

20.12.20

Curriculum Vitae

1. Personal Data

Name in Hebrew: מירב בן נתן
Name in English: Merav Ben Nathan
E-Mail: meravb@wgalil.ac.il

2. Education Certificates and Degrees

<u>Education</u>	<u>Institute</u>	<u>Department</u>	<u>From - To</u>
First Degree	Tel-Aviv University	B.Sc, General Science, Exact Sciences	1988-1992
Teacher Certificate Mathematics	The Kibbutz Seminary, Tel-Aviv.	Math Teaching	
First Degree	The Open University	BA (Cum Laude), Social Sciences	1997-2001
Second Degree	Tel-Aviv University	MA, Cognitive Psychology	2004-2005
Third Degree	Tel-Aviv University	PhD, (Summa Cum Laude), Cognitive Psychology	2005-2009

3. **Title of Master's Thesis:** No Thesis, Direct course to Doctoral Thesis

Title of Doctoral Thesis: "Multiple Representations for Numbers: How Abstract Are They?"

Supervisor: Professor Daniel Algom

4. Academic Ranks

<u>Rank</u>	<u>% Position</u>	<u>From - To</u>	<u>Institute</u>
Faculty Lecturer	62.5%	2011- Present	Western Galilee College

5. Grants and Awards

<u>Year</u>	<u>Name of Grant/Award</u>
1997-1999	President award for exceptional students, The Open University.
2008	The Trozky prize for outstanding graduate students, Tel-Aviv University (competitive)

6. Active Participation in Conferences (Only from 2001)

Ben Nathan, M., & Algom, D. (2007). The perceived magnitude of two-digit numbers: A functional measurement analysis. Workshop on Functional Measurement. Padova, Italy.

Ben Nathan, M. (2007). Possible confounding in studies of the SNARC effect. Workshop on number, space, and action. Aachen, Germany.

Ben Nathan, M., & Algom, D. (2008). Do Arabic numbers and number words differ in tasks of magnitude? Annual conference of the International Society for Psychophysics. Toronto, Canada.

Ben Nathan, M. (2013). The development of numerical understanding, The Beer Sheva International meeting on numerical cognition..

Ben Nathan, M., Salti, M., & Algom, D. (2015). Perception of Multidigit Numbers. Workshop on Functional Measurement. Akko, Israel.

Ben Nathan, M., Salti, M., & Algom, D. (2019). The Many Faces of Music: Attending to Music and Delight in the Same Music are Governed by Different Rules of Processing. The 6th Israeli Conference on Cognition Research. Akko, Israel.

Ben Nathan, M. (2019). The Human use of Musical information: Sensory vs. Hedonics. The Brain Music Cognition (BMC) 2019 Conference. Jerusalem, Israel.

7. Positions Held

<u>From-To</u>	<u>Institute</u>	<u>Position</u>	<u>% Position</u>
2011- Present	Western Galilee College	Lecturer	62.5-108.3%
2005-2009	Department of Psychology, Tel-Aviv University.	Research assistant in Cognitive Psychology Professor Daniel Algom's Laboratory	
2002-2003	Departement of Pschology,	Research assistant in Cognitive Psychology (Attention Impairments) Professor Jehosuah Tsal and Dr. Lilach Shalev's Laboratory	
2001-2002	Department of Sciences Education, Weitzman Institute, Rehovot	Developer MathematicsAdvanced Teaching	
1999-2002	Nature, Society, and Environmental High School, Tel Aviv	Teacher of Mathematics	
1993-1996	Nature, Society, and Environmental High School, Tel Aviv	Teacher of Mathematics	
1994-1996	Weitzman Institute, Rehovot	Research associate, Project for distinguished teachers of Mathematics Professor Ruhama Even,	
1992-1995	Kidum School, Tel-Aviv	Mathematics, teaching supervisor	
1989-1992	Tel-Aviv High school, Tel Aviv	Teacher of Mathematics	
1989-1988	ORT- Industrial High School, Holon	Teacher of Mathematics	

8. Scientific Areas of Specialization

Cognitive Psychology- Numerical Cognition, Music Perception

9. Academic Profile

My research concerns quantitative measures of elementary cognitive processes. In particular, they include applications to numerical perception. Thus, in three studies (Theorie & Modelie, Psychological Bulletin & Review, Aachen Conference) I investigated basic phenomena of numerical cognition, including the SNARC effect, the construction of Two-digit numbers, and the roll of space in processing.

More recently I apply advanced mathematical models in the quest to better understand substantive domains, in particular music. The models include Functional Measurement of Norman Anderson, The Garner Speeded Classification Paradigm and System Factorial Methodology of James Townsend. This work has produced three reports (Acta Psychologica, the Akko Conference on Cognition, The Jerusalem Conference on Brain and Music). Much work on the psychology of music is in progress. My main discovery is that people perceive melodies differently as a sensory stimulus and as an affective stimulus with hedonic value.

Returning to methodology, I gave major addresses on Functional Measurement in an important international meeting over the years (Padova Conference, Akko – The international society on Functional Measurement).

My plans are to continue developing these directions on methodology and music perception.

Publications

Ben Nathan Merav

Refereed Publications

Ben Nathan, M., & Algom, D. (2007). The perceived magnitude of two-digit numbers: A functional measurement analysis. *Teorie & Modelli*, 12, 87-96.

Ben Nathan, M., Shaki, S., Salti, M., & Algom, D. (2009). Numbers and Space: Associations and Dissociations. *Psychonomic Bulletin & Review*, 16(3), 578-582.

Ben-Nathan, M., Salti, M., & Algom, D. (2019). The many faces of music: Attending to music and delight in the same music are governed by different rules of processing, *Acta Psychologica*, 200, 1-9.

non-refereed publications

Ben Nathan, M., & Algom, D. (2009). Do Arabic numbers and number words differ in tasks of magnitude? In: B. A. Schneider, B. M. Ben-David (Eds.), *Fechner Day 2008* (pp.129-132). Toronto: International Society for Psychophysics.

PAPERS PRESENTED AT SCIENTIFIC CONFERENCES

Ben Nathan, M., & Algom, D. (2007). The perceived magnitude of two-digit numbers: A functional measurement analysis.

Ben Nathan, M. (2007). Possible confounding in studies of the SNARC effect.

Ben Nathan, M., & Algom, D. (2008). Do Arabic numbers and number words differ in tasks of magnitude?

Ben Nathan, M. (2013). The development of numerical understanding,

Ben Nathan, M., Salti, M., & Algom, D. (2015). Perception of Multidigit Numbers.

Ben Nathan, M., Salti, M., & Algom, D. (2019). The Many Faces of Music: Attending to Music and Delight in the Same Music are Governed by Different Rules of Processing.