

Ola Svenson
Date of birth: August 8, 1939.
Risk Analysis, Social- and Decision Research Unit
Department of Psychology, Stockholm University
S-106 91 Stockholm Sweden and
Decision Research, 1201 Oak Street, Eugene, Oregon 97401-3575
osn@psychology.su.se

FIELDS OF RESEARCH SPECIALIZATION: Judgment and Decision Processes, Risk Analysis, Traffic Safety, Human Factors, Organizational and Technological Aspects of Nuclear Safety.

EDUCATION

1963 B.A. Psychology, Mathematics, Education.
1964 M.A. Psychology, Education, Mathematics.
1967 Fil. lic. (in Sweden corresponding to the PhD after 1970), Psychology.
1971 Ph.D. Psychology, Stockholm University
1973 Docent (research qualification)
1976 Declared competent as full professor Engineering Psychology (Luleå Technical University, Sweden).

ACADEMIC APPOINTMENTS

1963-1968 Assistant teacher, Department of Psychology, Stockholm University
1968 - 75 Researcher, Department of Psychology, Stockholm University/The Swedish Council for Social Science Research.
1975-76 Full Professor of Psychology, University of Göteborg (one academic year appointment).
1976-84 Researcher, The Swedish Council for Social Science Research.
1985-86 Visiting Researcher Decision Research.
1987-1993 Professor of Psychology, Main chair, Department of Psychology, Lund University, Lund, Sweden.

1998 Halden OECD Reactor Project, Norway. Visiting Researcher (January - February).
1998 -99 Research Fellow Royal Netherlands Academy of Arts and Sciences, NIAS.
1993- 2009 June Professor of Psychology, Department of Psychology, Stockholm University.
2009 - present Professor emeritus of Psychology, Department of Psychology, Stockholm University.

POSITIONS AND MEMBERSHIPS (Selected past and present)

American Psychological Association, foreign member.
European Association for Decision Making, member, President 1997-98.
European Association of Experimental Social Psychology, member.
Human Factors Society, member.
International Organization for Research in Economic Psychology, member.
Society for Risk Analysis, International, fellow, honorary member, board member.
Society for Risk Analysis, Europe, member, Distinguished Achievement Award 1997.
Society for Judgment and Decision Making, member.
Swedish Academy of Science, Radiation Protection, member.

EDITORIAL BOARDS (Selected past and present)

Acta Psychologica, Cognition Technology and Work, International Journal of Forecasting, Journal of Behavioral Decision Making, Risk Analysis.

RESEARCH FUNDING (Selected past and present)

Long term funding

The Swedish Social Science Council. Support every year from 1972-1996.
The Swedish Nuclear Power Inspectorate. Support every year 1985-2007.

Short term funding (5 years or shorter usually 3 years)

IAEA Vienna "Investigation of Methodologies for incident analysis".
Bank of Sweden Tercentenary Fund
Council for Work Environment Research
Nordic Nuclear Research
Swedish Environmental Protection Agency
Swedish Council for Working Life and Social Research
Swedish Road Administration
The National Board for Spent Nuclear Fuel
The Swedish Radiation Safety Authority

PUBLICATIONS (Selected and in English only)

Books

Beach, L., Humphreys, P., Svenson, O. & Wagenaar, W. (Eds.) (1980) *Exploring human decision making*. Amsterdam: North Holland. Also printed as *Acta Psychologica*, 1980, as vol. 45.

Humphreys, P., Svenson, O. & Vári, A. (Eds.) (1983) *Analyzing and aiding decision processes*. Amsterdam: North Holland and Budapest: Academic Press Hungary.

Montgomery, H. & Svenson, O. (Eds.) (1988) *Process and structure in human decision making*. Chichester: Wiley.

Svenson, O. & Maule, J. (Eds.) (1993) *Time pressure and stress in human judgment and decision making*. New York: Plenum

Ranyard, R., Crozier, W. R. & Svenson, O. (Eds.) (1997) *Decision making: Cognitive models and explanations*. London: Routledge.

Svenson, O., Saalo, I., Oedewald, P., Reiman, T. & Skjerve, A.B. (Eds.) (2005) *Nordic perspectives on safety management in high reliability organizations Theory and applications*. Risö, Denmark: Nordic Nuclear Research and Stockholm: Stockholm University, Department of Psychology. (Open access document available from the Denmark home page).

Journal Articles and Book Chapters

1964-1970

Künnapas, T., Mälhammar, G., & Svenson, O. (1964) Multidimensional ratio scaling and multidimensional similarity of simple geometric figures. *Scandinavian Journal of Psychology*, 5, 249-256.

Svenson, O. (1970) Scaling velocity and space from time estimates. *Scandinavian Journal of Psychology*, 11, 115-123.

Svenson, O. (1970) A functional measurement approach to intuitive estimation as exemplified by estimated time savings. *Journal of Experimental Psychology*, 86, 204-210.

1971-1975

Svenson, O. (1971) Changing the structure of intuitive estimates of time-savings. *Scandinavian Journal of Psychology*, 12, 131-134.

Svenson, O. (1973) Change of mean speed in order to obtain a prescribed increase or decrease in travel time. *Ergonomics*, 16, 772-782.

Pettersson, H., & Svenson, O. (1974) Subjects' simplification of rules for estimating money saved when buying a specified quantity of a cheaper product compared to a more expensive one. *Scandinavian Journal of Psychology*, 15, 127-134.

Svenson, O. (1975) A unifying interpretation of different models for the integration of information when evaluating gambles. *Scandinavian Journal of Psychology*, 16, 187-192.

Svenson, O. (1975) Analysis of time required by children for simple additions. *Acta Psychologica*, 39, 289-302.

Svenson, O., & Broquist, S. (1975) Strategies for solving simple addition problems: A comparison of normal and subnormal children. *Scandinavian Journal of Psychology*, 16, 143-151.

1976-1980

Svenson, O. (1976) Experience of mean speed related to the speed over parts of a trip. *Ergonomics*, 19, 11-20.

Montgomery, H., & Svenson, O. (1976) On decision rules and information processing strategies in multiattribute decision making. *Scandinavian Journal of Psychology*, 17, 283-291.

Svenson, O., Hedenborg, M-L., & Lingman, L. (1976) On children's heuristics for solving simple additions. *Scandinavian Journal of Educational Research*, 20, 161-173.

Dahlstedt, S., & Svenson, O. (1977) Detection and reading distances of retroreflective road signs during night driving. *Applied Ergonomics*, 8, 7-14.

Svenson, O. (1977) Intuitive extrapolation of a growth function. *Scandinavian Journal of Psychology*, 18, 339-344.

- Svenson, O. & Sjöberg, K. (1978) Subsidizing and counting processes in young children. *Scandinavian Journal of Psychology*, 19, 247-250.
- Svenson, O. (1978) Risks of road transportation in a psychological perspective. *Accident Analysis and Prevention*, 10, 267-280.
- Svenson, O. (1979) Process descriptions of decision making. *Organizational Behavior and Human Performance*, 23, 86-112.
- Svenson, O., & Hedenborg, M-L. (1979) Strategies used by children when solving simple subtractions. *Acta Psychologica*, 43, 477-489.
- Svenson, O., & Hedenborg, M-L. (1980) Counting processes in simple addition. *Scandinavian Journal of Educational Research*, 24, 93-104.
- Svenson, O., & Hedenborg, M-L. (1980) Strategies for solving simple subtractions as reflected by children's verbal reports. *Scandinavian Journal of Educational Research*, 24, 157-172.

1981-1985

- Svenson, O. (1981) Are we all less risky and more skillful than our fellow drivers? *Acta Psychologica*, 47, 143-148.
- Svenson, O., & Sjöberg, K. (1982) Solving simple subtractions during the first three school years. *Journal of Experimental Education*, 50, 91-100.
- Wenglert, L., & Svenson, O. (1982) Self-image and predictions about future events. *Scandinavian Journal of Psychology*, 23, 153-155.
- Svenson, O. (1983) Decision rules and information processing. In L. Sjöberg, T. Tyszka, & J. Wise (Eds.) *Decision analysis and decision processes*. Lund: Doxa.
- Svenson, O., & Sjöberg, K. (1983) Speeds of subsidizing and counting processes in different age groups. *Journal of Genetic Psychology*, 142, 203-211.
- Svenson, O., & Sjöberg, K. (1983) Evolution of cognitive processes for solving simple additions during the three first school years. *Scandinavian Journal of Psychology*, 24, 117-124.
- Svenson, O. (1983) Scaling evaluative statements in verbal protocols from decision processes. In Humphreys, P., Svenson, O. & Vári, A. (Eds.) *Analyzing and aiding decision processes*. Amsterdam: North Holland and Budapest: Academic Press Hungary.
- Svenson, O., & Humphreys, P. (1983) Training decision processes: Introduction. In Humphreys, P., Svenson, O. & Vari, A. (Eds.) *Analysing and aiding decision processes*. Amsterdam: North Holland.
- Svenson, O. (1983) Cognitive processes in judging cumulative risk over different periods of time. *Organizational Behavior and Human Performance*, 33, 22-41.
- Montgomery, H. & Svenson, O. (1983) A think aloud study of dominance structuring in decision processes. In R. Tietz (Ed.) *Aspiration levels in bargaining and economic decision making*. Berlin: Springer.

- Svenson, O. (1984) Managing the risks of the automobile: A study of a Swedish car manufacturer. *Management Science*, 30, 486-502.
- Svenson, O. (1984) Long-term risks and time in a psychological perspective. *Canadian Journal of Operational Research and Information Processing*, 22, 196-214.
- Svenson, O. (1985) Memory retrieval of simple additions as reflected in response latencies. *Acta Psychologica*, 59, 285-304.
- Svenson, O. (1985) Cognitive strategies in a complex judgment task: Analysis of concurrent verbal reports and judgments of cumulated risk over different exposure times. *Organizational Behavior and Human Decision Processes*, 36, 1-15.
- Svenson, O. & Fischhoff, B. (1985) Levels of environmental decisions. *Journal of Environmental Psychology*, 5, 55-67.
- Svenson, O., Edland, A., & Karlsson, G. (1985) The effect of numerical and verbal information and time stress on judgments of the attractiveness of decision alternatives. In L.B. Methlie and R. Sprague (Eds.) *Knowledge Representation of Decision Support Systems*. Amsterdam: North Holland.
- Svenson, O., Fischhoff, B., & Mac Gregor, D. (1985) Perceived driving safety and seat belt usage. *Accident Analysis and Prevention*, 17, 119-133.
- 1986-1990**
- Svenson, O., & Karlsson, G. (1986) Attractiveness of decision alternatives characterized by numerical and non-numerical information. *Scandinavian Journal of Psychology*, 27, 74-84.
- Svenson, O., & Nilsson, G. (1986) Mental economics: Subjective representations of factors related to expected inflation. *Journal of Economic Psychology*, 7, 327-349.
- Montgomery, H., & Svenson, O. (1986) Analiz dominantorne strukturiranovania problemu prijatia restrenij s isopolzavaniem metoda mishlenia vslich. *Cbornik Trudor*, 12, 16-29 (translation of Montgomery & Svenson, 1983).
- Fischhoff, B., Svenson, O., & Slovic, P. (1987) Active response to environmental hazards: Perceptions and decision making. *The Handbook of Environmental Psychology* (Eds. D. Stokols, J. Altman, E. Willems). New York: Wiley.
- Svenson, O., & Edland, A. (1987) Change of preferences under time pressure: Choices and judgments. *Scandinavian Journal of Psychology*, 29, 322-330.
- Svenson, O. (1988) Mental models of risk, communication and action: Reflections on social amplification of risk. *Risk Analysis*, 8, 199-200.
- Fischhoff, B., & Svenson, O. (1988) Perceived risks of radionuclides: Understanding public understanding. In M. Carter, J.H. Harley, G.D. Schmidt and G. Silini (Eds.) *Radionuclides in the food chain*, New York: Springer.

- Svenson, O. (1988) Managing product hazards at Volvo car corporation In R.E. Kasperson, J.X. Kasperson, C. Hohenemser, & R.W. Kates (Eds.) *Corporate management of health and safety hazards*. London: Westview Press.
- Biel, A., Svenson, O., & Dangården, B. (1989) Energy and the public in Sweden. In *Energy and the public*. London: World Energy Conference.
- Montgomery, H., & Svenson, O. (1989) A think aloud study of dominance structuring in decision processes. In Montgomery, H. & Svenson, O. (Eds.) *Process and Structure in human decision making*. Chichester: Wiley (reprint of Montgomery & Svenson, 1983).
- Svenson, O. (1989) Eliciting and analyzing verbal protocols in process studies of judgment and decision making. In Montgomery, H. & Svenson, O. (Eds.) *Process and structure in human decision making*. Chichester: Wiley.
- Svenson, O. (1989) Illustrating verbal protocol analysis: Individual decision processes and dialogues proceeding a joint decision. In Montgomery, H. & Svenson, O. (Eds.) *Process and structure in human decision making*. Chichester: Wiley.
- Svenson, O. (1989) On expert judgments in safety analyses in the process industry. *Reliability Engineering and Systems Safety*, 25, 219-256.
- Svenson, O., & Karlsson, G. (1989) Decision making, time horizons and risks in the very long time perspective. *Risk Analysis*, 9, 385-399.
- Montgomery, H., & Svenson, O. (1989) Experimental studies: Introduction. In H. Montgomery & O. Svenson (Eds.) *Process and structure in human decision making*. Chichester: Wiley.
- Svenson, O., & Montgomery, H. (1989) Societal decision making: Introduction. In H. Montgomery & O. Svenson (Eds.) *Process and structure in human decision making*. Chichester: Wiley.
- Svenson, O., & Edland, A. (1989) Change of preferences under time pressure: Choices and judgments. In H. Montgomery & O. Svenson (Eds.) *Process and structure in human decision making*. Chichester: Wiley (reprint of Svenson & Edland, 1985).
- Svenson, O., Edland, A., & Slovic, P. (1990) Choices and judgments of incompletely described decision alternatives under time pressure. *Acta Psychologica*, 75, 153-169.
- Svenson, O. (1990) A psychological perspective on accident evolutions and how to arrest them in nuclear power plants. In L.A. Cox Jr & P. Ricci (Eds.) *New risks*. New York: Plenum.
- Svenson, O. (1990) Some propositions for the classification of decisions situations. In K. Borcherding, O.I. Larichev & D.M. Messick. (Eds.) *Contemporary issues in decision making*. Amsterdam: Elsevier.

1991-1995

- Svenson O., & Malmsten, N. (1991) Post decision consolidation processes in human decision making. *Journal of Scientific Contributions to General Psychology*, (Italy), 6, 109-120.
- Svenson, O. (1991) AEB analysis of incidents and accidents in the processing industries. In G. Apostolakis (Ed.) *Probability safety assessment and management*. New York: Elsevier.

- Svenson, O. (1991) The accident evolution and barrier function (AEB) model applied to incident analysis in the processing industries. *Risk Analysis*, *11*, 499-507.
- Svenson, O. (1991) The time dimension in perception and communication of risk. In R.E. Kasperson & P.J. Stallen (Eds.) *Communicating risk to the public: international perspectives*. Dordrecht: Riedel.
- Svenson, O. (1992) Differentiation and consolidation theory of human decision making: A frame of reference for the study of pre- and post-decision processes. *Acta Psychologica*, *80*, 143-168.
- Svenson, O., & Benthorn, L.J. (1992) Consolidation processes in decision making: Post decision changes in attractiveness of alternatives. *Journal of Economic Psychology*, *13*, 315-327.
- Svenson, O., & Benson III, L. (1993) On experimental instructions and the inducement of time pressure behavior. In O. Svenson & J. Maule (Eds.) *Time pressure and stress in human judgment and decision making*, New York: Plenum (pp. 157-166).
- Maule, J., & Svenson, O. (1993) Theoretical and empirical approaches to behavioral decision making and their relation to time constraints. In O. Svenson & J. Maule (Eds.) *Time pressure and stress in human judgment and decision making*. New York: Plenum (pp. 3-26).
- Svenson, O., & Benson III, L. (1993) Framing and time pressure in decision making. In O. Svenson & J. Maule (Eds.) *Time pressure and stress in human judgment and decision making*. New York: Plenum (pp. 133-144).
- Maule, J., & Svenson, O. (1993) Concluding remarks. In O. Svenson & J. Maule (Eds.) *Time pressure and stress in human judgment and decision making*, New York: Plenum (pp. 323-330).
- Edland, A., & Svenson, O. (1993) Judgment and decision making under time pressure: Studies and findings. In O. Svenson & J. Maule (Eds.) *Time pressure and stress in human judgment and decision making*. New York: Plenum, (pp. 27-40).
- Svenson, O., Ortega Rayo, A., Andersen, M., Sandberg, A., & Svahlin, I. (1994) Post-decision consolidation as a function of the instructions to the decision maker and of the decision problem. *Acta Psychologica*, *87*, 181-197.

1996-2000

- Jacobsson Kecklund, L., Edland, A., Wedin, P. & Svenson, O. (1996) Safety barrier function analysis in a process industry: A nuclear power application. *International Journal of Industrial Ergonomics*, *17*, 275-284.
- Svenson, O. (1996) Decision making and the search for fundamental psychological regularities: What can be learned from a process perspective? *Organizational Behavior and Human Decision Processes*, *65*, 252-267.
- Svenson, O., & Malmsten, N. (1996) Post-decision consolidation over time as a function of gain or loss of an alternative. *Scandinavian Journal of Psychology*, *37*, 302-311.

- Svenson, O. (1997) Differentiation and consolidation. In R. Flin, E. Salas, M. Strub & L. Martin. *Decision making under stress: Emerging themes and applications*. Aldershot, UK, Ashgate Publishing Ltd. (pp. 301–314).
- Verplanken, B., & Svenson, O. (1997) Personal involvement in human decision making: On conceptualization and effects on decision processes. In Ranyard, R., Crozier, W.R., & Svenson, O. (Eds), *Decision making: Cognitive models and explanations*. London: Routledge (pp. 41–57).
- Jacobsson Kecklund, L., & Svenson, O. (1997) Human errors and work performance in a nuclear power plant control room: Associations with work-related factors and behavioral coping. *Reliability Engineering and Systems Safety*, 56, 5-15.
- Svenson, O., & Hill, T. (1997) Turning prior disadvantages into advantages: Differentiation and consolidation in a real-life decision making. In Ranyard, R., Crozier, W.R., & Svenson, O. (Eds), *Decision making: Cognitive models and explanations*. London: Routledge (pp. 218-232).
- Svenson, O., & Shamoun, S. (1997) Predecision conflict and different patterns of postdecision attractiveness restructuring: Empirical illustrations from an important real-life decision. *Scandinavian Journal of Psychology*, 38, 243-251.
- Svenson, O. (1998) A decision theoretic approach to an accident sequence: when feedwater and auxiliary feedwater fail in a nuclear power plant. *Reliability Engineering and Systems Safety*, 59, 243 -252.
- Svenson, O. (1998) The perspective from behavioural decision theory on modeling travel choice. Prepared for T. Gärling, T. Laitila & K. Westin (Eds.). *Theoretical foundations of travel choice modeling*. Pergamon, Oxford (pp. 141–172).
- Svenson, O. (1998) A process perspective on human judgment and decision making. *Cognitive Studies*, 5, 6-16.
- Svenson, O. (1998) Multi-criteria decision aids and human decision making: Two worlds? *Journal of Multi-Criteria Decision Analysis*, 7, 352-354.
- Svenson, O., Lekberg, A., & Hammarberg, A.E.L. (1999) On perspective, expertise and differences in accident analyses: Arguments for a multidisciplinary integrated approach. *Ergonomics*, 42, 1561-1571.
- Svenson, O. (1999) On models of incidents and accidents. In Hoc, J.M., Millot, P., Hollnagel, E. & Cacciabue, P.C. (1999). *Lez Valenciennes*, 28, 169-172.
- Svenson, O. (1999) Differentiation and Consolidation Theory: Decision making processes before and after a choice. In Juslin, P. & Montgomery, H. (Eds). (1999). *Judgment and Decision Making- Neo-Brunswikian and Process-Tracing Approaches*. Mahwah, New Jersey: LEA.
- Hammarberg, A., & Svenson, O. (2000) Individual postdecision processes in group settings. *Scandinavian Journal of Psychology*, 41, 145-158.
- Lundberg, C.G., & Svenson, O. (2000) Postdecision consolidation in a trend prediction task. *Scandinavian Journal of Psychology*, 41, 169-174.

2001-2005

- Svenson, O. (2001) Accident and incident analysis based on the Accident Evolution and Barrier Function (AEB) model. *Cognition, Technology and Work*, 3, 42-52.
- Hedenborg, M., & Svenson, O. (2001) Errors in subtractions: Judged and observed frequencies. *Scandinavian Journal of Psychology*, 42, 87-96.
- Salo, I., & Svenson, O. (2001) Constructive psychological processes before and after a real-life decision. In C.M. Allwood & M. Selart (Eds.) *Decision making: Social and creative dimensions*. Amsterdam: Kluwer. (pp.137-151).
- Enkvist, J., Edland, A., & Svenson, O. (2001) Operator performance in a blind test piece trial. *Materials Evaluation*, 59, (pp. 531-536).
- Svenson, O., & Salo, I. (2001) Latency and mode of error detection in a process industry. *Reliability Engineering and System Safety*, 73, 83-90.
- Enkvist, J., Edland, A., & Svenson, O. (2001) Effects of operator time pressure and noise on manual ultrasonic testing. *Insight*, 43, 725-730.
- Shamoun, S., & Svenson, O. (2002) Value conflict and post-decision consolidation. *Scandinavian Journal of Psychology*, 43, 325-333.
- Svenson, O. (2003) Values, affect and processes in human decision making: a differentiation and consolidation theory perspective. In S.L. Schneider & J. Shanteau (Eds.) *Emerging Perspectives on Judgment and Decision research*. Cambridge: Cambridge University Press, (pp. 287-326).
- Salo, I., & Svenson, O. (2003) Mental causal models of incidents communicated in licensee event reports in a process industry. *Cognition Technology and Work*, 5, 211 - 217.
- Feldman-Stewart, D., Brundage, M.D., Van Manen, L., & Svenson, O. (2004) Patient-focussed decision making in early-stage prostate cancer: Insight from a cognitively based decision aid. *Health Expectations*, 7, 126 – 141.
- Svenson, O. (2005) Pre-and postdecision construction of preferences: Differentiation and consolidation. In S. Lichtenstein & P. Slovic (Eds.) *The construction of preference*. New York: Cambridge University Press, pp. 356-371.
- Svenson, O., & Patten, C J D. (2005) Mobile phones and driving: A review of contemporary research. *Cognition, Technology & Work*, 7, 182 - 197.

2006-

- Patten, C.J.D., Kircher, A., Östlund, J., Nilsson, L., & Svenson, O. (2006) Driver experience and cognitive workload in different traffic environments. *Accident Analysis and Prevention*, 38, 887-894.
- Svenson, O., & Salo, I. (2007) Mental representation of important real-life decisions. *European Journal of Operational Research*, 177, 1353-1362.

- Svenson, O., Salo, I., & van de Loo, K. (2007) Memories of real-life decisions. *Memory*, 15, 205-220.
- Svenson, O. (2008) Decisions among time saving options: When intuition is strong and wrong. *Acta Psychologica*, 127, 501-509.
- Yourstone, J., Lindholm, T., Grann, M., & Svenson, O. (2008) Evidence of gender bias in legal insanity evaluations: A case vignette study of clinicians, judges and students. *Nordic Journal of Psychiatry*, 62, 273-278.
- Svenson, O. (2009) Driving speed changes and subjective estimates of time savings, accident risks and braking. *Applied Cognitive Psychology*, 23, 543-560 .
- Svenson, O. & Jakobsson, M. Creating coherence in real-life decision processes: Reasons, differentiation and consolidation. *Scandinavian Journal of Psychology*, in press.
- Svenson, O. Motivation, decision theory and human decision making. In S. Kreitler (Ed.) *Cognition and Motivation: Forging an Interdisciplinary Perspective*. Cambridge: Cambridge University Press, in press.
- Svenson, O. Salo, I & Lindholm, T. Post Decision Consolidation and Distortion of Facts. *Judgment and Decision Making*, in press

Reviews

- Svenson, O. (1979) Review of J.R. Bettman: An information processing theory of consumer choice. *Journal of Consumer Policy*, 3, 351-353.
- Svenson, O. (1984) A disease named Brunswik's agony: Can verbal reports and a fictitious disease help us understand cognitive processes? *Scandinavian Journal of Psychology*, 25, 189-191.
- Svenson, O. (1985) Protocol Analysis: Verbal reports as data by Ericsson, K.A. and Simon, H.A. Review in *British Journal of Psychology*, 76, 277-278.
- Svenson, O. (1995) The adaptive decision maker, *Journal of Behavioral Decision Making*, 8, 143-144.