

## **CURRICULUM VITAE**

### **ELDAD YECHIAM, Ph.D.**

#### **ADDRESS:**

Behavioral Science Area,  
Faculty of Industrial Engineering and Management,  
Technion - Israel Institute of Technology,  
Haifa 32000, Israel.  
Telephone: (972) 4-829-4420, Fax: (972) 4-829-5688  
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#### **PERSONAL:**

Born: July 8, 1973. Ramat-Gan, Israel

#### **DEGREES:**

Ph.D. *Cognitive Psychology and Human Factors Engineering*. Technion - Israel Institute of Technology, 2003

M.Sc. *Industrial Psychology*. Technion - Israel Institute of Technology, 2000, Summa cum laude

B.A. *Psychology and Comparative Literature*. University of Bar-Ilan, 1994, Magna cum laude

#### **GENERAL FIELDS OF INTEREST:**

Decision making and learning, Cognitive modeling, Individual differences, Skill acquisition, Human-computer interaction

#### **ACADEMIC APPOINTMENTS:**

Associate professor, Technion, Faculty of Industrial Engineering and Management, Behavioral Science Area, 2010-present

Senior Lecturer, Technion, Faculty of Industrial Engineering and Management, Behavioral Science Area, 2005-2010

Post Doctoral Research Fellow, Indiana University - Bloomington, Department of Psychology, 2003-2005

#### **PREVIOUS PROFESSIONAL EXPERIENCE:**

System analyst and programmer, Amanet Systems inc., 1997-1998

**TEACHING EXPERIENCE:**

*Undergraduate Courses:* Industrial Psychology, Cognition and Decision-making  
*Graduate Courses:* Individual Differences, Research Methods in Behavioral Sciences, Quantitative Models in Behavioral Sciences, Research Seminar on Behavioral Change

**TECHNION ACTIVITIES**

Head of the Behavioral Science & Management area, 2010-present

**EDITORSHIP:**

Frontiers in Cognitive Science – Editorial board member (2010-)  
Journal of Behavioral Decision Making - Editorial board member (2010-)

**PEER REVIEWED PAPERS:***Journal articles:*

1. Yechiam, E., Erev, I., and Gopher, D. (2001). On the potential value and limitations of emphasis change and other exploration-enhancing training methods. *Journal of Experimental Psychology: Applied*, 7(4), 277-285.
2. Barron, G. and Yechiam, E. (2002). Private E-mail requests and the diffusion of responsibility. *Computers in Human Behavior*, 18(5), 507-520.
3. Yechiam, E., Haruvy, E., and Erev, I. (2002). Reinforcement learning and the prevention of data catastrophes. *Journal of Managerial Psychology*, 17 (7), 599-611.
4. Yechiam, E., Barron, G., Erev, I., and Erez, M. (2003). On the robustness and the direction of the effect of cause-related marketing. *Journal of Consumer Behaviour*, 2 (4), 320-332.
5. Yechiam, E., Erev, I., Yehene, V., and Gopher, D. (2004). Melioration and the transition from touch-typing training to everyday use. *Human Factors*, 45 (4), 671-684.
6. Yechiam, E. and Barron, G. (2004). Learning to ignore online help requests. *Computational and Mathematical Organization Theory: Special issue on Learning in Dynamic, On-line Environments*, 9 (4), 327-339.
7. Yechiam, E., Erev, I., and Parush, A. (2004). Easy first steps and their implication to the use of a mouse-based and a script-based strategy. *Journal of Experimental Psychology: Applied*, 10 (2), 89-96.
8. Yechiam, E., Barron, G., and Erev, I. (2005). The role of personal experience in contributing to different patterns of response to rare terrorist attacks. *Journal of Conflict Resolution*, 49, 430-439.

9. Yechiam, E., Stout, J.C., Busemeyer, J.R., Rock, S.L., and Finn, P.R. (2005) Individual differences in the response to forgone payoffs: An examination of high functioning drug abusers. *Journal of Behavioral Decision Making*, 18, 97-110.
10. Yechiam, E., and Busemeyer, J.R. (2005). Comparison of basic assumptions embedded in learning models for experience based decision-making. *Psychonomic Bulletin and Review*, 12 (3), 387-402.
11. Yechiam, E., Busemeyer, J.R., Stout, J.C., and Bechara, A. (2005) Using cognitive models to map relations between neuropsychological disorders and human decision making deficits. *Psychological Science*, 16 (12), 973-978.
12. Yechiam, E. (2006). Why are macros not used? A brief review and an approach for improving training. *Computers and Education*, 46, 206-220.
13. Yechiam, E., and Busemeyer, J.R. (2006). The effect of foregone payoffs on underweighting small probability events. *Journal of Behavioral Decision Making*, 19, 1-16.
14. Lovallo, W.R., Yechiam, E., Sorocco, K.H., Vincent, A.S., and Collins, F.L. (2006). Working memory and decision-making in familial risk for alcoholism: studies from the Oklahoma Family Health Patterns Project. *Alcoholism: Clinical and Experimental Research*, 30 (5), 763-773.
15. Yechiam, E., Erev, I., and Barron, G. (2006). The effect of experience on using a safety device. *Safety Science*, 44 (5), 515-522.
16. Lane, S., Yechiam, E., and Busemeyer, J.R. (2006). Application of a computational decision model to examine acute drug effects on human risk taking. *Experimental & Clinical Psychopharmacology*, 14 (2), 254-264.
17. Grosskopf, B., Erev, I., and Yechiam, E. (2006). Foregone with the wind: Indirect payoff information and its implications for choice. *International Journal of Game Theory*, 34 (2), 285-302.
18. Kester, H., Sevy, S., Yechiam, E., Burdick, K.E, Cervellione, K.L, and Kumra, S. (2006). Decision-making impairments in adolescents with early-onset schizophrenia. *Schizophrenia Research*, 85 (1-3), 113-123.
19. Johnson, S.A., Yechiam E., Murphy, R.M., Queller, S., and Stout, J.C. (2006). Motivational processes and autonomic responsivity in Asperger's disorder: Evidence from the Iowa gambling task. *Journal of the International Neuropsychological Society*, 12 (5), 668-676.
20. Yechiam, E., Goodnight, J., Bates, J.E., Busemeyer, J.R., Dodge, K.A., Pettit, G.S., and Newman, J.P. (2006). A formal cognitive model of the Go/No-Go discrimination task: Evaluation and implications. *Psychological Assessment*, 18 (3), 239-249.
21. Sevy, S., Hassoun, Y., Bechara, A., Yechiam, E., Napolitano, B., Burdick, K., Delman, H., and Malhotra, A. (2006). Emotion-based decision-making in healthy

- subjects: Short-term effects of reducing dopamine levels. *Psychopharmacology*, 188(2), 228-235.
22. Yechiam, E., and Budescu, D.V. (2006). The sensitivity of probability assessments to time units and performer characteristics. *Risk Analysis*, 3 (3), 177-193.
23. Yechiam, E., and Ert, E. (2007). Evaluating the reliance on past choices in adaptive learning models. *Journal of Mathematical Psychology*, 51 (2), 75-84.
24. Sevy, S., Burdick, K., Visweraiah, H., Abdelmassih, S., Lukin, M, Yechiam, E., and Bechara, A. (2007). Iowa Gambling Task in schizophrenia: A review and new data in patients with schizophrenia and co-occurring cannabis use disorders. *Schizophrenia Research*, 92 (1-3), 74-84.
25. Yechiam, E., Kanz, J., Bechara, A., Stout, J.C., Busemeyer, J.R., Altmaier, E.M., and Paulsen, J. (2008). Neurocognitive deficits related to poor decision-making in people behind bars. *Psychonomic Bulletin and Review*, 15, 44-51.
26. Lev, D., Hershkovitz, E., and Yechiam, E. (2008). Decision making and personality in traffic offenders: A study of Israeli drivers. *Accident Analysis and Prevention*, 40, 223-230.
27. Yechiam, E., Hayden, E.P., Bodkins, M., O'Donnell, B.F., and Hetrick, W.P. (2008). Decision making in bipolar disorder: A cognitive modeling approach. *Psychiatry Research*, 161, 142-152.
28. Sagi, I., and Yechiam, E. (2008). Amusing titles in scientific journals and article citation. *Journal of Information Science*, 34 (5), 680- 687.
29. Yechiam, E., and Busemeyer, J.R. (2008). Evaluating generalizability and parameter consistency in learning models. *Games and Economic Behavior*, 63 (1), 370-394.
30. Farah, H., Yechiam, E., Bekhor, S., Toledo, T., and Polus, A. (2008). Association of risk proneness in overtaking maneuvers with impaired decision making. *Transportation Research Part F: Traffic Psychology and Behaviour*, 11, 313-323.
31. Erev, I., Ert, E., and Yechiam, E. (2008). Loss aversion, diminishing sensitivity, and the effect of experience on repeated decisions. *Journal of Behavioral Decision Making*, 21 (5), 575-597.
32. Yechiam, E., Druyan, M., and Ert, E. (2008). Observing others' behavior and risk taking in decisions from experience. *Judgment and Decision Making*, 3(7), 493-500.
33. Tarlovsky, Y., Yechiam, E., Ofek, E., and Grunwald, W. (2008). Peripheral Arterial Tone: A missing channel in polygraph examination? *American Journal of Forensic Psychology*, 26 (2), 45-60.
34. Bishara, A. J., Pleskac, T. J., Fridberg, D. J., Yechiam, E., Lucas, J., Busemeyer, J. R., Finn, P. R., and Stout, J. C. (2009). Similar processes despite divergent behavior in

two commonly used measures of risky decision making. *Journal of Behavioral Decision Making*, 4, 435-454.

35. Barron, G., and Yechiam, E. (2009). The coexistence of overestimation and underweighting of rare events and the contingent recency effect. *Judgment and Decision Making*, 4, 447-460.

36. Koritzky, G., and Yechiam E. (2010). On the robustness of description and experience based decision tasks to social desirability. *Journal of Behavioral Decision Making*, 23, 83-99.

37. Yechiam, E., Arshavski, O., Shamay-Tsoory, S.G., Yaniv, S., and Aharon, J. (2010). Adapted to explore: Reinforcement learning in Autistic Spectrum Conditions. *Brain and Cognition*, 72, 317-324.

38. Ert, E., and Yechiam, E. (2010). Consistent constructs in individuals' risk taking in decisions from experience. *Acta Psychologica*, 134, 225-232.

39. Agai, N., Yechiam, E., Carmel, Z., and Levkovitz, Y. (2010). Non-specific effects of Methylphenidate (Ritalin) on cognitive ability and decision-making of ADHD and healthy adults. *Psychopharmacology*, 210, 511-519.

40. Hochman, G., Yechiam, E., and Bechara, A. (2010). Recency gets larger as lesions move from anterior to posterior locations within the ventromedial prefrontal cortex. *Behavioural Brain Research*, 213, 27-34.

41. Yuviler-Gavish, N., Yechiam, E., and Kallai, A. (2011). Visual guidance can be both appealing and disadvantageous in spatial tasks. *International Journal of Human Computer Studies*, 3, 113-122.

42. Hochman, G., and Yechiam, E. (2011). Loss aversion in the eye and in the heart: The Autonomic Nervous System's responses to losses. *Journal of Behavioral Decision Making*, 24, 140-156.

43. Yechiam, E., and Ert, E. (2011). Risk attitude in decision making: In search of trait-like constructs. *Topics in Cognitive Science*, 3, 166-186.

44. Yechiam, E., and Rakow, T. (in press). The effect of foregone payoffs on choices from experience: An individual level modeling analysis. *Experimental Psychology*.

45. Koritzky, G., and Yechiam, E. (in press). On the value of non-removable reminders for behavioral modification: An application to nail-biting (Onychophagia). *Behavior Modification*.

46. Yechiam, E., and Telpaz, A. (in press). Losses induce consistency in risk taking even without loss aversion. *Journal of Behavioral Decision Making*.

*Book chapters*

1. Yechiam, E., Veinott, E.S., Busemeyer, J.R., and Stout, J.C. (2007). Cognitive models for evaluating basic decision processes in clinical populations. In R. Neufeld (Ed.), *Advances in clinical cognitive science: Formal modeling and assessment of processes and symptoms* (page 81-111). Washington, D.C.: American Psychological Association Publications.
2. Yechiam, E., and Gopher, D. (2008). Deliberate suppression of vision as a training tool for multimodal skills. In SKILLS consortium, *Beyond movement: The history and future of gesture analysis* (page 80-103). Alinea publishing house.
3. Gavish, N., & Yechiam, E. (2010). The Disadvantageous but appealing use of visual guidance in procedural skills training. In D. Kaber and G. Boy (Eds.), *Advances in cognitive ergonomics* (pp. 764-773). CRC press.
4. Hochman, G., Glockner, A., and Yechiam E. (2010). Physiological measures in identifying decision strategies. In A. Glockner and C. Wittman (Eds.), *Foundations for tracing intuitions, challenges, and methods* (pp. 139-159). London: Psychology Press & Routledge.
5. Koritzky, G., Luria, A., and Yechiam, E. (2011). A model of the initial stages of drug abuse: From reinforcement learning to social contagion. In R.P Ebstein., S.H. Chew, and S.G. Shamay-Tsoory. *From DNA to social cognition*. John Wiley & Sons.

*Submitted for Publication*

Yechiam E., and Hochman, G. Negativity bias in what? Decision and attention models of losses. May, 2011

Koritzky, G., Yechiam, E., Bukay, I., and Milman, U. How obese men differ from obese women: Evidence from neuropsychological studies. July, 2011.

**TUITION BOOKS**

Hochman, G., and Yechiam, E. (2010). SAS – Statistical Analysis System. An instruction book (In Hebrew). Hertzlia: Hod-Ami.

**WORKING PAPERS**

Yechiam E., and Hochman, G. Loss-aversion or loss-focusing: The positive impact of losses on performance and the tax-max effect.

Hochman, G., and Yechiam, E. Bridging the gap between error-related negativity and behavioral decisions with losses: The role of delayed ERPs.

**RESEARCH GRANTS:**

Israel Anti-Drug Authority, 2010 – 2012, Role: Co-PI (with G. Yadid and P. Roska).  
Long-term treatment with Dehydroepiandrosterone (DHEA) and its effect on quality of life, psychosocial factors and cognitive functioning in multidrug-dependent addicts.

Minerva Foundation, 2008 – 2012, Role: Co-PI (with D. Gopher and I. Erev)  
Max Wertheimer Minerva Center for Cognitive Processes and Human Performance.

US Air Force, 2007 – 2008, Role: PI  
Adequate level of mental arousal in a cognitive task: A new approach (073055).

EU Sixth Framework Programme, 2006 – 2011, Role: Co-PI (with D. Gopher).  
Multimodal interfaces for capturing and transfer of skill (SKILLS, IP 035005)

Israel Science Foundation, 2006 – 2009, Role: PI.  
Cognitive modeling of impulsive decision-making: An integrative approach (244/06).

**AWARDS:**

- 2010 Cognitive Science Society Computational Modeling Prize in Applied Cognition
- 2010 Salomon S. Mani Award for Excellence in Teaching
- 2007 Technion President's Excellent Lecturer Award
- 2001 Wolf Foundation Award for Ph.D. candidates

**PUBLICITY:**

“The coexistence of overestimation and underweighting of rare events and the contingent recency effect” (Barron G., and Yechiam, E., 2009) was featured in *Science News*.

“Underweighting rare events in experience-based decisions: Beyond sample error” (Barron, G., Ursino, G., and Yechiam, E., 2008) was part of a symposium winning the Academy of Management, OB Division, Making Connections Award.

“Private E-mail requests and the diffusion of responsibility” (Barron, G., and Yechiam, E., 2002) was featured in *New Scientist Magazine*, *CNN.com*, *CNET*, *Marketing News*, *Reader's Digest*, *The Volunteer Management Report*.

**RECENT PRESENTATIONS:**

2011 Plenary symposium lecture: *The effects of losses on attention provide sufficient conditions for their impact on maximization and individual difference*. Conference on Subjective Probability, Utility, and Decision Making (SPUDM 23), Kingston, UK, August 2011.

2011 *The problem in the assessment of risk taking: Different risks, different building blocks, different measures*. International Conference on Behavioral Decision Making, Interdisciplinary Center, Herzliya, Israel, May 2011.

- 2011 *Disentangling the behavioral and brain responses to Losses*. International Conference on Behavioral Decision Making, Interdisciplinary Center, Herzliya, Israel, May 2011.
- 2010 *The effect of losses on maximization: Loss aversion versus a global-effect model*. The 43rd Annual Meeting of the Society for Mathematical Psychology, Portland, Oregon, August 2010.
- 2010 *Risk attitude in decision making: A clash of three approaches*. Annual Conferences of the Cognitive Science Society. Portland, Oregon, August 2010. Won the Cognitive Science Society Computational Modeling Prize in applied cognition (together with Eyal Ert).
- 2009 *Losses induce consistency in human choice behavior*. Conference on Subjective Probability, Utility, and Decision Making (SPUDM 22), Rovereto, Italy, August 2009.
- 2009 *Applications of the Loss Signals Risk hypothesis*. The joint 42nd Annual Meeting of the Society for Mathematical Psychology and the 40th annual conference of the European Mathematical Psychology Group, Amsterdam, Netherlands, July 2009.
- 2009 *The challenge of Neuroeconomic applications: Predicting the individual's decisions across situations*. Fifth Asia Pacific Meeting of the Economic Science Association. Haifa, Israel, March, 2009.
- 2009 *Assessing risk in situations with high social desirability: Comparing the sensitivity of personality tests and decision tasks*. The 12th Meeting of the Israeli Society for Biological Psychiatry, Hagoshrim, Israel, March, 2009.
- 2008 *Using cognitive models for understanding individual differences in decision making and neuropsychological disorders*. The 29<sup>th</sup> International Congress of Psychology, Berlin, Germany, July 2008.
- 2007 *Poor theory of mind is associated with erratic choice behavior but not with IQ: Findings in Aspergers and healthy subjects*. (1) Conference on Subjective Probability, Utility, and Decision Making (SPUDM 21), Warsaw, Poland, August 2007. (2) The 11<sup>th</sup> Meeting of the Israeli Society for Biological Psychiatry, Kfar-Giladi, Israel, March, 2007.
- 2006 *Acute drug effects on motivational and cognitive processes involved in repeated choice*. Affect, Motivation, And Decision Making Conference, Ein Boqueq, The Dead Sea, Israel, December 2006.
- 2004 *The long-lasting effect of forgone payoffs on risk taking*. The 25th annual meeting of the Society for Judgment and Decision making, Minneapolis , Minnesota, November 2004.
- 2004 *Strategies for extrapolating probability judgments over time*. Poster presented at the 25th annual meeting of the Society for Judgment and Decision making, Minneapolis , Minnesota, November 2004.

2004 *On the examination of basic assumptions embedded in learning models.* 37th Annual Meeting of the Society for Mathematical Psychology, Ann Arbor, Michigan July-August 2004.

2004 *Differential influence of marijuana on decision processes in the Bechara gambling task.* (Yechiam, E., Stout, J., Lamborn, C., Mussat-Whitlow, B.J, Liguori, A. and Porrino, L.J.). Poster presented at the 11th annual Cognitive Neuroscience Society (CNS) meeting, San Francisco, California, April 2004.

2003 *Description, experience and the effect of rare terrorist attacks.* Biennial Conference on Subjective Probability, Utility, and Decision Making (SPUDM 19), Zurich, Switzerland, July 2003.

2003 *A strategy based approach to the acquisition of complex perceptual motor skills.* (1) The XIII congress of the European Society for Cognitive Psychology (ES COP), Granada, Spain, September 2003. (2) The 47th Annual Meeting of the Human Factors and Ergonomics Society, Denver, Colorado, October 2003.

#### **RECENT INVITED LECTURES:**

“Individual differences in risk taking and the role of losses.” Evo-Learning, Kfar-Blum, Israel (November, 2010).

“The use of decision tasks for clinical diagnosis: The case of autism.” The 2010 Conference on health: Individual, Governance, Policy. The Onno Academic Institute, Kiryat-Onno, Israel (October, 2010).

“Is risk taking a general trait? Implications for drivers’ behavior.” The Annual Conference of the Phoenix Program for Road Safety, Bar-Ilan University, Israel (July, 2010).

“Using physiological measures to track intuitions: The example of losses.” EADM Workshop on Intuition: Methods and Recent Findings. Bonn, Germany (May, 2010).

“Dynamics of involvement in small probability risks: Population model and studies of drug abusers.” International Conference on Learning, Reward-Seeking Behaviors and Addiction, Hebrew University, Israel (May, 2009).

“The trap of risks with rare losses is made deeper by regret: Implications to social learning and drug abuse.” International Workshop on Regret, Emotions, and Decision Making, Hebrew University and Ben-Gurion University (March, 2009).

“Suppression of visual guidance in remote training accelerates learning”. The Scientific Conference on the SKILLS Integrated Project, Augsburg, Germany (December 2008).

“The decision making style of risky drivers.” The Annual Conference of the Phoenix Program for Road Safety, Bar-Ilan University, Israel (July, 2008).

“On the potential of using experience-based tasks for studying individual differences.” Workshop on Unraveling Decisions from Experience, University College of London (January, 2008).

“Deliberate suppression of vision as a training tool for multimodal skills.” 1st International Workshop on MultiModal Interfaces for the Transfer of Human Skills: "Beyond Movement", Sant'anna School of Advanced Studies, Pisa (December 2007).

“Using cognitive models to map relations between neuropsychological disorders and human decision making deficits.” University of Illinois at Urbana-Champaign (Oct 2004), Iowa University (Apr 2005), University of Basel (Aug 2008).

#### **GRADUATE STUDENTS:**

##### *Completed:*

Hershkovitz, Eyal “Cognitive modeling analysis of decision making processes and personality traits in dangerous drivers” M.Sc. 2007

Sagi, Itay “The association between amusing titles and article citation” M.Sc. 2007

Tal (Tarlovsky), Yonatan “Non intrusive speedy lie detection” M.Sc. 2007

Druyan, Meir “The effect of foregone payoffs on social learning” M.Sc. 2008

Ert, Eyal (I. Erev co-advisor) “Loss aversion, diminishing sensitivity, and the effect of experience on repeated decisions” Ph.D. 2008

Arshavski, Olga “Choice Convergence as a component of indecisiveness” M.Sc. 2008.

Pavlodsky, Julia “On the connection between decision making based on descriptions and decision making based on experience” Ph.D. 2008

Telpaz, Ariel “Autonomic arousal as predictor of risk taking in experiential decisions” M.Sc. 2008

Hochman, Guy. “The role of losses in decision making processes: The interplay between physiological and behavioral measures” Ph.D. 2010

Arad, Maya “Peripheral Arterial Tone: Predictor of performance in a vigilance task” M.Sc. 2010

Hochmitz, Ilanit “Procedural skill – Is it in your head or in your hand?” M.Sc. 2010

Koritzky, Gilly “The impact of social desirability on description and experience based choice tasks” Ph.D. 2010

Shelef, Michal “The influence of multimodal communication on trainer-trainee interaction: developing a training protocol for effective use of visual aids” M.Sc. 2011

Agay, Nirit “Non-selective effects of Methylphenidate (Ritalin) on cognitive ability and decision-making of adults with ADHD and healthy adults” Ph.D. 2011

*In progress:*

Ohana, David (G. Yadid co-advisor) “The effect of Dehydroepiandrosterone (DHEA) on behavioral decision making and addiction” Ph.D.

Telpaz, Ariel “The mind's eye: Predicting future decisions from pupil size and movement” Ph.D.

Hadas, Oren “Overcoming a sedentary lifestyle: The role of memory and resolve”. M.Sc.

Rosenblatt, Nimrod “What is self control training? A test of candidate processes in a smoking cessation program” M.Sc.

Sidi, Yael “Examination of different types of reminders as tools for promoting choice adherence” M.Sc.

**MEMBERSHIPS:**

Cognitive Science Society  
Cognitive Neuroscience Society  
Judgment and Decision Making Society  
European Association for Decision Making  
Economic Science Society