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| Contributors  | Dr. Raymond Slot (HU)                                                   |
| Date          | 21/12/17                                                                 |
| Abstract      | Adaptation of empirical research tools and its testing.  
|               | Expected Results: the definition of the instruments and indicators through a methodical procedure of literature critical revision and systematization, and the empirical test of data collection. |
| Keywords      | Quite time/Transcendental Meditation Program, research, empirical tool, instruments and indicators |

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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>
<thead>
<tr>
<th>Title</th>
<th>Authors Original Version (OV)</th>
<th>Authors Portuguese Version (PV)</th>
<th>Number of Items</th>
<th>Dimensions</th>
<th>References and Observations</th>
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<td>Table 2: Teacher / Staff Protocol</td>
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</tr>
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</table>

**Coping Responses Inventory – Youth Form (CRI-Y)**

- **Authors:** Moos, 1993
- **Number of Items:** 48
- **Dimensions:**
  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

**Satisfaction with School**

- **Authors:** Giacomoni & Hutz (2008)
- **Number of Items:** 7
- **Dimensions:** Satisfaction with School

**References and Observations**


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<thead>
<tr>
<th>Measure</th>
<th>Authors</th>
<th>Method/Validation</th>
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<tr>
<td>Generic Job Satisfaction Scale</td>
<td>MacDonald &amp; MacIntyre (1997)</td>
<td>OV: MacDonald &amp; MacIntyre (1997). The Generic Job Satisfaction Scale: Scale Development and Its Correlates Em-</td>
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<tr>
<td>Test Name</td>
<td>Authors/References</td>
<td>Items</td>
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<tr>
<td>Positive and Negative Affect Schedule (PANAS)</td>
<td>Watson, Clark, &amp; Tellegen, 1988 Galinha &amp; Pais Ribeiro, 2005</td>
<td>20</td>
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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)


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