October, 2022

Brief Curriculum Vitae - Avishai Henik

Biographical information

Born: April 26, 1945; Tel-Aviv, Israel Work Address: Department of Psychology

Ben-Gurion University of the Negev

Beer-Sheva, Israel 84105

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Education

1968-1971 BA Ben-Gurion University of the Negev, Beer-Sheva, Psychology.

1971-1974 MA Hebrew University, Jerusalem, Psychology. 1974-1979 PhD Hebrew University, Jerusalem, Psychology.

1980-1982 Postdoctoral Fellow, Department of Psychology, University of Oregon,

Eugene, Oregon, and Cognitive Neuropsychology Laboratory, Neurological Sciences Center, Good Samaritan Hospital, Portland,

Oregon.

Employment history

| 1971-1973 | Researcher, Military Psychological Unit, Israel Defense Forces. |
|------------|-----------------------------------------------------------------------------------|
| 1973-1979 | Instructor, Department of Behavioral Sciences, Ben-Gurion University of the |
| | Negev (BGU), Beer-Sheva, Israel. |
| 1979-1980 | Lecturer, Department of Behavioral Sciences, BGU. |
| 1982-1984 | Lecturer, Department of Behavioral Sciences, BGU. |
| 1984 | Senior Lecturer, Department of Behavioral Sciences, BGU. |
| Summers | Visiting Scientist, Department of Psychology, University of Utah, Salt Lake City, |
| 1986, 1988 | Utah. |
| 1987-1989 | Chairman, Department of Behavioral Sciences, BGU. |
| 1989-1990 | Visiting Scientist, Department of Neurology, U.C. Davis, VA Medical Center, |
| | Martinez, California, U.S.A. |
| 1992 | Associate Professor, Department of Behavioral Sciences, BGU. |
| 1992-1994 | Associate-Dean, Faculty of Humanities and Social Sciences, BGU. |
| 1994-1995 | Visiting Scientist, Department of Neurology, U.C. Davis, VA Medical Center, |
| | Martinez, California, U.S.A. |
| 1996 | Professor, Department of Behavioral Sciences, BGU. |
| 1997-2000 | Chairman, Department of Behavioral Sciences, BGU. |
| 1999-2002 | Chairman, Zlotowski Center for Neuroscience, BGU. |
| 2001-2007 | Dean, Faculty of Humanities and Social Sciences, BGU. |
| 2007-2008 | Visiting Scientist, Department of Psychology, U.C. Berkeley, California, U.S.A. |
| 2014 | Distinguished Professor, Ben-Gurion University of the Negev |

Editorial board

2019-

2020-

| Editorial board | | |
|-----------------|-----------------------------------------------------------------------------------|--|
| 1994-2002 | Psychologia (Hebrew) | |
| 1997-2008 | Neuropsychology | |
| 2002-2011 | Associate editor: The Scientific World JOURNAL - Cognition and Higher Level | |
| | Brain Function Domains | |
| 2006- | Neuropsychologia | |
| 2007-2010 | The Open Behavioral Science Journal | |
| 2010 | Guest editor, Developmental Neuropsychology, special issue on numerical cognition | |
| 2015-2018 | Journal of Numerical Cognition, Associate Editor | |
| 2017- | Journal of Experimental Psychology: General, Consulting Editor | |

Psychonomic Bulletin and Review, Consulting Editor

Dean, School for Advanced Studies, Achva Academic College

Awards and research fellowships

1980-1981 Rothschild Foundation Postdoctoral Fellowship.

| 1980-1982 | Postdoctoral Fellowship, Neurological Sciences Center, Good Samaritan Hospital, Portland, Oregon. |
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| 1997 | Japan Society for the Promotion of Science (JSPS) Fellowship. |
| 2000-2014 | Zlotowski Chair in Cognitive Neuropsychology, BGÚ. |
| 2009 | BGU President's award for excellence in research. |
| 2010 | Fellow (elected) American Psychological Society (APS). |
| 2017 | Excellent Mentor Prize, awarded by the Israel Society for Neuroscience (ISFN) |
| | for exceptional mentoring in neuroscience. |
| 2018 | Meitner Humboldt Research Award, awarded by the Alexander von Humboldt |
| | Foundation. |
| 2020 | FENS-Kavli Network of Excellence Mentoring Prize 2020, awarded by the |
| | Federation of European Neuroscience Societies and the Kavli Foundation |
| | scholars network for demonstrated leadership in fostering the careers of |
| | neuroscientists |

Current grants

2022 ISF, Henik, A. Task conflict. Five years, \$63,000 per year.

Research students

1985-2020 53 MA students, 10 post-doc fellows, 44 PhD students Current 7 PhD students, 3 MA students, 1 post-doc fellow

Research interest

My research encompasses cognitive systems dealing with numerical processing, word processing, attention (spatial and selective), and synesthesia. In all of these areas I investigate the brain-behavior relationship both in normal and brain-injured populations. To this end, I use behavioral methods as well as various neuroimaging techniques like fMRI and ERP. Part of my research is devoted to understanding typical and atypical development.

Publications (2018-2022)

257. Aisenberg, D., Sapir, A., Close, A., Henik, A., & d'Avossa, G. (2018). Right anterior cerebellum BOLD responses reflect age related changes in Simon task sequential effects. *Neuropsychologia*, 109, 155-164. https://doi.org/10.1016/j.neuropsychologia.2017.12.012

- 258. Arend, I., Yuen, K., Sagi, N., & Henik, A. (2018). Neuroanatomical basis of number synaesthesias: A voxel-based morphometry study. *Cortex, 101,* 172-180. https://doi.org/10.1016/j.cortex.2018.01.020
- 259. Cohen, Z. Z., Aisenberg, D., & Henik, A. (2018). The effects of training on tactile enumeration. *Psychological Research*, 82, 468-487. 10.1007/s00426-016-0835-5
- 260. Cohen, Z. Z., Arend, I., Yuen, K., Naparstek, S., Gliksman, Y., Veksler, R., & Henik, A. (2018). Tactile enumeration: A case study of acalculia. *Brain and Cognition, 127*, 60-71. https://doi.org/10.1016/j.bandc.2018.10.001
- 261. Fias, W., & Henik, A. (2018). Introduction. In A. Henik & W. Fias (Eds.), *Heterogeneity of function in numerical cognition* (pp. xvii-xx). San Diego: Academic Press.
- 262. Gliksman, Y., & Henik, A. (2018). Conceptual size in developmental dyscalculia and dyslexia. *Neuropsychology*, *32*, 190-198. http://dx.doi.org/10.1037/neu0000432
- 263. Henik, A., Bugg, J. M., & Goldfarb, L. (2018). Inspired by the past and looking to the future of the Stroop effect. *Acta Psychologica*, *189*, 1-3.
- 264. Henik, A. & Fias, W. (Eds.). (2018). *Heterogeneity of function in numerical cognition*. San Diego: Academic Press.
- 265. Henik, A., Katzin, N., & Hochman, S. (2018). The interplay between proficiency and executive control. In A. Henik & W. Fias (Eds.), *Heterogeneity of function in numerical cognition* (pp. 147-154). San Diego: Academic Press.

- 266. Hershman, R., Henik, A., & Cohen, N. (2018). A novel blink detection method based on pupillometry noise. *Behavior Research Methods*, *50*, 107–114. doi.org/10.3758/s13428-017-1008-1
- 267. Hochman, S., Henik, A., & Kalanthroff, E. (2018). Stopping at a red light: Recruitment of inhibitory control by environmental cues. *PLoS ONE, 13*, e0196199. https://doi.org/10.1371/journal.pone.0196199
- 268. Kalanthroff, E., Davelaar, E. J., Henik, A., Goldfarb, L., Usher, M. (2018). Task conflict and proactive control: A computational theory of the Stroop task. *Psychological Review, 125,* 59-82. http://dx.doi.org/10.1037/rev0000083
- 269. Leibovich-Raveh, T., Stein, I., Henik, A., & Salti, M. (2018). Number and continuous magnitude processing depends on task goals and numerosity ratio. *Journal of Cognition, 1*, 19. https://doi.org/10.5334/joc.22
- 270. Moyal, N., Henik, A., & Anholt, G. E. (2018). Categorized affective pictures database (CAPD). *Journal of Cognition*, 1, 41. http://doi.org/10.5334/joc.47
- 271. Reznik, D., Gertner-Saad, L., Even-Furst, H., Henik, A., Ben Mair, E., Shechter-Amir, D., & Soffer-Dudek, N. (2018). Oneiric synesthesia: preliminary evidence for the occurrence of synesthetic-like experiences during sleep-inertia. *Psychology of Consciousness: Theory, Research, and Practice, 5*, 374-383. http://dx.doi.org/10.1037/cns0000160
- 272. Reynvoet, B., Vos, H., & Henik, A. (2018). Comparative judgement of familiar objects is modulated by their size. *Experimental Psychology, 65,* 353-359. https://doi.org/10.1027/1618-3169/a000418
- 273. Schmidt, C. C., Timpert, D. C., Arend, I., Vossel, S., Dovern, A., Saliger, J., Karbe, H., Fink, G. R., Henik, A. & Weiss, P. H. (2018). Preserved but less efficient control of response interference after unilateral lesions of the striatum. *Frontiers in Human Neuroscience*, *12*, 414.
- 274. Weinbach, N., Sher, H., Lock, J. D., & Henik, A. (2018). Attention networks in adolescent anorexia nervosa. *European Child & Adolescent Psychiatry, 27,* 343-351. 10.1007/s00787-017-1057-0
- 275. Bar-Hen-Schweiger, M., & Henik, A. (2019). Intelligence as mental manipulation in humans and nonhuman animals. *Animal Sentience*, 23, 31.
- 276. Binyamin-Suissa, L., Moyal, N., Naim, A. & Henik, A. (2019). Perspective taking and emotion: The case of disgust and sadness. *Consciousness and Cognition, 74,* 102773. https://doi.org/10.1016/j.concog.2019.102773
- 277. Cohen, Z., Gliksman, Y., & Henik, A. (2019). Modal-independent pattern recognition deficit in developmental dyscalculia adults: Evidence from tactile and visual enumeration. *Neuroscience*, 423, 109-121.
- 278. Geva, D. & Henik, A. (2019). Perspective taking in judgement of relative direction tasks. *Memory & Cognition, 47,* 1215-1230. https://doi.org/10.3758/s13421-019-00929-1
- 279. Gliksman, Y., & Henik, A. (2019). Enumeration and alertness in developmental dyscalculia. *Journal of Cognition*, *2*(1), 5. DOI: https://doi.org/10.5334/joc.55
- 280. Gliksman, Y., & Henik, A. (2019). Size matters! Automaticity of conceptual size in learning disabilities. *Literacy and Language*, *7*, 66-83. (Hebrew).
- 281. Hershman, R. & Henik, A. (2019). Dissociation between reaction time and pupil dilation in the Stroop task. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 45*, 1899-1909. http://dx.doi.org/10.1037/xlm0000690

- 282. Hershman, R., Henik, A., & Cohen, N. (2019). CHAP: Open-source software for processing and analyzing pupillometry data. *Behavior Research Methods, 51,* 1059-1074. doi: 10.3758/s13428-018-01190-1
- 283. Jamaludin, A., Henik, A., & Hale, J. B. (2019). Educational neuroscience: bridging theory and practice. *Learning: Research and Practice*, *5*, 93-98. doi:10.1080/23735082.2019.1685027
- 284. Katzin, N., Cohen, Z., & Henik, A. (2019). If it looks, sounds or feels like subitizing is it subitizing? A modulated definition of subitizing. *Psychonomic Bulletin & Review*, 26, 790–797. https://doi.org/10.3758/s13423-018-1556-0
- 285. Katzin, N., Salti, M., & Henik, A. (2019). Holistic processing of numerical arrays. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 45*, 1014-1022. http://dx.doi.org/10.1037/xlm0000640
- 286. Milshtein, D., & Henik, A. (2019). Actor mindreading: Cognitive processes underpinning theories and practices of European stage acting in the eighteenth century. *Comparative Drama*, 53(3-4), 175-200. https://doi.org/10.1353/cdr.2019.0017
- 287. Arend, I., Yuen, K., Ashkenazi, S., & Henik, A. (2020). Space counts! Brain correlates of spatial and numerical representations in synaesthesia. *Cortex, 122,* 300-310. DOI: 10.1016/j.cortex.2018.11.006
- 288. Bar-Hen-Schweiger, M., & Henik, A. (2020). The transition of object to mental manipulation: Beyond a species-specific view of intelligence. *Animal Cognition*, *23*, 691-701. https://doi.org/10.1007/s10071-020-01375-2
- 289. Gabay, Y., Gabay, S., Schiff, R., & Henik, A. (2020). Visual and auditory interference control of attention in developmental dyslexia. *Journal of the International Neuropsychological Society*, 26(4), 407-417. https://doi.org/10.1017/S135561771900122X
- 290. Ganor-Stern, D., Gliksman, Y., Naparstek, S., Ifergane, G., & Henik, A. (2020). Damage to the intraparietal sulcus impairs magnitude representations of results of complex arithmetic problems. *Neuroscience*, *438*, 137-144. https://doi.org/10.1016/j.neuroscience.2020.05.006
- 291. Hershman, R. & Henik, A. (2020). Pupillometric contributions to deciphering Stroop conflicts. *Memory & Cognition*, 48, 325-333. https://doi.org/10.3758/s13421-019-00971-z
- 292. Hochman, S., Cohen, Z. Z., Ben-Shachar, M. S., & Henik, A. (2020). Tactile enumeration and embodied numerosity among the deaf. *Cognitive Science, 44*, e12880. Doi:10.1111/cogs.12880
- 293. Hochman, S., Leshem, S., Henik, A., & Kalanthroff, E. (2020). Conditioning automatic inhibition task: Introducing a novel task to associate automatic inhibition with specific cues. *Journal of Neuroscience Methods*, *342*, 108809. https://doi.org/10.1016/j.jneumeth.2020.108809
- 294. Katzin, N., Katzin, D., Rosen, A., Henik, A., & Salti, M. (2020). Putting the world in mind: The case of mental representation of quantity. *Cognition*, *195*, 104088. https://doi.org/10.1016/j.cognition.2019.104088
- 295. Milshtein, D., & Henik, A. (2020). I read, I imagine, I feel: Feasibility, imaginability and intensity of emotional experience as fundamental dimensions for norming scripts. *Basic and Applied Social Psychology*, 42, 432-459. https://doi.org/10.1080/01973533.2020.1796670
- 296. Milshtein, D. Hochman, S., & Henik, A. (2020). Do you feel like me or not? This is the question: Manipulation of emotional imagery modulates affective priming. *Consciousness and Cognition*, 85, Article 103026. https://doi.org/10.1016/j.concog.2020.103026
- 297. Okon-Singer, H., Henik, A., & Gabay, S. (2020). Increased inhibition following negative cues: A possible role for enhanced processing. *Cortex*, *122*, 131-139. https://doi.org/10.1016/j.cortex.2018.12.008

- 298. Rotem, A., & Henik, A. (2020). Multiplication facts and number sense in children with mathematics learning disabilities and typical achievers. *Cognitive Development*, *54*, 100866. https://doi.org/10.1016/j.cogdev.2020.100866
- 299. Schmidt, C. C., Timpert, D. C., Arend, I., Vossel, S., Fink, G. R., Henik, A. & Weiss, P. H. (2020). Control of response interference: caudate nucleus contributes to selective inhibition. *Scientific Reports*, *10*, Article 20977. https://doi.org/10.1038/s41598-020-77744-1
- 300. Binyamin-Suissa, L., Hochman, S., Moyal, N., & Henik, A. (2021). Perspective taking effects are modulated by the valence of stimuli. *Acta Psychologica*, *215*, 103267. doi:10.1016/j.actpsy.2021.103267
- 301. Fias, W., & Henik, A. & (Eds.). (2021). *Heterogeneous contributions to numerical cognition: Learning and education in mathematical cognition.* San Diego: Academic Press.
- 302. Fias, W., & Henik, A. (2021). Introduction. In Fias, W., & Henik, A. & (Eds.). *Heterogeneous contributions to numerical cognition: Learning and education in mathematical cognition* (pp. xiii-xix). San Diego: Academic Press.
- 303. Henik, A. (2021). Early difficulties in numerical cognition. In Fias, W., & Henik, A. & (Eds.). *Heterogeneous contributions to numerical cognition: Learning and education in mathematical cognition* (pp. 383-398). San Diego: Academic Press.
- 304. Henik, A., Bar-Hen-Schweiger, M., Milshtein, D., & Jamaludin, A. (2021). Yes, memorize. *Mind, Brain and Education, 15,* 18-23.
- 305. Henik, A., Salti, M., Avitan, A., Oz-Cohen, E., Shilat, Y., & Sokolowski, H. M. (2021). Numerical cognition: Unitary or diversified system(s)? *Behavioral and Brain Sciences, 44,* e191. doi: 10.1017/S0140525X21001035.
- 306. Hershman, R., Levin, Y., Tzelgov, J., & Henik, A. (2021). The contribution of meaning to the detection of task conflict. *Quarterly Journal of Experimental Psychology, 74,* 1553-1561. DOI: 10.1177/17470218211001331
- 307. Hershman, R., Levin, Y., Tzelgov, J., & Henik, A. (2021). Neutral stimuli and pupillometric task conflict. *Psychological Research*, *85*, 1084–1092. https://doi.org/10.1007/s00426-020-01311-6
- 308. Lask, L. S., Moyal, N., & Henik, A. (2021). Rumination, emotional intensity and emotional clarity. *Consciousness and Cognition*, *96*, 103242. https://doi.org/10.1016/j.concog.2021.103242
- 309. Linkovski, O., Rodriguez, C. I., Wheaton, M. G., Henik, A., & Anholt, G. E. (2021). Momentary induction of inhibitory control and its effects on uncertainty. *Journal of Cognition, 4*(1), 10. https://doi.org/10.5334/joc.133
- 310. Sapir, A., Hershman, R., & Henik, A. (2021). Top-down effect on pupillary response: Evidence from shape from shading. *Cognition*, *212*, 104664.
- 311. Shilat, Y., Salti, M., & Henik, A. (2021). Shaping the way from the unknown to the known: The role of convex hull shape in numerical comparisons. *Cognition*, *217*, *104893*. https://doi.org/10.1016/j.cognition.2021.104893
- 312. Arend, I., Yuen, K., Ashkenazi, S., & Henik, A. (2022). Cognitive and brain correlates of acquired number-colour synaesthetic-like associations. *Neuropsychologia*, *166*, *108155*. https://doi.org/10.1016/j.neuropsychologia.2022.108155
- 313. Ashkenazi, S., Gliksman, Y., & Henik, A. (2022). Understanding estimations of magnitudes: An fMRI investigation. *Brain Sciences*, *1*2, 104. https://doi.org/10.3390/brainsci12010104

- 314. Binyamin-Suissa, L., Hochman, S., & Henik, A. (2022). Asymmetric affective perspective taking effects toward valence influenced by personality perspective taken. *Psychonomic Bulletin & Review*, *29*, 1978–1985. doi: 10.3758/s13423-022-02090-4
- 315. Cohen, Z. Z., Gotlieb, N., Erez, O., Wiznitzer, A., Arbel, O., Matas, D., Koren, L., & Henik, A. (2022). Attentional networks during the menstrual cycle. *Behavioural Brain Research*, *425*, 113817. https://doi.org/10.1016/j.bbr.2022.113817
- 316. Gliksman, Y., Berebbi, S., & Henik, A. (2022). Math fluency during primary school. *Brain Sciences*, *12*, 371. https://doi.org/10.3390/brainsci12030371
- 317. Gliksman, Y., Berebbi, S., Hershman, R., & Henik, A. (2022). BGU-MF: Ben-Gurion University math fluency test. *Applied Cognitive Psychology*, *36*(2), 93–305. https://doi:10.1002/acp.3918
- 318. Hershman, R., Beckmann, L., & Henik, A. (2022). Task and information conflicts in the numerical Stroop task. *Psychophysiology*, *59*(9), e14057. doi:10.1111/psyp.14057
- 319. Hershman, R., Milshtein, D., & Henik, A. (2022). The contribution of temporal analysis of pupillometry measurements to cognitive research. *Psychological Research*. Advance online publication. https://doi.org/10.1007/s00426-022-01656-0
- 320. Kallai, A. Y. & Henik, A. (in press). Absolute or relative size: What do we perceive when we look at a glass that is half full? *Journal of Experimental Psychology: Learning, Memory, and Cognition.*