (pp. 209-225). West Sussex, UK: Wiley-Blackwell. § shared first authorship
- Demir, Ö. E.**, Applebaum, L., Levine, S. C., Petty, K., & Goldin-Meadow, S. (2011). The story behind parent-child book-reading interactions: Relations to later language and reading outcomes. In N. Danis, K. Mesh, and H. Sung (Eds.), *Proceedings of the 35th Boston University Conference on Language Development* (Vol. 1, pp. 157-169). Somerville, MA: Cascadilla Press.
- Demir, Ö. E.**, & So, W. C. (2007). What's hidden in the hands? How children use gesture to convey arguments in a motion event. In A. Brugos, M.R. Clark-Cotton, and S. Ha (Eds.), *Proceedings of the 31st Boston University Conference on Language Development* (pp. 172-183). Somerville, MA: Cascadilla Press.
- Demir, Ö. E.**, Küntay, A., & Özyürek, A. (2005). Görme engelli Türk çocuklarının ve annelerinin işaret zamiri kullanımı: Dokunsal ortak dikkat [Demonstrative pronoun use by Turkish blind children and their mothers: Tactile joint attention]. In S. Topbaş (Ed.), *2. Ulusal Dil ve Konuşma Bozuklukları Kongresi Bildiriler Kitabı [Proceedings of the 2nd National Language and Speech Disorders Congress]* (pp. 95-104). Ankara, Turkey: Kök Yayıncılık.

MANUSCRIPTS IN SUBMISSION AND IN PREPARATION

Silvey, C., **Demir-Lira, Ö. E.**, Goldin-Meadow, S., & Raudenbush, S. (under revision). Effects of time-varying parent input on child language outcomes differ for vocabulary and syntax.

Asaridou, S. S., **Demir-Lira, Ö. E.**, Uddén, J., Goldin-Meadow, S., & Small, S. (under review). Pragmatic language processing in the adolescent brain.

Demir-Lira, Ö. E., Kanero, J., Oranç, C., Koşukulu, S., Franko, I., Kuntay, A. & Göksun, T. (under review). Using gestures in L2 vocabulary teaching: Human or robot tutors?

PREREGISTERED REPORTS

Asaridou, S. S., **Demir-Lira, Ö. E.**, Uddén, J., Goldin-Meadow, S., & Small, S. (2019). Pragmatic language processing in the adolescent brain. *bioRxiv*, 871343; doi: <https://doi.org/10.1101/871343>

Suárez-Pellicioni, M., **Demir-Lira, Ö. E.**, Lytle, M. & Booth, J. R. (2019, July 3). Neurocognitive mechanisms of the role of math attitudes in predicting gains in subtraction skill in children. Retrieved from osf.io/d5rc9

ORGANIZED SYMPOSIA

Demir-Lira, Ö. E., (July, 2020) “Beyond quantity-quality: Specifying aspects of high-quality parental language input that predict optimal child language outcomes” at the 15th Congress of the International Association for the Study of Child Language, Philadelphia, PA.

Demir, Ö. E., (April, 2014) “New approaches to understanding SES differences in neurocognitive development across the lifespan” at the Biennial Meeting of the Society for Research in Child Development, Philadelphia, PA.

So, W. C. & **Demir, Ö. E.**, (April, 2007) “The role and universality of discourse-pragmatic principles in referential expression in speech and gesture” at the Biennial Meeting of the Society for Research in Child Development, Denver, CO.

CONFERENCE PRESENTATIONS

Nelson, P., *Scheiber, F., *Momany, A., Ryckman, K. & **Demir-Lira, Ö. E.** (July, 2020). *The role of literacy activities in preterm and full-term children’s vocabulary acquisition*. Paper to be presented at the 2020 International Association for the Study of Child Language Conference.

Doğan, I., Kızıldere, E. Kobaş, M., Aktan-Erciyes, A., **Demir-Lira, Ö. E.** & Göksun, T. (July, 2020). *Parental verbal input in different gestational weeks and atypical development*. Paper to be presented at the 2020 International Association for the Study of Child Language Conference.

Demir-Lira, Ö. E., Schatt, D., Levine, S.C., & Goldin-Meadow, S. (May, 2019). *Predictors of parent decontextualized talk during book reading: Role of book genre and parental resources*” Paper presented as part of symposium organized by Frausel, R. and Goldin-Meadow, S.G., “Academic resilience: Relations between early parental input and the behavioral and neurocognitive basis of children’s academic performance” at 31st APA Annual Convention, Washington, DC.

Demir-Lira, Ö. E. (March, 2019). Discussant at the Conversation Roundtable “The use of Preregistration Tools in Ongoing, Longitudinal Cohorts” presented at the Biennial Meeting of the Society for Research in Child Development, Baltimore, MD.

Kanero, J., **Demir-Lira, Ö. E.**, Oranç, O., Koşukulu, S., Franko, I., Adıgüzel, Z., Uluşahin, O., Göksun, T., & Küntay, A. C. (November, 2018). *How do robot gestures help second language learning?* Paper presented as part of a symposium organized by van den Berghe, R. “Social Robots for Language Learning” at the EARLI Conference on SIG 5 Learning and Development in Early Childhood, Berlin, Germany.

Demir, Ö. E., Asaridou, S. S., Goldin-Meadow, S., & Small, S. (February, 2016). *Early parental language input quality, but not quantity, predicts neural basis of narrative processing at child age 7-9*. Paper presented at the 6th Beckman Institute Annual Postdoctoral Research Symposium, University of Illinois-Urbana Champaign, Champaign, IL.

- Gullick, M., **Demir, Ö. E.**, & Booth, J. R. (2014, April). *Socioeconomic status may drive divergent reading skill-coherence relationships in right visuospatial tracts*. Paper presented as part of a symposium organized by Demir, Ö. E., “New approaches to understanding SES differences in neurocognitive development across the lifespan” at the Biennial Meeting of the Society for Research in Child Development, Philadelphia, PA.
- Demir, Ö. E.**, Rowe, M., Heller, G., Goldin-Meadow, S., & Levine, S. C. (2014, July). *Vocabulary, syntax and narrative development in children with and without early unilateral brain injury: Early parental talk about the there-and-then matters*. Paper presented in 13th International Congress for the Study of Child Language, Amsterdam, Netherlands.
- Treiman, R., Schmidt, J., Decker, K., Robins, S., Levine, S. C., & **Demir, Ö. E.** (2014, July). *Parent letter talk and the home literacy environment*. Paper presented at the Society for the Scientific Study of Reading, Santa Fe, NM.
- Demir, Ö. E.**, Fisher, J. A., Goldin-Meadow, S., & Levine, S. C. (2013, November). *Narrative processing in typically developing children and children with early pre- or perinatal focal brain injury*. Paper presented at the annual American Speech-Language-Hearing Association Convention, Chicago, IL.
- Cartmill, E., **Demir, Ö. E.**, Green, M., Levine, S. C., & Goldin-Meadow, S. (2013, April). *Parent use of gesture to children with early brain injury*. Paper presented at the Biennial Meeting of the Society for Research in Child Development, Seattle, WA.
- Holt, A. E., Riley, J. D., **Demir, Ö. E.**, Goldin-Meadow, S., & Small, S. (2012, November). *Early maternal use of decontextualized language predicts individual differences in children’s white matter at age 7-9*. Paper presented at the Neurobiology of Language Conference, San Sebastian, Spain.
- Cartmill, E., **Demir, Ö. E.**, Levine, S. C., & Goldin-Meadow, S. (2012, July). *Using the hand to ground the mind: Parents’ use of gesture during decontextualized speech to typically-developing children and children with early brain injury*. Paper presented at the 5th Conference of the International Society for Gesture Studies, Lundt, Sweden.
- Demir, Ö. E.**, Ates, A. B., & Küntay, A. (2011, July). *When words fall short: Non-speech communicative devices of Turkish toddlers and their caregivers*. Invited symposium presented at the International Association for Cross-Cultural Psychology Regional Conference, Istanbul, Turkey.
- Demir, Ö. E.**, Applebaum, L., Levine, S. C., Petty, K., & Goldin-Meadow, S. (2010, November). *The story behind parent-child book-reading interactions: Relations to later language and reading outcomes*. Paper presented at the Boston University Conference on Language Development 35, Boston, MA.
- Demir, Ö. E.**, Goldin-Meadow, S., & Levine, S. C. (2009, July). *A tale of two hands: Development of narrative structure in preschoolers’ speech and gesture*. Paper presented at the Multimod 2009 International Conference: Multimodality of communication in children: Gestures, emotions, language and cognition, Toulouse, France.
- Demir, Ö. E.**, So, W. C., Goldin-Meadow, S., & Özyürek, A. (2009, April). *The influence of shared perceptual context on English- and Turkish-speaking children’s referring expressions: Taking what listeners see into account*. Paper presented as part of a symposium organized by So, W. C. & Demir, Ö. E., “The role and universality of discourse-pragmatic principles in referential expression in speech and gesture” at the Biennial Meeting of the Society for Research in Child Development, Denver, CO.
- So, W. C., **Demir, Ö. E.**, & Goldin-Meadow, S. (2009, April). *When speech is ambiguous gesture steps in: Sensitivity to discourse-pragmatic principles in early childhood*. Paper presented as part of a symposium organized by So, W. C. & Demir, Ö. E., “The role and universality of discourse-pragmatic principles in referential expression in speech and gesture” at the Biennial Meeting of the Society for Research in Child Development, Denver, CO.

Demir, Ö. E., Goldin-Meadow, S., & Levine, S. C. (2008, October). *A tale of two hands: Narrative structure in preschoolers' speech and gesture*. Paper presented at the Boston University Conference on Language Development 33, Boston, MA.

So, W. C., **Demir, Ö. E.**, & Goldin-Meadow, S. (2008, August). *Speaking and gesturing under discourse constraints in early childhood*. Paper presented in XI International Congress for the Study of Child Language, Edinburgh, UK.

Angeleri R., **Demir Ö. E.**, So W. C., & Goldin-Meadow S. (2007, September). *L'argomento verbale nelle parole e nei gesti dei bambini: Uno studio cross-linguistico*. Paper presented at Congresso Nazionale AIP, Como, Italy.

So, W. C., **Demir, Ö. E.**, Goldin-Meadow, S., & Özyürek, A. (2007, April). *Gone from the charts, but not from our hearts*. Paper presented as part of a symposium organized by So, W. C. & Demir, Ö. E., "Cognitive and pragmatic constraints in early child argument representation in speech and gesture" at the Biennial Meeting of the Society for Research in Child Development, Boston, MA.

Demir, Ö. E., So, W. C., & Goldin-Meadow, S. (2006, November). *What's hidden in the hands? How children use gesture to convey arguments in a motion event*. Paper presented at the Boston University Conference on Language Development 31, Boston, MA.

Demir, Ö. E. (2003, July). *Annelerin gören ve görme engelli çocuklarına direktif kullanımı [Mothers' directive input to blind and sighted children]*. Paper presented at the Eighth Annual Congress of Psychology Students, Ankara, Turkey.

INVITED TALKS

Demir-Lira, Ö. E. (2020, June). *The role of parental language input in preterm children's cognitive development: A case of heightened plasticity*. Universitat Pompeu Fabra, Barcelona, Spain.

Demir-Lira, Ö. E. (2020, April). *Academic development in children with early brain injury: The role of parent-child interactions*. Northwestern University Pediatric Hemiplegia Family Conference. Chicago, IL.

Demir- Lira, Ö. E. (2017, December). *Academic resilience and the role of parental factors*. Social Sciences and Humanities Seminar. Koç University, Istanbul, Turkey.

Demir- Lira, Ö. E. (2017, November). *Academic resilience: Implications for Learning Sciences*. Boğaziçi University Graduate Program in Learning Sciences. Boğaziçi University, Istanbul, Turkey.

Demir- Lira, Ö. E. (2017, November). *Language development in children with early brain injury: The role of biological and environmental factors*. Inaugural talk of the Doctoral Program on Translation and Language Sciences and Master Talk in Linguistics. Universitat Pompeu Fabra, Barcelona, Spain.

Demir- Lira, Ö. E. (2017, September). *Academic resilience: Relations between early parental input and the behavioral and neurocognitive basis of children's academic performance*. Twelfth International Summer School on Mind, Brain and Education: Neuroscience of Poverty. Erice, Sicily, Italy.

Demir-Lira, Ö. E. (2016, April). *A brief introduction to hierarchical linear modeling*. Purdue International Biology Education Research Group Workshop. Purdue University, Lafayette, IN.

Demir, Ö. E. (2016, March). *Unpacking individual differences in academic development: Relations between early input, brain, and behavior*. Talk presented at the Developmental Brown Bag, University of Illinois at Urbana-Champaign, Chicago, IL.

Demir, Ö. E. (2015, November). *Unpacking socioeconomic status differences in academic development: Relations between early input, brain, and behavior.* Talk presented at the Department of Psychology, Loyola University Chicago, Chicago, IL.

Demir, Ö. E. & Levine, S. C. (2015, October). *Language and literacy learning.* Talk presented at the Second Meeting of the University of Chicago Science of Learning Network, Chicago, IL.

Levine, S. C. & **Demir, Ö. E.** (2015, April). *Language development in children with early brain injury.* Talk presented at the Pediatric Hemiplegia Symposium, Northwestern University and Rehabilitation Institute of Chicago, Chicago, IL.

Demir, Ö. E. (2014, November). *Parental socioeconomic differences in academic development: Effects of early input on brain and behavior.* Talk presented at the Department of Psychological and Brain Sciences, Indiana University Bloomington, Bloomington, IN.

Demir, Ö. E. (2012, April). *Development of reading skills: The role of individual- and environmental-level factors.* Talk presented at the Workshop on Education & Committee on Human Development Workshop, University of Chicago, Chicago, IL.

Rowe, M. & **Demir, Ö. E.** (2009, November). *Parental talk to children: The importance of quality versus quantity in predicting child vocabulary and narrative skill.* Talk presented at the Workshop on Education, Committee on Education, University of Chicago, Chicago, IL.

Levine, S. C., Sauer, E., & **Demir, Ö. E.** (2009, September). *Language development in children with pre- or perinatal unilateral lesions.* Instructional course presented at the 63rd Annual Meeting of The American Academy of Cerebral Palsy and Developmental Medicine, Scottsdale, AZ.

Demir, Ö. E. (2009, June). *Narrative structure in preschoolers' speech and gesture.* Talk presented at the Language and Communicative Development Group Series Workshop, Koç University, Turkey.

POSTER PRESENTATIONS

***Momany, A., *Scheiber, F., **Nelson, P., Ryckman, K. & **Demir-Lira, Ö. E.** (May, 2020). *Preterm birth and emotion dysregulation in early childhood.* Poster to be presented at the 32nd APS Annual Convention, Chicago, IL.

Nelson, P., *Scheiber, F., *Momany, A., Ryckman, K. & **Demir-Lira, Ö. E.*** (May, 2020). *Sources of plasticity in preterm children's vocabulary acquisition: interacting roles of gestational age and parent-child interactions.* Poster to be presented at the 32nd APS Annual Convention, Chicago, IL.

*Scheiber, F., ***Momany, A., **Nelson, P., Ryckman, K. & **Demir-Lira, Ö. E.*** (May, 2020) *The relationship between parental mental health, socioeconomic status, and children's cognitive outcomes.* Poster to be presented at the 32nd APS Annual Convention, Chicago, IL.

*Scheiber, F., ***Momany, A., **Nelson, P., Ryckman, K. & **Demir-Lira, Ö. E.** (July, 2020). *The role of parental mental health in children's language outcomes.* Poster submitted to be presented at the 2020 International Association for the Study of Child Language Conference.

Kızıldere, E. Kobaş, M., Doğan, I., Aktan-Erciyes, A., **Demir-Lira, Ö. E.** & Göksun, T. (July, 2020). *Event representation, parental spatial input, and relational language comprehension in full-term and preterm infants.* Poster submitted to be presented at the 2020 International Association for the Study of Child Language Conference.

Kızıldere, E. Kobaş, M., Doğan, I., Aktan-Erciyes, A., **Demir-Lira, Ö. E.** & Göksun, T. (July, 2020).

Parental verbal input in different gestational weeks and atypical development. Poster submitted to be presented at the 2020 International Association for the Study of Child Language Conference.

Vilà-Giménez, I. Dowling, N. **Demir-Lira, Ö. E.**, Prieto, P. & Goldin-Meadow, S. (July, 2020). *Early children's use of non-referential beat gestures predicts narrative abilities at 5 years of age.* Poster submitted to be presented at the 2020 International Association for the Study of Child Language Conference.

Dowling, N., Vilà-Giménez, I., **Demir-Lira, Ö. E.**, Prieto, P. & Goldin-Meadow, S. (July, 2020). *Non-referential flip gestures follow distinct developmental trajectories of functions.* Poster submitted to be presented at the 2020 International Association for the Study of Child Language Conference.

Asaridou, S. S. **Demir-Lira, Ö. E.**, Goldin-Meadow, S., Levine, S. C. & Small, S. (March, 2019). *Language development and brain reorganization in a child born without the left hemisphere.* Poster presented at the Biennial Meeting of the Society for Research in Child Development, Baltimore, MD.

Demir-Lira, Ö. E., Kanero, J., Oranç, O., Koşukulu, S., Franko, I., Adıgüzel, Z., Uluşahin, O., Göksun, T., & Küntay, A. C. (November, 2018). *Using gestures in L2 vocabulary teaching: Human or robot tutors?* Poster presented at the 43rd Annual Boston University Conference on Language Development (BUCLD), Boston, MA.

Demir-Lira, Ö. E., Oranç, C., Kanero, J., Koşukulu, S., Franko, I., Adıgüzel, Z., Göksun, T. & Küntay, A. C. (April, 2018). *Sosyal robotların jest kullanımının çocuklarda ikinci dil öğrenimine etkileri.* Poster presented at the Turkish Robotics Conference 2018. Istanbul, Turkey.

Asaridou, S. S., Siu, **Demir-Lira, Ö. E.**, Goldin-Meadow, S. & Small, S. (June, 2017). *Neuroanatomical correlates of reading in typically developing children.* Poster presented at the annual meeting of the Organization for Human Brain Mapping. Vancouver, Canada

Asaridou, S. S. **Demir-Lira, Ö. E.**, Siu, Levine, S. C. & Small, S. (November, 2017). *Brain network reorganization for language after complete prenatal hemispheric infarction.* Poster presented at the Annual meeting of the Society for the Neurobiology of Language Conference. Baltimore, MD.

Glenn, D., Congdon, E. Gibson, D., **Demir-Lira, Ö. E.**, Levine, S. C. (May, 2016). *Possible limits to brain plasticity in numerical cognition.* Poster presented at the Annual Meeting of the Midwestern Psychological Association. Chicago, IL.

Asaridou, S. S., **Demir-Lira, Ö. E.**, Tune, S., Goldin-Meadow, S., & Small, S. (2015, June). *Inferences during auditory sentence comprehension in the developing brain.* Poster presented at the 2016 CNS Annual Meeting. New York, NY.

Demir-Lira, Ö. E., Asaridou, S. S., Goldin-Meadow, S., & Small, S. (April, 2016). *Early parental language input quality, but not quantity, predicts cortical thickness at child age 7-9.* Poster presented at the 2016 CNS Annual Meeting. New York, NY.

Frausel, R. R., Silvey, C., **Demir, Ö. E.**, Freeman, C., Richland, L. Levine, S.C., Goldin-Meadow, S. *Modality and discourse mode affordance of higher-order thinking.* (October, 2015). Poster presented at the Ninth Biennial Meeting of the Cognitive Development Society. Columbus, OH.

Demir, Ö. E., Asaridou, S.S., Goldin-Meadow, S., & Small, S. (October, 2015). *Pace of vocabulary development in preschool years is associated with individual differences in brain structure in school years.* Poster presented at the Seventh Annual Meeting of the Society for the Neurobiology of Language, Chicago, IL.

Asaridou, S. S., **Demir, Ö. E.**, Goldin-Meadow, S., & Small, S. (2015, June). *Early vocabulary growth and white matter*

microstructure: dorsal or ventral? Poster to be presented at the Seventh Annual Meeting of the Society for the Neurobiology of Language, Chicago, IL.

Asaridou, S. S., **Demir, Ö. E.**, Goldin-Meadow, S., & Small, S. (2015, June). *Early vocabulary growth rate is associated with individual differences in children's white matter.* Poster presented at the Organization of Human Brain Mapping Annual Meeting, Honolulu, HI.

Demir, Ö. E., Prado, J. & Booth, J. R. (September, 2014). *The neural systems predicting long-term outcomes in arithmetic development vary as a function of parental socioeconomic status.* Poster presented at the Flux International Developmental Cognitive Neuroscience Conference, Los Angeles, CA.

Demir, Ö. E., Prado, J., & Booth, J. R. (2013, July). *The differential role of spatial and verbal working memory in the neural basis of arithmetic.* Poster presented at the Maryland Neuroimaging Center Summer Institute, College Park, MD.

Demir, Ö. E., Carlson, M., Levine, S. C., & Goldin-Meadow, S. (2013, April). *Summer setback: The impact of time off from school on reading in children with brain injury.* Poster presented at the Biennial Meeting of the Society for Research in Child Development, Seattle, WA.

Carlson, M., **Demir, Ö. E.**, Goldin-Meadow, S., & Levine, S. C. (2013, April). *Using the path of early MLU growth to predict later syntactic development.* Poster presented at the Biennial Meeting of the Society for Research in Child Development, Seattle, WA.

Demir, Ö. E., Applebaum, L., Levine, S. C., Petty, K., & Goldin-Meadow, S. (2011, July). *Early parent-child book-reading and its relations to later language and reading outcomes.* Poster presented at the Eighteenth Annual Conference of the Society for the Scientific Study of Reading, St. Pete Beach, FL.

Raja Beharelle, A., **Demir, Ö. E.**, Mok, E., McIntosh, A., & Small, S. (2011, June). *Distributed neural activity patterns related to phonological reading skill in young readers.* Poster presented at the 17th Annual Meeting for the Organization of Human Brain Mapping, Quebec, Canada.

Demir, Ö. E., Applebaum, L., Levine, S. C., & Goldin-Meadow, S. (2011, April). *Early parent-child book-reading: Aspects that predict later reading outcomes.* Poster presented at the Biennial Meeting of the Society for Research in Child Development, Montreal, Canada.

Demir, Ö. E., Applebaum, L., Levine, S. C., & Goldin-Meadow, S. (2011, April). *Relations between academic language use by preschool children and later reading comprehension.* Poster presented at the Biennial Meeting of the Society for Research in Child Development, Montreal, Canada.

Ates, A. B., **Demir, Ö. E.**, & Küntay, A. (2011, April). *Effects of discourse-pragmatic factors on verbal and gestural reference of Turkish toddlers and primary caregivers.* Poster presented at the Biennial Meeting of the Society for Research in Child Development, Montreal, Canada.

Mok, E. H., Dick, A. S., Raja, A., Zinchenko, E., **Demir, Ö. E.**, & Small, S. (2010, November). *Neural processing of co-speech iconic gestures.* Poster presented at the 40th annual meeting of Society for Neuroscience, San Diego, CA.

Demir, Ö. E., Rowe, M., Heller, G., Levine, S. C., & Goldin-Meadow, S. (2009, October). *Decontextualized language use in the early home environment of children with early unilateral brain injury: Relations to vocabulary and narrative development.* Poster presented at the 6th Biennial Meeting of the Cognitive Development Society, San Antonio, TX.

Vaish, A., **Demir, Ö. E.**, & Baldwin, D. (2009, April). *Twelve- and 18-month-olds recognize when they need referential information*. Poster presented at the Biennial Meeting of the Society for Research in Child Development, Denver, CO.

Demir, Ö. E., So. W. C., Goldin-Meadow, S., & Özyürek, A. (2008, August). *Preschoolers' use of referring expressions in speech and in gesture: Sensitivity to extralinguistic context*. Poster presented in XI International Congress for the Study Of Child Language, Edinburgh, UK.

Demir, Ö. E., Song, S., Levine, S. C., & Goldin-Meadow, S. (2008, May). *Narrative ability in children with pre- and perinatal brain lesion*. Poster presented at the Midwestern Psychological Association Annual Meeting, Chicago, IL.

Sauer, E., & **Demir, Ö. E.** (2007, November). *Gesture ability in children with perinatal lesions (PL): Relation to language and motor ability*. Poster presented at the Cognitive Development Society V Biennial Meeting, Santa Fe, NM.

Vaish, A., & **Demir, Ö. E.** (2007, August). *Eighteen-month-old infants recognize when they need information*. Poster presented at the 13th European Conference in Developmental Psychology, Jena, Germany.

Demir, Ö. E., Levine, S. C., & Goldin-Meadow, S. (2006, June). *Development of verb and verb morphology use in children with early unilateral brain injury*. Poster presented at the Symposium on Research in Child Language Disorders, Madison, WI.

Demir, Ö. E., Küntay, A., & Özyürek, A. (2004, September). *Görme engelli Türk çocuklarının ve annelerinin işaret zamiri kullanımı: Dokunsal ortak dikkat [Demonstrative pronoun use by Turkish blind children and their mothers: Tactile joint attention]*. Poster presented at the National Psychology Congress, Istanbul, Turkey.

Demir, Ö. E., Küntay, A., & Özyürek, A. (2004, April). *Görme engelli Türk çocuklarının ve annelerinin işaret zamiri kullanımı: Dokunsal ortak dikkat [Demonstrative pronoun use by Turkish blind children and their mothers: Tactile joint attention]*. Poster presented at the Second National Language and Communicative Disorders Congress, Eskişehir, Turkey.

Demir, Ö. E. (2003, July). *Mothers' directive input to their blind children*. Poster presented at the Eighth European Congress of Psychology, Vienna, Austria.

TEACHING EXPERIENCE

University of Iowa

2020, Spring **Instructor**, The Brain Goes to School: An Introduction to Educational Neuroscience
Instructor, Developmental Cognitive Neuroscience
 2019, Fall **Instructor**, Research Methods and Data Analysis
 2019, Spring **Instructor**, The Brain Goes to School: An Introduction to Educational Neuroscience
 2018, Fall **Instructor**, Research Methods and Data Analysis
Guest Lecturer, Foundations of the Learning Sciences, Professor: Matthew Lira

University of Chicago

2010, Spring **Instructor**, Psychological Research Methods
 2008, Fall **John Dewey Prize Lecturer**, Introduction to Pragmatic Development
 2008, Winter **Guest Lecturer**, Introduction to Language Development, Professor: Susan Goldin Meadow
Teaching Assistant, Introduction to Language Development, Professor: Susan Goldin Meadow
 2008, Spring **Lecturer**, Mind, Core Curriculum
Teaching Assistant, Experimental Design, Professor: William Goldstein
 2007, Winter **Teaching Assistant**, Mind, Core Curriculum

- 2007, Spring **Guest Lecturer**, Introduction to Developmental Psychology, Professor: Susan C. Levine, Cybele Raver
Teaching Assistant, Introduction to Developmental Psychology, Professor: Susan C. Levine, Cybele Raver
- 2006, Fall **Teaching Assistant**, Mind, Core Curriculum
Teaching Assistant, Mind, Core Curriculum
Koç University
- 2017, Fall **Visiting Professor**, Cognitive Development
Guest Lecturer, Psychology of Science and Technology, Professor: Matthew Lira
University of Illinois at Chicago
- 2011, Fall **Guest Lecturer**, Oral Language: Its Development and Role in the Classroom, Professor: Perla Gamez
Loyola University Chicago
- 2017, Fall **Guest Lecturer**, Language Development, Professor: Perla Gamez
Northwestern University
- 2014, Fall **Guest Lecturer**, the Word Gap: Linking Early Language and Cognition Across Development and Across Socioeconomic Strata, Professor: Sandra Waxman
Pedagogy Workshops
- 2016, Fall Fundamentals of Teaching in Psychology, University of Chicago

ADVISING AND MENTORSHIP

Graduate

University of Iowa
Advising

Francesca Scheiber, 2019-present

Dissertation, Thesis and Research Advisory Committees

Sydney Houlton: Research Advisory Committee, 2020 – present
 Morgan di Napoli Parr: Comps Committee, 2020 – present
 Alyssa Sullivan: Research Advisory Committee, 2019 - present
 Ariel Kim: Research Advisory Committee, 2019 – present
 Mary Aldugom: Comps Committee, 2018-2019
 Megan Lorenz: Dissertation Committee, 2018-2019
 Todd Pruner: Dissertation Committee, 2018-2019

University of Chicago
Advising

Antonia Muzard (M.A. student): Co-advisor, 2016-2017
 Abigail Walker (M.A. student): Co-advisor, 2016-2017
 Monika Marko (M.A. student): Co-advisor, 2009-2010

External

Sumeyra Saatci (Koc University): Master's Thesis committee, 2018-2019
 Ayse Karaduman (Koc University): Master's Thesis committee, 2014-2015

Undergraduate/High School

University of Iowa
Advising

Megan Schumer: Honors Advisor, 2019-present

Dissertation, Thesis and Research Advisory Committees

Stella Son: Honors Reader, 2018-2019

University of Chicago

Advising

Undergraduate Honors:
 Jennifer Liu: Co-advisor, 2011-2012
 Katherine Petty: Co-advisor, 2009-2010

Illinois Math and Science Academy Student Inquiry and Research Program:
 Leisha Igoel: Co-advisor, 2016-2017
 Ethan Jacobs: Co-advisor, 2016-2017
 Gabriella T. Heller: Co-advisor, 2016-2017
 Sabrina Song: Co-advisor, 2016-2017

PROFESSIONAL DEVELOPMENT

2019	Completion of National Research Mentoring Network (NRMN)-sponsored, 8-hour evidence-based, research mentor training workshop, the Iowa Mentoring Academy at the University of Iowa. (Curriculum Reference: Pfund, C., House, S., Asquith, P., Spencer, K., Silet, K., & Sorkness, C. (2012). Mentor training for clinical and translational researchers. Entering Mentoring Series. New York, NY: WH Freeman and Co, 1-121).
2019	TILE (Spaces to Transform, Interact, Learn, Engage) Instruction Certificate
2019	ABCD Workshop on Brain Development and Health
2018	Boston University fNIRS Training Workshop, Boston
2017	Advanced Techniques in Neuroimaging, 21 st National Biomedical Engineering Meeting, Istanbul, Turkey
2015	Chicago Neuroimaging Workshop 2015: The Dynamic Social Brain, Chicago
2012	SPM8 for Basic and Clinical Investigators, Neurometrika, Chicago
2011	Training Course in fMRI, University of Michigan

SERVICE AND OUTREACH

2019	Member , Diversity and Inclusion Committee, Interdisciplinary Neuroscience Graduate Program, University of Iowa
2019	Discussant , Alfred P. Sloan Foundation Science on Screen, Iowa City Film Scene
2016	Reading Mentor , Open Books Reading Buddies Program
2015	Discussant , Language and Behavior Focus Group, Pediatric Hemiplegia Symposium, Northwestern University and Rehabilitation Institute of Chicago
2014	Reviewer , Society for Research in Child Development
2013-2014	Co-chair , Interdepartmental Neuroscience Program Postdoctoral Affairs Committee, Northwestern University
2013, 2014	Presenter , Brain Fair, Chicago Public Schools
2013, 2014	Science Fair Judge , Galileo Math and Science Academy
2007-2008	Chair , Psychology Graduate Students Travel and Research Funding Committee, University of Chicago
2004-2007	Member , Psychology Graduate Students Travel and Research Funding Committee, University of Chicago
2003-2004	Secretary , Student Senate, Koç University
2002-2003	Representative , Student Senate, Koç University
2002-2003	Representative , Turkish Psychological Association Student Chapter

PROFESSIONAL MEMBERSHIP

American Educational Research Association, Cognitive Development Society, Flux International Society for Developmental Cognitive Neuroscience, Midwestern Psychological Association, Society for Research in Child Development, Society for Scientific Study of Reading

EDITORIAL ACTIVITIES

Editorial Board: Frontiers in Education - Special Educational Needs

Ad Hoc Grant Reviewing: Austrian Science Fund (FWF)

Ad Hoc Reviewer: Brain and Language, Child Development, Cognitive Science, Cognition, Developmental Science, Early Childhood Research Quarterly, Gesture, Journal of Child Language, Journal of Cognitive Neuroscience, Journal of Experimental Child Psychology, Journal of Experimental Psychology, Language and Cognition, Language and Cognitive Processes, Language Learning and Development, Learning and Instruction, Neuropsychologia

REFERENCES

Available upon request