

PANDELIS E. PERAKAKIS

Work Address

Edificio de Investigación II
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PERSONAL DATA	Date of Birth	June 24, 1978
	Place of Birth	Serres, Greece
	Nationality	Greek

EDUCATION **PhD Clinical Psychophysiology** 2005–2009
Department of Personality, Evaluation and Psychological Treatment
University of Granada, Spain
Dissertation: Fractal Analysis of Cardiac Dynamics
Supervisors: Jaime Vila Castellar, PhD and Gustavo Reyes del Paso, PhD

MSc Clinical Psychophysiology 2003–2005
Department of Personality, Evaluation and Psychological Treatment
University of Granada, Spain
Dissertation: Effects of Reducing Breathing Amplitude on Heart Rate Variability and the Cardiac Defense Response

BSc Psychology 1998–2003
Department of Psychology
Aristotle University of Thessaloniki, Greece
Dissertation: Lucid Dreaming and Personality Traits

Undergraduate Courses 1996–1998
School of Law and Economics
Aristotle University of Thessaloniki, Greece

Secondary Education 1990–1996
Anatolia American College, Thessaloniki, Greece

RESEARCH FIELDS AND ACTIVITIES Clinical psychophysiology, statistical physics, cardiac dynamics, heart rate variability, evoked cortical potentials, fractal analysis, cardiorespiratory psychophysiology, psychophysiology of emotion, respiratory and anxiety disorders, cognitive neuroscience, experimental economics, ethics in science, academic publishing, bibliometric measures, software development

POSITIONS HELD **Post-doctoral researcher** Dec 2010–present
Juan de la Cierva Spanish National Grant

LEE & Economics Department
University Jaume I of Castellón, Spain

Visiting scholar Feb 2009–Sep 2009
Center of Polymer Studies, Physics Department
Boston University, Boston MA, USA

Post-doctoral researcher Dec 2009–Dec 2010
Department of Psychology, University of Granada, Spain

Visiting Scholar 6/2006–10/2006
Carlos Chagas Filho
Institute of Biophysics
Department of Physiology and Pharmacology
Federal University of Rio de Janeiro, Brasil

Clinical Psychologist 2005–2010
Clinic Laboratory, Department of Psychology, University of Granada, Spain

Teaching/Research Assistant 2005–2009
FPI Spanish National Grant
Department of Psychology, University of Granada, Spain

INTERNSHIPS AND INTERNATIONAL COLLABORATIONS **Center for Polymer Studies** 3/2009–10/2009
Department of Physics
Boston University, USA

The Buteyko Clinic 6/2008–10/2008
Moscow, Russia

Carlos Chagas Filho 6/2006–10/2006
Institute of Biophysics
Department of Physiology and Pharmacology
Federal University of Rio de Janeiro, Brasil

AWARDS AND RESEARCH GRANTS *Research Grant:* 2012–2014
The role of public information in markets: An experimental and computational approach
Organism: Spanish Ministry of Science and Innovation

Research Grant: 2012–2016
Cátedra de Excelencia del Banco de España en Economía Computacional
Organism: Banco de España

Research Grant: 2010–2013

Individual and Strategic Decision Making in Laboratory Experiments
Organism: Spanish Ministry of Science and Innovation

Research Grant: 2009–2011
Cortical and Peripheral Mechanisms of the Cardiac Defense Response: The Connection with Anxiety Disorders
Organism: Spanish Ministry of Science and Innovation

Research Grant: 2009–2011
Physical, Cardiovascular and Psychological Assessment in Adolescents: Mechanisms of Risk and Protection
Organism: Spanish Ministry of Science and Innovation

Research Grant: 2005–2009
Cortical Mechanisms Involved in the Attentional and Emotional Modulation of the Cardiac Defense Response
Organism: Spanish Ministry of Science and Innovation

Internship Grant: 2009
Organism: Spanish Ministry of Science and Innovation
Host Institute: Center of Polymer Studies, Boston University, USA

Internship Grant: 2008
Organism: Spanish Ministry of Science and Innovation
Host Institute: The Buteyko Clinic, Moscow, Russia

Internship Grant: 2006
Organism: Spanish Ministry of Science and Innovation
Host Institute: Institute of Biophysics, Carlos Chagas Filho, Rio de Janeiro, Brasil

Internship Grant: 2003
Organism: Greek Ministry of Education
Host Institute: Department of Personality, Evaluation and Psychological Treatment, Faculty of Psychology, University of Granada, Spain

**TEACHING
AND
RESEARCH
SUPERVISION** Graduate course 2009–2010
Course title: Disability and Communication
Department: Department of Personality, Evaluation and Psychological Treatment

ment, Faculty of Psychology, University of Granada, Spain

Graduate course 2007–2009

Course title: Clinical Psychophysiology

Department: Personality, Evaluation and Psychological Treatment, Faculty of Psychology, University of Granada, Spain

Graduate course 2006

Course title: Biofísica Especial III — Métodos em Psicofisiología

Department: Biological Sciences, Federal University of Rio de Janeiro, Brasil

Masters dissertation supervision 2010

Title: Fractal Analysis of Mood Swings: Towards a New Theory of Affective Variability

Student: Carmen Goicoechea Salas

Department: Personality, Evaluation and Psychological Treatment, Faculty of Psychology, University of Granada, Spain

Masters dissertation supervision 2008

Title: Towards a Physiological Understanding of Short-Term Detrended Fluctuation Analysis of Heart Rate Variability

Student: Eduardo Martinez-Nieto

Department: Personality, Evaluation and Psychological Treatment, Faculty of Psychology, University of Granada, Spain

SOFTWARE PATENTS

- KARDIA: Specialized Matlab-based data processing software for the analysis of cardiac interbeat intervals.
License: GNU General Public License (GPL)
Available at: <https://sourceforge.net/projects/mykardia/>
- SVMT: software for stereo-vision motion tracking of motor reactivity.
License: GNU General Public License (GPL)
Available at: <https://sourceforge.net/projects/svmt/>

OTHER ACADEMIC ACTIVITIES

- Review editor for “Frontiers in Fractal Physiology”
2011–present
- Scientific committee member for the International Psychological Applications Conference and Trends (InPACT) 2012
24/05/2012–26/05/2012
Granada, Spain
- Scientific committee member for the Society for the Advancement of Behavioral Economics annual meeting (SABE 2012)
12/07/2012–15/07/2012
Lisbon, Portugal
- Organization of the 1st National Symposium for Asthma and Allergies
23/05/2006–25/05/2006
Granada, Spain

- Member of the organizational committee of the 5th Congress of the Spanish Psychophysiological Society
28/09/2006–30/09/2006
Granada, Spain
- Reviewer for the journals:
 - International Journal of Psychophysiology
 - Computer Methods and Programs in Biomedicine
 - Physica A: Statistical Mechanics and its Applications

AFFILIATIONS

- Society for Psychophysiological Research (SPR)
- Society for Chaos Theory in Psychology and Life Sciences (SCTPLS)
- International Association for the Study of Dreams (IASD)

TITLES AND HONOURS

Included in Marquis “Who is Who in the World 2011”

PUBLICATIONS

Book Chapters

Perakakis, P., Taylor, M., Trachana, V.(2010). The roads to open access. 2010 World Social Science Report. UNESCO Publishing, Paris. ISBN: 978-92-3-104131-0

Invited Reviews

Vila, J., Guerra, P., Muñoz, M.A., Vico, C., Viedma, M.I., Delgado, L.C., Perakakis, P., Kley, E., Mata, J.L., Rodriguez, S. (2007). Cardiac defense: From attention to action. *International Journal of Psychophysiology* 66(3), pp. 169–182.

Journal IF: 3.045. Journal ranking: Q2 in categories Neurosciences; Physiology; Psychology. Cited: 18 (ISI)

Taylor, M., Perakakis, P., Trachana, V. (2008). The Siege of Science. *Ethics in Science and Environmental Politics*. 8(1), pp. 17–40.

Cited: 12 (Scopus)

Articles in Peer-Reviewed Journals

Vousdoukas, I.M., Perakakis, P., Idrissi, S., Vila, J. (2012). SVMT: A Matlab toolbox for stereo-vision motion tracking of motor reactivity. *Computer Methods and Programs in Biomedicine*, in press

Mocaiber, I., Perakakis, P., Pereira, M., Machado-Pinheiro, W., Volchan, E., de Oliveira, L., Vila, J. (2011). Stimulus appraisal modulates cardiac reactivity to briefly presented mutilation pictures. *International Journal of Psychophysiology*. 81, pp. 299–304

Perakakis, P., Taylor, M., Mazza, G.M., Trachana, V. (2011). Understanding the role of open peer review and dynamic academic articles. *Scientometrics*. 88 (2), pp. 669–673

Viedma, M.I., Perakakis, P., Muñoz, M., López-Herrera, A., Vila, J. (2011). Sketching the First 45 Years of the Journal *Psychophysiology* (1964-2008): A Co-word Based Analysis. *Psychophysiology*. 48(8), pp. 1029–1036

David, I., Volchan, E., Vila, J., Keil, A., Oliveira, L., Faria-Junior, A., Perakakis, P., Pereira, M., Machado-Pinheiro, W. (2011). Stroop matching task: role of feature selection and temporal modulation. *Experimental Brain Research*. 208, pp. 595–605

Journal IF: 2.256. Journal ranking: Q3 in Neurosciences

Perakakis, P., Taylor, M., Mazza, M., Trachana, V. (2010). Natural selection of academic papers. *Scientometrics*. 85 (2), pp. 553–559

Journal IF: 2.167. Journal ranking: Q1 in Computer science, interdisciplinary applications

Perakakis, P., Joffily, M., Taylor, M., Guerra, P., Vila, J. (2010). KARDIA: an Open Access Toolbox for the Analysis of Cardiac Interbeat Interval Data. *Computer Methods and Programs in Biomedicine*, 98, pp. 83-89.

Journal IF: 1.144. Journal ranking: Q2 in Computer science, theory & methods, Q3 in categories Computer science, interdisciplinary applications; Engineering, biomedical; Medical informatics

Delgado, L., Guerra, P., Perakakis, P., Viedma, M., Robles, H., Vila, J. (2010). Human values education and mindfulness meditation as a tool for emotional regulation and stress prevention for teachers: An efficiency study. *Behavioral Psychology/Psicología Conductual*. 18(3), pp. 511–532

Journal IF: 0.226

Delgado, L., Guerra, P., Perakakis, P., Vera, N., Reyes del Paso, G., Vila, J. (2010). Treating chronic worry: Psychological and physiological effects of a training programme based on mindfulness. *Behavior Research and Therapy* 48(9), pp. 873–882 *Journal IF: 2.995. Journal ranking: Q1 in Clinical psychol-*

ogy

Delgado, L., Guerra, P., Perakakis, P., Vila, J. (2010). La meditación “Mindfulness” o de atención plena como tratamiento de la preocupación crónica: evidencia Psicofisiológica. *Ciencia Cognitiva*, 4(3), pp. 73–75

Delgado, L., Guerra, P., Perakakis, P., Vila, J. (2010). La preocupación crónica como miedo contextual: Evidencia Psicofisiológica. *Ciencia Cognitiva*, 4(2), pp. 51–53

Perakakis, P., Taylor, M., Martinez-Nieto, E., Revithi, I., Vila, J. (2009). Breathing Frequency Bias in Fractal Analysis of Heart Rate Variability. *Biological Psychology*, 82(1), pp. 82-88.

Journal IF: 4.363. Journal ranking: Q1 in categories Behavioral sciences; Psychology

Ramírez, I., Guerra, P., Muñoz, M., Perakakis, P., Tornay, F., Anllo-Vento, L., Vila, J. (2009). The Dynamics of Cardiac Defense: from Attention to Action. *Psychophysiology*, 47(5), pp. 879–887.

Journal IF: 3.926. Journal ranking: Q1 in categories Physiology; Psychology, Q2 in Neurosciences

Vila, J., Guerra, P., Muñoz, M., Perakakis, P. et al (2009). La Dinámica De Miedo: La Cascada Defensiva. *Escritos De Psicología*, 3(1), pp. 37-42

Delgado, L., Guerra, P., Perakakis, P., Mata, J.L., Perez, N., Vila, J. (2009). Psychophysiological correlates of chronic worry: Cued versus non-cued fear reaction. *International Journal of Psychophysiology*, 74, pp. 280-287

Buela-Casal G., Perakakis P., Taylor M., Checa P. (2006). Measuring Internationality: Reflections And Perspectives on Academic Journals. *Scientometrics*, 67, pp. 45-65.

Cited: 24 (ISI)

Medina, A., Perakakis P., Ortega V., Sierra J.C. (2005). Afectividad, Estrés y Ansiedad Heterosocial: Exploración De Las Relaciones Con El Deseo Sexual En Adultos Jovenes. *Cuadernos de Medicina Psicosomática y Psiquiatría de Enlace*, 75, pp. 62-71

Published Conference Abstracts

Goicoechea, C.S, Perakakis, P., Calvillo, G., Vila, J. (2011). I am in a bad mood because I am in a bad mood: evidence of fractal variability in mood swings. *Psychophysiology*, 48 (s1), S27

Idrissi, S., Perakakis, P., Ivanov, P.Ch., Vila, J. (2011). Phasic postural re-

- sponses to affective picture-viewing. *Psychophysiology*, 48 (s1), S27
- Mohamed, S., Perakakis, P., Mata-Martin, J.L., Figueroa-Varela, M., Vila, J. (2010). Persistent correlations in human postural sway at short time intervals: a possible measure of postural responses to affective stimulation. *Psychophysiology*, 47 (s1), S35
- David, I.A, Vochan, E., Vila, J., Faria, A., Perakakis, P. et al. (2010). Stroop task and the N2 component: conflict monitoring or control implementation? *Psychophysiology*, 47 (s1), S82
- Guerra, P., Mohamed, S., Ramírez, I., Perakakis, P., Vila, J. (2010). Attentional modulation of cardiac defense: sympathetic mechanisms underlying its potentiation and habituation. *Psychophysiology*, 47 (s1), S21
- Perakakis, P., del Paso Reyes, .G., et al. (2009). Questioning the validity of fractal measures of short-term heart rate variability: evidence from autonomic blockade and paced breathing experiments. *Psychophysiology*, 46 (s1), S79-S79
- Viedma-del Jesus, M., Muñoz, M., Perakakis, P. et al. (2009). Emotion as a central theme in psychological research. *Psychophysiology*, 46 (s1), S139-S139
- David, I.A, Vochan, E., Vila, J., Faria, A., Perakakis, P. et al. (2009). Temporal modulation of N1 visual component in a stroop matching task. *Psychophysiology*, 46 (s1), S49-S49
- Souza, G.G.L., Perakakis, P., Guerra, P., et al.(2009). Cardiac reactions to psychological stress: the influence of vagal tone and social support. *Psychophysiology*, 46 (s1), S64-S65
- Perakakis, P., Spyridou, A., Muñoz, M., Viedma Del Jesus, M., Vila, J. (2008). Comparison of the detrended fluctuation analysis with spectral measures of heart rate variability: the influence of respiration. *Clinical Neurophysiology*, 119 (9), pp. 151
- Viedma Del Jesus, M., Muñoz, M., Perakakis, P., Fernandez-Santaella, M., Vila, J. (2008). Defensive reactivity in simple phobias. *Clinical Neurophysiology*, 119 (9), pp. 164
- Perakakis, P., Guerra, P., Mata-Martin, J., Anllo-Vento, L., Vila, J. (2008). KARDIA an open source graphic user interface for the analysis of cardiac interbeat intervals. *Psychophysiology*, 45 (s1), addendum
- Perakakis, P., Vila, J., Machado-Pinheiro, W., et al. (2008). Distinguishing visual search and working memory via cortical and heart-rate responses. *Psychophysiology*, 45 (s1), S38-S38
- Mocaiber, I., Perakakis, P, Pereira, M.G., et al. (2008). Modulation of atten-

tional bradycardia by distractive affective pictures. *Psychophysiology*, 45 (s1), S28-S28

David, I.A., Volchan, E., Vila, J., Faria, A., Perakakis, P., et al. (2008). Evidence of semantic conflict resolution in a stroop matching task: An event-related potential study. *Psychophysiology*, 45 (s1), S55-S55

Perakakis, P., Anllo-Vento, L., Guerra, P., Faria, A., Depaula Antunez, I., Vila, J. (2007). Distinguishing visual search and working memory via cortical and heart-rate responses. *Journal of the International Neuropsychological Society*, 13 (s2), pp. 72-72

Delgado, L.C., del Jesus, M.I.V., Perakakis, P., et al.(2007). Psychophysiological correlates of excessive worry: Hyperventilation and lower vagal control. *Psychophysiology*, 44 (s1), S57-S57

Faria, A., Machado-Pinheiro, W., Depaula Antunez, I., Guerra, P., Perakakis, P. et al. (2007). Emotional Engagement and Disengagement Verified by Saccadic Reaction Times. *Psychophysiology*, 44 (s1), S57-S57

Perakakis, P., Taylor, M., Mata J.L., et al. (2006). Linear and nonlinear measures of heart rate variability: Correlations with respiratory variables. *Psychophysiology*, 43 (s1), S76-S76

Guerra, P.M., Bradley, M.M., Perakakis, P., et al. (2006). Defensive reactions to natural human screams and aversive white noise (II). *Psychophysiology*, 43 (s1), S43-S43

Perakakis, P., Taylor, M., Munoz, M., Rodriguez, S., Vila, J. (2006). Dissociation Between Linear and Nonlinear Measures of Heart Rate Variability: The Role of Respiration. *Journal of Psychophysiology*, 20 (3), pp. 244-244

Vila, J., Vico, C., Munoz, M.A., Perakakis, P., et al. (2006). Psychophysiology of positive emotions: Affective processing of loved faces. *Journal of Psychophysiology*, 20 (3), pp. 226-226

Delgado, L.C., Guerra, P., Perakakis, P., et al. (2006). The effect of worrying on cardiac defense. *Journal of Psychophysiology*, 20 (3), pp. 233-234

Guerra, P., Perakakis, P., Machado-Pinheiro, W., et al. (2006). Defensive reactions to natural human screams and aversive white noise at moderate intensity. *Journal of Psychophysiology*, 20 (3), pp. 244-244

Perakakis, P., Taylor, M., Buena-Casal, G., Checa, P. (2005). A Neuro-Fuzzy System to Calculate a Journal Internationality Index. I Spanish Congress of Informatics (CEDI), Symposium on Fuzzy Logic and Soft Computing (LFSC). Granada 13-16 September, Spain

Dissertations

Perakakis, P. (2009). Fractal Analysis of Cardiac Dynamics: The Application of Detrended Fluctuation Analysis on Short-term Heart Rate Variability. PhD Dissertation, University of Granada, Spain

Perakakis, P. (2006): The Effects of Reduced Breathing on Heart Rate Variability and on the Cardiac Defense Response. MSc Dissertation, University of Granada, Spain

Perakakis, P. (2003). Lucid Dreaming: Correlating Personality Traits With The Ability To Learn Inducing Lucid Dreams Voluntarily. Undergraduate Dissertation. Aristotle University, Thessaloniki

Perakakis, P. (2001). Course in Lucid Dreaming. Aristotle University, Thessaloniki

CONFERENCES

Chair

Social Factors in Adolescence and Adolescent Development. Symposium held at the 4th Annual International Conference on Psychology. Athens, Greece, 27-30 May 2010

Application of Chaos Theory and Nonlinear Dynamics in Psychology. Symposium held at the International Nonlinear Science Conference (INSC). Heraklion, Greece, 10-12 March 2006

Workshops

Michael Taylor, Pandelis Perakakis, Varvara Trachana. How the impact factor power law came to be and the new alternatives. European Association of Science Editors (EASE). Barcelona, Spain, 14 May 2007

Michael Taylor, Pandelis Perakakis, Varvara Trachana. Putting The Impact Factor In Its Place With A New Approach In Bibliometry. Mediterranean Editors & Translators (METM). Barcelona, Spain, 27-28 October 2006

Oral Communications

Perakakis, P. Fractal analysis of heart rate variability: is it valid at short time scales? 4th Annual International Conference on Psychology. Athens, Greece,

27-30 May 2010

Perakakis, P., Vila, J., Machado-Pinheiro, W., Guerra, P., Faria Jr., DePaula, I., Anllo-Vento, L. Distinguishing visual search and working memory via cortical and heart rate responses. Sociedad Española de Psicofisiología (SEPF). Castellon, Spain, 18-21 September 2008

Perakakis, P., Vila, J., Machado-Pinheiro, W., Guerra, P., Faria Jr., DePaula, I., Anllo-Vento, L. Distinguishing visual search and working memory via cortical and heart rate responses. Cognitive Neuroscience Society (CNS). 16th Annual meeting. April 12-15, 2008, San Fransisco, USA

Perakakis Pandelis. Caos En El Corazón. Análisis No Lineal De La Variabilidad Cardiaca E Implicaciones Para La Salud Cardiovascular. I Congreso Hispano-Cubano de la Psicología de la Salud. Cienfuegos, Cuba, 2006

Earle-Warfel, E., Krippner, S., Perakakis, P. Post-Traumatic Stress Disorder From The Perspective Of Chaos Theory. International Nonlinear Science Conference (INSC). Heraklion, Crete, Greece, 10-12 March 2006

Buela-Casal, G., Perakakis, P., Taylor, M. y Checa, P. The problem of criteria in the assessment of journal internationality : a bibliometric analysis of four Psychology journals. 9th European Congress of Psychology. Granada, Spain, 3-8 Julio 2005

Posters as first author

Perakakis, P., Taylor, M., Muoz, M.A., Vila, J. The Heart As A Complex Adaptive System And The Implications For Respiratory Interventions: Does Our Heart Like Deep Breathing? Federacao de Sociedades de Biologia Experimental (FeSBE). Aguas de Lindoia, Sao Paulo, Brasil, 23-26 August 2006

Perakakis, P., Mata Martn, J. L., Guerra P.M., Faria Junior, A. J. P., Volchan, E., Vila, J. Cardiorespiratory Interactions In A Defense Paradigm: Is There A Link Between Hyperventilation And Cardiac Defense? Federacao de Sociedades de Biologia Experimental (FeSBE). Aguas de Lindoia, So Paulo, Brasil, 23-26 August 2006

Perakakis, P., Taylor, M., Vila, J. Effects Of Shallow Breathing On The Fractal Correlation Properties Of Heart Rate Dynamics: An Alternative Explanation For The Buteyko Effect. International Nonlinear Science Conference (INSC). Heraklion, Crete, Greece, 10-12 March 2006

Perakakis, P., Taylor, M., Vila, J. Los Efectos Del Método Buteyko Sobre Las Propiedades Fractales De La Dinámica Cardiaca. I Congreso Hispano Cubano de la Psicología de la Salud. Cienfuegos, Cuba, 2006

LANGUAGES	Greek	Proficient
	English	Proficient
	Spanish	Proficient

- TECHNICAL SKILLS**
- Setup and operation of specialized physiological measurement instruments (Biopac, Powerlab, ANT Neurosystems, Grass, Coulbourn, Datex Ohmeda, AMTI force plates)
 - Operation of specialized data analysis and stimulus presentation software (Matlab, Eeglab, ASA, Acknowledge, Chart, Presentation, E-prime, SPSS)
 - Biological signal recording and analysis (EEG, ECG, PetCO₂, Respiration, EMG, EDA, stabilometry)
 - Operation of statistical packages R and SPSS

PROPOSED REFEREES

Jaime Vila Castellar
 Research area: Cardiovascular Psychophysiology
 Department of Psychology, University of Granada, Spain
 Email: jvila@ugr.es

Plamen Ch. Ivanov
 Research area: Scaling and Non-linear Analysis of Biological Signals
 Harvard Medical School and Boston University, USA
 Email: plamen@buphy.bu.edu

Gustavo Reyes del Paso
 Research area: Cardiorespiratory Psychophysiology
 Department of Psychology, University of Jaen, Spain
 Email: greyes@ujaen.es