


EUROPE

Ensuring Unity and Respect as Outcomes for People of Europe



 Co-funded by the
Erasmus+ Programme
of the European Union

europe-project.org

Project Title	EUROPE - ENSURING UNITY AND RESPECT AS OUTCOMES FOR THE PEOPLE OF EUROPE
Acronym	EUROPE
Project agreement number	AGREEMENT N°580416-EPP-1-2016-1-IT-EPPKA3-IPI-SOC-IN
Status version	Final
Document number	Europe_D 5.3_Empirical tool_28.02.17
Distribution level	<p>Open License</p>  <p>This work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License¹</p>
WP leader	P2 Stichting Hogeschool Utrecht (Utrecht University of Applied Sciences)
Partner Contributing to the Deliverable	<p>P2 - University of Applied Science Utrecht (HU)</p> <p>P3 - Universidade do Algarve (UALG)</p>
Authors	<p>Dr. Joana Vieira dos Santos (UALG)</p> <p>Dr. Sérgio Vieira (UALG)</p>
Contributors	Dr. Raymond Slot (HU)
Date	28/02/17
Abstract	<p>Adaptation of empirical research tools and its testing.</p> <p>Expected Results: the definition of the instruments and indicators through a methodical procedure of literature critical revision, systematization and the empirical test of data collection.</p>
Keywords	Quiet time/Transcendental Meditation Program, research, empirical tool, instruments and indicators

¹ <https://creativecommons.org/licenses/by-nc-sa/4.0/>



Co-funded by the
Erasmus+ Programme
of the European Union

The European Commission support for the production of this publication does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

Table of Contents

Research set-up	3
1. Psychological tests	3
1.1 Data collection procedure.....	3
1.2 Procedure for preliminary analysis	9
1.3 Procedure for results analysis	9
2. Semi-structured interviews	10
2.1 Application procedure	10
2.2 Sample.....	10
2.3 Content analysis procedure	10
3. School statistics	11
Table 1: Students Protocol	4
Table 2: Teacher / Staff Protocol	6
References	12

Research Set-up

The research approach uses three instruments for measuring the effects of Transcendental Meditation within schools. These instruments are: (1) psychological tests, (2) semi-structured interviews and (3) analyzing school statistics. Areas that will be analyzed are, among others, absenteeism, disciplinary measures and academic performance.

1. Psychological tests

1.1 Data collection procedure

Authorization to develop the study was granted by the principal of the schools, following their interest in joining the EUROPE project as beneficiaries of the implementation of the Quiet Time meditation technique in a school context. Subsequently, the project was presented to the teachers and other technicians of the school, the students and their respective parents, who authorized the collection of data for the research associated with the project. The data collection took place generically in three moments, the first two (pre-test and post-test) with a 4-month interval and a follow-up collecting data after 6 months. The collection of quantitative data was carried out by questionnaires, which includes a battery of instruments that evaluate the dimensions in study. The questionnaires were applied by the researchers and by the coordinator of the implementation of the QT technique in a school context, in a classroom setting or in a specific space (time) for the collection of data. Standard instructions for all participants, read aloud, were used to ensure equal treatment. To ensure the confidentiality of the data, the matching of the questionnaires was done using an alphanumeric code created by the participants themselves.

Regarding the contents of the questionnaires, below we present two different tables, the first one have the information collected for the students and the second one to the adults (teachers; staff). Besides this psychological tests, it was also collected demographic information for both, students and adults (for example: (1) Students – Age; Gender; School Year; Disciplines most enjoyed; Disciplines least enjoyed; (2) Adults – Age; Gender; Teaching Level; Discipline that teaches)

Table 1: Students Protocol

Title	Authors Original Version (OV)	Authors Portuguese Version (PV)	Number of Items	Dimensions	References and Observations
First Part					
Adolescent Psychopathology Scale – Short Form (APS-S)	Reynolds, 2000	Lemos, 2004	115	<p>(1) Conduct Disorder; (2) Oppositional Defiant Disorder; (3) Major Depression; (4) Generalized Anxiety Disorder; (5) Posttraumatic Disorder; (6) Substance Abuse Disorder; (7) Eating Disturbance; (8) Suicide; (9) Academic Problems; (10) Anger/Violence Proneness; (11) Self-Concept; (12) Interpersonal Problems.</p>	<p>OV. Reynolds, W. M. (2000). <i>Adolescent Psychopathology Scale – Short Form: Professional Manual</i>. Lutz, FL: Psychological Assessment Resources.</p> <p>PV. Lemos, I. (2007). <i>Família, Psicopatologia e Resiliência na Adolescência: Do risco psicossocial ao percurso delinquente</i>. Faro: Universidade do Algarve, Doctoral Thesis not published.</p>
Multidimensional Anxiety Scale for Children (MASC)	March, Parker, Sullivan, Stallings, & Conners 1997	Salvador, et al., 2017	39	<p>Social Anxiety (Humiliation / Rejection; Public Performance Fears); Separation Anxiety; Harm Avoidance (Perfectionism; Anxious Coping); Physical Symptoms (Tense/Restless; Somatic/Autonomic).</p>	<p>OV: March, J., Parker, J. Sullivan, K., Stallings, P., & Conners, K. (1997). The Multidimensional Anxiety Scale for Children (MASC): Factor Structure, Reliability, and Validity. <i>Journal of the American Academy of Child & Adolescent Psychiatry</i>, 36(4), 554-565.</p> <p>PV: Salvador, M. C., Matos, A. P., Oliveira, S., March, J., Arnarson, E., Carey, S., & Craighead, E. (2017). A Escala Multidimensional de Ansiedade para Crianças (MASC): Propriedades Psicométricas e Análise Fatorial Confirmatória numa Amostra de Adolescentes Portugueses. <i>Revista Iberoamericana de Diagnóstico y Evaluación – e Avaliação</i></p>

					<i>Psicológica, 45(3), 33-46.</i>
Second Part					
Strengths and Difficulties Questionnaire (SDQ)	Goodman, 1998	Fleitlich, Loureiro, Fonseca, Matos, sd.	25	Emotional Symptoms Conduct Problems Hyperactivity Peer Relationship Problems Prosocial Behaviour	Available: http://www.sdqinfo.com
Healthy Kids Survey Resilience Assessment Module	Constantine, Bernard, & Diaz 1999	Martins, 2005	58	Internal Resources: School Connection; Family Connection; Community Connection; Peers Connection. External Resources: Cooperation; Self-efficacy; Empathy, Effective Help-Seeking; Self-awareness; Goals and aspirations.	OV: Constantine, N. A., & Bernard, B. (2001). California Healthy Kids Survey Resilience Assessment module: Technical report. Berkeley, CA: Public Health Institute. PV: Martins, M. H. (2005). <i>Contribuições para a análise de crianças e jovens em risco/resiliência e desenvolvimento</i> . Faro: Universidade do Algarve, Tese de doutoramento não publicada.
Positive and Negative Affect for Children (PANAS-C)	Laurent et al. (1999)	Ameixa (2013)	30	Positive Affects Negative Affects	OV: Laurent, J., Catanzaro, S. J., Joiner, T. E., Jr., Rudolph, K. D., Potter, K. I., Lambert, S., Osborne, L., Gathright, T. (1999). A measure of positive and negative affect for children: Scale development and preliminary validation. <i>Psychological Assessment, 11(3)</i> , 326-338. http://dx.doi.org/10.1037/1040-3590.11.3.326 PV: Ameixa, G. (2013). Estudo de Adaptação e Validação de duas Escalas de Avaliação da Dimensão Emocional. Faro: Universidade do Algarve. Unpublished Master thesis.
Satisfaction With Life Scale (SWLS)	Diener, Emmons, Larsen, &	Simões (1992)	5	Life Satisfaction	OV: Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction With

	Griffin (1985)				Life Scale. <i>Journal Of Personality Assessment</i> , 49(1), 71. PV: Simões, A. (1992). Ulterior validação de uma escala de satisfação com a vida (SWLS). <i>Revista Portuguesa de Pedagogia</i> , XXVI, 3, 503 – 515.
Coping Responses Inventory – Youth Form (CRI-Y)	Moos, 1993		48	(1) Logical Analysis (2) Positive Reappraisal (3) Seeking Guidance and Support (4) Problem Solving (5) Cognitive Avoidance (6) Acceptance or Resignation (7) Seeking alternative rewards (8) Emotional Discharge	OV: Moos, R. H. (1993). <i>CRI-Youth Form from Professional Manual</i> . Psychological Assessment Resources Inc. PV: Borges, A., Manso, D. Tomé, G., & Matos, M. G. (2008). Ansiedade e coping em crianças e adolescentes: Diferenças relacionadas com a idade o género. <i>Análise Psicológica</i> , 4 (XXVI), 551-561.
Satisfaction with School	Giacomoni & Hutz (2008)		7	Satisfaction with School	OV: Giacomoni, C., & Hutz, C. S. (2008). Escala multidimensional de satisfação de vida para crianças: estudos de construção e validação. <i>Estudos de Psicologia</i> , 25, 23-35. PV: idem

Table 2: Teacher / Staff Protocol

Title	Authors Original Version (OV)	Authors Portuguese Version (PV)	Number of Items	Dimensions	References and Observations
Life Orientation Test - Revised	Scheier et al. (1994)	Laranjeira (2008)	10	Optimism	OV: Scheier, M. F., Carver, C. S., & Bridges, M. W. (1994). Distinguishing optimism from neuroticism (and trait anxiety, self-mastery, and self-esteem): A reevaluation of the Life Orientation Test. <i>Journal of</i>

					<p><i>Personality and Social Psychology</i>, 67, 1063–1078.</p> <p>PV: Laranjeira, C. A. (2008). Tradução e validação portuguesa do revised life orientation test (LOT-R). <i>Universitas Psychologica</i>, 7, 469-476.</p>
Perceived Stress Scale	Cohen, Kamarck, & Mermelstein (1983)	Trigo, Canudo, Branco, & Silva (2010)	10	Perceived Stress Scale	<p>OV: Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. <i>Journal of Health and Social Behavior</i>, 24, 385-396.</p> <p>PV: Trigo, M, N. Canudo, N., Branco, F. & Silva, D. (2010). Estudo das propriedades psicométricas da Perceived Stress Scale (PSS) na população portuguesa <i>Psychologica</i>, 53, 353-378.</p>
Psychological Well-Being	Springer & Hauser (2006)	Ferreira & Simões (1999)	42	<p>Psychological Well-Being (6):</p> <ol style="list-style-type: none"> 1. Autonomy 2. Environmental mastery 3. Personal Growth 4. Positive relations with others 5. Purpose in life 6. Self-acceptance 	<p>OV: Springer, K.W. & Hauser, R. M. (2006). An assessment of the construct validity of Ryff's scales of psychological well-being: Method, mode, and measurement effects, <i>Social Science Research</i>. 35(4),1080-1110. https://doi.org/10.1016/j.ssresearch.2005.07.004</p> <p>PV: Ferreira, J. A. & Simões, A. (1999). Escalas de bem-estar psicológico (EBEP). In M. R. Simões, M. M. Gonçalves, & L. S. Almeida (Eds.), <i>Testes e provas psicológicas em Portugal</i>. (Vol. 2, pp. 111-121). Braga: APPORT/SHO.</p>
Generic Job Satisfaction Scale	MacDonald & MacIntyre (1997)		10	Job Satisfaction	<p>OV: MacDonald & MacIntyre (1997). The Generic Job Satisfaction Scale: Scale Development and Its Correlates <i>Em-</i></p>

					<p><i>ployee Assistance Quarterly</i>, 13(2), 1-16 PV: not published yet</p>
State-Trait Anxiety Inventory - STAI	Speilberger et al. (1983)	Silva & Campos (1998) Silva (2006)	40	State Anxiety (20 items) Trait Anxiety (20 items)	<p>OV: Spielberger, C. D., Gorsuch, R. L., Lushene, R., Vagg, P.R., & Jacobs, G. A. (1983). <i>Manual for the State-Trait Anxiety Inventory</i>. Palo Alto, CA: Consulting Psychologists Press. VP: Silva, D. (2006). O inventário de estado-traço de ansiedade - S.T.A.I. In M. Gonçalves, M. Simões, L. Almeida & C. Machado (Coords.). <i>Avaliação Psicológica – Instrumentos validados para a população portuguesa</i> (pp. 45-60). Coimbra: Quarteto Editora.</p>
Maslach Burnout Inventory	Maslach & Jackson (1981)	Melo, Gomes, & Cruz (1999)	22	Emotional Exhaustion Depersonalization Physical Tiredness/Efficacy	<p>OV: Maslach, C., & Jackson, SE. (1981). The Measurement of Experienced Burnout. <i>Journal of Occupational Behaviour</i>, 2(2), 99-113. DOI:10.1002/job.4030020205 PV: Melo, B. T., Gomes, A. R., & Cruz, J. F. (1999). Desenvolvimento e adaptação de um instrumento de avaliação psicológica do <i>burnout</i> para os profissionais de psicologia. In A. P. Soares, S. Araújo & S. Caires (Orgs.), <i>Avaliação psicológica: formas e contextos</i> (vol. VI, pp. 596-603). Braga: APPORT (Associação dos Psicólogos Portugueses) - Universidade do Minho.</p>
Positive and Negative Affect Schedule (PANAS)	Watson, Clark, & Tellegen, 1988	Galinha & Pais Ribeiro, 2005	20	Positive Affects Negative Affects	<p>OV: Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS</p>

					<p>scales. <i>Journal of Personality and Social Psychology</i>, 54(6), 1063-1070. http://dx.doi.org/10.1037/0022-3514.54.6.1063 PV: Galinha, I.C., Pereira CR, Esteves F. (2014). Versão reduzida da escala portuguesa de afeto positivo e negativo P ANAS-VRP: Análise fatorial confirmatória e invariância temporal. <i>Psicologia</i>, 28(1), 50-62.</p>
Satisfaction With Life Scale (SWLS)	Diener, Emmons, Larsen, & Griffin, 1985	Simões, 1992	5	Life Satisfaction	<p>OV: Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction With Life Scale. <i>Journal Of Personality Assessment</i>, 49(1), 71. PV: Simões, A. (1992). Ulterior validação de uma escala de satisfação com a vida (SWLS). <i>Revista Portuguesa de Pedagogia</i>, XXVI, 3, 503 – 515.</p>

1.2 Procedure for preliminary analysis

Considering that we use a quasi-experimental methodological design, we use procedures that tries to guarantee the comparison group can be used as a control group. Since we are working in the case of students with intact classes or part of classes according to the interest that students and their parents / guardians have expressed in joining Quiet Time and in the case of technical teachers, with part of the school's professionals, it is necessary, at first, to ensure that we can use the comparison group as a control group. To do this, variance analysis (t-tests for independent samples) will be performed in each of the dimensions under study, as well as the groups will be compared with respect to known sources of variability (Maroco, & Bispo, 2003), such as age and gender and, professionals, professional experience and teaching group. This set of preliminary analysis procedures are indicated as necessary to guarantee the internal validity of the study (Almeida & Freire, 2003), that is, to ensure that the differences that arise at the end of the intervention are due to the implementation of the Quiet MT technique Time in the school context and not the characteristics of the groups.

1.3 Procedure for results analysis

In the results analysis it will be presented the means and standard deviations for each of the dimensions, regarding the groups (experimental and control) and moment (pre / post-test / follow-up). Finally, we will clarify the effects of the intervention in each of the

dimensions considered. The intercorrelations (pretest / post-test / follow-up) will also be analyzed for the dimensions in study to know the amplitude and level of significance of the four and six-month intervals.

2. Semi-structured interviews

Some of the impact indicators have been defined, that are not all measurable by psychological testing. Examples of these indicators are: school climate, ability to deal with diverse learners and different cultures. To measure these type of impact indicators, several semi-structured interviews will be conducted, with parents, teachers and school management.

Interview analysis protocol

2.1 Application procedure

The interview protocol requires a semi-structured interview, developed along a script concerning general behavior improvement, health perception, school performance, perceived attention and concentration, and school and class climate.

These interviews aim to assess these dimensions, not measured in the self-reported psychological tests, with both parents and students involved in the Quiet Time Program.

These interviews will be conducted in a safe environment for both students and parents, as well as teachers, guarantying the conditions for a truthful gathering of information. A trained interviewer will led the interview with both parents (or educational responsible) separately from the students.

It is estimated that the interviews last for an hour, considering the recommendations to single semi-structured interviews.

The interviews will be recorded with the informed consent of those involved, for later transcription and codification for content analysis.

2.2 Sample

A total sample of 20 parents, 10 students, and 5 teachers, randomly selected from the experimental group will be contacted to participate in the interviews.

2.3 Content analysis procedure

The nature of the data collected in interviews implies a content analysis, that will be conducted using the Bardin method (Bardin, 2013).

Content analysis is regarded a systematic and objective method to analyze the content of written and oral messages, that allow us to obtain both quantitative and qualitative indicator to infer knowledge that cannot be assessed from self-reported measures.

These method uses a human decision maker to elicit the main categories that emerge from the collected corpus. As suggested, two judges will classify the text into general categories, selecting both context unit and registry units from the text, that gives sense to the information gathered.

Then, an inter-judge measure will be used to guarantee the systematization and objectivity of the analysis, to sustain the overall validity of the data analysis, and consequently of the study.

The categorical analysis that we aim to do, will have to ensure the mutual exclusion, homogeneity, pertinence, objectivity, fidelity and productivity of the categories obtained by the interviews.

After this internal fidelity measure, all categories will be classified in terms of frequency and valence, and statistically crossed with the results obtained by self-reported psychological measures.

3. School statistics

Impact indicators, that are related to academic performance, absenteeism and suspension of students are derived from school statistics.

References (only the cited in the document)

- Almeida, L. & Freire, T.(2003). Metodologia da investigação em psicologia e educação. Braga: Psiquilíbrios Edições
- Bardin, L. (2013). Análise de conteúdo. Lisboa: Edições 70.
- EUROPE Consortium. (2016). Detailed Description Of The Project. Organization for Security and Co-operation in Europe. (2015). Declaration on the 13 november terrorist attacks in paris. Paris, France: Permanent Council OSCE.
- Maroco, J., & Bispo, R. (2003). Estatística aplicada às ciências sociais e humanas. Lisboa: Climepsi Editora.
- Policy., O. (2013). The importance of quality implementation for research, practice, and policy. Washington DC.

Partners:



Fondazione Hallgarten Franchetti - Centro Studi Villa Montescia (Coordinator)

Italy
montescia.eu



Stichting Hogeschool Utrecht [Utrecht University of Applied Sciences]

Nederland
international.hu.nl



Universidade do Algarve

Portugal
ualg.pt



CESIE
Italy
cesie.org



Agrupamento de Escolas João de Deus [Teacher Training Centre]

Portugal
aejdfaro.pt



Maharishi School Trust Limited

United Kingdom
maharishischool.com/2016/12/09/lancashire-fire-rescue-visit



Stichting Maharishi Onderwijs Nederland

Nederland
mbsdefontein.nl



Maharishi Foundation England

United Kingdom
uk.tm.org/maharishi-foundation-uk



APEJAA – Associação de Pais e Encarregados de Educação da Escola João Afonso De Aveiro

Portugal
agrupamentodeescolasdeaveiro.pt



Cooperativa Cultural Ciencia Tecnologia Vedica Maharishi, CCCT

Portugal
meditacao-transcendental.pt



MIKI – SVERIGE [Maharishi Institut for Kreativ Intelligen]

Sweden



Stichting Maharishi Vedisch Instituut

Nederland
nl.tm.org