



UNIVERSIDADE D
COIMBRA

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**MEDITATION PRACTICE EFFECTS IN SUBJECT WITH
AUTISTIC SPECTRUM DISORDER**

**Dissertation from the Mestrado em Exercício e Saúde em Populações Especiais
supervised by the Doctor Pedro Miguel Pereira Gaspar and presented to the Sport Faculty
department (FCDEF) of the University of Coimbra (UC)**

July of 2020

Dissertation of Master thesis presented in
Faculty of Sciences of Sports and
Physical Education of University of
Coimbra in order to obtain the Master
Degree in Exercise and Health with
Special Populations.

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Citation of the these:

Descamps, G. (2020). *Meditation and Autism*. Master thesis, Faculty of Sciences and Sports and Physical-Education of University of Coimbra, Coimbra, Portugal.

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1. Introduction

1.1. Preamble

In the context of my master thesis realized in the area of exercise and health for special population, I choose to work on the thematic of meditation, more particularly on the one of meditation for people with Autistic Syndrome Disorder (ASD).

During the 2018/2019 academic year I performed different internship and one was in the center of cerebral palsy of Coimbra with a group of kids/teenagers with who I was doing Judo sessions. During the sessions, I used some exercises of respiration, relaxation, meditation, learned in my third year of bachelor with the professor Pedro Gaspar from the university of Coimbra and a French professor from the university of Orleans, Albin Hamard. I realized that those small exercises had a positive impact on my Judo sessions and that I could catch the attention and focus of the participants during more time.

In the month of Mars 2019, when the Professor Pedro Gaspar presented us his project, I found on it a good opportunity to work and know more on this specific area. Furthermore, this project was presented with a population for who I have an important interest and that I already work with in my internships during this academic year, with the association of APPDA. The contact that I already had with this association was a good opportunity to work with them in the context of my master these.

1.2. General presentation of the problem

Over the past 50 years, the prevalence of ASD (Autism Spectrum Disorder) is showing a steady increase (Poovathinal et al.,2018). The global epidemiologic study performed by Elsabbagh et al. (2012) has shown that in 2012, the global prevalence was estimated at 61.9/10,000. About Portugal, the global prevalence of ASD in the mainland in 2007 was estimated at 9.2 per 10,000 (Oliveira et al., 2007).

As Must et al. (2014) are showing, the social behaviour consequences of the autism spectrum disorder are the cause of the sedentary lifestyle of the children. Persons with ASD are usually showing many behaviours related to stress due to some difficulties about control of emotions. As we already know, Mindfulness is one of the techniques who permits a better attentional control, a better emotional regulation and a modification of conscience of himself (Pentz & Simkin, 2017). Therefore, it looks interesting to work on this thematic, especially with this public for who the practice of mindfulness seems even more useful.

Also, in the family point of view, having a child with ASD can create stress source in the parents of the children, as reported in the study of Ferraioli and Harris (2012), *“parents of children with autism spectrum disorders (ASD) report higher levels of stress and affective symptoms compared to those of typically developing children, parents of children with other disabilities (e.g., Down syndrome, intellectual disability), and children with chronic illness”*. In the study of Abbeduto et al. (2004) they compared the psychological well-being of mothers of Youths with Autism, Down Syndrome, or Fragile X Syndrome. The study revealed that the group of mothers who displayed the lower levels of well-being is the one of mother with a child with ASD. About stressful events, Smith et al. (2010) studied and compared the daily experience of 96 mothers living with their adolescent or adult children. They found out that compared to a control group *“Fatigue, arguments, avoided arguments, and stressful events were also more common among mothers of individuals with ASD.”*

1.3. Relevance of the study

The literature that we found about this thematic is recent. Working with meditation and populations with Autistic Spectrum Disorder is in way of development and there are not many qualitative studies realized with this thematic.

The few most recent studies prove the importance to keep studying on this field of research, as the benefices of meditation and mindfulness are particularly linked to the consequences of autism spectrum disorders which are related with stress and difficulties about emotional control (Pentz & Simkin, 2017; Ahmed & Sequeira, 2012).

The studies of Ferraioli and Harris (2012) and De Bruin (2014) demonstrate that the place of the family is important on ASD and the stress reaction from the parents for example is higher with children with ASD. Therefore, making interviews to them will probably be particularly interesting in order to see the potential changes of behavior of the participants along the intervention.

1.4. Issue statement

The following study is a qualitative research, which intends to analyze the effect of mindfulness session on young people with Autistic Spectrum Disorder on their lifestyle and behavior, with their classmates, teachers and their families. We are open to listen all kind of feedbacks and potential changes that may come from different factors. Even if we will target some points of our study on potential changes of anxiety and stress reduction, increase of concentration and focus and prosocial behavior.

1.5. Objectives

All long of the study, we are looking forward to all the different feedbacks that may come from the participants and the persons surrounding them. The different feedbacks will be analyzed after the 1st and 2nd cycle thanks to interviews at three different levels, which are: participants, families and staff members of the center. Potential changes and evolution will also be analyzed during each session thanks to field notes observations.

Firstly, by observing and interviewing the participants, we will try to analyze the different effects of meditation on reduction of stress and anxiety, development of concentration and focus, emotional control, prosocial behavior, global well-being and relation with classmates.

Secondly, one member of the family (parent or sibling) will be interviewed. The objective is to have a global point of view on modification of behavior on the participant. Also, the relation participant-family will be analyzed and if any modification of behavior was noted during and after the meditation sessions.

Thirdly, interviews are made with the staff members that are working in the institution. In order to analyze if there are modifications in the global behavior of the participant, in the class context, how the participants are interacting between each other's and this evolution, all long of the study.

Finally, thanks to the fieldnotes observation after each session and a comparison with another group during the 2nd cycle, we will analyze the improvements in the practice of the participant and possible evolution of the class mood in general.

Those four steps of interviewing and observations are inter-dependent, and closely correlated. For example, some teachers of the institution can give us some families indications about the participant, also parents can have an opinion about their children in the context of the classroom. Therefore, later in the structure of our study they must be discussed together. As well as the fieldnotes which complete the interviews analysis.

We will compare and discuss our results later, with the different review of literature that we selected. Those comparisons, with their methods and the results that they obtained will help us to realize the strengths and the potential weaknesses of our study. From this, we will find new wonders and questions about our thematic and ideas for future studies will emerge.

1.6. Structure of the study

After this introduction, the following chapter of this study is the literature revision, which will be completed all long of the year of the thesis. Organized in different part, the objective of this revision is to help us to understand the specificity and problematic of the population, the description and benefices of the practice in general and for our different participants.

Then, in the methodology, after presenting the sample of all our participants, we will present the different instrument of measures, with their literature that will help us to used them. And the study schedule will be presented in the format of a chronogram.

The results will be presented with their analysis, for the first and second cycle of our study and by different group of our sample, which are the participants, family of them and staff members.

Finally, the discussion and conclusion will come at the end of this thesis to discuss the results obtained with our initial questions, but most of all to find more new questions for potential future studies.

2. Literature revision

The literature revision will be made in six different parts, separate in sub-thematic. The first part is about Autistic Syndrome Disorder in order to understand the characteristics of the population the epidemiology and different problematics.

The second part is about meditation, description of this practice, the different approach in a well-being or therapeutic point of view and what are the different benefices.

The third part of the literature revision will be the mix of those subtopics, or the global thematic of this thesis which will be searched with the following keywords: Autism AND Meditation.

The fourth part will be about the parents of children with ASD and the different interest of why including them in a program would be a good initiative and could be used for future research.

The fifth part is about the evolution of the body perception and his association in the mind in our occidental society. Which will explain the beginning of the important of body-mind technics and more specifically the Meditation one.

Finally, the last and sixth part is about one particular technic of Meditation, which is the mantra one or Transcendental Meditation, which took more and more place and importance all long of the evolution of our program.

2.1. Definition and problematic of Autism Spectrum Disorder

The World Health Organization (2019) is defining ASD as the following *“Autism spectrum disorders (ASD) are a group of complex brain development disorders. This umbrella term covers conditions such as autism and Asperger syndrome. These disorders are characterized by difficulties in social interaction and communication and a restricted and repetitive repertoire of interests and activities.”*.

The American Psychiatric Association (2018) gives a similar definition: *“Autism spectrum disorder (ASD) is a complex developmental condition that involves persistent challenges in social interaction, speech and nonverbal communication, and restricted/repetitive behaviors.”*.

In a worldwide level, the prevalence of ASD is globally increasing over the past 50 years (Poovathinal et al., 2018). The study of Elsabbagh et al. (2012) made from a global epidemiologic study of ASD, in 2012 reveals that the prevalence was estimated at 61.9/10,000.

From a national level, in Portugal, the prevalence of ASD in the mainland in 2007 was estimated at 9.2 per 10,000 (Oliveira et al., 2007).

The problematics and consequences related to ASD are various and depend of each personality. The article of Must et al. (2014) revealed that the social behaviour consequences of the autism spectrum disorder are the cause of the sedentary lifestyle of the children. Persons with ASD are usually showing many behaviours related to stress due to some difficulties about control of emotions.

The following studies about ASD, psycho-social and psycho-affective disorders reveals that depression and anxiety are the most common psychiatric concern.

Adults with ASD *“carry a high risk for coexisting mental health problems from a broad spectrum of disorders and for unfavourable psychosocial life circumstances”*. For this population, Hofvander et al. (2009) note in their study more important *“mood and anxiety disorders”*.

For young adults and adolescents, the study of Shtayermman (2007) show that the victimization of peoples with ASD is higher. The sample of his study had a high rate (20%) of *“criteria for a diagnosis of Major Depressive Disorder, 30 percent met criteria for Generalized Anxiety Disorder and 50 percent had clinically significant level of suicidal ideation.”* As the previous authors, Lecavalier (2006) concluded; *“Overall, lower adaptive skills were associated with less prosocial behaviors and symptoms of anxiety, and higher scores on other subscales, indicating more problems.”* for young people with ASD. This fact shows us that ASD is not a problematic of the person, but of the society, which is not included enough for non-neurotypical people. By considering people with special needs and people with ASD as people in *“situation of handicap”*, we conclude that it is a societal problematic.

We will see in the next part related to the benefices of meditation, that those different problematics related to stress and anxiety can be resolved in the practice of those activities.

2.2. Benefices of Meditation and specificity of Mindfulness

Meditation and Mindfulness has shown many benefices with various population. In this part of the review we will present different studies and findings who have shown benefices of Meditation and specifically to Mindfulness.

Firstly, the definition of Mindfulness that Anderson et al. (2007) give us from John Kabat-Zinn, which is *“paying attention in a particular way: on purpose, in the present moment, and nonjudgmentally”*.

Kabat-Zin is an important researcher in Mindfulness, since the 1980's. For example, he did a MBSR (Mindfulness-Based Stress Reduction) program (Kabat-Zinn et al., 1985) with patient with chronic pain. The results were a decrease in the body pain, in anxiety and in depression level.

After this, many other studies like the one of Reibel et al. (2001) showed that training in MBSR have positive result in a heterogeneous population. After an 8-weeks program *“The results of this prospective, observational study demonstrate significantly enhanced health-related quality of life, reduced physical symptoms, and decreased psychological distress.”*

In France the rheumatologist Jean-Gérald Bloch is considered as a pioneer of the therapeutic meditation. In his interviews from Sabah Rahmani (2019) in *“Le Monde”* he shows the exponential augmentation of clinical study about this subject, which were about 143 publications in 2010 until 700 publications per year since 2016. The doctor spoke about the way of how his relationship with the patients changes during the practice of meditation. The discussion is more centre in the relation, closer with the patient who is considered in his globality and not like just an organ that need to be cured.

It is important to remind that the practice of therapeutic meditation is separated to any form of spirituality, even if it is from a Buddhist influence, as the theologian Jean Marie Gueullette is saying in an interview from Catherine Mary (2018) to *“Le Monde”*, it must not be presented as a spirituality up of all the spirituality, we need to teach it while being conscient that we are in the register of therapy, which is not a spiritual experience.

In his interview from Novel (2016) to *“Le Monde”*, the psychiatrist Christophe André show the importance of *“coming-back”* to the body, because the body is always in the present, in the instant, not like our mind, which is too much elsewhere, out of the present. In this way, even if an one hour session of meditation can look like consuming a lot of time, mindfulness allow to make the difference between what is *“urgent and important”* and so we can reduce the time that we are *“losing”* in useless activities.

Is it important to note that mediation is not just a question of winning time are being more performant, etc ... and which could play the game of the capitalism. As is saying the Professor Antonio

Pele in his interview from Legros (2019) to "Le Monde", he sees the interest of Meditation practice as a response to the acceleration of the neoliberalism. Indeed, some company like Google are creating centre of Meditation for their employees, in order to make them be more focus in their activities and have a better production. The author describes this practice like "*McMindfulness*" or "*Meditation Mcdo*".

Berger and Picaud (2019) explain that the popularity and democratisation of the meditation can be analysed in the context of a real "*emotional market*". The main cause of this is associated by the two sociologists because of the reduction of the role of the state, mainly on the work market, causing a flexibilization of the work and a deregulation of the markets with in main consequences an augmentation of the risks and uncertainty for the individual.

At the opposite, the philosopher Alexandre Jollien, in his interview from Legros (2019) to "Le Monde", also explains that the purpose of Meditation is "*to be rid of this insatiable quest for gain, profit*". When high-level athletes or workers are using this to improve their performance, the philosopher describes it as an instrumentalization of the practice. For Alexandre Jollien meditating is a "*way of life, a relationship with the world, more free and generous*".

In this last point of view, the practice of Meditation is not considered as a narcissistic or egocentric activity, but in a practice that can make the person being better with himself and the society, being generous and helping the others, which can be linked to the concept of empathy. As the psychiatrist Christophe André explains in the same interview of Novel (2016), the practice of meditation can active areas of the brain linked to benevolence (*bienveillance*), empathy, engaging positive emotions. At the opposite some areas linked to fear, aggressivity are like disactivated.

In a first time, Christophe André, in his interview to Novel (2016) demonstrates that the research world is suspicious about meditation, but in 2014 around 700 studies are speaking about this thematic, the revue "The Lancet" from a work of the university of Oxford show that meditation of mindfulness is as useful against depressed than the anti-depressed treatments.

About the development of brain areas linked to compassion, empathy, Simon-Thomas (2012) synthetize the vision of the two pioneers of this area, whom are Tania Singer, the director of the department of social neuroscience at the Max Planck Institute in Leipzig, Germany, and Richie Davidson, founder of the Centre for Investigating Healthy Minds at the University of Wisconsin, Madison.

Those two scientists *“have been studying people with more than 10,000 hours of meditation practice under their belts, as well as inexperienced meditators, who they observe before and after meditation training.”*

Briefly, the results of those studies are the following: *“their data reveals that meditation can change the brain in measurable ways—and in ways that seem linked to care and compassion for others. For example, when meditation “experts” watched videos of other people suffering, functional magnetic resonance image (fMRI) scans of their brains showed heightened activity primarily in structures that are important to care, nurturance, and positive social affiliation—that is, brain regions that orient them toward the well-being of other people. In non-meditators, the videos of suffering were more likely to engage brain structures that support unpleasant feelings, such as sadness, aversion, or pain—which, in turn, makes people distressed and want to remove themselves from the situation.”* (Simon-Thomas, 2012).

Other scientists worked on this thematic, like Lutz et al. (2004), comparing eight long-term Buddhist practitioners that had for *“10,000 to 50,000 h over timer periods ranging from 15 to 40 years.”* of meditation practices, with 10 healthy student volunteers, as control group that had *“no previous meditative experiences but had declared an interest in meditation”*. Both groups trained a week before in meditation of compassion, they needed to *“think of someone they care about, such as their parents or beloved, and to let their mind be invaded by a feeling of love or compassion”*. When the researchers collected the EEG (Electroencephalogram) data *“both controls and long-term practitioners tried to generate this nonreferential state of loving-kindness and compassion.”* The analysis of EEG differed from the two groups *“in particular over lateral frontoparietal electrodes. In addition, the ratio of gamma-band activity (25-42 Hz) to slow oscillatory activity (4-13 Hz) is initially higher in the resting baseline before meditation for the practitioners than the controls over medial frontoparietal electrodes.”* The fact that the long-term practitioners *“self-induce sustained electroencephalographic high amplitude gamma-band oscillations and phase-synchrony during meditation.”* reveals that *“mental training involves temporal integrative mechanisms and may induce short-term neural changes.”* (Lutz et al., 2004).

This is what we call cerebral plasticity. One of the most evident example of brain malleability is shown on the studies of Maguire et al. (2000; 2003) who revealed that the London taxi driver have a hippocampal size which is getting larger as much as they are working for year, than classic population. *“Hippocampal volume correlated with the amount of time spent as a taxi driver”* (Maguire et al., 2000) the next study revealed that *“structural differences in the human hippocampus reflect the detail and/or duration of use of the spatial representation acquired”* (Maguire et al., 2003).

About our thematic *“emotions, attention and introspection are ongoing and labile processes that need to be understood and studied as skills that can be trained, similar to other human skills like music, mathematics or sports. This principle is foundational for Buddhist contemplative practice, since such practices are based upon the notion that the mind is malleable in this way.”* (Lutz, Dunne & Davidson, 2007). The authors explain *“Thus, since there is bi-direction communication between the brain and periphery, it is theoretically possible to affect those types of conditions by inducing changes in the brain through meditation.”*.

An example of this is the study developed by Davidson et al. (2003), after 8 weeks training with the program MBSR (mindfulness-based stress reduction), the trained group was compared to a control group, they showed up that the trained group had a higher antibody response to the vaccine of influenza. This study shows how the relation between brain and immune function can change with meditation. *“These findings demonstrate that a short program in mindfulness meditation produces demonstrable effects on brain and immune function. These findings suggest that meditation may change brain and immune function in positive ways and underscore the need for additional research.”*.

Benefices of meditation are scientifically proven during the last years for the general population as we just saw. In the next part of the review we will see how it could help people with ASD.

2.3. Meditation for people with Autistic Spectrum Disorder

More specific to our thematic we found some articles about meditation and mindfulness for people with Autistic Spectrum Disorder. The quantity of study in this thematic is not important, by writing the key words “Meditation” AND “Autism” in the research navigators like Google Scholar we found and selected a total of 6/7 corresponding to our thematic and which was scientifically interesting.

The first study by Rosenblatt (2011) presented an 8 weeks program which is meditation and body-mind technics in their large globality, including exercises of Yoga, Music and Dance, which are all part of the family of body-mind technics. Their results from a quantitative method, based on the BASC-2 (Behavior Assessment System for Children-2) questionnaire, have shown a change of the index of behavioural and cognitive symptoms in all program participants. The conclusion of this study is that body-mind techniques can be beneficial for children with ASD. This *“multimodal relaxation program”* had a positive impact on the 24 participants aged from 3 to 16 years old. She concludes by saying that *“Randomized studies of this intervention are needed to confirm this finding. Such studies should involve a larger number of subjects, additional assessment tools of the treatment effect beyond self-report inventories and a more systematic analysis of the factors contributing to individual variability in treatment response.”*.

It happens that some individuals with ASD engage physical aggression, this have an impact for them, their parents and siblings. Singh et al. (2011a) used a mindfulness program called *“Meditation on the Soles of the Feet”* with three adolescents. The results are the following: *“Incidents of aggression across the three adolescents ranged from a mean of 14–20 per week during baseline, 4–6 per week during mindfulness training, including zero rates during the last 4 weeks of intervention. Aggression occurred a rate of about 1 per year during a 3-year follow-up.”* The results of this program are important and suggest the fact that adolescents with ASD *“can learn, and effectively use, a mindfulness-based procedure to self-manage their physical aggression over several years.”* In a second study of Singh et al. (2011b) the authors saw that during a 4-year follow-up, *“no episodes of physical aggression occurred”*. The three adolescents with Asperger syndrome controlled their aggressive behaviour in the long term. The target measured in this study is only focus on physical aggression.

Focusing in the thematic of depression and anxiety, Spek, van Ham and Nyklicek (2013) made a 9 weeks MBT (Mindfulness Based Training) in 42 high-functioning adults with ASD. They compared their results with a control group, and they observed some important differences in the reduction of *“depression, anxiety and rumination”*. The researchers used a quantitative method to obtain data,

based on self-report questionnaires, to see impact of the practice on depression, anxiety, rumination, life quality, pleasant mood and also an assessment to measure verbal comprehension.

As we saw in the first part of the literature review, about benefices of Mindfulness, empathy can be improved with different programs. In their quantitative study, Ridderinkhof et al. (2017) performed a program based on a five-minute mindfulness in order to cultivate the empathy with participants who has autistic trait and narcissistic trait. The results revealed that mindfulness didn't have effect on empathic responding, maybe because the program used was short and brief, but people who has higher autistic traits *"did show increased prosocial behaviour across conditions."*

Another type of meditation is studied by Black and Rosenthal (2015), who made a qualitative study, on the impact of Transcendental Meditation (TM) on children and young adults with ASD. This type of meditation is a *"mantra-based meditation technique"* and *"does not emphasize the need to concentrate and control the mind, and the practitioner maintains alertness during meditation. For these reasons, it may be relatively simple to teach TM to individuals with ASDs."* The authors interviewed six individuals between 10 and 30 years old, with ASD and *"who had practiced TM twice per day for 15–20 min, at least 10 times per week, for at least 3 months were interviewed."* They observed that *"Most individuals reported that the changes they experienced from TM were gradual and accumulated over time, i.e. the longer they meditated, the more benefit they experienced."* The way which Transcendental Meditation were helpful are various, particularly in *"reduced stress and anxiety, and improved emotion and behaviour regulation, productivity, the ability to tolerate and cope in novel settings and social environments, and the capacity to transition and manage unexpected changes in routine."* The parents of the participants observed that their children *"were able to take on more tasks, needed less time to recover following a stressful situation (such as a highly social or novel setting), and generally seemed more at-ease."*

The last study presented in this part is the quantitative study of Bogel et al. (2008). They performed several sessions of Mindfulness during 8 weeks with adolescents with Pervasive Spectrum Disorder and some of the participants had ASD. They observed that after mindfulness training *"children self-reported substantial improvement on personal goals, internalizing and externalizing complaints, attention problems, happiness, and mindful awareness, and performed better on a sustained attention test."* The specificity of this program is that they included the parents in the training. The parents *"reported improvement on children's goals, externalizing and attention problems, selfcontrol, attunement to others and withdrawal. In addition, parents improved on their own goals."* But the effect of ASD was not differently investigated compared to the other participants with PSD.

From this last study we can do a link to our next part which is focus about the benefices of including parents and families in the programs.

2.4. Meditation for parents with children with Autistic Syndrome Disorder

According to the objectives of our study, it was essential to read literature about the inclusion of the parents inside a program of meditation.

As we already problematized in the second part of the introduction, the prevalence of stress for parents with children with ASD is higher *“compared to those of typically developing children, parents of children with other disabilities (e.g., Down syndrome, intellectual disability), and children with chronic illness”* (Ferraioli & Harris, 2012).

As showed in the study of Abbeduto et al. (2004), the mothers with ASD children had lower score in psychological well-being than the one with a child with Down Syndrome or Fragile X Syndrome. Some other studies revealed the importance of stressful events in daily life of parents or mothers like in the one of Smith et al. (2010) which revealed the importance of stressful events of mother with ASD children, comparing to others.

The study of De Bruin et al. (2014) have the same conclusion about it: *“Anxiety, depression, somatic complaints, and burn-out are significantly higher in parents of children with ASD compared to parents of typically developing children.”*

Nikmat, Ahmad and Razali (2008) studied the psychological wellbeing and the parenting stress of 52 parents with autistic child. They found out that *“90.4% of parents had significant parenting stress, and 53.8% of parents showed clinical disturbance in psychological wellbeing.”*

The study of Sivberg (2006) joined the same conclusion, by comparing 66 parents with children with ASD, with 66 parents with children without ASD. Also, they hypothesized an *“indicator of a stronger burnout effect of the mothers”*.

Ferraioli and Harris (2010) developed an 8 weeks program of meditation, with 2 hours meeting per week, which was incorporating exercises of didactics, role plays, discussion and homework. They highlighted the *“bidirectional effects between parent emotion and child outcomes”* by incorporating *“mindfulness techniques into their daily lives”*.

Singh et al. (2006; 2007), have found positive results regarding mindfulness intervention with parents of children with ASD. The first study of Singh et al. (2006) is about a 12-Session Mindfulness Parent Training Program. *“We taught three parents the philosophy and practice of mindfulness in a 12-week course and assessed the outcome of the training on their children’s behaviour.”* Although the sample of this study is small, consisting of only three mothers, the results were promising and *“showed that the mothers’ mindful parenting decreased their children’s aggression, noncompliance, and self-injury and increased the mothers’ satisfaction with their parenting skills and interactions with their children.”*

The authors demonstrate the importance of a routine practice of mindfulness, which permits more positive effects. *“During mindfulness training, the mothers’ satisfaction with their parenting skills and their interactions with their children increased from baseline levels, reaching the highest levels when they began using mindfulness routinely on a daily basis.”*

The second article of Singh et al. (2007) is also about a 12 weeks training program, which shows *“that after training in the philosophy and practice of mindfulness, parents can mindfully attend to the challenging behaviours of their children with autism. Parents also report an increased satisfaction with their parenting skills and social interactions with their children.”* They concluded the following: *“We speculate that mindfulness produces transformational change in the parents that is reflected in enhanced positive behavioural transactions with their children.”* For the four children of the sample, they found that *“Reductions occurred in the aggressive behaviour of all four children. Some reduction from baseline was evident during mindfulness training, but more substantial reductions occurred during the mindfulness practice phase and, by the end of the phase, aggressive behaviour was occurring minimally.”*

The last article of this part of the review is an article of De Bruin et al. (2014). They did a 9 week of 90 minutes sessions a week. They were also encouraged to practice at home, together, parents and adolescents. The program consists in taught parents to *“take a breathing space before responding to difficult behaviour of their child that may trigger impulsive and emotionally intense reactions, and thus reduces parental reactivity.”* The results of the sample were the following: *“they reported improved social responsiveness, social communication, social cognition, preoccupations, and social motivation. About themselves, parents reported improvement in general as well as in parental mindfulness. They reported improved competence in parenting, overall parenting styles, more specifically a less lax, verbose parenting style, and an increased quality of life.”*

These studies demonstrate the importance of both training, parents and children in the same time, for stress reducing.

2.5. Meditation as a body-mind practice: Symbol of body evolution in occidental society

This part of the thesis has two main objectives. The first one is to show how the evolution of the body perception and his association to the mind evolved in the occidental history, which were correlated to the birth of body-mind technics. The second one is to show how important those practices, and particularly Meditation have their place in the field of study of physical education faculties.

2.5.1. From a dualist philosophy of the body and the mind

To understand better how Meditation is a recent practice which still subject of debates in our occidental society, we will present in a first part the evolution of how the body is perceived in a philosophical dimension and with his association with the mind.

The main philosophic idea that we need to surpass is the cartesian one, from René Descartes and his idea of dualism between the body and the mind. This dualist idea, come from antiquities roots and the concept of Platon that the body is the “tombeau de l’âme/tomb of the soul” as Formis (2009) says in her article, we need to “rompre avec l’idée philosophique par excellence selon laquelle le corps est réduit au “tombeau de l’âme” ou au simple véhicule de l’action volontaire/break with the philosophical idea according to which the body is reduced to the “tomb of the soul” or to the simple vehicle of voluntary action”.

Following the idea of Platon, the mind is deceived by the body “Lorsque c’est avec le corps que l’âme tente d’examiner quelque chose, écrit Platon, il est évident qu’elle est totalement trompée par lui/”When it is with the body that the soul” tries to examine something, writes Platon, it is obvious that it is completely deceived by it”(Phédon, 65b)”(Formis, 2009).

Later, in the 16th century, the dualism idea of Descartes is symbolized by the “res extensa (la substance étendue/the extended substance) from the res cogitans (la substance pensante/the thinking substance”, “le moi/the self”, “le cogito/the cogito”. (Deveillairs, 2013) And the “res extensa”, the body, is not something we can trust in following his idea, the senses and corporal sensations are betrayer. This Cartesian idea have as a source the discomfort and the difficulty of Descartes, to describe the body with proper words, the right vocabulary “dans un vocabulaire suffisamment juste/ in a vocabulary that is sufficiently accurate” (Vinit, 2013). In one letter of the 18th June 1643, he says about the body that it is “la chose la plus difficile à expliquer mais il suffit de l’expérience (sic)/ the hardest thing to explain but experience is enough”.

In the 18th century, the age of enlightenment, the body continued to be considered as a treat “à cause de sa tendance à distraire la pensée rationnelle en la détournant de sa poursuite d’objectivité/

because of its tendency to distract rational thought by diverting it from its pursuit of objectivity (Stoller, 1997, p. XII).”(Winniger et al. 2017).

Vinit (2013), show how this vision is a mistake and that the body allow to the individual to be open to the world. *“Réduire le corps à sa dimension de chose rate ce qu’il est, pour l’individu conscient, d’être au monde par son corps./ Reducing the body to its dimension of thing misses what it is, for the conscious individual, to be in the world by his body.”.*

In France, researchers from physical education area are using the term of “pratiques de conscience/consciousness practice”. Midol and Chenault (2017) shows how important is to surpass the metaphysic philosophy of the XXI century and Descartes. Already in 1934, Marcel Mauss introduce the thematic of “techniques du corps/body technics”, that the body is linked to many biologic, cultural, symbolic and social factors. The authors are describing practice like Meditation as innovating practice that allow *“une réinvention de sa conscience à partir de l’agir et selon les conditions de l’environnement (culturel, anthropologique, intentionnel...)/A reinvention of one’s consciousness from action and according to environmental conditions (cultural, anthropological, intentional ...).”.*

The main vision of Mauss (1934) that we need to consider all long of this study and his general in this area of study is the one of *“Homme total”*, he speaks about a triple point of view consideration, for example the study of the walking activity, which need to be explore through an anatomical/physiological point of view, but also psychological and sociological.

2.5.2. From cartesian dualism to a proper body-consciousness

The body is at the centre of all those bio-psycho-social interactions. Being aware about what is happening in our body, our sensations, is, as Vinit (2013) say *“La pratique de l’attention développe ainsi une intimité accrue à soi-même qui prend la forme d’une présence plus “habitée”/ The practice of attention develops an increased intimacy to oneself which takes the form of a more “inhabited” presence.”.* Developing this intimacy is part of the concept of Phenomenology, described by the author. *“En soulignant que le corps [...] (est) la forme la plus primordiale de la présence à soi et à l’autre, la phénoménologie vient rappeler que le monde nous est donné dans le lien vivant et renouvelé que nous entretenons avec lui./ By emphasizing that the body [...] (is) the most primordial form of presence to oneself and to the other, phenomenology reminds us that the world is given to us in the living and re-discovered link that we maintain with it.”.*

Those are the proves that a proper conscience of the body exist *“conscience du corps (est) le surgissement d’une conscience complètement incarnée, dérivée quant à elle d’un corps pensant, d’un corps qui produirait de la conscience par ses propres moyens : le mouvement l’exercice, la posture, le*

comportement, bref, l'expérience. / "Body consciousness (is) the emergence of a completely embodied consciousness, derived for its part from a thinking body, from a body which would produce consciousness by its own means: movement exercise, posture, behavior, in short, experience." (Formis, 2009). Here we find back the notion of experience, from a different approach than the cartesian one.

This body conscience can be worked thanks to body-mind technics like QIGONG for example. In his article, Winiger et al. (2017), explain the vision of Yuasa about QIGONG, which is like Meditation, part of the body mind practice. This practice helps to surpass the cartesian dualism of the spirit and the body, thanks to the practice that are called as *"culture de soi/self cultivation"* and this kind of practice helps to the unification of body and mind. Which can be felt as sensation of fusion with movements.

This philosophy of the body-mind technics regroups other practice like Yoga for example, Ferrero (2013) explain that in the Yogic tradition the body is automatically considered as body-mind with a *"lien indissociable existant entre nos émotions, nos états psychiques et le corps/ inseparable link existing between our emotions, our psychic states and the body (Baret, 2007)."*

All those body-mind technics have as a common point the work about the breathing. Like Midol and Chenault (2017) are describing as the most basics practice. And the most basics practice, like linked to the breath *"se relier aux souffles par des exercices de respiration (qui) sont une voie d'accès à l'activation de la conscience/ "Connecting with the breaths through breathing exercises (which) are a pathway to the activation of consciousness"*.

The authors show the importance of the interdisciplinary articulation, which needs to be approached and learned via the transdisciplinary as much as the pluridisciplinary. And studying *"les pratiques de consciences/consciousness practice"* are not about creating new concepts, or innovating them, but *"plutôt accorder des forces de savoir en présence dans nos pratiques quotidiennes afin qu'elles s'harmonisent vers un horizon viable pour l'humain et son environnement/ rather to harness the forces of knowledge present in our daily practices so that they harmonize towards a viable horizon for humans and their environment."* (Midol & Chenault, 2017).

2.5.3. Bodily experience and lived experience

The French researcher, Gaillard (2010) showed the importance of the sensibility of the body and how it has an impact on the happening of our actions *"La sensibilité du corps nous informe en permanence du déroulement de nos actions./The sensitivity of the body constantly informs us of the course of our actions."* In the context of sport activities for example and research of performance, the state which is described as state of "flow". Is *"L'état de "flow", qui accompagne la réalisation de performances exceptionnelles, traduit une attention particulière à son expérience corporelle, sans*

intention de contrôle. / “The state of flow, which accompanies the achievement of exceptional performances, reflects a particular attention to his bodily experience, without intention of control.”.

The term of body-experience is defined by Chenault (2012) like: *“L’expérience corporelle (Biache 2008; Huel and Gal Petitfaux, 2010) peut être envisagée comme “tout vécu d’un évènement ou d’une situation impliquant le corps, donnant lieu à un ressenti subjectif et s’accompagnant pour l’individu de connaissances nouvelles sur soi ou sur son environnement” (citation de Petit Faux, in Mangeol, 2011:29)/ The bodily experience (Biache 2008; Huel and Gal Petitfaux, 2010) can be considered as “any experience of an event or situation involving the body, giving rise to a subjective feeling and accompanying for the individual new knowledge about oneself or one’s environment”(quote from Petit Faux, in Mangeol, 2011: 29).”.*

Jay (2014) show how important it is to learn how to live presently, in this body-experience *“à faire dialoguer intelligence du corps, la conscience et la pensée/To bring together body intelligence, consciousness and thought”*, he showed in his paper how somatic technics and practice like dance can permit this state of consciousness in harmony with the body.

And as we saw in the previous parts with the philosophy of Marcel Mauss, this body, and the corporal experience are inter-related to a social dimension as-well. We must move away from this common thought which suggests that these practices are *“nombrilistes/self-absorbed”*, because we develop a body *“lived in relation, in interaction with itself, the physical environment, the human environment, the world in all its acceptations.”* (Jay, 2014).

2.5.4. Body awareness techniques

Here we arrive to the object of our study, a group of researcher from the University of Orleans in France, Chenault, Hamard and Hilpron defined what they called *“Les techniques de conscience du corps/ Body awareness techniques”* (Chenault, Hamard & Hilpron, 2011) following the authors, their definition is: *“se définissent sur un plan conceptuel comme des techniques de soi médiées par des techniques du corps./Conceptually define themselves as techniques of self, mediated by techniques of the body.”* Chenault et al. (2013) in that same articles that they did in 2011 they showed the importance of the heritage, from the oriental culture on those practice, like for martial art, QiGong, or meditation and their impact on the *“emergence of body awareness techniques”*. The common point on all those technics is that they invite to the *“maîtrise du geste en soi sur soi, mettant l’accent sur le souffle, le mouvement et l’esprit/ control of the gesture in oneself on oneself, emphasizing the breath, the movement and the spirit.”*.

Those techniques have as objective to work on our own *"conscience corporelle/body awareness"* which is described by the researchers like *"La conscience corporelle est tributaire d'une population et de techniques qui orientent l'attention au corps/"Body awareness is dependent on people and techniques that direct attention to the body."* (Chenault et al., 2013). There is no *"body-awareness"* without *"technic"* for the researchers.

The researchers explained that those technics, coming from the orient are linked to religious questions. Those spiritual questions are an obstacle in the mind of a lot of occidental people. The authors are comparing this attractivity as well as repulsively to the debate about sport practice at the beginning of the XX century.

But, the *"techniques du conscience du corps"* even if they are somehow related to those spiritual questions, the goal of the educator is to open the body-awareness by teaching it in a *"laic autonomy"* giving the freedom to *"d'appréhender les valeurs de santé, spirituelles et politiques qu'incarne toute technique du corps, jusque dans ses usages les plus quotidiens. / to grasp the health, spiritual and political values that embody all body techniques, even in their most everyday uses."* (Chenault et al., 2013).

I personally get interested on those *"techniques de consciences du corps"* through the Judo activity and the articles of my professor in the faculty of Orléans, Michael Hilpron. In his article *"Ippon comme l'expérience corporelle du vide pleinement vécu"* he shows that Judo, by being a *"technologie de soi/self-technology"* is part of the *"technique de conscience du corps/ "Body awareness technique"* with the importance of the material culture and the active role of the environment material and human in the technic of body awareness. In a previous article in 2012 *"L'appropriation du Judo: d'une "voie de la souplesse" à l'efficience incarnée."* that *"en unissant corps et esprit, pensée et action, sujet et objet, le judo développe une disposition à s'adapter et à réagir dans l'instant présent/By uniting body and mind, thought and action, subject and object, judo develops a disposition to adapt and react in the present moment."* It is thanks to the kinesthesia contact with the *judogi* (judo clothes) that the Judoka can feel all the movements of his opponent and then, *"l'oubli de soi/ self forgetfulness"* is felt through the spectacular action of the *ippon* (maximal point). As Gao (2013) said in his article by citing Tarik Mesli about Ninjutsu *"dépasser la dualité corps-esprit pour atteindre cet état subtil et éphémère mène à la question d'équilibre et de paix/Going beyond the duality of body and mind to reach this subtle and ephemeral state leads to the question of balance and peace"*.

But, as the work of Albin Hamard, from the same faculty, showed that in the family of techniques de conscience du corps, can be included others activities which are not sportive, like Meditation or body-mind technics in general which can include Qi Gong for example, as Chenault (2012) has shown

“techniques de maîtrise (gong) du souffle (qi)/ breath (qi) control techniques (gong)”, which allow the process that she describe as embodiment process “Le processus d’embodiment, commence par l’incarnation d’un espace dans une fenêtre temporelle précise./ The embodiment process begins with the embodiment of a space in a specific time.”.

2.5.5. Technologies de soi/Self-technology

In the previous part was introduced the notion of *“technologie de soi/ self-technology”* which is closely related to the notion of *“Techniques de Conscience du Corps/Body Consciousness Techniques”*. As Boudreau (1992) explained, this notion of *“technologies de soi”* came with Michel Foucault at the end of his life. *“des diverses façons qu’ont eues les êtres humains au cours des siècles d’agir sur eux-mêmes, sur leur corps, leur esprit, leurs pensées et leur façon d’être/ in the various ways that human beings have over the centuries to act on themselves, on their body, their mind, their thoughts and their way of being”*. The author describe those technics as technics of *“constitution et de domination de soi/ constitution and self-domination [...] techniques de subjectivation/ subjectivation techniques”*.

In the previous part was explained that the *“Techniques de Conscience du Corps”* was part of the family of *“Technologies de soi”*. But in general, the family of Budo, which regroup Judo, a combat sport, as well as martial arts like Karate are part of the *“technologies du soi”*. Three essential elements must always be in interaction during the practice of those activities, the technique (wasa), the body (thai) and the spirit (shi). As Deschamaru (1983) says, from the article of Boudreau (1992) *“la puissance du corps, et l’habileté de la technique ne sont rien sans la vigilance de l’esprit/The power of the body, and the skill of the technique are nothing without the vigilance of the spirit”*. From this point of view, Budo and martial arts are part of the self-technology, with as a final goal the complete union of the body and the spirit.

2.5.6. Specificity of Meditation

To finish this demonstration, which showed the evolution of the body perception in a philosophical way and the consideration of corporal/body perception, sensation, experience that allowed to develop practices linked to *“technologies du soi”* and the family of *“techniques de conscience du corps”*. In this part will be described more in a specific way, the practice of our study, Meditation.

Meditation is part of the *“Techniques de conscience du corps”*, and also part of the *“technique de soi”*, that we exerce *“sur soi/on oneself”*. As Foucault (2001) is saying those technics are not just a constant attention on oneself, this exam of oneself as we saw before can be considered as very phenomenologic, but also *“un ensemble d’action, de pratiques, de techniques que l’on exerce de soi sur soi, par lesquelles on se modifie/”A set of actions, practices, techniques that one exercises from oneself to oneself, by which one changes oneself”*.

Hamard and Chenault (2017), showed that meditation come from the latin *“meditari/meditatio”* which means, following the CNRTL (Centre National de Ressources Textuelles et Lexicales) *“l’action de penser avec une grande concentration d’esprit pour approfondir sa réflexion/ the act of thinking with great concentration of mind to deepen one’s thinking”*.

The authors are describing the different movement posture that need to be performed for the practice. The participant needs to choose a posture in *“lotus”* or *“semi-lotus”* but can be as well just sited in a chair. Then, the practitioners his invited to *“poser son attention sur les mouvements de la respiration, de sorte que l’observation des phénomènes liée à la respiration devienne le fil conducteur et le point de référence de l’attention/ focus on the breathing movements, so that the observation of breathing-related phenomena becomes the common thread and point of reference for attention (Depraz, Varela and Vermesch, 2011, p.68)”*.

We know, as shown in the previous part that this practice is coming from the Oriental culture. Mainly Europe and North America, this practice was *“adapted”* to an occidental way. The authors describe this practice as *“technique occidentalisée de conscience du corps/ westernized body awareness technique”*. Hamard (2013), showed by citing Geslin (1999) that Meditation in occident is the result of *“processus d’adoption, d’adaptation et de transformation que peuvent accompagner un transfert de techniques entre cultures différentes/Adoption, adaptation and transformation process that can be accompanied by a transfer of techniques between different cultures”*.

Hamard and Chenault (2017) are citing Varela et al. (1993) to explain the main goal of this technic which is *“développement d’habitudes dans lesquelles corps et esprit sont pleinement coordonnés,*

produisant une transformation qualitative du vécu/ development of habits in which body and mind are fully coordinated, producing a qualitative transformation of experience”.

The reason why Meditation is part of the “Techniques de Conscience du Corps” is that the practitioners always need to be and to keep a “*conscience fine de sa position associée à un geste intérieur qui agit sur l’image du corps et le schéma corporel/fine awareness of its position associated with an interior gesture which acts on the body image and the body diagram (Gallagher, 2005, p. 243)*” (Hamard & Chenault 2017).

2.5.7. Results and consequences of the practice

The researchers Hamard and Chenault (2017) believe that the practice described in the previous part allow to “*agissent sur la perception de l’image de soi/ act on the perception of self-image*”. If the intensity of the practice is important they also believe that it can also affect and modify “*le schéma inconscient du soi corporel/ the unconscious scheme of the bodily self*”. In that aspect, the researchers think that it “*peuvent toucher des habitus profonds qui gouvernent nos actions quotidiennes/ can touch deep habits that govern our daily actions*”.

We see here that the researchers made a difference between the concept of “*Body image*” and the one of “*Body schema*”. Gallagher (2005) is giving a definition of those two terms.

“*Body image: a system of (sometimes conscious) perceptions, attitudes, and beliefs pertaining to one’s own body.*” and “*Body schema: a nonconscious system of processes that constantly regulate posture and movement – a system of motor-sensory capacities that function below the threshold of awareness, and without the necessity of perceptual monitoring.*” Gallagher (2005).

The authors show the importance of the “*gestes intérieurs/inter movements*”, which will be described in the following part. Those “*gestes intérieurs*”, or “*actes intérieurs/intern acts*” (Petitmengin, 2001) needs to be identified (Hamard & Chenault, 2017) for those techniques and practice to have an impact on our consciousness.

In “*concentrative*” Meditation, Hamard and Chenault (2017) described the intern movements or acts, like “*La personne maintient une attention sur un point de focus particulier (la respiration, une image visualisée ou non, la vision de l’encens, l’écoute du son du bol, etc.)/”The person maintains attention to a particular point of focus (breathing, a visualized or not image, the vision of incense, listening to the sound of the bowl, etc.).*” in our study, the main point of focus, attention, is the breathing.

The authors concluded by saying that the “*expérience de modification de la perception corporelle/ experience of changing body perception*” is the result of a “*tension*” between those intern movements

codified by the “techniques des conscience du corps” and the whole is surrounded and influenced by a social and cultural context.

2.5.8. Meditation, training of a body practice

All long of this academic year, I needed to answer this question to people who was asking me how Meditation could be the main point of a master thesis for someone who study physical education?

Meditation is part of the body practice as we saw in the previous parts. And like other body practices it needs to be trained frequently to obtain results.

To prove this affirmation, I will use the examples given by relevant Meditation experts which are Jon Kabat-Zinn, famous professor of Medicine and founder and current president of the Centre for Mindfulness in Medicine, Health Care, and Society, in the University of Medicine of Massachusetts. And mostly, Christophe André psychiatrist and psychotherapist, national French reference in Mindfulness and Meditation.

Description of the position used during the practice:

The description of the technic and body position that need to be used during the practice is made by Petitmengin (2015), by describing the Shamatah form of Meditation, which is the practices of “*calme mental/mental calmness*” and similar to our practice. The posture of the body is important because it has a direct incidence on the “*clarté et la stabilité de l’esprit/clarty and stability of the mind*”. The practitioners need to have a straight back position, seated, on a pillow or on a chair. Legs in lotus or semi-lotus. Hands are on the knees or in a special meditation pose. Eyes are closed, relaxed and should watch in the prolongment of the nose. The authors speak about the breath like the main common support of the practice and the practitioners needs to “*poser son attention sur la respiration, sans la transformer, sans tension, ni effort/ focus on breathing, without transforming it, without tension or effort*”. The authors speak about this “*geste intérieur/internal moves*” of coming back to this support, when the participant lost his focus, go to this thoughts, and make the effort to give up them again to come back to the breath. This move will be described on this part with the work of Christophe André and Albin Hammard.

Jon Kabat-Zinn made a conference in 2016 in the University of Strasbourg, about Meditation and Medicine, to describe the process of this practice he used the English expression, “*the body has it hear to the rail*” which means that “*the body is listening very, very deeply and transforming as a result of you not doing anything, but simply being awake*” (21min). Which show how the body is at the centre of the attention during this practice.

Christophe André in his conference *“Méditation et Santé/Meditation and Health”* in 2018 is defining meditation as a *“entraînement de l’esprit/training of the mind”*(15min) the analogy of the training is always used in his conference, he compares it to physical activity, saying that *“méditation est finalement à notre cerveau ce que l’exercice physique est à notre corps./meditation is finally to our brain what physical exercise is to our body”* (15min). Nowadays, we started to prescribe physical exercises because of the social habits which recently changed, due to the sedentary lifestyle which is more important in western countries. The psychiatrist is comparing it for Meditation and the increase of phone importance in our society, because our *“attention est de plus en plus agressée, par les incitations publicitaires, par les interruptions venues des écrans, des SMS, des mails, des coups de téléphone/ attention is more and more aggressed, by publicities, spams on screens, messages, mails, phone call”*. And so, *“c’est comme si la méditation, intuitivement, nous sentions qu’elle allait nous aider à réparer les dégâts à ces changements croissants de style de vie./it’s like if meditation, intuitively, we were feeling that it could help to repair the damages of those important lifestyle changes.”* (18min).

For the psychiatrist, the practice of Meditation is kind of like the training practice in different physical activities, *“on ne peut pas imposer à notre cerveau des changements immédiats/we can’t impose to our brain immediate changes”*. It is like another body practice, *“si vous voulez courir plus longtemps (...) vous ne pouvez pas vous lever un matin et dire (...) je vais courir plus longtemps/if you want to run longer (...) you can’t wake up one day and say (...) I will run longer”*, he explains how this process is similar for the brain with the practice of Meditation *“pour notre cerveau, c’est pareil/for our brain, is the same (...) je peux faire des exercices qui m’entraînent à mieux observer, ou décider d’être plus concentré, d’avoir une meilleure mémoire, (...) développer mes capacités d’attention, d’apaisement émotionnel/ I can do exercises which train me to observe better, or decide to be more focus, to have a better memory, develop my capacity of attention, of emotional control”* (28min30).

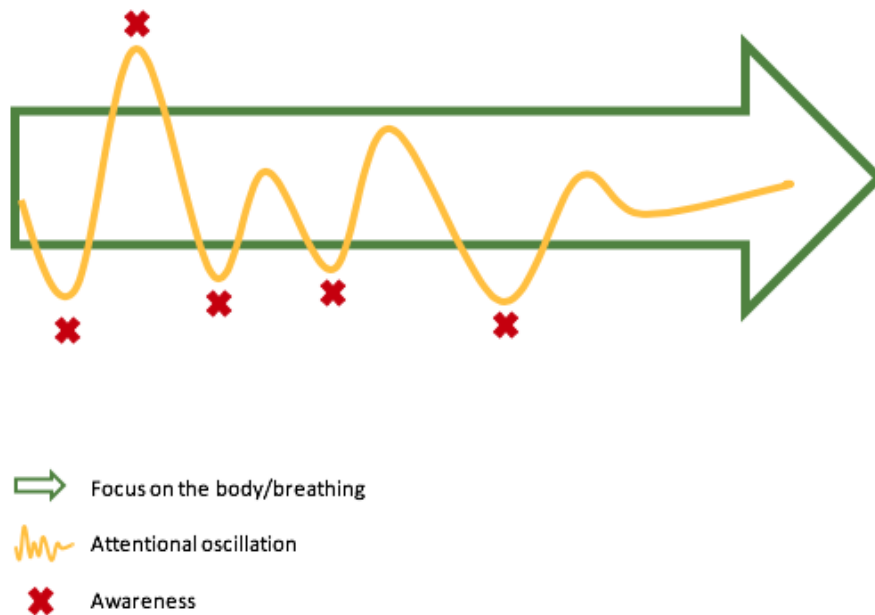


Image 1. Representation of attentional oscillations and awareness (From Christophe André)

Christophe André use a graphic to symbolize the training of the brain during mindfulness practice, the goal of the exercise is to be focus on the breath, and *“mon attention s’échappe, on la raméne, elle se rééchappe, tout va bien, notre cerveau fonctionne comme ça, ce qu’on essaye de développer, dans cet exercice, c’est ce qui est signifié par ces petites croix rouges, c’est ça le moment important de l’exercice, c’est quand tout à coup je réalise que je suis plus dans le souffle, mais dans une pensée ou une autre. (...) c’est ça l’exercice et c’est de la musculation, c’est comme quand on fait des mouvements avec ses bras, avec ses jambes, on fait travailler son cerveau en étant attentif à ce que l’on fait/my attention is going, I bring it back (to the breath), it goes again, everything is alright, our brain is working like this, what we are trying to develop in this exercise, which is symbolized by the **small red cross**, is the most important part of the exercise, it is when I realise that I am not anymore (focus) on the breath (**green arrow**) but in one thought or another. (...) this is the exercise, and this is musculation, it is like when we do movements with arms, with legs, we make work our brain by being focus on what we are doing”* (34min30). The psychiatrist is speaking about musculation of attentional capacity *“muscler vos capacités attentionnelles/muscle your attentional capacities”* (55min).

The yellow line present in the graphic is what Hamard and Chenault (2017) described as intern moves.

When we realise that we do overthinking a lot and we decide to practice meditation or mindfulness, it is similar than when we realise that we are physically tired after climbing stairs for example and we decide to practice physical activity or to stop smoking for example.

The psychiatrist compared Meditation teachers as gym teacher, because it is a technic and when we do session I groups, *“on apprend une technique, on est un peu comme des profs de gym qui vous apprennent à faire des mouvements bons pour la santé, nous on apprend aux gens à faire des mouvements bons avec leur cerveau, à observer le fonctionnement de leur cerveau/we learn a technic, we are a bit like physical education teacher who teach you how to do good movements for the health, we learn to people how to do good movements with their brain, to observe the functioning of their brain”* (52min).

This type of Meditation is described by Hamard (2013) like *“concentrative”* meditation, and when the participant lost his focus that he must keep on a *“support”*, like the breath. But when the person is aware about his *“errance/wandering”*, the participant come back to the *“support”*.

2.5.8.1. Limits

Hamard (2013), speak about the potential consequences of the westernization of Meditation. Those westernization had an impact, according the author to the philosophic approach neglected due to the importance given to the bodily and psychological impact. The consequences of this occidental vision are that Meditation is considered too much like a medicament. And considering is like a *“gymnastique de l'esprit/gymnastic of the spirit”* goes to the opposite vision of trying to search for a *“flexibility”, “fluidity”* of the mind and the practice can be considered as a *“puissante auto-contrainte/powerful self-restraint”*. The objective is than not to continue to *“sportified”* meditation, but to try to let the field of other physical activities being more meditative.

2.6. Mantra Techniques

As explained in the following parts, on the description of the sessions and the exercises during our study, the end of the first cycle and the whole part of the second cycle was importantly focus on the use of the different mantras during the practice of meditation.

To understand better the specificity of those exercises, we analysed in a first time the most recent systematic review of literature on the thematic of Mantras and mental health benefices for a non-clinical population. From this review we found online the most important papers about this thematic, in order to understand the specificities of this type of meditation and practice, itself, on mental health, but also compared to other types of meditation like mindfulness for example.

2.6.1. Presentation of the most recent systematic review

The most recent systematic review made about the benefices of the practice of Mantra is the one of Lynch et al. (2018) called *“Mantra meditation for mental health in the general population: A systematic review”*. The objective of their review is to see the effects on the mental health of the mantra meditation. This study is focus on non-clinical populations, from the 37 articles included in this study, the conclusion made is that there is important outcomes in the different areas *“anxiety, stress, depression, burnout, anger and psychological distress”*, so mantra exercises *“can improve mental health and negative affectivity in non-clinical populations”*.

The different studies are treating about different outcomes: anxiety, stress, anger and burnout.

About **anxiety**, 23 of the papers reported were about anxiety state and evolution of trait. 17 of those reported significant improvements in the income of anxiety. But, 11 of those 17 papers, did not have any control group and were quasi experimental. Only two articles concluded that *“mantra meditation has a significant impact on anxiety, in comparison to a control group”*.

The first article is considered by Lynch et al. (2018) as a weak quality. It is from Nidich et al. (2009) called *“A randomized controlled trial on effects of the transcendental Meditation program on blood pressure, Psychological Distress and coping in Young Adults”*. 298 students participated to this study and participated of a three months Transcendental Meditation program, which is mainly composed of mantra exercises, they found out *“Significant improvements (...) in total psychological distress, anxiety, depression, anger/hostility, and coping.”*

The second paper who shows significant results about anxiety is considered by Lynch et al. (2018) as a moderate quality. It is from Nidich et al. (2016) called *“Reduced trauma symptoms and perceived stress in male prison inmates through the transcendental meditation program: a randomized controlled trial.”* They found out that for inmates, there is significant results in *“total trauma*

symptoms, anxiety, depression, dissociation, and sleep disturbance subscales.”. In the study, 181 inmates participated to a Transcendental Meditation Program, of 5 sessions lasting 1 hour per session, and then, they were encouraged to *“practice this stress reduction technique for 20 minutes twice a day, once in the morning and once in the late afternoon”* Nidich et al. (2016). For four months.

About **depression**, 11 studies reported outcomes on it, 8 of them *“reported significant improvements in depression”*. Four of them reported *“significant reductions in depression scores for the mantra meditation group, in comparison to the control group”*. The two ones of Nidich et al., (2009 & 2016) that we just saw in the anxiety part.

The third one is the one of Elder et al. (2014) (weak quality, according to Lynch et al. 2018) called *“Effect of transcendental meditation on employee stress, depression, and burnout: a randomized controlled study.”*. The study was made with 40 secondary school teachers and support staff of a therapeutic school for children with problems of behaviour. The TM (Transcendental Meditation) intervention was of 4 months, after some didactic lectures, participants were advised to practice the technique twice a day for 15 to 20 minutes at home. After the intervention, results showed that the TM program *“was effective in reducing psychological distress in teachers and support staff”*.

The study of Wolf and Abell (2003) (moderate quality, according to Lynch et al. 2018), called *“Examining the effects of meditation techniques on psychosocial functioning”* the mantra chanted is called the *maha mantra*, on a 4 weeks program, the 31 participants who practiced the *maha mantra* showed better results on stress reducing than the control group (31) and the placebo control group (31). The conclusion of the authors is that this technique *“has potential in addressing problems related to stress and depression and that it be considered as one possible component of a spiritual approach to social work practice.”*

In the literature, there is few studies comparing mantra meditation, with other types of meditation, mindfulness or even relaxation. Alexander et al. (1989) in *“Transcendental Meditation, Mindfulness, and Longevity: An experimental study with the elderly.”* compared all those different practice with a group of 73 elderly people, with an average age of 81 years old. On this 3 years study, they found out the group who improved most on *“paired associate learning; 2 measures of cognitive flexibility; mental health; systolic blood pressure; and ratings of behavioural flexibility, aging, and treatment efficacy.”*, followed by the Mindfulness group, compared to the relaxation and no-treatment groups. The mindfulness improved most and had better results on *“perceived control and word fluency. After 3 years, survival rate was 100% for TM and 87.5% for MF in contrast to lower rates for other groups.”* (Alexander et al., 1989). But the study didn’t reveal any outcomes about depression.

Another study compared meditation types, it's the following:

About **stress**, 14 studies reported about stress outcomes. The study of Schoormans and Nyklicek (2011) compared mantra meditation with mindfulness on self-reported stress but didn't have any significant outcomes. 35 participants were practicing Mindfulness Meditation and 20 practiced Transcendental Meditation. After reporting well-being questionnaires, the authors found out good well-being results for the participants, but no differences between the two meditations types. About **burn-out** two studies reported about it, first one, is from Elder et al. (2014) called *"Effect of transcendental meditation on employee stress, depression, and burnout: a randomized controlled study"*, that we already saw in the depression part, they reported *"reported a significant reduction in overall burnout for those who practiced TM, compared to controls."* Lynch et al., (2018). About **anger**, four studies reported outcomes about it. One reported significant result on anger scores for the Transcendental Meditation group, compared to the control one. Is the one of Nidich et al. (2009) on *"A randomized controlled trial on effects of the transcendental meditation program on blood pressure, psychological distress, and coping in young adults."* The study was made on 298 university students who did a TM program of 3 months, the TM group had a significative reduction of the anger variable. (weak quality study).

In general, about comparison of TM with mindfulness practitioners *"One cross-sectional study reports no significant difference between TM practitioners and mindfulness practitioners on the Global MoodScale(GMS) which reflects subscales relating to both positive and negative affect"* (Lynch et al., 2018). This study is called *"Mindfulness and psychologic well-being: are their related to type of meditation technique practiced?"* from Schoormans and Nyklicek, 2011. The results of the study are the following *"All self-reported mindfulness facets correlated with almost all measures of well-being across groups, but no differences were evident between meditation types regarding mindfulness or well-being. Days per week spent on meditation was the only multivariable predictor of both higher mindfulness and lower perceived stress."*.

From this review, two articles are presenting qualitative findings, the first one is quite old, from West (1980), in *"Meditation, personality and arousal"*, he reported how the use of mantra can help to manage stress, emotions and unwanted thoughts.

The second, one, more recent, is from Bormann et al. (2006) in *"Mantra repetition for stress management in veterans and employees: a critical incident study"*, the objective of this 3 months program was to see the perception of the impact of meditation, 26.4% of the sample cited psychological benefits and 17.3% told that they had a decrease of stress susceptibility. About feelings,

while meditating, 22.52% of the participants spoke about mental relaxation and peace state during their primary experience.

2.6.1.1. Conclusion of the review about Mantra meditation

Lynch et al. (2018) are concluding their systematic review saying that even if there are some evidences that mantra meditation/TM improve mental health in a non-clinical population, *“this evidence is based on individual studies of poor quality.”* But the positive trends are evident, on such programmes and may *“have exciting educational, occupational and psychotherapeutic potential”* on the general population.

Regarding our work, mantra meditation, compared to a most classic Mindfulness program without mantra was compared in two articles of this study, the most relevant one which was about stress is the one of Schoormans and Nyklicek (2011), but they didn't find out any significant difference in result for both type of practice.

2.6.2. Other articles

We found online other papers, that were not part of this last systematic review, we analysed them in order to give more strength to our review, having a different perspective and better description of this type of meditation. To find the literature online, the keywords used were Mantra(s) and Meditation.

The first article found, from Lolla (2018) give us a definition of the most used mantra, the *“OM (aum), it is from the Hindu religion and represent the primal sound of the Indian spiritual science [...] It is believed to contain all sounds”*. They show the importance of the OM in the oriental culture, which is an *“ancient Indian spiritual science of sound vibration”* that *“had been used to help the mind, the body and life”*.

About **stress**, Sharma and Singh (2014) made a study on 20 adolescents to see the effects of Mantras (*“OM”* and *“Gayatra Mantra”*) on educational stress. They observed significant results, on stress *“pressure from society”, “workload”, “worry about grade”* and *“self-expectation stress”*. They concluded that chanting mantras have an impact in combating the stress of the adolescents.

Other studies showed others results on other aspects, like **memory**. Ghaligi, et al. (2005) observed the effect of 2 years chanting on memory and sustained attention. They observed that from their 35 subjects, chanting group had significant *“better verbal and spatial scoring and decrease in total time take”*. Those results on memory can be explained by the study of Engstorm et al. 2010. They observed the *“Functional Magnetic Resonance Imaging of Hippocampal Activation During Silent Mantra Meditation”* of meditation practisers, of less than 2 years of practice and they saw that the certain

zone of the hippocampal were more active during meditation time and this could be correlated to memory consolidation *“memory consolidation could be one possible explanation of hippocampal activation during meditation”*.

About **attention**, Pradhan and Derle (2012) observed that the practice of Gayatri Mantra, compared to *“Poem Chanting”*, on 60 schools' students (12-14 years old) showed better score on the Digit-letter substitution task.

2.6.2.1. Brain activity

To have a Transdisciplinary and Pluridisciplinar approach, here are included two articles which treat about the brain activity during the practice of this technic.

Thomas and Rao (2016) used Electroencephalogram with 12 subjects and functional Magnetic Imaging (fMRI) with 8 subjects to observe the effect of Gayatri Mantra Meditation on Meditation Naïve Subjects they concluded that there is changes in the brain before and after listening those mantras *“the results showed that the areas that had maximum activation were the bilateral superior temporal gyri, right temporal lobe, right insula, left inferior parietal lobule, lateral globuspallidus and culmen of the cerebellum.”*

The second study is from the researchers Gurjar et al. (2009) who are defining the OM mantra like the *“most powerful of all the mantras”*, important one in the oriental culture of Meditation. They measured the frequency modulation and represented waveforms of the *“OM”* chant by recording them.

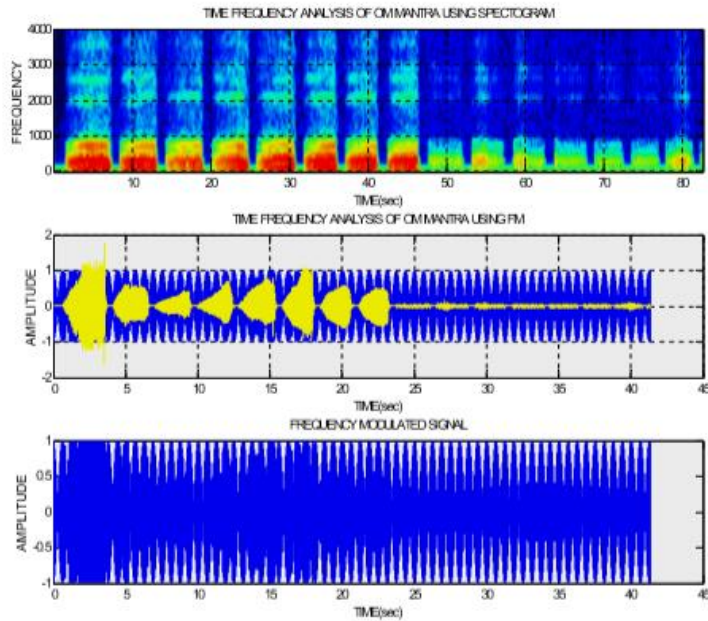


Fig. 1 Depicts the chanting of "OM" by a male speaker and frequency modulated waveform.

The figure 1 presented here are from a male chanting OM. The amplitude and the frequency were measured and analysed during the time. The researchers analysed that the fact that the mantra *"is being repeated naturally slows down. It is not a matter of forcing the mantra to slow, but rather, this slowing comes quite naturally"* had an impact in stabilization of brain *"From this we could conclude that chanting OM mantra results in stabilization of brain, removal of worldly thoughts and increase of energy. It means that concentrating on OM mantra and continuously doing it slowly shifts our attention."* The frequency modulated (FM) signal carrier evolution shows that *"As we go on chanting OM mantra, the mind becomes calm. When the mind becomes calm, the body relaxes, and the breath becomes even soother and slower."*

2.6.2.2. Conclusion

Those last studies, confirmed the importance of mantra meditation by having positive results on studies, like about stress, attention and memory. And the impact that have this study on the brain, by activating zone related to memory for example, but also by reducing his activity and making the mind becoming calm and calmer. Once again, no important differences with other type of Meditation, like classic mindfulness are made. For our population, the observation made, which will be analysed and developed in the next parts are that the participants are getting better and better on following and doing the mantras in rhythm. Also, it can be like an additional support, to focus on during the practice. The advantage compared to breath as a support, is that the mantra is an individual and a collective support. Also, the sound coming from oneself vibration can be easier to follow during more time as a focus support, than the simple breathing activity. Nevertheless, variety of technics used

during our program are part of the strength of our study. The goal is also to present different technics, and the participant, depending of their affinities for one or another will adopt and practice at home, by themselves the one that they prefer.

3. Methodology

3.1. Sample

The sample is constituted of 24 participants. They are differentiated in three categories. The first one is the one of the young peoples with ASD (9), the second one is the family, mainly parents and one sibling of the participants (8) and the last one is the professors of the institution (7). **3.1.1. Young people with Autistic Spectrum Disorders** The 9 young people with ASD belong to the same class of the institution of APPDA (Associação Portuguesa para as Perturbações do Desenvolvimento e Autismo). All the participants have between 18 and 32 years old, with an average of 21.5 years old and 4,37 SD. In our sample, 8 participants are men and 1 participant is a female. We asked some information about the participants, from the psychologist/technical director of the institution. We realised that half of the participants besides ASD, also have a diagnostic of mental disability, one has epilepsy, another has dyslexia. The other information that we asked are about the activities that the participants are practicing. Four of them are practicing swimming, one equitation and another dance. Then, the observations are filled by the psychologist/technical director of the centre.

Table 1. Description of the participant sample.

Initials	Gender	Age	Perturbation of ASD	Other Diagnostics	Activities practice/practiced	Observations
D. S.	Male	21	Yes			No cognitive impairment
F. D.	Male	18	Yes	Perturbation of intellectual development	Adapted natation/Adaptation to the aquatic environment	
J. D.	Male	32	Yes	Intellectual deficiency Dyslexia Global late of development		
J. Q.	Male	24	Yes	Developmental late	Adapted natation	
M.M.	Female	24	Yes		Dance	Shyness
P. R.	Male	19	Yes			Behavioural problems
R. S.	Male	19	Yes	Intellectual deficiency	Equitation	
T. V.	Male	19	Yes	Intellectual deficiency	Adapted natation	
V. L.	Male	21	Yes	Intellectual deficiency	Adapted natation	Behavioural problems

The participant sample for the 1st cycle is the same than for the 2nd one, except that one participant, P.R. left the group of the class for the second cycle, because he gets interned in a special institution.

To know more about the participants, we asked more personal information to them during the interviews. Like where they live, if they live with their parents, if they have siblings if yes, if they live with them.

We found out different groups, the participants who are not living with their parents, the ones living just with their mother and the ones living with their both parents.

3.1.1.1 Participants living without parents

We found that one of the participants (P.R.) is living out of the family, he is placed in an institution, because her mom told us during the interview that she was not able, because of time, energy to take care of him the whole day and night.

Another participant (D.S.), is living alone with an old ant of him, he doesn't have too many family contacts, some professor of the institution found out a lack of family affection for him.

A third participant (J.Q.), is not living with his parents, but with his sister and boyfriend sister, according to the interviews of both, they seem have a good relationship and in harmony.

3.1.1.2. Participants living with their mother

Two of the participants (M.M. and J.D.), are living alone with their mother because they are divorced and separated.

Another participant (V.L.), is living alone with his mother, because he lost his father, which is also the case of the one living alone in a centre, for him her mother told us about the suicide of her husband.

3.1.1.3. Participant living with their both parents

Three participants (F.D., T.V. and R.S.), are living with their both parents, in more "classical" families, with both parents and siblings.

3.1.2. Family of the participants

We contacted the family of the participants through the persons working in the institution. Then we organized, preferentially face-to-face interviews or phone interviews.

The parents have between 48 and 64 years old, with an average of 55.9 years old and 12,14 SD. The sister of one of the participants is 25 years old. The different family situation is the following: Married, Divorced, Separated Widow and Single for the sibling.

Table 2. Description of the family members

Initials of the children	Mother/Father/ Sibling	Family situation	Age	Profession
F. D.	Father	Married	61	Electrician
J. D.	Mother	Divorced	57	
J. Q.	Sister	Single	25	Laboratory assistant
M. D.	Mother	Separated	52	Teacher
P. R.	Mother	Widow	58	Supermarket employee
R. S.	Mother	Married	48	Administrative
T. V.	Father	Married	51	Clinical analysis technician
V. L.	Mother	Widow	64	

One of the participants is living with just one old ant. It was complicated to contact her, and she was living far away. We tried to compensate by asking more information about him to the staff members of the institution.

3.1.3. Staff members of the institution

The staff of the institution represent the professionals working in the centre. Most part of them are teachers and in direct contact with our participants, but some can be coordinator and in a different contact, more indirect with the class.

From all the professionals of the institution interviewed face to face, just one is a man. They have between 30 and 45 years old, with an average of 34,4 years old and 6.50 SD.

Table 3. Description of the staff members

Name	Gender	Age	Family situation	Formation	Job in the institution
Psychologist/ Technical director	F	33	Single without child	Psychology	Psychologist Technical director
Teacher 3	F	45	Married with two children	Economy	External teacher
Teacher 2	F	30	Married without child	Science of Education	Technical support for coordination and internal teacher
Teacher 1	F	32	Married without child	Psychology	Teacher
Technical monitors	F	41	Single without child	Social services	Internship monitoring technique
Training coordinator	M	34	Single without child	Law	Training coordinator
Teacher A.	F	26	Single without child	Management	Teacher

Seven staff members were interviewed at the end of the 1st cycle. On the second cycle, we interviewed again the Psychologist/Technical director and the teacher A. who was interviewed for the first time. The other staff members were not available for those second interviews or were not being part anymore of the class formation.

3.2. Instruments associated to methodology

The methodology of this qualitative study which can be globally described in three main steps, which are: *“Collecting and Managing Data”*, *“Interpreting and Analysing Data”* and *“Writing”* (Miller, Hengst & Wang, 2003). From an example of ethnographic study, described by the authors, the qualitative research doesn't need to follow these three steps in a chronological way. Nevertheless, the first part *“Collecting and Managing Data”* help us to understand the use of the different instrument that we need for this study. Those instruments will be essential for our study methodology and the rest of the two next step which are *“Interpreting and Analysing Data”* and *“Writing”* which will be described in the last sub-part of the instrument description.

3.2.1. Notebooks for fieldnotes

Firstly, in the field work, the first methods that will be used are the field notes. During but mostly after the session of meditation, the observer is writing notes about the different events and key moments that happened during the session. The definition of Field Notes is *“written descriptions and reflections about the participant-observation. Most researchers make notes in their logs as frequently as possible, jotting down short notes “on the fly” and more detailed notes later.”* (Miller, Hengst & Wang, 2003). We used a classic notebook to do them and then we find out the different highlights for each session of meditation we did, they are presented on the annexes of the thesis.

During the session, the type used of observation is *“Observer as participant---role of researcher is known.”* (Creswell, 2009) the advantages of this type are defined by the authors are *“Researcher can record information as it occurs.”* The notebook will help me to take notes of the main things, interactions and events which are happening during the session which will be directed by an experienced teacher with more than 12 years of practice of Meditation.

3.2.2. Recorder for interviews and interviews script

Another way to collect and manage data, in a later time are the interviews, they *“may be conducted with individuals or groups, and the general organization of the interview is usually planned in advance. (...) In addition to more formal interviews, ethnographers find opportunities to insert their questions into casual conversation.”* (Miller, Hengst & Wang 2003).

For the Interviews, the type used is *“Face-to-face---one-on-one, in person interview”* which is *“Useful when participants cannot be directly observed”* (Creswell, 2009) which is the case for example if the participants are following the indications to practice meditation at home.

The instrument used for this is the recorder application of my phone. Before starting every interview, we asked the interviewees if they were agreed to be recorded, they all accepted, and we

all guarantee their anonymities in the study. For the second cycle, interviews were not face to face, but all made by phone call, so the instrument used was another phone application that was recording calls. The interviews were all typed and their transcript is on the computer. Those transcripts are not present on the annexes, for anonymous reasons but the highlights of those interviews are.

3.2.3. Collecting artefacts

Also, by communicating with the professors and workers of the institution APPDA, we performed to have some important information, like the one that helped us to describe our sample in the previous part *“The researcher may also collect indirect observations by working with participant—collaborators [...] collecting artefacts about the community, the participants, the physical setting, the institution, and the practices may also be a critical form of data collection.”* (Miller, Hengst & Wang, 2003). Those artefacts came from email communications and informal conversations between the psychologist/technical director of the centre and us.

3.2.4. Use of those instruments for the rest of the methodology

The second part *“Interpreting and Analysing Data”* is starting from the first session until the end and after the program. Because *“Data analysis begins early in the research process and continues throughout what is often a long program of ethnographic inquiry (...) effective fieldwork requires the direction such ongoing interpretation provides.”* (Miller, Hengst & Wang, 2003). So, the records on my phone were listened several times to be typed on my computer, as for the fieldnotes that were read and highlighted.

In the third part which is *“Writing”* we follow the advices of the same authors which are *“One way of stating a guiding principle for ethnographic writing is “write early, write often.” This process begins with the researcher’s log and field notes”*. For this, we often, all long of the study read our transcripts and fieldnotes, to proceed the writing part.

3.3. Interviews procedures

3.3.1. First cycle

On the last week of June 2019, all the interviews were made. With the participants and staff members all interviews were made face to face. We tried to do as much face to face interviews with the family members of participants, but some couldn't move until the centre, so some phone interviews were made, which was the case with the sister of J.Q., the mother of R.S. and the mother of M.M.

For each of the three group of our sample members (participants, staff members, parents/sibling) we designed an example of interview, present on the annexe.

The methodology and design of the interviews are mainly made thanks the guidelines of two authors which are Steinar Kvale (1996) and Michael Quinn Patton (2001).

Here the objective of the semi-structured interviews is to be open to the conversation in the objective to catch as much information as possible from the participants. *"The very virtue of qualitative interviews is their openness."* (Kvale, 1996).

In the Chapter 7 of his book, Kvale (1996) give us a lot of indications about how to structure and made the interviews, improvising in the questions, depending of the answers of the participants. The author describes the research interview as an *"interpersonal situation, a conversation between two partners about a theme of mutual interest."*

The beginning of the interview is a *"briefing in which the interviewers defines the situation for the subject; briefly tells about the purpose of the interview, the use of a tape recorder, ..."* (Kvale, 1996). And, *"The initial briefing should be followed up by a debriefing after the interview."* The debriefing of the interview has a good interest, because it is giving to *"the subject an additional opportunity to deal with issues he or she has been thinking or worrying about during the interview."* (Kvale, 1996). Those two parts, briefing and de-briefing will be present in our interviews design.

Globally all the questions need to be *"Simply expressed, the more spontaneous the interviews procedure, the more likely one is to obtain spontaneous, lively, and unexpected answers from the interviewees."* (Kvale, 1996). The objective of the questions is to obtain the most developed answer from the participant, they *"should promote a positive interaction; keep the flow of the conversation going and motivate the subjects to talk about their experiences and feeling."* (Kvale, 1996).

The second author who help us design and work on the interviews is Patton (2001) in his book *“Qualitative Research and Evaluation”*, Chapter 7: Qualitative Interviewing, with the skeleton of the different questions that need to be approached during the interviews:

Four main thematic questions that will be approached (Patton, 2001):

Opinion and Values Questions: *“Questions aimed at understanding the cognitive and interpretive processes of people ask about opinions, judgements, and values (...) Answers to these questions tell us what people think about some experience or issue. They tell us about people’s goals, intentions, desires, and expectations.” “What do you think about*”

Feeling Questions: *“Feeling questions aim at eliciting emotions --- feeling responses of people to their experiences and thoughts.” “How do you feel about that ”*

Knowledge Questions: *“Knowledge questions inquire about the respondent’s factual information – what the respondent knows.”*

Sensory Questions: *“Sensory questions ask about what is seen, heard, touched, tasted, and smelled.”*

Those four thematic of questions will be used for everyone during the interview, they can be found on the different interviews' design in the annexes.

3.3.2. Second cycle

On the week of the 16th of December, interviews were made with all the participants, except one, M.M. who was absent this day, her interview was made on the 14th of January after the summer hollydays. For the parents, all second cycle interview were made by phone call, according to the advices of the Psychologist/Technical director and the difficulties for them to move until the centre for being interviewed. For staff members of the institution, they were made in the same week as for the participants, but as we already explained we had only two interviewees, the psychologist/technical director and the teacher A.

The methodology followed is the same one as for the 1st cycle. We can see by comparing both transcript (present in annexes) that the different categories of question (Opinion and Values Questions, Feeling Questions, Knowledge Questions, Sensory Questions) from Patton (2001). Before proceeding to the second cycle interviews, we read all transcript that were taped from the first cycle, in order to be able to ask at list one specific question to each participant and see hypothetical evolution from the beginning of the program.

3.4. Spatial description of the place

This part is made in order to contextualize the spatial environment, from the neighbourhood view to the room where the sessions happened and his evolution during the two cycles, in order to understand better how the different characteristics of this context and evolutions of those could have an impact on the sessions and how they were felt by the participants.

In order to understand better, the spatial context where the activity took place, we present here in a view from the application Google earth of the centre. The screenshot 1 is a view from the top, the three arrows in red are representing the room where the activity took place. This same room is represented on the screenshot 2 by the red oval from a street view, also from the application Google earth.



Screenshot 1. Upper view of the centre.



Screenshot 2. View from the street.

We can see on the figure 1 the street (Rua Luis dos Camoes) and the neighbourhood, located close to the faculty of economy (FEUC) in the highest part of the city, which is quiet and surrounding by green spaces. From an inside view, the last day of the practice, some picture were taken in order to understand better the architecture and design of the room, the position of the participants and the teacher.



Picture 1. Left part of the room.



Picture 2. Right part of the room.

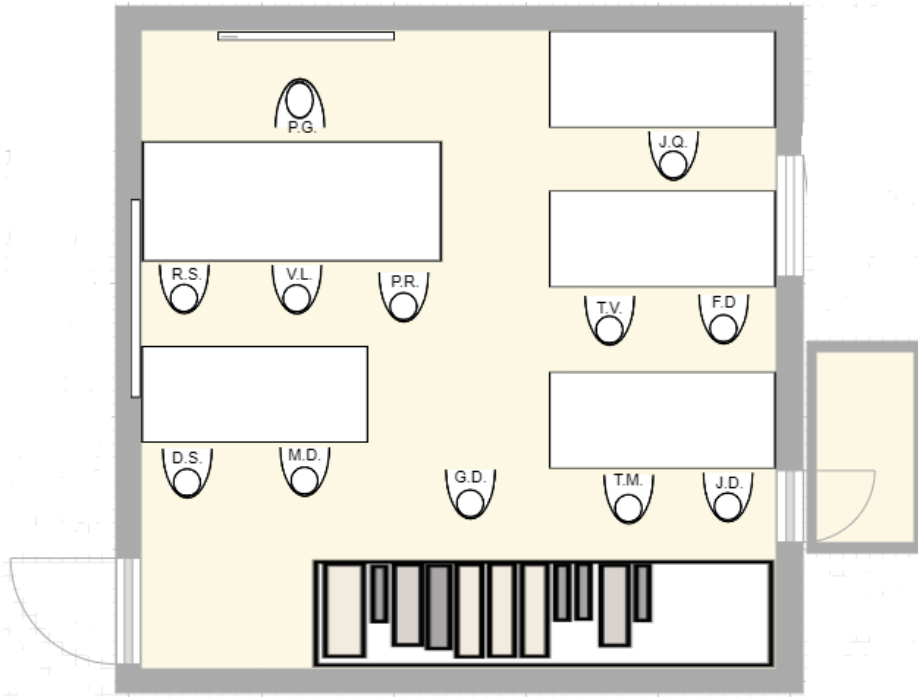
Those two pictures are from the end of the second cycle, between the first and the second one, some changes were made in the disposition of the student inside the classroom. Those are presented on the two followings drafts, realised with the website “archifacile.fr”.

Every participating is facing the professor who is in front of the whole class, all participants have their back straight, hands on the knees, closed eyes most part of the time. Also, their books and computers are organised and closed in front of them on their table.

The environment of the room is quite cosy, the luminosity is not too strong, coming from the right side with the window and the balcony door but also an extra light can be turned on the middle top of the class. About the noise, the room is quiet, except if someone is opening the door which can be noisy and annoy the participants. Also, the neighbourhood is calm enough and very few cars are passing through the street which participate to create a calm environment. Nevertheless, this cosy feeling can be different and subjective to everyone, some participants complained about the noise of the cars or the light which was too strong.

We know, from the 5th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) that the sensory issues are considered in the clinical diagnosis of ASD. As it is explained in the article of Horder et al. (2014), the sensitivity of people with ASD for environmental stimuli is more intense and less conventionally than the rest of the population. This last article shows the unknown part of this specificity about sensory issues, if they are manifested as a trait of ASD, is as a trait of comorbidity and other disorders like stress and anxiety which can be associated to ASD traits.

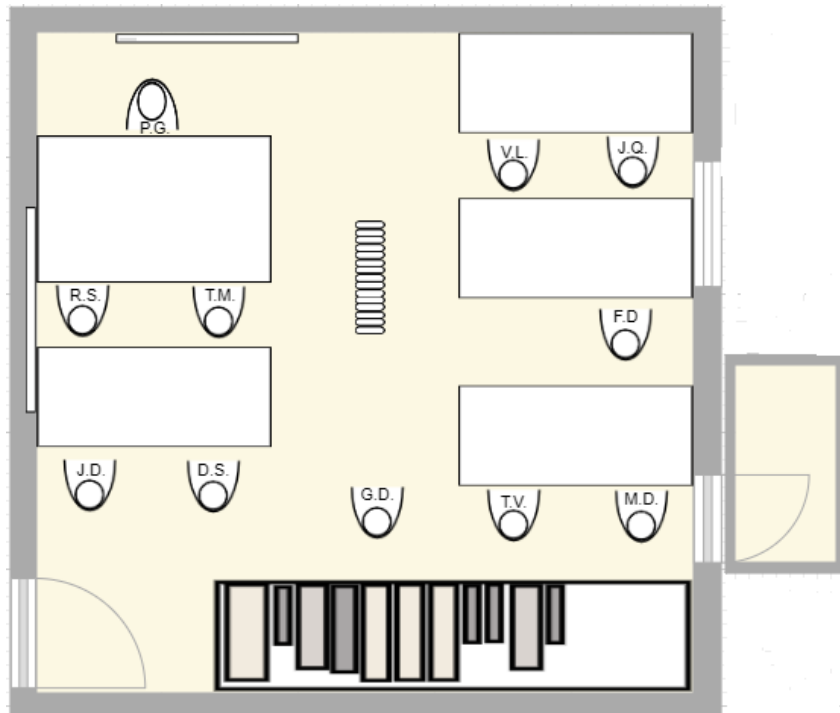
On the first cycle, we were 12 people inside the room. Everyone, sitting in a chair, is represented by his initials, which are the same as presented on the part describing the sample. The ones who are not on that presentation are T.M. one student of the institution who is part of the class and participated to all the sessions but is not part of the study like the others because he doesn't have ASD, but mental special necessity. P.G. is the professor of meditation and G.D. is myself, on the background, participating and observing in a first time, but being more active in the second cycle and sometimes switching my place with P.G. to lead the session.



Sketch 1. Room organisation on the first cycle.

The different important element of the room is the little balcony at right, also the window at tight in front, the board behind the meditation leader and at the left side. And from what we can't see on the pictures of the figure 3 and 4, the wardrobe at the background and the door at left on the background.

Note: from a mistake on both sketch M.M is noted M.D.



Sketch 2. Room organisation on the 2nd cycle.

Compared to the figure 5, the figure 6 is really similar, except that the table in front is less long, because one participant is missing in the second cycle, which is P.R. also, one radiator is on the middle of the room, from the month of November.

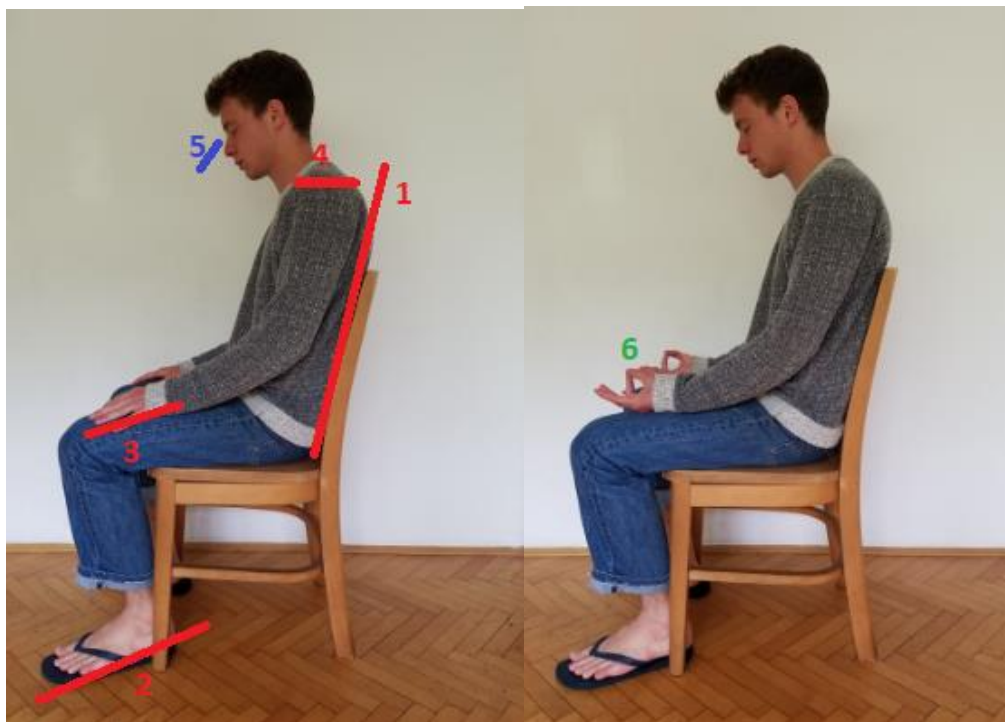
Which is important to note is the changes of places and of pairs of some participants. T.M. and J.D. are not together anymore in the second cycle. We will see that this can have come benefices on the meditation practice. We found out on the analysis of the first cycle that the association of those two participants, side by side had an impact on their focusses. Also, F.D. starts being more isolated during the second cycle, the interviews from the second cycle revealed some conflicts with him and some other participants. Also, the second cycle revealed the apparition of a new pair, the one of T.V. and M.M. which revealed some benefices on the ongoing of the practice. The others change on the class didn't reveal any other special changes on the ongoing of the practice.

3.5 Session description

The first session was done the 8th of May 2019, and the last session was done the 19th of February, the last session that I participated was the 22th of January, right before going to Slovenia to make my Erasmus internship, all the qualitative interviews were made before this date. Between the 8th of May and the 19th of February, there is two months break in the summer, from the 17th of July to the 17th of September, due to summer holidays, which separated the first cycle (2 months) and the follow-up cycle (4 months). The average of time of one session is around one hour. Here is presented the main exercises which constitute one usual session.

3.5.1. Respiration Base

This is the most basic exercise of Mindfulness. It consists of having the breathing as an internal support to focus and follow.



Picture 3 and 4. Meditation basic position.

The basic position is on a chair. The back is straight (1) but not over straight, this position shouldn't ask an effort to the participant. The whole part of the foot is touching the ground (2). Hands are on the legs, a little bit up of the knees (3), or optionally they can have a special meditation position (6) which consist on the thumb joining the annular. The shoulders must be relaxed and down (4). Also, the participant is closing the eyes and have his face oriented on the prolongation of the nose (5). The most important in this position is that the participant feel comfortable and let his breathing going on a natural rhythm.

The goal is to use the respiration as an internal support, focusing from the nose to the chest and the air passing through with all the sensations around. The adaptations made during the centre were the professor coming to each participant to touch their chest in order to show where the movement need to come from and where to focus on.

3.5.2. Description of one image

The professor starts each session by bringing to the class and to each participant one image.



Poster 1. Example of poster used during the session

This is one of the images/posters which was used for the introduction of the session. It is always a different one, but the thematic of what is represented is similar. Usually it is someone in a meditation position on a beautiful landscape with sunset colours.

The goal when the image is given to each participant at the beginning of the session is to let them present it, describing what they see, what they interpret about it to the group. It is an interesting way to enter the session and start talking to each other and then focusing in group.

Sometimes the lightly colours present on the picture allow to make the transition with the next exercise which is “Ball of light”.

3.5.3. Ball of light

This exercise consists on imagining a “ball of light” in the centre of our chest. This ball grows more and more from the centre of our chest, to the whole city, passing by the room, the street, ... The goal is to focus on an “image”, a support which is first internal, then external, which allow to visualize different places, by putting the breathing at the centre of the attention.

The adaptations which can be made is to be very slow, to explain the propagation of the “light of ball” from the chest to the whole city, passing by the classroom, ...

Usually, after this exercise, we come back to the breathing as an “intern” support and doing the “Respiration base” exercise.

3.5.4. Mantras

In our practice, Mantras are used as a collective “support” to follow and practice on during the session. They must be repeated in a group rhythm. The different mantras that we did are the following: “Om”, “Om Shanti” and “Om Ma”.

3.5.5. Alternated rhythm breathing

We introduced this exercise called Pranayama in the second cycle. Which consist in breath in for 2 seconds, then we need to hold our breath for 8 seconds and breath out for 4 seconds.

The objective is to be able to control the breath and reduce the heartbeat by becoming calm and calmer. This exercise was not used a lot, but some participants, the most advanced ones because they were practicing at home got interested.

3.5.6. "Pranayama", alternated nostril breathing

This exercise is part of the group of exercises called "Pranayama" respiration. It was not used a lot, but as the previous one, the most interested participants were asking about.

The exercise is explained on the two following pictures, it consists in alternating the nostrils blocked during the breathing.



Picture 5 and 6. Description of "pranayama" exercise

3.5.7. Exercise with a candle

In a Mindfulness exercise, the candle constitutes an external support to focus on during the practice. The position used is the basic one in the chair. The difference is that this time we must open the eyes a little bit to see the light of the candle and to focus on. The concept is the same than the respiration base 1, the difference is about the support to focus on, the participant needs to associate his breath and his focus on an external support which is the candle. The instructions given by the teacher are to imagine that we breath in the light from the candle and we breath out all our problems and overthinking/heavy thoughts.

3.6. Study Schedule

From the 8th of May until the 26th of June was performed an 8 weeks cycle of meditation, with one session a week of approximatively 1h of practice, as well as optional exercises to perform at home, before going to sleep, at the wake-up time and/or both. In the last weeks of the cycle, between the 17th and 28th of June, was performed interviews, with the participants, the parents of the participants and the professors of the center. Until the end of July, the Meditation sessions will continue to organize session in the center of APPDA, also in a weekly way, until the summer break in august. Two months after the end of this first cycle, it takes place a longer cycle. In this second cycle, we will use the same methods to collect data's, which are the direct observations and the interviews at the end and analyzing the differences between.

Here we present a synthetic schedule of the study program. From March 2019 the presentation of the project to June 2020 the submission of the final work.

March 19	April 19	May 19	June 19	July 19	August 19
Presentation of the study from the Professor Pedro Gaspar	Organization of the first cycle	First 8 weeks cycle		Extra-session of meditation	Reading of Literature
				Data collection/interviews	Data retranscription
September 19	October 19	November 19	December 19	January 20	February 20
Second cycle of weekly sessions					Analysis of interviews and the results
Submission of the project		Data collection/interviews	Data retranscription		
		March 20	April 20	May 20	June 20
Redaction of the thesis Conclusion				Submission of the Master thesis	

Table 4. Study schedule.

The sessions of the second cycle started in the 18th of September and ended on the 22nd of January. All interviews were made between the week of the 16th of December until the 22nd of January, due to the absence for some before the holyday and the difficulties for some parents to be available by phone all in the same week.

4. Results

4.1. Analysis of interviews

4.1.1. Analysis of participants interviews 1st and 2nd cycle

After reading several times the transcripts of our qualitative interviews, we highlighted the most important items and keywords which compose the most important information given by the participants and became our qualitative data. Those items were then categorized in different groups and joined in three main themes. For both cycles, the process used was the same, which help us to see the potential evolution of the practice from the point of view of the participants, we made the choice to let the items in Portuguese language.

1st cycle

For the 1st cycle, we joined the different items, words, sentences were in a total of 17 codes. Those codes are represented in the next table, which represent the repartition of those codes and their number of items for our 9 participants.

Table 5. Codes reparation from 1st cycle participants interviews

J.D.	D.S.	M.M.	P.R.	R.S.	F.D.	V.L.	T.V.	J.Q.	Items
(21)	(26)	(27)	(22)	(21)	(25)	(32)	(6)	(64)	Total (220)
Personal sensation during meditation (4)	Personal sensation during meditation (9)	Personal sensation during meditation (8)	Personal sensation during meditation (5)	Personal sensation during meditation (6)	Personal sensation during meditation (9)	Personal sensation during meditation (4)	Personal sensation during meditation (2)	Personal sensation during meditation (15)	62
Stress in daily life (1)	Stress in daily life (2)	Stress in daily life (2)	Stress in daily life (5)	Stress in daily life (2)	Stress in daily life (5)	Stress in daily life (11)	Stress in daily life (2)	Stress in daily life (17)	47
								Stress during the night (3)	3
								Stress related to natation (9)	9
Opinion about the practice (7)	Opinion about the practice (4)	Opinion about the practice (2)	Opinion about the practice (5)	Opinion about the practice (1)	Opinion about the practice (3)	Opinion about the practice (4)		Opinion about the practice (2)	28
								Opinion about meditation related to natation (2)	2
No Previous experience (5)	No Previous experience (3)		No Previous experience (1)			No Previous experience (1)	No Previous experience (1)	No Previous experience (1)	12
		Previous experience (5)		Previous experience (5)					10
Other practice (1)		Other practice (2)			Other practice (1)	Other practice (1)	Other practice (1)	Other practice (1)	7
Mother opinion (3)		Mother opinion (1)							4
				Parents opinion (1)	Parents opinion (2)				3
	Colleagues opinion (1)	Colleagues opinion (3)	Colleagues opinion (2)	Colleagues opinion (3)	Colleagues Opinion (1)				10
	Home practice (3)	Home practice (2)			Home practice (3)				8
			No Home practice (3)	No Home practice (1)		No Home practice (4)			8
								Hypothetical Home practice (5)	5

J.D.	D.S.	M.M.	P.R.	R.S.	F.D.	V.L.	T.V.	J.Q.	Items
	Colleagues relation (1)	Colleagues relation (2)	Colleagues relation (1)		Colleagues Relation (1)	Colleagues relation (3)		Colleagues relation (3)	11
						External observation about changes (1)			1
	Description of the practice (3)			Description of the practice (2)		Description of the practice (3)		Description of the practice (6)	14

Then, those codes were classified into different categories, to constitute at the end, three main themes. Our three main themes are the following:

-Participant -Practice -External

The following table represent the repartition of the 17 codes on their categories according to their themes.

Table 6. Codes repartition in Categories and Themes from 1st cycle participant interviews

Codes	Categories	Themes
Personal sensation during meditation (62)		
Opinion about the practice (28)		
Opinion about meditation related to natation (2)	Opinion (30)	Participant (158)
Stress in daily life (47)		
Stress during the night (3)	Stress (59)	
Stress related to natation (9)		
Other practice (7)		
Description of the practice (14)		
Previous experience (10)	Background (22)	Practice (57)
No Previous experience (12)		
Home practice (12)		
No home practice (4)	Home (21)	
Hypothetical Home practice (5)		
Mother opinion (4)	Family (7)	External (19)
Parents opinion (3)		
Colleagues opinion (10)	Colleagues (21)	
Colleagues relation (11)		
External observation about changes (1)		

Participant

Participants were asked about their **personal sensations** during the sessions, the objective was to have a feedback from themselves to know what they feel while practicing the different exercises. All the participants answered about this question, the most common answers were all positives “*bem*”, “*sempre tranquilo*” J.D., or “*aliviado*”, “*calmo*” D.S. who also describe his soul as “*alma nova*”, “*meu próprio completamente novo*”. The well-being of the participants during the practice are various, M.M. gave us more detail about her physical state “*corpo tranquilo*”, “*estável*”, “*equilibrado*”, “*calor no peito*”, who had a positive impact on her mood “*senti-me melhor*”, “*irrito menos*”. Even P.R. who had more difficulties to get focus during the session told us that he felt “*mais calma*”, with “*boas sensações*”, also he felt sleepy during some sessions “*sono*”. More than good sensations during the sessions, R.S. told us that he was feeling better during the entire day “*no dia, muito melhor*”, which is also the case of F.D. who felt “*completamente tranquilo no final*”. T.V. with who it was the hardest to lead the interview told he was “*senti bem*”, it is hard to analyse if this answer shows a real feeling or an easy adaptation to the question asked. The participant who gave us more feedbacks about his stress feelings told us how meditation helped him to lead with it “*aleijar o stress*”, “*mais aliviado*”, “*não penso em outras coisas*” which is the main goal of mindfulness. The participant for who was harder to focus on the exercises and forget the rest was V.L. who told us that he still have “*muito pensamento*” and even if he feels well for some minutes, then “*relaxando, mas volta ao normal*” he comes back to think about his thoughts “*volta aos pensamentos que tinha*”.

About the **opinion** on the practice, all the participants, except T.V gave us feedbacks about what they thought of the sessions, they were globally positive, the most common answers were “*muito bom*”, “*gostei muito*” expressing their motivation to continue, which is the case of J.D. for example, “*deveríamos continuar*”. J.Q. was very enthusiastic, “*espetáculo para nos*”, “*fantástico*” and said that it helped him to write better “*ajudar a escrever bem*” which was an unexpected effect. Just V.L. gave us a differentiated feedback saying that he had difficulties at the beginning “*não estava habituado*”, “*inicio não apreciava*” but accepted the idea to try and continue “*deve ser bem tentar*”.

The stress question was important in our interview, in the way that one of the most goal of the practice was the **anxiety and stress** reduction of the participants. The totality of the participants gave us at least one feedback about it. D.S. even told us that he was using meditation to fight against his daily stress, which is reducing “*menos stress*”, “*paro e faço meditação*”, the same for F.D. “*paro e faço meditação*”. All participants reported daily stress, some are receiving medicine for it, which is the case of P.R. who told us about his anxiety crisis at night “*gritar a noite*”, “*tomar medicação*”. Just two participants answered “no” at the question if they were feeling stress sometimes, R.S, but right after

told us about how the busy days in the center were a problem for him, *"muito corrido"* and T.V. but told us about the stressful videogame that make him feeling this sensation *"jogo de horror"*. The day rhythm is also a difficulty for V.L. *"acordar cedo"*, *"dias complicados"* which provokes *"muita ansiedade"* and *"stress"*. The participant who gave us more feedbacks about it, is J.Q. who associate his daily stress to his epilepsy crisis *"luz do portátil bate os olhos"*, *"coração bate forte"* and to difficult family's event *"perdi minha mãe e avo"*. He also related stressful event during the night *"sonhos horríveis"*, *"transpirar a noite"* and in his swimming pool activity *"crise na piscina"*, *"prova de nataçãõ"* which is also analyzed in the part where we describe the meditation practice during one competition. He also shows how the practice technics helped him in this problematic *"agora estou estável"*, *"estou mais calmo"*. In the natation competition, it helped him to *"acabar a prova"* and *"poer coisas no sitio"*.

One question was asked about the **activities** that the participants are doing out of the course, J.D. has *"vinte anos de body board"* behind him, M.D is doing *"dança"*, *"ballet contemporânea"*. F.D. Physical activity at home *"ginástica com meu pai"*, V.L. and J.Q. *"nataçãõ"* with the centre.

Practice

In order to know how was perceived the practice we asked the participants to **describe** the exercises they did with us, D.S., R.S. and J.Q. described the importance that the inspiration was made with the nose *"inspirar pelo nariz"*, D.S. *"respirar com o nariz"* R.S. *"tocar os sinos"*, *"pelo nariz"* J.Q. than the exercise of the light ball was described *"bola a crescer"* V.L., *"luz"* D.S., or the mantras exercises *"canções"* D.S. *"gosto do ôômmmm"* J.Q. also the importance of the weekly images that were used at each session *"focos numa imagem"* D.S. and *"papeis"* V.L.

We asked to each participant about their **background** in the practice, in order to know if it was the first time or not that they were experiencing meditation. Only two participants revealed that they already experimented it. The one who did are M.M. *"tinha feito"*, *"três anos atras"*, *"gostava muito"*, *"exercícios de respiração também"* which was a different type of meditation called *"meditação do poder do amor"* and R.S. *"já tinha feito"*, *"era mais pequeno"*, *"deitado"*, *"coisas boas"*, *"foi bom"*. We can see that those different experiences than the one who are doing now were both appreciated by the participants. One, T.V. *"acho que não"* is not sure whether he already practiced it or not. All the others are doing their first experience right now in this cycle.

As we already explained on the description of the program, everyone is advised to **practice at home** at two different moments, when they wake up and before to sleep. We questioned the participants to know if they did it. Three of them revealed that they at least tried to practice at home, which is the case of D.S. who practice *"diariamente"*, *"antes de dormir"*, also M.M. *"as vezes"*, *"a*

noite” and F.D. “*uma vez*” and think about to continue “*vou continuar*”. One, J.Q. gave an unclear answer saying that he will maybe start “*vou fazer*”, “*vou arranjar um sitio*”. The others didn't give us answer about that or told us that they didn't practice at home because they don't like doing it there, which is the case of P.R. “*não gosto*”, “*muito barulho*”, it is really important to note that he is living in a night centre, and doesn't really have private space, or they don't have the time to do it, like V.L. “*tenho horários*”, “*correr*”, “*tomar medicação*”, here it is important to note that taking the medicine are part of his daily busy life.

External

We questioned the participants about the **opinion of their family** about the practice, not all answered, some participants didn't speak about this at home. The mother of J.D told him that was “*muito interessante*” we will see in her interview that she encourages a lot his son on it. M.M. told us “*as vezes fazemos*” that she was practicing sometimes with her mother, which we are really satisfied about. R.S. said that his parents told him “*era bom*”, the same for the family of F.D.” *bom*” he even said that they realised that he was calmer “*que fiquei tranquilo*”. The others participant or didn't talk about this with their families or they just didn't give us their feedbacks.

Also, we wanted to know if the program was a subject of conversation for the participants between them and what were the point of views of each other. This is the reason why we asked about their **colleagues'** opinion about it. The few answers we received about this question are really varied “*alguns não acham é tanto bom*” D.S., M.M. made some observations about her colleagues “*maioria ficava mais calma*”, “*mais tranquilos*”, “*calma no dia*”. P.R. admitted that his colleagues liked it more than him “*gostaram*”, “*mais que eu*”. R.S. think that the practice is good for his colleagues “*bom para eles*” he noted that “*maior parte gosta*”, “*alguns não tanto*”. F.D. his evaluating his opinion like his colleagues one “*gostaram mais o menos como eu*”.

About class colleagues we also asked the participant to describe what **relation they have with the rest of the class**. D.S. told us that he was improving everyday “*melhor cada dia*”, probably due to some conflicts at the beginning. M.M. spoke to us about how her colleagues were sometimes perturbing the sessions “*rir dos colegas, desconcentrava*” but “*esta melhor*”. F.D. gave a similar feedback “*riam*”, the same as V.L. “*barulho*”, “*riam*” who has difficulties to be focus “*não da para concentrar*”. The laugh of colleagues is for those three a problem in the process to be focus during the practice. We know by the fieldnotes observation that some participants start to laugh when F.D. is doing the mantra, for some it is also a problem for being focus, like J.Q. expressed “*gostei dos colegas*”, “*não gostei do F.*”, “*ôômmmm do F.*”. We know the difficulties of inclusion of the class of P.R. even if he limited his answer by “*esta bem*”. To conclude this external part one who gave a feedback of what

“others” (staff members) said about potential effects on the program on him is V.L. “me disseram que estou mais calmo”.

2nd cycle

The process used is exactly the same as for the 1st cycle, we collect a more diversified kind of items, which makes a number of codes more important, 41. That can be explain by the fact that interviews were more personal, so each individual gave more differentiated and personal feedbacks.

Those 41 codes are represented in the next table, which represent the repartition of those codes and their number of items for our 8 participants. As we mentioned previously, the number of participants in our study, was 9 participants in the first cycle, but is pass to 8 for the 2nd one. Because P.R. left the group to get interned.

Table 7. Codes repartition from 2nd cycle participants interviews

F.D. (91)	D.S. (36)	R.S. (28)	J.D. (52)	M.M. (39)	J.Q. (47)	V.L. (83)	Items (376)
Day state (3)	Day state (3)	Day state (1)	Day state (2)	Day state (1)	Day state (1)	Day state (4)	16
Description of the last sessions (3)	Description of the last sessions (1)		Description of the last sessions (2)	Description of the last sessions (5)	Description of the last sessions (4)	Description of the last sessions (3)	20
Feelings (1)	Feelings (2)	Feelings (1)	Feelings (9)	Feelings (1)	Feelings (5)	Feelings (2)	24
Discussion with family (1)	Discussion with family (1)	Discussion with family (2)	Discussion with family (4)	Discussion with family (6)	Discussion with family (5)	Discussion with family (4)	27
Discussion with professors (2)	Discussion with professors (2)			Discussion with professors (2)	Discussion with professors (3)		11
Discussion with colleagues (6)	Discussion with colleagues (2)	Discussion with colleagues (2)	Discussion with colleagues (5)	Discussion with colleagues (4)	Discussion with colleagues (4)		23
Personal opinion about last sessions (1)	Personal opinion about last sessions (1)	Personal opinion about last sessions (5)	Personal opinion about last sessions (2)	Personal opinion about last sessions (6)	Personal opinion about last sessions (3)		20
Description of the recent exercises (4)		Description of the recent exercises (2)	Description of the recent exercises (2)				10
Utility of the practice (4)	Utility of the practice (1)	Utility of the practice (3)		Utility of the practice (2)			12
Practice at home (10)	Practice at home (3)			Practice at home (5)			18
		Not practice at home (3)	Not practice at home (4)				9
					Practice at home or not? (3)		3
Changes on the participant (4)	Changes on the participant (4)		Changes on the participant (4)	Changes on the participant (2)	Changes on the participant (7)	Changes on the participant (2)	23
Stress and anxiety (6)	Stress and anxiety (5)		Stress and anxiety (5)	Stress and anxiety (2)		Stress and anxiety (15)	33

F.D.	D.S.	R.S.	J.D.	M.M.	J.Q.	V.L.	
Extra meditation practice than home (4)	Extra meditation practice than home (3)						7
Description of the current class environment (7)	Description of the current class environment (3)	Description of the current class environment (3)					13
	Controlling emotions (5)						5
				Description of the agitation on the class (2)	Description of the agitation on the class (3)	Description of the agitation on the class (2)	7
				Positive evolution of the class environment (1)	Positive evolution of the class environment (2)		3
Feeling after session (3)		Feeling after session (2)			Feeling after session (1)	Feeling after session (1)	7
					Feedbacks about one specific colleague (T.V.) (6)		6
		Recommendations (3)				Recommendations (3)	6
		Routine difficulties in the centre (1)				Routine difficulties in the centre (6)	7
Problematic relations with colleagues (9)			Problematics relations with colleagues (4)			Problematics relations with colleagues (3)	16
Objective for the future (5)							5
Opinion of the colleagues (1)							1
Stop of sport activity (4)							4
Stress and anxiety evolution with meditation (7)							7
Meditation utility for colleagues (1)							1
Continuity of meditation (6)							6

F.D.	D.S.	R.S.	J.D.	M.M.	J.Q.	V.L.	
			Past health problems (4)				4
			Hypothetical future home practice (5)				5
						No discussion with colleagues (1)	1
						Routine at home (2)	2
						Speaking about mother difficulties (4)	4
						Speaking about the death of someone family (father) (14)	14
	Difficulty on the practice (1)						1
						Extra sport practice (1)	1
						Changes on the class environment (2)	2
						Continuity of meditation for himself (7)	7
						Opinions of staff members about continuity (2)	2
						Continuity of meditation for the others (5)	5

The following table represent the repartition of the 41 codes on the different level of categories according to their themes, the three main themes are the same as for the 1st cycle.

Table 8. Codes repartitions in Categories and Themes from 2nd cycle participants interviews

Codes (418)	Categories	Sub-Categories	Themes
Difficulty on the practice (1) Feelings during meditation (24) Feeling after sessions (7) Personal opinion about last session (20)	Related to Meditation (73)		
Day state (16) Stress and anxiety (33) Routine difficulties in the centre (7) Routine at home (2) Objectives for the future (5) Past health problems (4)	Global state (67)		Participant (175)
Changes on the participant (23) Controlling emotions (5) Stress and anxiety evolution with meditation (7)	Changes (35)		
Practice at home (18) No practice at home (9) Practice at home? (3) Extra meditation practice than home (7)	Extra (37)		
Description of last sessions (20) Description of last exercises (10) Recommendations (6)	Sessions (36)		Practice (96)
Continuity of meditation (6) Continuity of meditation for himself (7) Continuity of meditation for the others (5) Hypothetical future home practice (5)	Future (23)		
Discussion with family (27) Discussion with colleagues (23) Discussion with teachers (11) No discussion with colleague (1)	Discussions (62)		
Opinions of the colleagues (1) Utility of the practice (12) Meditation utility for colleagues (1) Opinions of the staff members for continuity (2)	Opinions (16)	External point of views (102)	External (147)
Description of the current class environment (13) Feedbacks about one specific colleague (6) Positive evolutions of the class environment (3) Changes on the class environment (2)	Class environment (24)		
Speaking about mother difficulties (4) Speaking about the death of family (14) Stop of sports activities (4)	Family problems (22)	External problems (45)	
Description of the agitation on the class (7) Problematic relations with colleagues (16)	Class problems (23)		

Participant

Firstly, we will see the different point of views of the participant related to the meditation. For example, we wanted to see if the **opinion** of the participants regarded to the practice, changed from one cycle to the other. Most part of the opinions about the last sessions, were positive, “gosto” F.D., D. R., T.V., “gostei muito” J.D., “eu acho bem” J.Q. in the case of R.S. he said that he liked more than before “gosto mais dos recentes” because of the “diferente experiencias” and especially the new exercises “mantras”, it is also the case of T.V. who speak about those new experiences “desde que começamos as novas experiencias da meditação, estou sempre a melhorar as minhas perspetivas”. M.M., said that she liked thanks to the positive impacts on herself “deixa-me mais tranquila”, “sinto um grande paz dentro de mi” but also on the group “deixa nos mais tranquilos”.

This personal observation from one participant on himself permit us to continue with the different **feeling** that were expressed regarding to the practice *moment* “sinto concentrado” D., “sinto bem” T.V., T.V. is the one who gave us the more differentiated feedback about this “a sentir tirar cancro no cerebral para não morrer, e da epilepsia” we know that his parents told him benefices of the impact of the practice on epilepsy, but it is hard to understand why T.V. associated it to the cancer. J.D. told us how calm he felt “mais calmo”, “ainda mais com o novo ciclo”, he used the expression “poe bem na hora”. J.Q. like for the first cycle related his amelioration state to his stress level in reduction “sinto duma forma mais relaxante”, “as vezes fico destressado”. V.L. added a differentiated answer, saying that it was hard for him to be in the instant present “estou pensando numa coisa e a que me faz pensar, não posso fazer mais nada”. We also questioned the participants about their feelings right after the session, F.D. Felt “muito mais calma”, “mais relaxado”, “sensação agradável de calor”, R.S. told us that he was feeling well, but not especially better than before, “bem”, “antes me sentia bem”. V.L. told us about his difficulties to be more relax, particularly those days, “nas aulas, são mesmas complicadas”.

More than feeling and mental state during and after sessions, we asked the participants how they were **feeling those days, globally**, at **home**, in the **centre**, if they are feeling stress and anxiety those days. We firstly asked the participants how they were today, they were all well, “ta tudo bem”, except V.L. who told us that he was a bit nervous because one of his colleague “estava um bocadinho, esta muito nervoso com o F.”. About **stress** and **anxiety**, the feedbacks of F.D. were interesting, in a first time he told us “agora não”, “acalmo com a meditação na mesma”, but then, we asked again about this same topic later on the interview and he told us that he still have stress feeling even if it get better thanks to the practice “sim”, “em tudo” “as vezes tenho este comportamento”, “já consegui melhorado”, “mas tem de ser melhorado ainda”. D.S. told us that the moment that he was feeling

more stress in his daily life was in the classroom of the centre *“quando sinto perturbado com qualquer coisa”, “se estou concentrado numa coisa e há alguém a fazer barulho eu sinto um bocado irritado”, “aqui na sala”, “fora não tanto”*. For R.S. the routine of arriving early in the centre is also a source of stress *“horários”, “tenho de chegar a hora”,* the problematic of arriving on time is also a stressful source for J.D. *“quando tenho uma hora”, “hora marcado para ir em algum sitio”*. M.M. told us about her anxiety *“sou um bocado ansiosa”, “não sei bem, explicar”*. The participant from far who gave more feedbacks about his stress and anxiety feelings is V.L. he told that this days he was feeling tired and stressed because one spectacle that they will do in the institution *“espetáculo a porta,” “uma cansada”* he says that he was very busy those days *“não há nada que me relaxa neste momento, porque é muito complicada”, “queres estar livre e estar com o pessoal da tua terra, mas não da”,* he said that he feel particularly stressful on this period of Christmas *“chega o natal”, “toda gente nesta altura é toda estressada”*. About this same topic, two participants reported some difficulties about their routine in the centre, which is the case of R.S. who said that was *“muito cedo”* for him to go in the morning and V.L. we understood that he was passing some difficult time *“aqui trabalho muito”, “não tens tempo”, “quero ir para casa”, “quero sair um bocadinho daqui porque eu preciso”* and even if he told us that at home *“ainda bem”* he also has a lot of things to do there *“não parei me casa”*. Spontaneously, during the conversation two participants gave us feedbacks about their expectations for the future, F.D. told us his professional objectives *“quero ser administrativo”* and how important for him to be calm and have the right to be calm as he expressed *“quero ficar mais calma”, “ficar com calma é única coisa que nos precisamos”, “todos nos temos este direito”*. The answer of J.D. was similar *“um dia que começar em trabalhar tenho de me concentrar em que vou fazer e como que vou fazer”* by relating it to his future work life *“ficar tranquilo, não stressar”, “trabalhos que tem muito stress”*.

The last category analysed for the participants is related to the **changes on themselves**. First, F.D. told us about his stress reduction thanks to the practice *“stress que eu tive”, “meditação ajuda a tirar o stress”*. We asked him if he thinks that there are some other positive changes *“acho que sim”, “mudanças foram feitas”, “agora é lidar com essas mudanças”,* but sometimes he still has some of his old behaviours as he said *“tenho aqui do passado”*. D.S. told us that he was feeling more responsible *“sinto mais responsável”* and with a better self-control *“mais saber controlar as coisas”,* the practice helped him to control his emotions *“controlar emoções é o mais difícil”, “alguma coisa boa”*. R.S. didn't give us any feedback about it, T.V. doesn't think that the practice had an impact on him *“acho que eu não vi”*, J.D. told us that globally the course in the centre helped him *“antes de vir nesse curso”, “estava um bocado stressado”, “sempre a correr”, “agora não”*. M.M. have a better control of her anxiety emotions *“estou mais calma”, “controlo mais quando estou ansiosa”*. The feedback of J.Q. is interesting, he told us that he changes with the practice *“já consegui mudar”,* by comparing himself

to one normality? To his colleagues *“estar mais normal”, “faço como os outros colegas, a sair”, “as vezes ir com os colegas”,* he felt positive effects but we can feel that he is worry about doing crisis again *“para não evitar ser pior”, “já estou mais calmo”, “já passou isso”*. The answer of V.L. about this question is complicate to analyse, because we know thanks to the whole interview how complicate those days for him were *“depende dos dias”, “quando estou cansado, também não há nada que da”*.

Practice

About this thematic we asked the same thing as for the first cycle, if the participants they were **practicing at home** or not. Three participants answered positively about the fact that they were practicing meditation at home. They are M.M., F.D. and D.S, we note here that they are the same than for the first cycle. F.D. told us in the first cycle that he practiced once and he was thinking about to continue, he told us in this second cycle interviews that he was practicing almost every day *“quase todos dias”* in his bathroom, when he is taking shower on the morning *“pratico no banho”, “mantras”, “tomo banho de manha”*. D.S. told us that he was continuing practicing on the same as for the first cycle and his daily practice was going well *“correndo bem”*, also, he told us about an extra practice that he is doing on his way on the train *“no comboio”, “antes de vir para ca”*. The same as M.M. who gave us a similar answer as for the 1st cycle *“as vezes”, “a noite antes de me deitar”, “faço um bocado de respiração”, “exercício da bola de luz”*. The participants who didn't practice at home like R.S. told us the reason of not having time *“tenho outras coisas para fazer”*. We were a bit surprised about the answer of J.D. who also told us that he didn't have time to practice it at home *“não tenho tempo para isso”*, wether his mother told us the opposite. The answer of J.Q. still as unclear as for the first cycle *“só faço um bocadito”, “não faço muitas vezes”*. As extras meditation practice, F.D. told us that he was also practicing in the center, *“depois ou antes da meditação”, “antes das quartas”, “pelo menos terça”*.

As for the first cycle, we asked the participants to **describe** us the **different exercises** that they did during the sessions. In this second cycle, we get two times more information than in the first one. On this question, most part of participants named the exercises, some gave a bit more details, like T.V. *“fechar os olhos e também de levantar a voz”, “não acostumo fazer isso”*, speaking about the mantras exercises which were well developed this semester, which were described as *“nova experiencia”* by J.D., V.L. admitted having some difficulties on this exercises *“fiz só algumas mantras”*.

It was also asked to the participant to project themselves and imagining if they would **continue this practice by themselves** without our intervention for example. F.D. told us how it was important for him to continue it *“estou a gostar”, “meditação me ajuda”, “é pedido”*, he seemed a bit worried that the cycle was ending, *“estamos a acabar a meditação não? é verdade?”*, *“o Professor P. vai continuar, não é?”* but told us that he would continue anyway *“vou continuar a fazê-lo”*. J.D. told us

that he will try to do it at home in the future *“vou tentar, mas eu não prometo nada.”* *“vou tentar na minha pessoa”*. As often V.L. gave us a differentiated answer, saying that he should continue even if he doesn't want it *“se é para fazer”, “tenho de fazer”, “não há hipótese”, “é para todos”* even if he told us at the end *“prefiro continuar”*, sincerely speaking for himself this time. He also told us that it was important for some of his colleagues to continue *“pessoas que deviam fazer todos dias, porque lhe faz bem, o F.D.”* for *“o F.D., o T.V.”*.

External

All the participants gave us at list one information about the different **discussion** made with people of their **family**, six to the eight participants gave us information about discussion with their colleagues and half of them with their teachers. The most typical answer that we found out about the discussion of the participants with the members of their parents or family members about the thematic of meditation is globally the same *“acham bem”, “acham que faz bem”*, with the exception of V.L who says really rationally *“o que que ela tem de achar? Não tem assim que ela tem de achar”*. About the discussion with their **colleagues**, the responses are really balanced, the one who represent better the general idea of the group is the one of M.M. *“alguns que gostam e que sentem bem [...] outros que não, não gostam muito [...] nem se quer tentar fazer”*. The ones who spoke with the staff members shows similar answer than the one from the family members, the staff members are generally motivating the student by saying them the benefices and the importance to continue *“dizem que algum faz bem e pode nos ajudar no nosso dia dia”* M.M.

About external opinions about the practice, we collected less data than the previous codes, nevertheless we found out some important information, usually the questions related to the opinion of staff members or family member about the practice were asked in order to have more information when the participant didn't say a lot of things about the discussion question. For example, T.V told *“ajuda [...] a mãe diz me”* to answer about the utility of the practice. We understand here the importance of a family member opinion in the continuity of the practice.

The **environment of the class** is well described by the participants, the majority, six to eight gave us description about the environment of the class and his evolution, some changes are relevant *“esta mudando”* V.L, *“agora esta mais calmo”* M.M., the participant J.Q gave us out of himself an important feedback about T.V. *“mas quando ele esta na meditação, se concentra muito”* relating to the evolution of his ruminations.

But, a big part of the participants related problems and conflicts which still exist and affect the well-being of the classroom, during or out of the meditation time. Which make the transition to our

second sub-categories called **external problems**. A lot are giving names of the one who annoy them "T.M. irrita-me" F.D. or "F.D e T.V. são muito distraídos", says D.S. We note that some participant has conflicts related to F.D, which is the case of J.D. "F. Não esta a respeitar nos" or V.L. "tem de aprender a fazer o som mais baixinho". Others make a general opinion of the environment like M.M. "as vezes esta um bocado agitado [...] fazem um bocadinho de barulho [...] tenho dificuldade em concentrar" . Or J.Q. "parece-me que não deixam-me concentrar".

The second sub-categories related to external factors problems is the one related to the family. Two participants spoke to us about that. The first one is F.D, he explained that he stopped practicing gymnastic at home with his father, as explained in the first cycle of interviews, because the sickness of his father started being worst "já não consigo fazer [...] o meu pai está muito doente". The second one, who passed a lot of time speaking about this, is V.L. He related his mother difficulties because of the loss of his father, some years ago, and the traumatized that he became sick abroad (Angola) "quando esta ca em Portugal, é diferente" and didn't come back at home to pass his last days. "esta época é um bocadinho complicado para ela [...] já perdeu pessoas" about his mother. V.L spoke about this in relation with this period of the year (Christmas) were family pass time with each other and he doesn't have the opportunity to be with his father this year "nesta época de festas, pensas no pessoal que já não estas ca contigo". V.L. spoke a lot about sadness "quando chega essas datas (natal, ferias...), fica mais tristes", but never in the first person, always on third or second, he always said during the interviews that he was feeling fine about this situation but worry about his mother "não é para mi, é mais para a minha mãe". That really intimate information revealed by the participant give us information about his global mental and psychological well-being on this day, which is really important on this study where we analyze the human being as a bio-psycho-social being, in his global dimension.

4.1.2. Analysis of family members interviews 1st and 2nd cycle

1st Cycle

The methodology of analysis is the same used as for the participants, after reading several times the transcript of interviews we highlighted the most important keywords, sentences, those became were joined in different codes presented in the next table.

In this first cycle, we joined all the different items in a total of 28 codes, presented in the next table. For the 8 family members interviewed, one by participant, except for D.S. for who it was not possible to interview someone of his family.

Table 9. Codes repartition from 1st cycle family's interviews

Mother of P.R.	Mother of J.D	Mother of V.L.	Mother of R.S.	Sister of J.Q.	Father of F.D.	Father of T.V.	Mother of M.M.	Items
(32)	(81)	(53)	(22)	(35)	(84)	(54)	(58)	Total (419)
description of childhood, growing (10)	description of childhood, growing (16)	description of childhood, growing (11)	description of childhood, growing (3)	description of childhood, growing (2)	description of childhood, growing (10)	description of childhood, growing (11)	description of childhood, growing (7)	70
Description of nowadays, personality (9)	Description of nowadays, personality (14)	Description of nowadays, personality (6)	Description of nowadays, personality (4)	Description of nowadays, personality (9)	Description of nowadays, personality (11)	Description of nowadays, personality (7)	Description of nowadays, personality (6)	66
	Meditation background of the parent (12)						Meditation background of the parent (11)	26
No Meditation background of the parent (3)		No Meditation background of the parent (2)	No Meditation background of the parent (1)	No Meditation background of the parent (1)	No Meditation background of the parent (3)	No Meditation background of the parent (2)		9
	Discussion with the children about the practice (6)			Discussion with the children about the practice (3)		Discussion with the children about the practice (8)	Discussion with the children about the practice (8)	25
No Discussion with the children about the practice (1)		No Discussion with the children about the practice (1)	No Discussion with the children about the practice (3)		No Discussion with the children about the practice (5)			10
Effects observed (6)	Effects observed (7)	Effects observed (9)	Effects observed (4)	Effects observed (5)			Effects observed (10)	41
						No Effects observed (9)		9
	Effects observed on Wednesday afternoon (1)							1
							No Effects observed on Wednesday (1)	1
Difficulties Lifestyle information of the parent (3)	Difficulties Lifestyle information of the parent (7)	Difficulties Lifestyle information of the parent (9)		Difficulties lifestyle of the parent (3)	Difficulties Lifestyle information of the parent (7)	Difficulties Lifestyle information of the parent (5)	Difficulties Lifestyle information of the parent (7)	41

Mother of P.R.	Mother of J.D	Mother of V.L.	Mother of R.S.	Sister of J.Q.	Father of F.D.	Father of T.V.	Mother of M.M.	Items
			Lifestyle information of the parent (2)	Lifestyle information of the parent (2)				4
	Activities of the children (4)	Activities of the children (6)	Activities of the children (2)	Activities of the children (2)	Activities of the children (8)	Activities of the children (3)		25
							Practice of dance (3)	3
	Children opinion about the practice (3)			Children opinion about the practice (1)				4
	Parent opinion about the practice (7)	Parent opinion about the practice (5)	Parent opinion about the practice (3)	Parent opinion about the practice (5)	Parent opinion about the practice (9)	Parent opinion about the practice (1)	Parent opinion about the practice (2)	32
	Participant feedback about the class (J.D.) (2)							2
	Practice at home of the children (2)							2
		Practice at home of the children? (1)		(No) Practice at home of the children? (2)				3
					Hypothetical Practice at home of the children (1)			1
						No Practice at home (4)		4
		Stress and anxiety of the children (3)						3
					Gymnastic at home (19)			19
					Stress and anxiety of the children (4)			4
					Knowledge of the parent about the practice (7)			7
						No knowledge about meditation of the parents (2)		2

Mother of P.R.	Mother of J.D	Mother of V.L.	Mother of R.S.	Sister of J.Q.	Father of F.D.	Father of T.V.	Mother of M.M.	Items
						Other types of the discussion (2)		2
							Meditation practice effect on the parent (3)	3

We grouped the 28 codes into different categories and three main themes, which are the following:

-Parents -Participants -Relation Parent-Children (Interaction and Observation)

Table 10. Codes repartition in categories and themes from 1st cycle parents' interviews

Codes	Categories	Themes
Difficulties Lifestyle information of the parent (41) Lifestyle information of the parent (4)	Lifestyle information (45)	
Meditation background of the parent (26) Meditation practice effect on the parent (3) No Meditation background of the parent (9)	Meditation (38)	Parents (124)
Parent opinion about the practice (32) Knowledge of the parent about the practice (7) No knowledge of the parent about the practice (2)	Point of view (41)	
description of childhood, growing (70) Description of nowadays, personality (66) Stress and anxiety of the children (3)	Global description (139)	
Activities of the children (25) Gymnastic at home (19) Practice of dance (3)	Leisure (47)	Participant (196)
Practice at home of the children (2) Practice at home of the children? (3) Hypothetical Practice at home of the children (1) No Practice at home (4)	Meditation home practice (10)	
Discussion with the children about the practice (25) No Discussion with the children about the practice (10) Children opinion about the practice (4)	Interaction about meditation (39)	
Participant feedback about the class (J.D.) (2) Other types of the discussion (2)	Other discussions (4)	Relation Parent-Children (Interaction and Observation) (95)
Effects observed (41) No Effects observed (9)	Effects on "long" term (50)	
Effects observed on Wednesday (1) afternoon No Effects observed on Wednesday afternoon (1)	Effects on short term (2)	

Parents

Firstly, we will analyze the information that parents gave us about themselves their lifestyle, we asked them in the interview if they were also feeling some **stress or anxiety** in their daily life. Also, it is important to precise that the information we will analyze in this theme are complementary to the one present on the sample description (age, profession, situation, ...). Most part of them, 7 to 8, shared us difficulties on their lifestyle, like the case of the mother of P.R., who is really tired because of her work (in pingo doce bakery) *“não tenho muito tempo”, “muito cansada”, “só quero descansar”* and need time to rest. The mother of J.D shared us her stress and anxiety feelings *“tenho ansiedade”, “consegui combater um bocadinho os stresses”, “problemas familiares”* due to complicated family situation *“divorcio”, “stress e cansas”*. The mother of V.L. also have life difficulties because of complicated family situation *“marido faleceu há um ano”,* she takes medicine because of it *“tomo medicação”, “tenho stress”, “complicado sem marido”, “muito difícil sem marido”, “tomo ansiolítico”*. The mother of R.S. is the only one who didn't give us special information about herself. The sister of J.Q *“tenho muito stress”,* associate her stress to two different causes, work and family *“stress do trabalho”, “stress familiares”*. The father of F.D. told us *“estou muito stressado também”* which get worst because of his health state *“desde que estou andando doente, tenho ainda muito mais”* he is consulting a professional for that *“tem sido acompanhamento dum psicólogo”, “ainda ontem lá fui”*. The father of T.V. associate his daily stress to his work *“também tenho stress”, “no trabalho”, “trabalho muito”, “horário meio estranho”*. The feedback of the mother of M.M. is really interesting, she associates her stress due to her family situation *“separada”, “mais preocupada”, “mais stressada”* but also because of her daughter *“mais ansiosa”, “por causa de lidar com a M.”*, her mood have an impact on herself *“o seu estatuto variável condiciona o meu espirito”, “normalmente sou uma pessoa tranquila”*.

Then, at the beginning of the interview we started with the topic of Meditation by asking to the parents if they had any **background** about it, if they already practiced it or not. We saw that 2 parents already experimented it and 5 never. The one who already did it are the mother of J.D. thanks to one friend and a TV show, she started to practice it *“comecei a poer em pratica certas coisas”, “tento me relaxar no sofá”, “direito”, “olhos fechados”* she told us that she would like to learn more *“gostava de aprender”*. The mother of M.M. is the one who look have the most important background about the practice, she even still practicing it *“também pratico meditação”, “eu segui também um curso de meditação”,* every day and even sometimes with her daughter *“acostumo de praticar quase diariamente e a M. também”, “de vez em quando fazíamos as duas”,* the type of meditation that she does is called *“meditação do poder do amor”,* who consist in *“treinos de respiração”, “pensar em coisas*

positivas”, *“tento a manter a focada só no momento”* and which have positive effects on her *“ajuda-me bastante”*, *“realmente a estar tranquila”*.

We also asked to the parents their **opinion and knowledge** about this practice. About opinions they are all positives, the mother of J.D. for example is very enthusiastic about it *“esses jovens precisam estar mais calmos”* she congratulated us *“muito bem transmitido”*, *“feedback muito positivo”* and say that it should be officially part of their program *“pena que esta disciplina não tem a mesma integrada”*, *“fundamental”*. The mother of V.L. is very surprise in a good way *“me parecia impensável”*, the sister of J.Q. told us that she will search more about *“parece bastante bem”*, *“irei procurar para ele”*. The mother of M.M. told us *“acho que é ótimo”* and that *“tenho pena que quando ela volta stressada em casa, não aplica”*. The father of T.V. gave us a differentiated answer *“uma coisa que acho estranho”* as well as the mother of R.S. *“não sei”*, *“nunca pesquisei”*, who says not having opinion *“não tenho opinião”*. Parents didn't give a lot of information about their knowledge on it, for example from the *“televisão”* like is the case of the father of F.D.

Participant

One of the main purposes of the interview was to arrive as much information as we could about the **personality, historic, growing, childhood of the participant**, in order to know them better in their most global dimension. Usually parents first gave us information about the childhood and then a nowadays description. For this part we will describe those important data, collected participants by participants:

The mother of P.R. describes his son when he was a child as a *“criança normal”* who had *“problema na escola”* and went to *“hospital pediátrico”* and the situation became more complicate because of some family event *“pai faleceu”*, *“complicações”* he was placed into an *“instituição”* because the mother needed to work *“precisava trabalhar”*, he had some problems with teachers *“problemas com professores”* and get internated *“internado”*, *“andava desorientado”*. About nowadays description, we notice that the well-being of P.R. in the centre is better *“bom aqui”*, *“esta vivente”*, *“melhor”*, *“bem ensino”*, he was *“internado duas semanas”* but everything is going well *“correr tudo muito bem”*.

The mother of J.D. shared us a long description about her son, and said how difficult it was for his son during the childhood because of his dyslexia *“tive dislexia”*, *“dislexia não ajuda a equilibrar os miúdos”* to learn how to talk *“aprendeu muito com as psicólogas”*, *“terapeutas da fala”*, *“desenvolvimento atrasas”*, she said that in one point he was not well accompanied *“precisava de outro professor, para a parte da linguagem”*, *“professora juntou ele com uma menina muda e surda”*,

“deixam de dizer todo” “começou a imitar a menina”, “não conseguiu dizer as coisas”. She also shared us that complicate family situation didn't help him *“passou muito para o divorcio, não foi fácil”, “tivemos de tentar ultrapassar isso”*. About a nowadays description, she said that her mental age is 10 years younger than reality *“como se tivesse 20-25-26”*, she gave a positive description of a happy man *“esta contente comigo”, “tem os amigos”, “não há ninguém que não gosta do J.”*, and he is good in social relations *“cria empatia”, “amizade”, “gosta de ajudar”, “adora crianças”*.

The mother of V.L. also shared us about a complicated background for the early childhood of her adopted son *“é adotado”, “tinha 3 anos e meio”, “foi maltratado”, “negligenciado”*, she told us that she adopted him while he was in an institution living with his twin brother *“irmão gêmeo”, “buscar numa instituição”* it was hard for her at the beginning *“era um bicho”*, her daughters helped her *“irmãs ajudaram”*, the situation became even more complicate some years ago when she lost her husband *“pai faleceu”*. She said that it is hard for him to have affective contact with her *“não consegue dar beijo, abraços”*. About the nowadays description, the feedbacks are better *“tem mudado muito”, “fui ensinado”, “lhe dei apoio”, “ele é muito ativo”, “anda em tudo”, “converso com ele”*.

The mother of R.S. didn't give us a lot of information about the growing of her son *“criança normal”, “crescimento normal”, “correu tudo bem”*, about nowadays she told us that sometimes he was feeling stress *“as vezes sente ansiedade, “tem stress”* his routine depend of the center week rhythm also *“semana mais tempo fora da casa”, “fins de semana, descansa em casa”*.

The sister of J.Q. spoke to us about the childhood aggressive behaviour of J.Q. related to complicate family situation *“já foi agressivo”, “problemas familiares”*. The description of nowadays that she did are brief but global she told us that J.Q. is living with her from two years *“morra comigo há dois anos”* he is *“calmo”, “distraído”, “falta de concentração”*, he used to speak more *“fala mais”*, sometimes he feels stress since he is really young *“stress e ansiedade desde pequenino”, “fica nervoso”, “é um miúdo como é”*. She also told us about his current sentimental life *“sentimentos amorosos”* which have a positive impact on his psychological well-being.

The father of F.D. gave us feedbacks about the growing time of his child but said that *“não sou a pessoa mais indicada para falar da sua infância, porque trabalhava muito”* and that it would be better to ask his wife. Nevertheless, he shared us the difficulty that he had to be focus *“não consegue estar muito concentrado durante muito tempo”, “só se for uma coisa que ele gosta muito”* and mentioned the Autism Syndrom Disorder *“rapaz com os problemas dele”, “autismo”*. About nowadays description, he told us about his lack of patience and tolerance *“se ele não gosta, não gosta”, “nos somos mais tolerantes, e ele não é tanto tolerante”*, his immaturity *“uma criança”* and his difficulties

in handy activities *“a dificuldade é ele trabalhar com as mãos”, “pouca agilidade para o desporto”, “tem dificuldade com um faca a cortar”,* linked to his lack of concentration *“falta de concentração”*.

The father of T.V. mentioned from the beginning of the description the ASD and his diagnostic *“coisa errada para ai os três anitos”,* describing some symptoms typical of ASD *“movimentos repetitivos”, “fala também não foi espontânea”, “algumas dificuldades na fala”, “brinquedos, eram muito repetitivos”, “arrumação das coisas”, “forma muito arrumada”, “foi diagnosticado”*. About nowadays, the father is really satisfied about the institution *“appda é um ambiente excelente”* which correspond to his children necessities *“gosta das coisas rigorosas, com objetivo”, “gostas das coisas avisadas”, “gosta de ser oriente e saber as coisas que vão fazer”, “tudo organizado”*.

The mother of M.M. gave us a really positive description of her daughter *“sua infância é uma pessoa com vontade de fazer coisas e desenvolver projetos”* with *“otimismo”, “vontade de fazer coisas”, “prazer em viver”* even if *“alguma situação que deixa ela ansiosa”, “medo da opinião dos outros”, “medo de falar”*. Nowadays she feels good in the class *“gosta do curso, colegas, formadores”,* her source of stress is basically when her routine has some changes *“mais ansiosa quando tem de frentear uma situação nova”,* which block her *“alguma paragem”, “dificuldade quando muda a rotina”, “muda os planos, fica mais ansiosa”* particularly unplanned ones *“plano mudou na ultima hora, fica desorientada”*.

During the conversation, we asked to the parents about the **extra activities and leisure** of their children. The mother of J.D. told us that is J.D like a lot sport and practice *“bodyboard”, “paddle”, “correr”*. The mother of V.L. told us that he was practicing different kind of dances *“hip-hop”, “dança”, “dança folclórico”, “integrado num grupo”* but also other type of activities *“muitas atividades”, “staff em trail e corridas”*. The mother of R.S. told us that he was practicing *“equitação”, “caminhada”*. The sister of J.Q. told us about *“terapia de cavalos”* and *“playstation”*. The feedbacks about this from the father of F.D. he told us how his computer activities were like a refuge for him *“se refugiou como autista no computador”, “refugiasse muito nessas coisas”* and doing many different activities through it *“as vezes estudar”, “coisa que ele gosta”, “jogo de computador”, “musica”*. He told us that he didn't really like physical activity *“não é assim muito do desporto”,* but he does natation with the centre *“faz natação aqui”* and at home with his father they do a bit of gymnastic *“ginástica a noite”* because he has some health problem due to his overweight *“porque ele ainda muito forte”, “não controla muito bem a respiração”, “algumas dificuldades”* and it is working *“esta a perder peso”, “nas anchas” “barriga mais pequena”, “mais magro”, “medico diz para ele ter cuidado do coração”,* the exercises are *“ginástica é duma base militar”, “gosta da ginástica”: “meia hora”, “abdominais”, “corrida”*

“bicicleta”. The participant who is the most involved in one extra activity is M.M., her mother told us that she is in a *“companha de dança desde os 16”*, *“pratica dança desde os 3”*, *“três vezes por semana”*.

We also asked to the parents if their children were practicing **meditation at home** or not. The only parent who answered us that her children was doing it is the mother of J.D. *“praticar no quarto”*, *“respirar fundo”*. The father of F.D. told us *“se é obrigarorio vai fazer, como trabalho de casa”*. And we already know that M.M. already practiced in group with her mother.

Relation Parent-Children (Interaction and Observation)

Firstly, it was important to know if the **participants conversed at home** with their families about the cycle. Obviously, J.D. spoke about this, her mother told us that he spoke about it *“disse que tinha meditação”*, *“a mostrar tudo”*, not just to her but even to the rest of the family *“falou no almoço com a família”*, *“mostrou os posterzinhos na família”* and the family members were glad about it *“irmão ficou encantado”*, *“minha nova ficou muito encantada”*. She also told us how good the opinion of J.D. about the practice was *“extremamente contente”*, *“reagiu muito bem”*, *“ganhar gosto”*. J.D. also gave to her some feedbacks about the class environment *“colegas muito agitados”* and how he was trying them to practice it *“tenta transmitir para os”*, according the mother feedback.

J.Q. also spoke to his sister about the sessions *“falar das aulas da meditação”*, *“falar do professor”*, *“falar de si”*, she told us that he also likes it *“ele gosta”*.

M.M. also talked to her mother about it *“falou e gostava muito”*, *“gostava de continuar”*, *“estava a sentir bem e gostava de continuar”*, one important feedback that M.M. shared to her mother is how she was feeling a bit disturbed because of her colleagues interruption during the practice *“tinha alguma pena dos colegas interromper”*, *“gosta de ficar em silêncio”*, *“dizia que muitas colegas estavam a falar e interromper”*.

The others participants didn't spoke about that to their parents, *“não é espontânea contar tudo”* father of T.V., *“fecha-se muito”* father of F.D., *“nunca me falou”* mother of V.L. and mother of P.R and R.S. the mother of R.S. knew thanks to the *“teeshirt da meditação”* that the professor gave to the participant, but apparently didn't ask more to her son. The father of T.V. told us that he is used to have other types of conversation with his son *“outro tipo de conversa”* like about comics *“desenhos animados”* and we know because of his imitations and sometimes ruminations that it constitutes his most important passion.

Finally, according to one of the main objectives of those interviews, it was important to know if the parents noted some **effect** or not in their children those last days, weeks. Sometimes effects can

be observed but are not necessary the result of the meditation practice *“acho ele diferente”* but to medication treatment for example *“associo ao tratamento”, “continuar o tratamento”*, like the mother of P.R. explained, nevertheless she hypothesized that the practice could maybe have an impact on it, associate to the treatment *“se calhar há influencia da meditação”, “conjunto do tratamento e de meditação”, “pode ser da meditação”*.

The one who gave us more feedbacks about radical changes is the mother of J.D. *“chegou mais calma”, “muito mais calma”, “ele tornou-se mais calmo”* and she insisted to show that was she is saying was true *“muuuuuito mais calmo, mas isto é verdade! Que estou a dizer!”*, *“muito grande”, “cada vez que ele teve meditação ele teve mais calmo”* she noted impact on the long term *“desde que começou, comecei a notar e ele como deve se sentir bem”* but also on a shorter term, like on Wednesday afternoon *“quando chega em casa, o dia que ele tinha meditação, vai extremamente relaxado”* after the session.

The mother of V.L. noted two important positive changes, that he is more calm *“ultimamente esta mais calma”, “mais ponderado”* but also more sociable with her *“fala mais comigo”, “mais sociável comigo”, “conversa mais comigo”*, compared to before *“não era habito”, “sempre a melhorar”*, she is not the only one in her family to observe positive effects, also the sisters of V.L. *“minhas filhas notaram ele mais calmo”, “tem sido indescritível”*.

The mother of R.S. said that from one month he is more calm *“mais calmo desde a um mês”* and could be thanks to the practice *“poderia ser”* because everything is normal in his routine *“a rotina é toda normal”* just the meditation is the only new thing *“meditação é única recente novidade”*.

The sister of J.Q. told us that he was calmer those times, compared to before *“ficou mais tranquilo do que ele estava”, “aparece bem”, “mais tranquilo”*, with less nervousity *“nervosidade diminui essas últimas semanas”, “mais calmo”*.

The mother of M.M. also noted some positive effects *“começou a andar um bocadinho mais agitada e agora andava bem,” “continou bem”* even if she doesn't know if it is thanks to the practice or not *“não sei se isso esta a ver com a meditação, mas ela andou bem”, “mais tranquila”* she is also taking medicine *“toma medicação”* but less *“toma menos”*. She said that recently she was more anxious *“agora ela está mais agitada, mais ansiosa”* and that the practice was helping her to be calmer *“fizer meditação nesta altura ajudava, a ficar mais calma”*. Also, about potential effects on Wednesday she told us that she didn't know because it is also the day that M.M. is coming back from her dance class.

The father of F.D. didn't give us any feedback about this and the one of T.V. told us that he didn't notice anything special those days *"não vi nada de especial", "também não vi nada de mal"* *"parece-me tudo ok"*. That he was already calm *"acho que ele era já mais calmo"* and his anxiety is controlled *"uma ansiedade que é controlada"*.

2nd cycle

In this second cycle, we identified a total of 32 codes. The 7 different family members interviewed, are the same as for the first cycle, except that we have one less, the mother of P.R. who left the class, as we already explained.

Table 11. Codes repartition from the first cycle family's interviews

Father of T.V. (41)	Sister of J.Q. (23)	Mother of R.S. (23)	Mother of M.M. (53)	Mother of J.D. (81)	Mother of V.L. (48)	Father of F.D. (48)	Items Total (317)
Conversation with the children about meditation (3)	Conversation with the children about meditation (3)	Conversation with the children about meditation (3)	Conversation with the children about meditation (6)	Conversation with the children about meditation (4)	Conversation with the children about meditation (5)	Conversation with the children about meditation (5)	29
Practice at home of the children (11)				Practice at home of the children (21)		Practice at home of the children (4)	36
		no Practice at home of the children (1)					1
			No Practice at home of the children? (2)		no Practice at home of the children? (1)		3
Opinion of the parent (1)	Opinion of the parent (2)	Opinion of the parent (3)	Opinion of the parent (5)	Opinion of the parent (12)	Opinion of the parent (9)	Opinion of the parent (6)	38
	Effects on the participant (7)	Effects on the participant (8)	Effects on the participant (1)	Effects on the participants (5)			19
No Effects on the participant (5)							5
Benefices of the sessions (2)			Benefices of the sessions (9)	Benefices of the sessions (4)	Benefices of the sessions (3)	Benefices of the sessions (1)	20
Changes on the routine of the participant those days (4)	Changes on the routine of the participant those days (3)		Changes on the routine of the participant those days (6)			Changes on the routine of the participant those days (6)	19
				Stress and anxiety of the participant this day (13)	Stress and anxiety of the participant this day (1)		14
					no Changes on the routine of the participant those days (1)		1
Opinion of the participant (3)						Opinion of the children (6)	9
			Meditation practice of the parent (12)	Practice of the parent (16)			28
				Effects observed on Wednesday? (6)	Effects observed on Wednesday? (1)		7

Father of T.V.	Sister of J.Q.	Mother of R.S.	Mother of M.M.	Mother of J.D.	Mother of V.L.	Father of F.D.	Items
	no effects observed on Wednesday (4)	No effects observed on Wednesday (3)	no effects observed on Wednesday (1)				8
Feedbacks about Wednesday (6)							6
Focus difficulties of the children (4)							4
Limited feedbacks from the children (2)							2
	Difficulties lifestyle of the parent (3)						3
	no stress and anxiety these days (1)						1
			Feedbacks from the participant about class environment (3)		Feedbacks from the participant about class environment (4)		7
		no feedbacks from the participant about the class environment (4)					4
		Positive extravert effects (3)					3
			Positive effects on Impulsivity of M. (8)				8
					Relation between the parent and the children (12)		12
					Anxiety of the parent (1)		1
					Positive effects on his family relations (8)		8
						Activities of the children (3)	3
						no more Gymnastic at home (10)	10
						No special Changes on the participant (6)	6

Father of T.V.	Sister of J.Q.	Mother of R.S.	Mother of M.M.	Mother of J.D.	Mother of V.L.	Father of F.D.	Items
						Affinity of the participant for meditation (1)	1

The main themes made are the same than for the 1st cycle analysis, we tried to focus more the interviews about the different feedbacks that we could receive about the practice and the potential benefices.

Table 12. Codes repartition in categories and themes from the 1st cycle family's interviews

Codes	Categories	Themes
Anxiety of the parent (1)	Lifestyle information (4)	Parents (70)
Difficulties lifestyle of the parent (3)		
Practice of the parent (28)	Meditation point of view (66)	
Opinion of the parent (38)		
Focus difficulties of the children (4)	Global description (39)	Participant (93)
no stress and anxiety these days (1)		
Changes on the routine of the participant those day (19)		
no Changes on the routine of the participant those days (1)		
Stress and anxiety of the participant these days (14)	Leisure (13)	
Activities of the children (3)		
no more Gymnastic at home (10)	Meditation home practice (41)	
Practice at home of the children (36)		
no Practice at home of the children (1)		
No Practice at home of the children? (3)	Interaction about meditation (31)	
Affinity of the participant for meditation (1)		
Conversation with the children about meditation (29)	Other discussions (23)	
Limited feedbacks from the children (2)		
Relation between the parent and the children (12)	Effects on "long" term (69)	Relation Parent-Children (Interaction and Observation) (111)
Feedbacks from the participant about the class environment (7)		
no feedbacks from the participant about the class environment (4)		
Positive extravert effects (3)		
Effects on the participants (19)	Effects on short term (19)	
No Effects on the participants (5)		
No special changes on the participant (6)		
Benefices of the session (20)		
Positive effects on Impulsivity of M. (8)		
Positive effects on his family relations (8)		
No special Changes on the participant (6)		
Effects observed on Wednesday? (7)		
No Effects observed on Wednesday? (8)		
Feedbacks about Wednesday (6)		

Parents

On the second cycle interview, we collected less data about lifestyle information of the parents. Usually we asked it on the first cycle, linked to the idea of potential cycle meditation organized for parents, but no one answered by our email solicitations, even if almost everyone was enthusiastic about it during the first cycle interviews. Therefore, on the 2nd cycle we collected less information about it. Nevertheless, the mother of V.L. shared us some of her **anxiety** *“eu também estou a haver muita ansiedade e muito... em relação ao futuro”*. Also, the sister of J.Q. by asking her if she saw any differences on her brother, she said she were less with him because *“tenho de ir mais logo ao trabalho”, “chego mais cansada a casa”, “acabo por deitar mais cedo também”*.

We also wanted to know if they were some **changed on the opinion** of the parents about the practice. The feedbacks didn't change a lot compared to the 1st cycle, the sister of J.Q. kept her positive opinion and added the idea of potential effects *“deve ser bons efeitos sim, pelo menos”*, the same as for the mother of R.S. *“pode ser benefícios, sim”, “deve ser alguns efeitos, sim”, “devem ter benefícios para as pessoas”*, the mother of M.M. developed about how good she perceives the practice, her opinion is the same as for the 1st cycle *“já tinha esta opinião pronto e continua a ter a mesma opinião”*, the same as for the mother of J.D. *“foi muito bom”, “vocês ter ensinado esta disciplina”*. Even if the mother of V.L. told us *“nunca pensei nisso a sério*, then she said *“acho que foi muito bom para ele e para a associação e possivelmente a meditação, eu sei que ele faz, não sei, também ajudou um bocado”*. The father of F.D. think that it should be always part of the program in the centre *“devia continuar na APDA”, “integrado isso no quadramento”, “penso que isso lhe faz bem”*.

The mother of M.M. told us that she kept **practicing** *“de vez em quando”*, we asked her if she was doing it with M.M. and she told us *“com a M. ao mesmo tempo não”, “em grupo sim, agora assim só com a M., não”, “temos um grupo que fazemos meditação”*. A new constant practitioner is the mother of V.L. who is doing kind of relaxation exercises, even if they are not proper Meditation exercises, it still a very interesting practice *“quando estou assim mais stressada, mais cansada, sinto bem, os olhos fechados”* she said that even if she never did meditation before she had good indications from us and her son *“quem me explicou foi você, foi o J.”* thanks to this relaxation she feels better *“ambiente muito calmo, não estou a fazer meditação, mas estou a me sentir tranquila”*.

Participants

In complement to the information that we get in the first cycle it was important to know if they were some **changes in the being of the participants**, like about routine, stress episodes, ...

The father of T.V. gave us additional feedbacks about the difficulties to be focus for his son, associated to his important use of his mobile phone *“tem alguma dificuldade a estar parado”, “esta com telemóvel”, “dizemos para ele de não estar com o telemóvel”*. T.V. had some changes on his routine, related to the sickness of his grandparents, he needs to visit them in the hospital *“temos de ir no hospital”, “ver os avos dele”*, the father said that this could create some agitation *“esta andando um bocadinho agitado esses últimos tempos”, “temos doenças dos avos”*.

About changes on the routine, the sister of J.Q. told us that soon they will change house *“vamos mudar de casa em breve”* but it doesn't have an impact on the being of J.Q. *“isso não interferiu muito com ele”, “ele sabe que depois vamos construir e vai ter o surfaço dele na mesma”*. Her sister answered that he didn't have particular stress those days *“não, não”*.

The mother of M.M. also gave us feedbacks about routine changes, M.M. is living those weeks with the father *“agora ela esta a viver com o pai”, “há mais ou menos um mês”*, they live in the same building *“no mesmo prédio”, “andar de cima”*, so they still use to see each other often *“eu assino essas coisas que costume ver”, “hoje estava com ela”*.

The mother of J.D. told us that J.D. was a bit tired those days because of the rhythm of tests in the formation *“ele andava um bocado cansado e também estava um bocado stressado (testes)”, “esses miúdos que tem esses problemas é um bocadinho difícil”* she said that it makes him feel a bit stressful *“as vezes ficam baralhado”, “ficam um bocado stressado”, “pelo menos o J.”* because he was not use to have so many tests *“não estão habituado a fazer tantos testes”*, they need to accelerate in the formation because the course is finishing.

The mother of V.L. gave us a lot of feedbacks about changes, that will be see in the next theme, about special changes and description of nowadays she told us *“para ele é difícil tomar decisoes”*, that was hard for him to take decisions.

About changes on the routine, the father of F.D. told us about the difficulties associated to the weather condition (tempest in Coimbra) *“agora com o tempo como esta, com o tempo mau, chuva e assim, são dias terríveis para ele”* and this is affecting a lot the quality of his sleep *“não dorme muito bem a noite”, “ele dorme quase nada” “bocado serio”*, he needs to compensate those sounds with the one of the television *“televisão com o máximo de som [...] para não ouvir o vento e a chuva”*. Those

days, F.D. is passing even more times than before on internet and his computer *“mais no internet”, “computador”, “playstation”*. As we already know from the interview of F.D. they stop doing gymnastic at home with his father. But the reason given by the father is different and not associated to his sickness, but because he was worry about a pain in the chest of his son *“ele até começou a dizer que ele tinha uma dor no peito”, “fui ao medico”* even if the doctor said that was probably nothing serious *“medico diz que em principio não era nada”*.

About the **practice at home** of Meditation, we collected more feedbacks than for the 1st cycle, which is a good sign of adhesion to the program.

The father of T.V. said that his son was sometimes doing it *“de vez em quando, faz”, “porque esta muito barulho”, “as vezes ele fecha os olhos”* and he is saying *“estou a meditar (diz)”, “as vezes pratica sim”*, his father is very surprised and find it amazing *“uma das coisas mais incríveis, dele”, “todos dias, não consigo dizer”, “vi ele varias vezes a fazer”* and described what he is doing like *“imagino que seja concentração”, “fechar os olhos”, “olhar para dentro”*. We know that during the 1st cycle he was not doing it by himself, this is a very positive result.

We were a bit surprised about the feedback from the mother of M.M., she told us that sometimes they do participate together in the same group, but about a lonely practice of M.M. she said *“acho que não”, “não sei”, “nunca lo percebi”*, M.M. probably didn't communicate it to her, because she told us that she was doing it often before to sleep.

Which is the exact opposite for the mother of J.D., the son told us that he was not doing it at home, but her mother said yes and gave us a lot of details about it (22 items). We can explain it because the description is more similar to relaxation, maybe the mother of J.D. doesn't make the difference with meditation and J.D. does it, *“retira-se um pouco”, “poe uma música calma de jazz”, “com os olhos fechados”, “durante algum tempo e faz lhe muito bem”, “se ele faz meditação, por acaso não lhe perguntei”, “pratica [...] ele teve muitos testes”, “olhos fechados”* she described it as *“a sua própria meditação”, “é o relaxamento dele”, “outras vezes vai para o quarto”*.

One of the participant who is practicing a lot at home is F.D., his father told us how much he likes it *“a outras coisas que ele gosta também, mas a meditação é uma coisa que lhe faz bem”* and as the same that F.D. told us that he is practicing in the shower *“no duche”, “no banheiro”, “poe um bocadinho de agua”, “ele diz que esta a meditação”*.

Relation Parent-Children (Interaction and Observation)

As for the 1st cycle, we again asked the parents if the participant mentioned and **conversed** at home about the practice. Compared to the 1st cycle, in the 2nd T.V. started speaking about this to his family *“fala com os primos”, “estou a meditar”, “boa relação com os primos”,* it is a good prove of evolution. Even if his father said *“ele não é muito de exprimir”, “exprimir as coisas, não”,* which gives even more value to the small conversation he had about this with his cousins for example.

For J.Q. is the opposite, he stopped speaking about this, according to what his sister said *“ultimamente não”,* she even thought that we stopped practicing it *“até pensava que ele já não tinha”.* It's the same for M.M. who spoke less about this to her mother also *“no início sim”, “agora não tem falado”, “quando começou, falava”, “ultimamente não”.*

Even if the mother of R.S. didn't give us a lot of details, she let us know that he started speaking about it *“não falou muito”, “qualquer coisa”, “diz que ele esta a fazer exercícios com meditação, não sei”.*

The mother of J.D. told us that he keeps speaking frequently about his *“ele fala”, “ele usou fala muito sobre a meditação”,* and saying it when he is going to practice it *“mesmo as vezes diz-me “eu preciso de estar no meu quarto, vou me-di-tar”.*

The mother of V.L. also thought that we stopped practicing it *“sobre a meditação nunca me falou, ainda não sabia que ele fazia”,* but she told us that he is not use to speak at all with her *“não fala sobre nada”* and that he could do it more with his sister *“é capaz de falar mais com as irmãs”,* particularly the oldest one *“a minha filha mais velha”.*

The one who started to speak more and more about this to his family, compared to the first semester, is F.D. *“o F. Fala”, “fala muito sobre isso”* his father told us how much he likes it *“ele gosta”, “fala muito da meditação e gosta, gosta imenso”,* this is a really positive sign of evolution and adhesion to the practice for F.D.

From the **class environment** they were really few feedbacks, the mother of M.M. still reminding what M.M. said at the beginning *“no iniciou falou”* about the agitation of some colleagues during the sessions *“diz que alguns colegas faziam um bocadinho de barulho durante as sessões”* which is perturbing her *“nesta situação de alguns colegas a não gostar de fazer meditação e perturbarem um bocadinho”,* but this feedback is not really relevant because it is coming from the 1st cycle, it is hard to identify if it is the same right now.

About **lack of communication** between the participants and their parents it is interesting to analyse the case of V.L. and his mother, we feel a complex from the mother about her age and worry to feel not like if she was her mother *“filha mais velha da idade da mãe biológica do V.”*, *“o V. vê se calhar nela, ele gosta dela como mãe”* she explained that it is difficult for V.L. to see her as a mother *“mas ele tem muita dificuldade em exprimir para mi”* and that was always like this *“foi sempre assim”* and that could explain this lack of communication *“capaz de falar mais com as irmãs”, “comigo já não tanto”* and that could be because of the age difference, she could be her grandmother as she said *“não sei se é por a diferença de idade”, “eu podia ser a avo dele”*.

Like for the 1st cycle, it was important to question the parents about their potential **observation on eventual effects**, new effects, or their continuity, progression, since the 1st cycle.

For T.V., the evolution from the 1st cycle is very satisfying. His father told us how well it worked for him and the importance that he is using it by his own *“tem funcionado sim”, “tem utilizado sim”*. Even if it enters in his routine, the effects are not notable for his father *“acho o comportamento dele tem sido aproximadamente o mesmo”, “não tenho notado mais isso ou mais aquilo”, “nem mais irritado”, “nem menos irritado”, “mesma coisa, mais ou menos”*. The same for short term effects, nothing special is noted on Wednesday, he also has swimming pool this day *“piscina”*.

The sister of J.Q. noted that his brother started to speak more with her *“eu notei que ele começou a falar mais”, “sobre os problemas dele”, “sobre a escola”, “começou a falar mais”,* from one month or two *“desde um mês e meio ou dois para cá”*, he is in a good wellbeing *“esta mais bem-disposto”*. But about Wednesday, no particular changes are noted *“acostuma a estar sempre alinear”, “ainda sempre disposto”*.

The mother of R.S. told us about different positive changes, that he is more calm *“ele está assim mais calmo”*, the most important ones are socially *“mudou, mudou muito”, “mais sociável”, “fala mais com as pessoas”*, he created friendships with people of his class *“já criou amizades”, “já criou amizades na turma si”*. Compared to the past *“sempre fui uma criança muito fechada”, “não falava muito”*, he became more extravert. About Wednesday, her mother didn't note special changes *“não estou a ver se ele fica mais calmo a quarta feira ou não”*.

The mother of M.M. shared us a lot of important positives feedbacks *“acho que lhe faz muito bem”, “acho que é ótimo”, “acho que é muito positivo”*. Saying that it had an impact on auto control *“aumentar o autocontrolo”* and helped her to control her impulsivity *“é um bocadinho impulsiva”, “em alguma situação, esta falta de autocontrolo”, “acho que esta melhor”* and she thinks that this can be thanks to the meditation practice *“sim, acho também que sim (melhor por causa da meditação)”* and

helped her to become more calm *“sim, acho que ela esta mais calma”*. It was also impossible for her to give any feedbacks of potential effect on the practice day *“não sei, não consigo dizer”*.

Obviously, the mother of J.D. gave us positive feedbacks about changes. That J.D. was able to lead better with his stress and be more *“esta mais calmo quando ele está mais stressado”*, *“consegue controlar bem as suas ansiedades o seu stress”* he is calmer in general *“fica mais tranquilo”*, *“agora ainda bastante calmo”*, *“muito mais relaxada”*. She congratulated the program *“foi muito bom mesmo, que vocês aprenderam”* it helped him to have a better ego *“foi muito bom para ele controlar a sua autoestima”*.

The mother of V.L. told us that was good at list a good experience for him *“acho que foi bom para ele”*, *“pelo menos foi uma boa, foi uma experiência”*. She thinks that this days (January) he is well *“realmente, acho que ele esta numa fase muito boa”* with less anxiety *“menos ansiedade, sim”* and he feels well in the centre *“agora ele estabilizou muito na associação”*, *“mais sereno”*, *“mais calmo”*. She also shared positive changes about his family relations, particularly the grandsons of her mother *“em casa, ele agosta-se muito com os sobrinhos”* compared to before *“ele não quiere invasões”*, *“as vezes reage muito mau”* he is now more patient with them *“ultimamente não tanto (não reage mau)”* she said that the last family meeting were good *“fizemos dois almoços da família aqui em casa e correu tudo bem”*, *“mais paciência”*, *“leva as coisas, mais ... doutra maneira”*. She said that on the last Wednesday he came back well *“ele ontem (4a feira) vinha muito bem”*, but this information cannot be very relevant because not compared to other days or all the Wednesdays in general.

The father of F.D. after explaining us how meditation became part of his son routine, he then recognized that there were benefices *“tem”*, *“coisa que lhe faz bem”*, but without identifying which specific aspects and no particular changes *“tem os problemas normal dele”*, *“mais ou menos a mesma coisa que era”*, *“não há nada que falta que eu vejo”*, *“esta num outro meio que ele estava mais”*. We also noticed that sometimes the father of F.D. was maybe not the most aware on the family about his son, he was sometimes asking his wife during the conversation some details about their son.

4.1.3. Analysis of staff members' interviews 1st and 2nd cycle

1st cycle

The staff member's interview are the ones with the more important diversity of codes, 57 for the first cycle. This can be explained by the fact that the conversations were even more open, with a various diversity of feedbacks.

Table 13. Codes repartition from 1st cycle Staff members interviews

Teacher 1	Teacher 2	Teacher 3	Technical motors	Training coordinator	Psychologist and technical director	Items
(36)	(36)	(90)	(54)	(80)	(183)	Total (479)
Relation with the class (1)		Relation with the class (1)	Relation with the class (2)		Relation with the class (1)	5
Description of the class (9)	Description of the class (8)	Description of the class (3)	Description of the class (4)	Description of the class (4)	Description of the class (8)	36
Observation on the long term of the class (1)	Observation on the long term of the class (1)		Observation on the long term of the class (4)			6
		Hypothetic observation on the long term (6)				6
				No Observation on long term (8)	No Observation on long term (1)	9
Conflicts and stress in the class (3)	Conflicts and stress in the class (3)					6
Opinion about meditation (6)	Opinion about meditation (5)	Opinion about meditation (9)	Opinion about meditation (4)	Opinion about meditation (5)	Opinion about meditation (6)	35
	Current meditation experience of the staff member (5)		Current Meditation experience of the staff member (3)			8
		No meditation experience of the staff member (3)				3
		Relaxation experience of the staff member (4)				4
Past meditation experience of the staff member (5)				Past Meditation experience of the staff member (5)		10
					First Meditation experience of the staff member during the centre session (4)	4
	Stress or anxiety of the class (5)	Stress or anxiety of the class (2)	Stress or anxiety of the class (3)	Stress or anxiety of the class (1)	Stress or anxiety of the class (8)	19
Conversation with the participants about the practice (4)				Conversation with the participants about the practice (5)		9

Teacher 1	Teacher 2	Teacher 3	Technical motors	Training coordinator	Psychologist and technical director	Items
	No Meditation feedbacks from the participants (1)		No Meditation feedbacks from the participants (2)			3
Description of one participant (T.V.) (2)		Description of one participant (T.V.) (8)		Description of one participant (T.V.) (4)		14
					Phone problematic solved for T.V. (12)	12
					Hypothetical benefices of meditation for T.V. (3)	3
					Behaviour during intervals of T.V. (7)	7
					Type of pedagogy used for one participant (T.V.) (3)	3
					Challenge of the integration in society for T.V. (11)	11
					Description of rumination and imagination life of T.V. (13)	13
					Ability of T.V. to come by bus (8)	8
Observation of evolution for 1 participant (V.L.) (1)		Observation of evolution for 1 participant (V.L.) (1)	Observation of evolution for 1 participant (V.L.) (3)			5
	No Observation of the teacher during meditation session (1)			No Observation of the teacher during meditation session (2)		3
	Description of one participant (D.S.) (7)		Description of one participant (D.S.) (4)	Description of one participant (D.S.) (14)	Description of one participant (D.S.) (10)	35
					Description of one participant in his initial phase in the centre (D.S.) (12)	12
		Contact with the class (3)	Contact with the class (3)	Contact with the class (6)	Contact with the class (4)	16
				Indirect contact with the class (2)		2
		Agitation in the class (4)		Agitation of the class (3)		7
				Instability of the class (3)		3
				Recent instability (3)		3
		Description of one participant (M.M.) (8)		Description of one participant (M.M.) (11)	Description of one participant (M.M.) (6)	25

Teacher 1	Teacher 2	Teacher 3	Technical motors	Training coordinator	Psychologist and technical director	Items
					Past description of one participant (M.M.) (4)	4
					Description of one activity (photography) for one participant (M.M.) (7)	7
		Description of one activity (dance) for one participant (M.M.) (11)				11
		Description of anxiety crisis of one participant (M.M.) (5)			Description of anxiety crisis of one participant (M.M.) (5)	10
		Description of Meditation perception for one participant (M.M.) (2)			Description of Meditation perception for one participant (M.M.) (6)	8
			Hypothetical observation of evolution for 1 participant (M.M.) (8)			8
		Description of J.Q. (5)				5
					Description of recent love emotions of J.Q. (5)	5
		Stress of one participant (J.Q.) (10)				10
		Observation of evolution for 1 participant (J.Q.) (2)	Observation of evolution for 1 participant (J.Q.) (4)			6
		F.D. observations on the long term (3)				3
					Description of how F.D. is involved in Meditation (5)	5
Observation of the teacher after the session on Wednesday (4)			Observation of the teacher after the session on Wednesday (3)			7
			observation of evolution for 1 participant (P.R.) (1)			1
			Hypothetical observation of evolution for 1 participant (T.V.) (2)			2
			Observation of evolution for 1 participant (V.L.) (4)			4

Teacher 1	Teacher 2	Teacher 3	Technical motors	Training coordinator	Psychologist and technical director	Items
				Meditation recommendations (4)		4
					Description of how J.D. is involved in Meditation (10)	10
					Familiarization to meditation for J.D. due to interest of mother (10)	10
					P.R. difficulties to get involve in Meditation (5)	5
					Meditation feedbacks for the group (6)	6
					No observation of the teacher the Wednesday after session (3)	3

We classified the codes into different categories and in 3 different main themes which are:

-Staff -Class -Participants

Table 14. Codes repartition in categories and themes for Staff members interviews 1st cycle

Codes	Categories	Themes
Relation with the class (5)	Staff relation with the class (23)	
Contact with the class (16)		S
Indirect contact with the class (2)		T
Opinion about meditation (35)		A
Current meditation experience of the staff member (8)		F
Past Meditation experience of the staff member (10)	Staff relation with Meditation (68)	F
Relaxation experience of the staff member (4)		F
First Meditation experience of the staff during the centre session (4)		(91)
No meditation experience of the staff member (3)		
Meditation recommendations (4)		
Description of the class (36)		
Stress or anxiety of the class (19)		
Conflicts and stress in the class (6)	Global class description (71)	
Agitation in the class (7)		
Instability of the class (3)		C
Recent instability (3)		L
Meditation feedbacks for the group (6)		A
Conversation with the participant about the practice (9)	Class and Meditation (18)	S
No Meditation feedbacks from discussion with participants (3)		S
Observation on the long term of the class (6)		
Hypothetic observation on the long term (6)		(123)
No Observation on long term (9)	Meditation observation on the class (34)	
Observation of the teacher after the session on Wednesday (7)		
No observation of the teacher the Wednesday after session (3)		
No Observation of the teacher during meditation session (3)		

Codes	Categories	Themes
Stress of one specific participant (J.Q.) (10)		
Description of recent love emotions of J.Q. (5)	J.Q.	
J.Q. description (5)	(20)	
Description of one participant (M.M.) (25)		
Description of anxiety crisis of one participant (M.M.) (10)		
Past descriptions of one participant (M.M.) (4)	M.M.	
Description of one activity (dance) for one participant (M.M.) (11)	(57)	
Description of one activity (photography) for one participant (M.M.) (7)		P
Description of one participant in his initial phase in the centre (D.S.) (12)	D.S.	A
Description of one participant in his current phase in the centre (D.S.) (35)	(47)	R
Description of one participant (T.V.) (14)		T
Description of rumination and imagination life of T.V. (13)		I
Challenge of the integration in society for T.V. (11)		C
Ability of T.V. to come by bus (8)	T.V.	I
Phone problematic solved for T.V. (12)	(68)	P
Type of pedagogy used for one participant (T.V.) (3)		A
Behaviour during intervals of T.V. (7)		N
Familiarization to meditation for J.D. due to interest of mother (10)		T
Description of how J.D. is involved in Meditation (10)		
Description of how F.D. is involved in Meditation (5)	Individual and	(262)
Description of Meditation perception for one participant (M.M.) (8)	meditation (38)	
P.R. difficulties to get involve in Meditation (5)		
observation of evolution for 1 participant (P.R.) (1)		
Hypothetical observation of evolution for 1 participant (T.V.) (2)		
observation of evolution for 1 participant (V.L.) (4)		
V.L. observations on the long term (5)	Potential changes and	
F.D. observations on the long term (3)	effects on Participants	
Hypothetical observation of evolution for 1 participant (M.M.) (8)	(32)	
J.Q. observations on the long term (6)		
Hypothetical benefices of meditation for T.V. (3)		

Staff

Firstly, we questioned the different staff members about the **quality of their relationship with the class** and about their **frequent direct contact or not with them**. Some are really brief "boa" teacher 1, to describe their relation with the class or "boa relação" teacher 3, who told us that her contact with the class is varying from at list two afternoons per weeks "Há alturas duas tardes", to more "há alturas mais tempo", "muito variável". The technical motor, which is in direct contact with them every day in "qualquer modulo" for their "portfolio" says having a good relation with them "boa" even if she let us know that sometimes it is a bit complicate "há situações que eles extrapolam um bocadinho". Not all the professionals of the center that we interviewed had a direct formal class contact, for example, the training coordinator is not working with them directly in the classroom, his contact is more indirect "contacto mais indireto", during other moments "intervalo", "almoço", "sistema", "alguma documentação", "alguma orientação". The psychologist/technical director who also have a "boa relação" is also a lot in contact with the class "todos dias", "acompanhamentos terapêuticos", at different moment, not only during the class time but also on "intervalos" and "almoço". This plurality of different contact with the class for the different teachers and professionals of the center will give us a large and global version of potential feedbacks and observation of the class and participants.

It was also important to know the different **point of view** of each professional **about the practice**, their opinion but also their **background** on the practice.

The **opinions** are all positives "Pode resultar", "pode ter efeitos brutais", "para continuar" as say the teacher 1. The teacher 2 said that this practice might be even more important for this public "Fundamental", "muito bom", "bom para toda gente", "sobre tudo com este publico", "efeitos concretos". The teacher 3 justified her good opinion "muito bom", "devia ser nas escolas todas", "toda gente", by speaking about the general well known benefits "auto relaxamento", "níveis melhor de concentração", "não bloquear em stress" as the technical motors told us "Acho que é fantástico", "ajudar a desenvolver a concentração", "ajudar eles a calmar-se concentrar-se", "ter o foco". The stress thematic came back with the training coordinator "aprender a controlar o nosso comportamento no dia dia", "para nos desligar um bocadinho do stress" she also recommended us to try to practice in a different place, like the garden "espaço diferente", "no jardim", "no exterior". The psychologist/technical director, justified her positive opinion about how it was important especially for this group "com este grupo faz todo sentido", "estes jovens tem alguma dificuldades em termos de autocontrole e a meditação acho que poderia permitir trabalhar precisamente esta dificuldade" and also bringing the thematic of anxiety "conseguir reduzir o nível de ansiedade", "muito positivo".

The staff members were also questioned about their **experience background** about the practice. We found out that 2 of them are currently practicing meditation and 2 of them practiced it on the past. The teacher 2 is currently practicing it *“Estou a fazer um curso de meditação”, “introdução”, “trabalho da respiração”*. The same as for the technical motors *“Neste momento estou a frequentar um curso”, “início a meditação”*. The teacher 1 used mindfulness in her professional practice *“Pratica profissional”, “mindfulness”*. The training coordinator had a previous experience who was called as *“meditação do relaxamento”*. The psychologist/technical director just have an experience with us during the first sessions *“foi uma novidade”*.

Class

We asked to the staff members to do a **global description of the class**, what we noted more was the diversity of the different participants. The teacher 1 spoke about it *“Muitas diferenças”* and described two different groups *“duas vertebbras”, “alguns mais conversadores”, “temporada”, “controlo do impulso”, “outros não”*. The training coordinator also spoke about those differences *“turma com características muitos especiais”, “padrões de comportamento muito, muito diferentes”*, also the psychologist/technical director *“grupo muito diferente”*. Those differences are not just about the participants but also day per day, the staff members noted some variations in the global mood *“comportamento da turma não é sempre o mesmo”* says the training coordinator, similar to what the teacher 3 says *“Muito variável”*, that each day the behaviour is different *“há dias que estão bem e trabalham bem”, “há dias que estão calmos”*.

The professionals of the center gave a lot of feedbacks about different **perturbations and agitation in the class**, the teacher 2 spoke about some difficulties *“dificuldade manter a calma”* to keep the calm in the class because of the agitation *“Bocadinho agitados”*. The teacher 3 identified the reason of the class agitation by associating it to some participants *“um ou dois elementos agitados, F.D e P.R.”, “depois o T.V. e V.L., agitam a turma”*. The mood of those 4 elements who have more difficulties to be focus *“esses 4 têm mais dificuldades em concentração”* have an impact on the global mood of the class *“quando estes elementos estão bem todos trabalham bem”*, about studying. The training coordinator spoke to us about recent instabilities and agitation in class *“até o comportamento instavel por parte de alguns”* due to some elements *“alguma instabilidade”*, he described the general mood has a class who has difficulty to be stable *“nao é uma turma que seja propriamente estável”*, this depends of different phases and factors *“depende muito das fases”, “depende de muitos fatores”*. The psychologist/technical director described the intervention in the class as *“desafio para nos formadores, para conseguir chegar as diferentes pessoas”* and spoke about the immaturity of the elements *“turma de jovens muito imaturos”*.

We also questioned the staff members to know if they were feeling in the global mood of the class some **stress or anxiety** and that could sometimes result in some conflicts between the different elements. Like the Teacher 1 reported, he noted some *“Impulsividade”* and *“dificuldade na gestão das próprias emoções”* which are the reason to the conflicts in the class *“razão dos conflitos na turma”*. The teacher 2 told us about impatience of the participants that could be the consequences of some anxiety events *“não conseguem esperar”, “alguma ansiedade”, “ansiedade natural deles”*. The teacher 3 globalized the stress of the class to the one of two participants, *“V.L. é muito ansioso, faz 100 vezes a mesma pergunta”* and J.Q. *“é um bocado estressado as vezes”* but we will analyse better the stress of each participant in the next part. This anxiety of some elements is interesting to note in the analyse of a global class mood, because as the technical motors said *“ansiedade contagia os outros”*. The psychologist/technical director identify the anxiety of the participants *“são muito ansiosos”* because of questions related to the future *“muitas questões sobre o futuro”*.

During the interview and to know more about **participants feedbacks**, from **conversations**, we asked to the staff members if the participants spoke about this thematic with them. We didn't get a lot of feedbacks from this, the teacher 1 told us *“alguns falam logo a seguir”, “F.D. da mais feedbacks” “V.L. um bocadinho”*, the training coordinator told us that some spoke about it *“uma a outro falaram”*, particularly at the beginning *“acho que falaram sobre isso no inicio”* and they showed their motivation to them and their parents *“mostraram vontade com nos, com os pais”, “acabaram por relatar em casa o que tinha feito”, “vários falaram disso”*, which is a really positive feedback. The psychologist/technical director gave us interesting feedbacks about the participants feelings *“eles abriam todos numa forma muito positiva a iniciativa”* and told us how this day of practice became part of the routine *“quarta-feira meditação já faz parte da rotina”*. Some didn't have any information *“nunca falaram comigo”* teacher 2 or *“não falaram”* technical motors.

We asked the teachers if they noted some potential **effects on the global class** about meditation, on the *“long”* term, weeks and on the day when we practice it, Wednesday.

On the day of the practice, some teachers noted effects, like the teacher 1 *“Calma se instala”*, she notes a real difference between before and after the session *“diferença entre antes e depois”, “apaziguados”, “efeito imediato obvio”*. The teacher 2 didn't note effects yet on the long term *“Ainda não sentimos os efeitos”*. The teacher 3 told us *“podem não se ver logo os efeitos”* but believes that it will work with the continuity *“continuidade acaba por ajudar e ver os outros efeitos positivos”*. The technical motors gave positive feedbacks about the Wednesday after the session *“De regra geral estão mais calmas”, “bastante agitados antes da sessão e muitos estressados”*, with an important change between before and after *“depois da sessão ficavam fantásticos”*. She is also the only professional in

the centre who gave us positive feedbacks about potential long-term effects *“Quando estou a dar a formação eles estão muito mais calmos”, “no longo termo mudou”, “menos conflitos”, “menos tensão entre eles”*. The training coordinator as the same conclusion than the teacher 3, we need more time to have results *“necessitaríamos duma fase de trabalho maior”, “alongar no tempo”, “tempo não está assim suficiente”* and believe also that with the continuity it will work *“com o trabalho que continuo, lá podemos chegar”*. The psychologist/technical director told us that she didnt note any differences on the long term *“a este nível, não conseguimos identificar alteração”*, but also on the short term *“não consegui identificar”* because of other factors *“sempre outros fatores”*.

Participant

We asked to the staff members if they could give us a **description** of the participants that we couldn't interview the family, like D.S., we were also worry to not be able to interview the mother of M.M. (finally we did) and we asked more feedbacks about T.V. with who it was more complicate to lead the interview. Then, spontaneously during the conversation, it happened that we spoke about other participants, their descriptions, about potential effects on everyone we tried to have a different vision for everyone.

The one we needed more a description about is D.S., because of his family situation it was impossible to have any feedback for them. The teacher 2 described us as someone calm *"Pessoa bastante calma"*, *"participativo"* who is sharing *"compartilha suas experiências"* and have discipline *"capta muito bem nossas ordens"*, *"não fica chateado ou ansioso quando chamamos atenção"*, this days he is going well *"nesses dias anda bastante bem"*. The technical motor told us that he was well those days, *"não tem tantos episódios de impulsividade"*, without too much impulsivity *"esta a perder a sua impulsividade"*, *"mais relaxado"*. The training coordinator gave us a large description of him, speaking about those families difficulties *"tem muito falta de efeitos"*, *"falta dos lares familiares"*, he is just with his ant *"apoio da sua tia e de um primo mais velho"*, *"falta la o aspeito maternal"*, he also said that his family is not aware about the problematics of ASD *"não compreendem o autismo"*, *"não compreendem algumas necessidades, comportamentos dele"*. About the personality of D.S. he told us *"miúdo muito dócil"*, *"muito afável"*, *"interessado"*, but who could feel stress sometimes and being instable *"stressado"*, *"desequilibrado com alguma situação"*, *"alguma situação pode lhe tornar numa pessoa mais violenta, agressiva"*, and he believes how meditation could bring future benefices to him *"poderia ser uma pessoa deste tipo de terapias"*. The psychologist/technical director shared us the evolution of the personality of D.S. during his different phases in the centre, at the really beginning he was *"muito tranquilo, pacífico"* but then he became more instable *"fase de completa destabilização"*, *"super instável do ponto de vista emocional e comportamental"* even violent sometimes *"mandou um burrão num colega da turma"*, they realized by bringing him to the psychiatrist that the medicine that he was taking was not well *"levou me a recorrer a psiquiatra"*, *"a medicação com que ele andava estava completamente desajustada"*, *"alguns dias tomava a medicação, outros dias não tomava"*, more than not well taken, the medicine was wrong *"medicação prescrita pelo medico de família eram completamente contrários daquela medicação prescrita pela psiquiatra"*. Nowadays (june) she is bringing herself to the psychiatrist *"acompanho-lhe nas consultas psiquiabras"*, one of the medicine is taken on the center *"a medicação da manha é tomava aqui conosco"*, *"não garantimos que ele toma a noite"* and he is really more calm *"esta muito mais calmo"*, *"muito mais controlada"*, more social

“muito mais acessível para falar”, “muito mais disponível durante as aulas”, “esta completamente diferente”.

During the interview of T.V. it was hard to obtain information because he was imitating my accent and not really answering the questions, therefore we questioned more the staff members about him. The teacher 1 told us indeed that it was harder for him to speak about his individual experience *“Falar sobre experiência individual”, “mais dificuldades”*. The teacher 3 confirmed that as we could see during his interview he is good in imitations *“Imita muito bem (cartoons)”* and usually other people like it *“pessoas gostam das suas imitações”, “natural que ele faça isso”* she spoke about him as a good student *“mas compreende tudo”, “bons testes” “ele consegue”*. The training coordinator confirmed us that it was not easy to talk with him *“muito difícil falar com o T.”, “nem sempre é fácil conseguirmos, chegar, chegar lá e captar-lhe atenção”*. The psychologist/technical director gave us a long description of what was made in the center to deal with the specificities of T.V. First she told us about the smartphone problematic and the video game that he was playing on it, they imposed him to put an alarm *“despertador no telemóvel”, “larga o jogo e vai para sala”* and she believes that he is following well this rule *“é regra é regra”, “interiorizou e compreendeu”, “não há questão mais nenhuma”*. Then, he didn't know what to do at the beginning, during the intervals *“nos primeiros intervalos, foram horríveis”, “não sabia o que era para fazer”, “não sabia o que eu esperava dele”,* he was lost *“ele sente-se completamente perdido.”* right now it is going really better *“agora já esta la fora a brincar com os colegas e os colegas a brincar com ele”*. We spoke about the main problematics, which are his ruminations and cartoon imitations *“é muito difícil”, “vive num mundo de desenhos animados”,* he is always doing those noises *“barulhitos de desenho animados”, “ruidos”, “esta a pensar nas personagens”*. And the main consequence about it is his integration in the society *“temos de trabalhar na integração dele na sociedade”,* just coming by autobus to the centre was something complicate because of those ruminations *“autocarro é grande conquista”,* and the reactions of others peoples around *“tinha a certeza que consegui vir sozinho”, “me preocupava era os outros”, “precisamente por este tipo de ruidos”* this problematic is the same for a potential work integration after the course *“num trabalho não vão ser permitido”, “no estagio não vai ser permitido falar como os desenhos animado”, “é impossível em qualquer entidade aceitar uma coisa desta”*. She believes that with the continuity, the practice can have benefices on him *“se ele começa a reconhecer os benefícios, ele próprio vai passar a fazer sozinho”*.

We also obtained more feedbacks about M.M. because we questioned more about her. The teacher 3 described us as someone shy *“Muito tímida”, “muito dócil”, “fiável”,* who interiorize a lot *“não exterioriza”*. She has important passions, like dance *“é bailarina”,* the teacher told us how good she feels when she does it *“tranquila”, “outra realidade”* and compared it to meditation *“se calhar o*

mesmo com a meditação". The teacher also described her panic crises *"tinha ataques de pânico"* as we could see once at the beginning of one session *"saía a correr da sala", "acontece pontualmente"*. Also, she said how she likes the practice *"gosta muito da meditação"* and even try to promote it to her colleagues *"a defender a meditação contra a opinião dos colegas"*. The technical motor, told us about hypothetical positive changes on M.M. *"acredito que tinha a ver modificações", "muito sensitiva" "muito consciente", "é capaz de haver transformação"*, but without giving us concret examples. The training coordinator describes M.M. as someone complex *"personalidade um bocadinho complexe", "forma de pensar muito própria"* with who is sometimes difficult to interact *"nem sempre é fácil abrir aos outros e permitir aos outros chegar até ela"* he also spoke about those spontaneous stress moment that are hard to control *"stress", "difícil ajudar lha", "fica muito alterada"*. Like for D.S., the psychologist/technical director gave us a complete description of M.M., she told us about her when she arrives in the centre, *"conhecemos ela numa fase que ela tinha acabado de sair do hospital"*, after she was interned in a day hospital *"tinha esta internado num hospital do dia"*, during this initial phase on the centre, she was really close on herself *"não conseguia estabelecer contacto visual com ninguém", "completamente fechada sobre si própria"*. Nowadays in the centre she is more social *"M. Muito mais sociável", "relação fantástica com os colegas"*, she is even helping the others *"super protetora com os que tem mais dificuldades"*, clinically she is more stable than before *"em termos clínicos não tenho qualquer dúvida que ele está mais estável, sem dúvida nenhuma"*. The psychologist/technical director believe that she will have benefices from this meditation experience *"será das tuas, que esteira mais a beneficiar com o curso"*. She told us about her spontaneous crises that they are happening less and less *"já algum tempo que não acontece"*. The psychologist/technical director spoke about another passion of M.M. which is photography *"é modelo fotográfico e ela tem fotografias lindíssima e fantásticas"*, she told us how good she is in non-verbal communication *"fantástica ao nível da comunicação não verbal"* and that their goal in the center is related to that *"os que nos tentamos de conservar aqui é a M. que nos vimos nas fotografias"*. About how she perceives meditation she said *"aderiu muito bem"* even if she didn't communicate a lot about *"não compartilha estas coisas com nos", "não consegui perceber se ela continua a fazer em casa o não"*, but she believes that she will continue to do it at home *"si ela reconhece o beneficio vai fazer de forma autónoma, sem duvida alguma"*.

Spontaneously, during the staff members's interviews, we collected some information about J.Q., the teacher 3 told us how it was difficult for him the level of the course *"Não consegue explicar uma ideia"*, he has some difficulties to express himself on the writing *"não consegue construir uma frase", "mistura", "não sei se consegue perceber"*, as for the oral part *"escrito e falada é muito difícil"* she also told us about his stress and anxiety *"têm ansiedade de pânico", "parte o lápis", "nervoso"*,

“estressado”, “ansiedade”, particularly during the tests “acontece com os testes”, “dificuldade em explicar”, “bloqueia”, “não consegue reagir”. About potential effects from the practice, the technical motors told us that he is more confident “bocadinho mais confiante”, calmer “não se enerva tanto com terminar as coisas”, “acho também ainda mais calma” and with less anxiety “bastantemente menos ansioso”. Which confirmed what her sister told about him, but as the Psychologist/Technical director, this could be from another reason than Meditation “acredito que a irmã diz que ele esta mais calma”, because of some sentimental reasons “há a parte do amor que tem contribui duma forma positiva”, which are reciprocal “esta mais calmo porque a rapariga já lhe diz que sim” and participated to stabilize him “ele já esta mais calmo”, “isso tem estabilidade ele muito”.

From the same professional, we also get some spontaneous information about P.R. and his difficulties to get involve in Meditation, particularly at the beginning *“primeira fase inicial de adaptação”, “na fase inicial o P.R. resistiu imenso”, “não queria fazer”, “é todo novo”* he needed and keep needs more time than the others to adapt and approach the practice *“é preciso algum, mais tempo do que outras pessoas para se adaptar o que é”.*

One of the participants that we get clearer the changes, from feedbacks, is V.L., we get from the teacher 1 a positive feedback change *“V. em geral é mais calma”*, the teacher 3 told us exactly the same *“V. anda mais calma”*, as for the technical motor *“aquele com quem mudou mais”, “imensa diferença”, “principalmente o V.”, “tem mudava muito mesmo”*, she showed some concrete changes *“na sala não tem tanta ansiedade”, “anteriormente falava muito mais muito repetitivas”, “mais controlada”.*

About F.D. the teacher 3 told us that his relationship was complicated, *“estava numa fase bem comigo”, “muito alterado”*, but recently it gets better *“ultimamente esta melhor”.*

About J.D., the psychologist/technical director gave us important feedbacks showing how involve he his and why, in the practice. She realized how involve he was, when he saw that he was in contradiction with his friend T.M. about the practice *“se identifica muito com o T., pela primeira vez ele alerta o T. para aderir na meditação”, “surpreendente me muito”, “umas das primeiras vezes que eu vi o J. recetivo e a contraria a opinião do T.”* she explained it by the fact that he is already familiarized to it *“esta fase de familiarização já fui ultrapassada”, “não foi totalmente novo”* and that it could explain faster results *“resultados surgem duma forma mais rápida”.* She explains this thanks to the mother of J.D. as she said do meditation *“a mãe do J.(D.) também faz meditação”*, we were surprised because she told us that she never really practiced it, what the teacher see as meditation is maybe what the mother of J.D. describes for her as something more similar to relaxation *“vê o por do sol com a mãe”, “ficam os dois duma forma muita relaxada”.*

2nd cycle

The staff members' interviews for the 2nd cycle are different from the 1st one, because less of them were interviewed, some left the centre and were not part of the class teaching program anymore. We grouped 19 codes for the 2 different staff members interviewed, presented here in the following table.

Table 15. Codes repartition from 2nd cycle staff members interviews

Psychologist and technical director	Teacher A	Items
(52)	(97)	Total (149)
Conversations with the participants about meditation (3)		3
Observation of the teacher about meditation routine evolution (11)	Observation of the teacher about meditation routine evolution (12)	23
How T.V. use meditation in his routine (5)		5
F.D. meditation perception (2)		2
Evolution of the class environment (7)	Evolution of the class environment (29)	36
No observations on Wednesday after the session (2)		2
Positive evolution of participants behaviour between them (3)		3
Positive stabilization on stress and anxiety (3)		3
Stress of one participant, V.L. (9)		9
D.S. feedbacks (9)		9
	Contact with the participants (4)	4
	First practice of the teacher during the centre session (5)	5
	Opinion of the teacher (12)	12
	Positive evolution of T.V. (10)	10
	Positive evolution of F.D. (3)	3
	Nonappreciation of meditation for T.M. (4)	4
	Perception of meditation for V.L. (8)	8
	Observations on Wednesday after the session (5)	5
	Positive evolution of D. (5)	5

Table 16. Codes repartition in categories and themes from 2nd cycle staff members interviews

Items	Categories	Themes
Contact with the participants (4)	Participants (4)	Teacher A (17)
First practice of the teacher during the centre session (5)	Meditation point of view (17)	
Opinion of the teacher (12)		
Conversations with the participants about meditation (3)	Conversations (3)	
Observation of the teacher about meditation routine evolution (23)		
Evolution of the class environment (36)	Positive evolutions (65)	Class (75)
Positive evolution of participants behaviour between them (3)		
Positive stabilization on of stress and anxiety (3)		
Observations on Wednesday after the session (5)	Short term observations (7)	
No observations on Wednesday after the session (2)		
How T.V. use meditation in his routine (5)	T.V. (15)	
Positive evolution of T.V (10)		
F. meditation perception (2)	F.D. (5)	
Positive evolution of F.D. (3)		
Stress of one participant, V.L. (9)	V.L. (17)	Participants (55)
Perception of meditation for V.L. (8)		
D.S. feedbacks (9)	D.S. (14)	
Positive evolution of D.S. (5)		
Nonappreciation of meditation for T.M. (4)	T.M. (4)	

Teacher

In those 2nd cycle interview, we did it with a teacher who was not interviewed in the 1st one, even if she was already present in the centre, she was not available the week when we did the interviews. So, we asked here the same question about **contact** with participants and meditation point of view. The teacher A. is in contact with the class a lot of time per week *“entre 6/9 horas, depende sempre das semanas”*, which is a lot *“passo bastante tempo com eles”*, more than the class she is constantly in interaction with them in the centre *“quanto mais eles estejam nos corredores”, “estão sempre em contacto comigo”*.

We also asked the teacher A. about her **meditation background**. The only experience she has was here in the centre with us during the 1st cycle in May *“primeira vez foi aqui”*, she gave us really good personal feedbacks about this experience *“sensação de alívio, e de calma que se tem”, “muito prazerosos”, “faz me sentir bem com o nosso próprio”, “momento de encontro”*.

Her **global opinion** is positive as well *“é muito importante”* particularly in the context of the class, *“como estar numa sala de aula”, “o saber esperar calmamente”*, she noted good evolutions about that, *“noto que eles têm evoluído muito, muito neste aspeto”*, we will develop more this part in the following themes. She spoke about the importance of trying new things *“tudo que seja alternativo, daquele que nos fazemos em nosso dia dia”, “fazemos várias coisas de forma diferente”*, and the special benefits of this practice *“trabalha muito ao nosso foco”* doesn't matter the quantity of time of the practice *“a própria meditação, que seja uma vez por semana, seja um pouco mais regularmente ou até muito vez em quando, eu acho que é muito, muito, muito positivo”*.

Class

The **conversations** reported with the participants and the psychologist/technical director *“nas aulas”* showed how the practice became part of the routine when they feel anxiety *“aqueles que eles dizem é que quando eles são ansiosos, que aquele que eles dizem que vão meditar”*, they used to speak more about this than during the 1st cycle *“acostumado a falar isso”*.

The psychologist/technical director made the main observation about how the practice became a **routine** for the participants *“é algo que eles têm recorrido com a frequência no dia dia deles, isso sim”*, and they are used to do it when they feel they need it *“tem funcionando como uma ferramenta para eles”*, in their daily life *“importante para o dia dia deles”*, to help them to be more stable *“contribui para que eles estabilizam”*, in an independent way *“sem que eles têm a recorrer a outras pessoas”*, which is a really positive feedback *“a meditação já faz parte do dia dia deles”, “é muito positivo”*.

The teacher A. gave us more details about this and explained us that when they finish an exercise during the class, the faster ones to finish it start practicing *"a quem começa a fazer a meditação quando esta a espera"*, particularly 4 elements, which are F.D., T.V., M.M. and D.S. *"por exemplo o F., o T.", "a M., o D. também", "principalmente estes quatro"*, she thinks that the one who do it more as a routine is T.V. *"principalmente o T.", T. faz muito meditação"*, he is explicitly saying it *"então vou fazer um pouco de meditação"*. It became a habit for those participants *"é um habito", "é um habito efetivamente", "criaram isso como um habito"*, which is really positive, particularly for T.V., it is an important positive evolution comparing to the 1st cycle, the feedbacks from his father confirmed it. The teacher A. explained how he is doing it *"T. Fica mesmo..., e fecha os olhos, fica, coloca as mãos para cima, fica ali, com uma serenidade e com uma calma", "muito tranquilo e depois a evolução dele ao longo do tempo, é muito bom, é muito bom"*.

To come back to the **global class mood evolution** (we will analyse more deeply the individuals changes on the following part), the psychologist/technical director spoke to us about a global change in the class environment *"houve uma mudança"*, which can be also compared to some elements, P.R., who stopped being part of the class *"portanto a saída de algum elemento"* and which help the class to be more focus. She said that she doesn't know if it is associated to the meditation practice *"não sei se isso esta a ver com a meditação"*, but the spirit of the class is calmer nowadays *"são muito mais tranquilos", "espírito do grupo, mais desenvolvido sim, sem dúvida"*. The teacher noted positive amelioration of some behaviours like a reduction of stereotypes behaviours *"algumas estereotipas que eles apresentam que também temos vindo a trabalhar com eles", "notamos uma redução desse comportamento"*. And better interaction between the participants *"tirando isso, o grupo está muito mais entrosado entre eles"*, there is an important reduction of conflicts, no new conflicts were noted those days *"sim", "nesses dias [...] nada assim muito significado", "não ouve nenhum que esta manifestando isso de forma mais intensa esses últimos dias"*.

The teacher A. also gave good feedbacks about the class environment changes and described the class like *"muito mais ativos", "são mais participativos"*, globally since the time we started to practice in the centre *"desde maio, junho"*, progressively all long of the time *"tenho notado muitas evoluções ao longo do tempo"*, they are more and more pacific *"estão muito mais pacíficos", "muito mais calmos"*. The teacher A. associate it to the meditation practice *"acredito que a meditação realmente tinha trazido alguma calma."* The teacher A. described the behaviour of participants like really disciplined *"e saber estar, que é muito importante", "saber estar na sala da aula", "não sentar de lado", "falar se eu levanto o dedo"*. As for the break moment, like the previous staff member described *"curiosamente, e nos momentos de pausa, por exemplo eles estão a fazer um exercício"*. And it helped them to learn better *"até mesmo ao nível da aprendizagem", "muito mais concentrados"*.

nas coisas". Results are explicit and clearly related to meditation for her *"efetivamente os resultados estão à vista, eu noto diferenças", "eles melhoraram muito", "o sentido de responsabilidade deles, também esta maior"*, with more responsibilities and less stress and anxieties *"calminho", "serenos", "aprestar atenção", "calma", "menos stress e ansiedade"*.

We also asked the two teachers if they noted special changes on Wednesday, after we finished to do the session. The psychologist/technical director told us that she didn't note any immediate difference *"no imediato, nos não notamos uma diferença, isso não", "mante-se igual, sim"*. Which is the opposite of the observations made about this day from the teacher A. *"claro que sim"*, which describe this day as really different *"é sempre um dia diferente"*. She didn't give us concrete example but showed again how important this day was for them because part of their routine with this example *"numa quarta e vocês chegaram", "estava a começar a dar a aula e eles "não, não, não, não, não! Não pode começar a aula porque nós temos a meditação"*.

Participants

As for the 1st cycle, we questioned specially about D.S. because of the difficulties to get in contact with his family. And then, we spontaneously spoke about other participants, the ones that the interviewees found more relevant to give feedbacks about.

About D.S, the psychologist/technical director of the centre told us about his current state which is really positive *"tem andando muito melhor do que na fase inicial quando ele viu para aqui"*, compared to the really beginning when he arrived to the centre *"muito mais calmo", "muito mais controlado", "em termos comportamentais"*. With a reduction of anxiety behaviours *"notamos uma redução dos comportamentos de ansiedade", "temos notado muitas alterações nele"*, he is part of the one who benefits the most from positive changes *"ele é dos jovens que temos notado mais alterações sem dúvida, "pelo lado positivo", "sem dúvida alguma"*. The teacher A. also have positive feedbacks to give about him *"aquele que eu noto é que ele tem estado extremamente focado"*, how he is more focus *"muito focado"*, and became even more during those last weeks *"sempre foi um aluno focado", "mas agora ainda mais", "muito mais calmo"*.

About T.V., the psychological/technical director told us that he is the one speaking more about it *"o T. é o que fala com muito frequência (sobre meditação)"*, he is also sometimes doing it during the classes *"por vezes durante as sessões faz isso"*, sometimes to enjoy it and rest a bit *"nem sempre da forma educada", "as vezes usa a meditação para dormir"*, he is one of the elements who use it more in his daily life *"é um dos jovens que com muita frequência nesses dias recorre a meditação"*. The teacher A. gave more details about concrete positive results, like his ruminations who diminished a lot

“o T. que faz muitos ruídos”, “diminuíram imenso”, even if he continues, it is less important than months ago “apesar dali a continuar a fazer, mas diminuíram”. He is also more focus “está muito mais focado”, “mesmo ao nível da concentração”, “noto ele muito mais concentrados” “tem um foco, muito, muito melhor”, “sinto que ele está muito mais focado”, the teacher insist on the effects specially on him “principalmente” “o T., vejo muita evolução no T.”.

After the interview of V.L. we were worry about his apparent important stress level, the psychologist/technical director relativized it by saying that he is always in this state *“O V. vai sempre dize que tem”, “tem sempre stress”, “é normal dize ele”, with always something that preoccupied him “ele tem sempre uma coisa que lhe preocupa”, “isso esta recorrente na historia dele”, from a long time already “já é muito antigo”, “desde o inicio”, even if right now it is less important than before “agora esta menos intenso”, “mas sim, continuar a acontecer”. The teacher A. spoke to us about his difficulties to practice meditation but his collaboration efforts to it “também é muito difícil (with meditation)”, “mas, pois, colabora”, “até colabora”. She said that sometimes if he is not well focus during the session is to call attention “é para chamar a atenção”, not because he doesn't like it “não que ele não gosta efetivamente”, “sempre quando há uma coisa nova”.*

One participant who also speak about it often is F.D. *“o F. também acostuma a falar isso”, who is also practicing it often “o F. também (recorre a meditação)”, as the psychological/technical director told us. The teacher A. noted important positive changes about him “está muito mais focado”, “saber estar” and she associate it thanks to the meditation work “acho que com a meditação nós conseguimos muito trabalhar o saber estar”.*

About the only class element which is not part of our participant, as we already explained why, the teacher A. gave us hypothetical reasons why he is feeling less involve in the program *“o T.M. não gosta nada de meditação”, “muito intransigente”, which is typical to his own personality “esta a ver com a mentalidade”, “o T.M. é aquele pessoalmente ele não aprecia”.*

4.1.4. Analysis of bonus interviews from T.M. 1st and 2nd cycle

After both cycles, we interviewed T.M. who is not officially part of our sample like the other participants. He doesn't have ASD, but mental retardation and follow the course like everyone. He participated as well to all the program, his interviews, particularly the ones of the 2nd cycle gave us an interesting point of view from the inside of the classroom, about different evolution and observations of his colleagues.

1st cycle

We grouped the different items in a total of 13 codes. In this first cycle, the interview for T.M. was made according to a similar design than for the rest of the participants.

Table 17. Codes repartition from 1st cycle T.M. interview

T.M. Codes	Items (33)
No stress, no anxiety	3
Opinion about Meditation	3
Conversation with colleagues about the practice	2
Colleagues opinion	1
Personal feeling during practice	3
Description of the practice	7
Extra activities	3
Meditation associated to extra-activity	2
No personal effects	1
No practice at home	1
Discussion with family	1
Discussion with staff members	3
Utility of the practice	3

Then, the codes were separated into 3 main themes, which are the same than for the other participants. There are no categories on this analysis, due to the low number of codes, because we analyse here just one participant.

Table 18. Codes repartition in themes from 1st cycle T.M. interview

Codes	Themes
No stress, no anxiety (3)	
Opinion about Meditation (3)	Participant (12)
Utility of the practice (3)	
Extra activities (3)	
Description of the practice (7)	
No practice at home (1)	
Meditation associated to extra-activity (2)	Practice (14)
Personal feeling during practice (3)	
No personal effects (1)	
Conversation with colleagues about the practice (2)	
Colleagues opinion (1)	External (7)
Discussion with family (1)	
Discussion with staff members (3)	

Participant

As for the others participant, we asked at the beginning of the interview if he was feeling stress and anxiety in his daily life. The participant answered negatively to this question, *“não, não”* saying that he is always calm and gave us an example when he lost his bus card in the bus and stayed calm, *“perdi a carteira, mas eu não fiquei estressado assim, estava calmo”, “estou tranquilo”*.

His opinion about Meditation is that he finds it interesting, even if it is not really his style of activities *“acho é interessante, não é muito meu gênero, mas é interessante”, “não sou muito disso”* he prefers others kind of activities *“gosto mais das coisas radicais”* like the extra ones he does *“bicicleta”, “vtt”, “ginásio”* which are sportive ones. But he recognizes the utility of the practice for people who are working a lot *“aquelas pessoas que estão mais estressadas com o trabalho ou assim”* and are feeling stress and tiredness because of this *“estão sempre cansadas, também podem um bocado relaxarem”, “acho que algumas pessoas reagem bem a meditação”*.

Practice

About the practice, he described it by saying the different exercises like the mantra one *“som do ôômmmmmm”* which is his favourite, *“aquele que gostei mais das sessões”*, also the ones with the pranayama exercise, *“sessão com os sinos”*. He told us the different effects *“para relaxar um bocado”, “respirar fundo”, “controlar a respiração para não cansarmos muito”,* and that it surprisingly helped him a bit *“respirar calmo e isso ajudou-me, essa parte eu gostei”*. Even if he told us that he was not practicing it at home, he recognized the benefices of how controlling the respiration can have benefices in others activities like the ones he does in V.T.T. *“quando vou para descer, tentar calmar para concentrar”, “aprendi esta técnica, vou, expiro fundo e vou”*. About the sessions in the class, he told us the feelings he had *“senti um bocadinho mais calmo”, calmer and more relax “bocadinho mais relaxado”, “sinto-me um bocadinho mais calmo quando faço isso”*. But he doesn't think that there are any effects on himself since he started practicing it *“acho nada, esta, ta igual”*.

External

T.M. didn't give us many feedbacks about potential discussion with colleagues about the practice, just that sometimes they are commenting it after the session *"quando saímos da meditação"*, but nothing special *"nada assim especial"*. He thinks that globally, his colleagues liked it *"gostaram"*. T.M. didn't speak about it a lot with his family neither *"só digo que pratiquei meditação, mas passou, andou"*. He didn't give us many feedbacks neither from discussions with staff members, except that beside commenting it sometimes *"falamos um dia ao outro"*, *"comentamos sobre a meditação"*, they think that is good to practice it *"também dizem que é muito bom fazer"*.

2nd cycle

For the 2nd cycle interviews, we changed our strategy. We already knew that T.M. won't be part of our study like the other participants, so his presence in the class since the beginning of the program was an opportunity to obtain feedbacks about his colleagues.

Table 19. Codes repartition from T.M. 2nd cycle interview

T.M. Codes	Items (30)
Day state	1
No practice at home	1
Benefices for colleagues	5
Effects from Wednesday	2
Perturbation in the class	4
Stress of some participants	2
No Meditation utility for himself comparing to others	4
Utility for the colleagues	1
Conversation with colleagues about the practice	3
Problematic of one participant behaviour in the class	6
Current environment of the class	1

We obtained 11 codes that we grouped in the same 3 main themes. Those themes have different contents than in the 1st one, because they are more focus on the observation and opinions related to the practice but also behaviour and class environment for his colleagues and not himself.

Table 20. Codes repartition in themes from 2nd cycle T.M. interviews

Codes	Themes
Day state (1)	Participant
No practice at home (1)	
No Meditation utility for himself comparing to others (4)	Practice (for his colleagues)
Conversation with colleagues about the practice (3)	
Utility for the colleagues (1)	
Benefices for colleagues (5)	
Effects from Wednesday (2)	
Current environment of the class (2)	External (class environment)
Problematic of one participant behaviour in the class (6)	
Stress of some participants (2)	
Perturbation in the class (4)	

Participant

The feedbacks that T.M. gave us about himself is that today he was feeling well *“estou bem”* and by answering the question about if he was practicing Meditation at home or not, *“não, a meditação não é para mi”*, that is opinion for the practice and himself didn't change.

Practice (for his colleagues)

Therefore, we took the advantage to ask him more questions about the description of the class environment. He told us again how Meditation had no benefices and utility on him, but he said being the only one of the class who don't need it *“acho mais ninguém”, “acho todos precisam, agora que eu não, não apreço muito a meditação”*, because he is able to control his stress, his colleagues doesn't have this capacity *“não preciso, já consigo controlar o stress, os outros, não, os outros têm mais problemas e não conseguem controlar, mas eu acho que com as minhas capacidades eu consigo controlar mais isso”*.

He asked them if they were practicing it at home *“já comentei, perguntei se eles fazem meditação, se eles estão a gostar, alguns estão a gostar, alguns fazem em casa, outros não fazem”*, but he is not sure if all of them are doing it or not *“agora não sei se eles dizem só para dizer ou se eles fazem mesmo, se estão a mentir”, “é difícil saber se eles estão a fazer ou não”*.

T.M. recognized how the utility of practicing it for his colleagues was important *“sim, sim, sim”* and that he was able to note some benefices on them, he can note some individuals differences *“alguns ajudam, sim, nota-se a diferença”*, particularly for some participants like F.D., M.M. and V.L. *“o F., por exemplo a M., o V. estão assim um bocadinho mais calma por causa da meditação”*, they are calmer in general *“ajuda mais para eles a ficar mais calmo”*. And compared to before, they are better in they stress control and colleagues' interactions *“antes estavam muito stressados nas aulas e agora estão mais calmos, estão mais compreensivos, compreendem melhor os colegas”, “acho que estão melhor desta parte”*. About potential benefices on a shorter term, he noted that after the session on Wednesday and until the rest of the week, the different elements of the class are better *“eu acho que estão melhor a partir de quarta feira para frente”, “quarta feira e para frente estão bem”*.

External (class environment)

We asked T.M. to describe us the current class environment. He told us that the environment was positive *“bastante bem”*, except the behaviour of one colleague those days, which is F.D. *“tirando com a situação do F. a turma esta bem”*. About F.D. he told us how his behaviour, at list for this day had an impact on the class *“esta a correr bem, hoje o F. que esta um bocadinho agitado”*, by speaking a lot *“esta a falar muito”*. According to F.D. observations, the days that F.D is not in the class are better *“quando o F. não esta na aula, o ambiente está sempre melhor”*, because he is bringing some agitation *“o F. é muito agitado, fala muito”, “esta as vezes baralhadas”*. And noted the importance for him to keep practicing more meditation *“eu acho que é ele precisa mais, muito mais da meditação”*. T.M. is not the only participant that we interviewed this day speaking about problematic behaviour of F.D. It is important to contextualize that all the participants (except M.M.) interviews were made the same day and this observation can be an exaggeration of personal conflicts for one day.

About feelings of some participants in the class, T.M. spoke to us about the crisis of M.M. that she sometimes does *“ela assa de sangue um bocado”*, also V.L *“o V. também, mas o V. nem tanto, mas é mais a M.”* is feeling stress sometimes. In general, for a global class observation, he told us how most part of the elements were feeling stress *“estão assim muito stressados, as vezes estão discordamos com os outros”* and that could have impact on colleagues relation, which can explain the small conflicts, because *“alguns passam assim na marmita”, “mais agitados”*. But he notes how Meditation have an impact on those stress feelings after Wednesday for the rest of the week *“depois de quarta feira para frente não tanto”*. Which is an interesting result on short term effects.

4.2. Analysis of the Fieldnotes

In the annexes of the thesis, are present the highlights of the fieldnotes that were written after each session of the program. The objective of this analysis is to add more data and strength to our other forms of collects like the interviews.

Because we just made the interviews twice, at the end of each cycle. The fieldnotes give an idea of a global progression all long of each cycle.

4.2.1. First cycle

The most relevant information that we noted during the 1st session, was that M.M. said that she practiced already. The one who showed signs of stress was P.R. because he was biting his nails and moving a lot, the same for V.L. who was moving a lot in his chair. F.D. and J.D. told at the end of the session that they were feeling good, *“muito mais tranquilo”* J.D., *“fiquei relaxado”* F.D. We also observed what the psychologist/technical director said about T.V. and his phone alarm at 9h28 for him to stop playing his video game and start the class. Participants were curious about the practice, for example, V.L. asked if it was related to hypnosis, J.Q. if we could practice with music, J.D. about Buddhism and flow. We saw from the beginning that T.M. was not motivated about the practice, because he was surprised when he understood that this will be every Wednesday *“todas as quartas feiras??”*.

On the Second session, the 15th of May, a group of three participants was identified like perturbator group, which is composed of P.R., T.M. and J.D., they are often not focus, laughing, particularly when F.D. is doing the *“ôôômmmmmm”* mantra. Excepting those three elements, the rest of the class do well the exercises, F.D. is used to speak a lot, asking a lot of questions, M.M. is really implicated and focus. P.R. still expressing signs of stress, like biting his nails, moving a lot, also he is always watching and observing the others around. V.L. even if he moves a lot during the exercises, is interested in the practice and questioned a lot the professor.

The 22nd of May was a very particular and exceptional session. The group of APPDA had a natation competition on the morning. I went to the swimming pool to practice Meditation with three of the participants, which are J.Q., F.D. and V.L. who were participating to the competition. We practiced a bit in the changing room, all of them became very focus fast and did the exercises well and were then ready to go back to this noisy and stressful environment with music, speaker voices and a lot of people. The most interesting to observe was J.Q. who came to sit close to me after his first race, because he told me that he was feeling very stressful *“estou com medo, ansioso de voltar la, nadar”* and worry to go back swimming there, because in the first round he lost his glasses. We practiced some respiration exercises for 5 minutes and then he felt more relax, was grateful *“obrigado”* and

ready for the second race. This small example is an interesting result about how the practice had an impact on J.Q. on the short term in this special context.

On the 29th of May, P.R. started the session with a crisis. He didn't want to leave his phone, started to hit the table and went to isolate himself on the balcony, hitting with a stick the iron of the balcony, during the whole session. From the trio perturbator group that we observed, just stayed T.M. and J.D. We noted that those two had a negative impact on some other participants, like V.L. who was sometimes unfocused by watching them and then starting to laugh. Except, them, everyone is well focus on the exercise. We noted that even if V.L. and F.D. arrived later, they were able to join the session and be focus on the exercises fast, like if we already note the first sign of a routine beginning.

The 5th of June was an interesting session to observe, because of another activity on the morning, we did the practice on the afternoon. We noted some tension and small conflicts in the classroom P.R. and V.L. are fighting a bit., it was harder for the group to get focus globally, we needed 10 minutes to have some silence in the classroom T.V. was in movement, excited, the same of V.L. who was perturbed because of his altercation with P.R. Surprisingly, T.M. and J.D. were more focus than usually, even if they were sneering a bit the “ôôômmmmm” mantra, the same as for P.R., who except that, was relatively calm.

The next week we did the session on a Tuesday, 11th of June, because the group was busy on Wednesday. It was notable, that they were surprised that the session was a day earlier in the week, but this change, which show again the importance of the routine, was easier than last week on the afternoon. We can hypothesize that the moment of the day when we practice Meditation (Morning at 9h30) is more important than the day of the week. The participants are in a routine, exercises start to be repetitive, they are entering in the exercises faster. Also T.M. and J.D. are calmer and more focus, even P.R. is doing effort. Some difficulties on being focus are notable for V.L. who is stressful at the beginning when he is looking for his images.

On the 19th of June, we came back to the normal routine of doing the session on the Wednesday morning. We notice how the group is globally focus and doing routinely the exercises, the participants starts speaking about the summer holidays, I did start speaking about the interviews that i will do with them.

The last session was on the 26th of June some interviews were realized this day, so I didn't participate to the session. Also, on the first part of July, the professor kept going there for 2 more sessions before the summer break.

First cycle conclusion from fieldnotes analysis

Different points were noted.

- Importance of the week routine, participants were less focus when we lost the routine on doing it on Wednesday morning, particularly when we went there once during an afternoon.
- Progress on the session routine, participants started entering more focus in the exercises faster during the session.
- Importance of group mood, two or three “perturbators” in the class can have an impact on the others to be focus.
- Global progress, even the less focus at the beginning (perturbators ones) made a lot of efforts, stop laughing, became more focus.

4.2.2. Second cycle

The second cycle started on 18th of September. The main modification is the absence of one of the participants, P.R., because he gets interned. From the observation of the first cycle, we know that he was the one perturbing more the group during the session. From the first session of this cycle, it was notable that participants re-entered in their practice routine, the group was calm. No-one was laughing anymore during the mantras. The one which had more difficulties to be calm was T.V. he had a lot of tics, ruminations and couldn't relax during this first session.

Already in the second session, 25th of September, the tics and ruminations of T.V. started to stop during the session, he gets more relax and asked to the professor at the end of the session if the practice could have benefices regarding epilepsy. The group is globally very focus, participating a lot during the debriefing and all exercises are well done.

On the 2nd of October, I needed to lead the session for the first time, because the professor was abroad. I took the opportunity to introduce new exercise, like the one with the candle and the rhymed respiration. D.S. asked a lot of questions about this last exercise, he was interested on it. T.V. get relaxed during this session. The absence of the professor didn't perturbate a lot the participants on their routine, because they knew about it, we told them the week before, so no one was surprised.

After one cancelled session, because the group was busy, we came back on the 23rd of October. The mantras exercises are becoming a habit, appreciated and well used by the participants, each session we can improve a bit some mantras and introduce new ones. P.R. came back for one day just, today, he was calm, sleepy, but not thanks to the practice, but as we observed and the psychologist/technical director told us, he was full of medicine. About T.V., it is interesting to note

that he is not necessarily doing the mantras exercises, but during those moments he is calmer, stop his ruminations, to move, his face also is calmer.

The 6th of November was a session a bit perturbed, because I improvised starting it alone, waiting for the professor that was a bit late. Participants were speaking a lot at the beginning, asking me different things, they were agitation in the class, which ended by M.M. who stood up and left the room running. The others were not surprised about it, they told me that it is sometimes happening. As the staff members told us during the interviews, she is sometimes doing it, less than before, it is part of her anxiety crises. The session continues calmer and as usual when the professor arrived.

On the 13th November the participants expressed their happiness when we arrived, we start to create a cosy and maybe somehow affective environment with them on this day. V.L. asked the teacher present in the class at this moment, to leave us alone with them, to be in better conditions for the practice. D.S. told us that the day before he practiced in the train when it stopped because of a technical problem. T.V. keep his improvements on each session, but if the exercises, like mantras ones become too long, then his tics and ruminations are starting again. Globally the group is calm and well focus.

The 20th of November, the session was special because I leaded it by purpose, the professor was there. Participants were surprised, because the professor was not abroad this time, but here, sitting instead of me at the background of the class. This perturbation on the routine, made the start of the session a bit difficult, V.L. was the most confused one about it, he was looking a lot behind him to check if the professor was still here, he was globally unfocussed and organising his stuff during the session. It was also notable that the behaviour of some participants like F.D. by doing the mantras very load had an impact on the calm and focus of others like T.V. who started his ruminations again exactly at this moment. D.S. is very implicated during the session, he kept asking me questions about the new exercises that I introduced and said that he was practicing at home. Which is an important result showing the program adhesion. Like for M.M., she also said that she was practicing at home. The observations of T.V. are the same as last session, he is winning in "focus endurance" more and more, but his ruminations are always susceptible to start again if exercises are too long.

On the 27th of November, the group showed again his satisfaction and joy to see us arriving. F.D. was already starting the practice alone before we arrive. We spoke during some minutes, the discussion was interrupted in an impressive way by the teacher thanks to his small gong who make a calm noise and vibration "diiiiiiiing", everyone became quiet and the group was focus during the exercises. We learned new mantras and improved the ones that we knew already, which are already well appropriated. The participant who is "resisting" more during the exercises, by sometimes not

closing his eyes and who keeps being in movement is V.L. The behaviour and interest of D.S. all long of the sessions are more and more satisfying, he is probably the most focus one of the groups. The efforts of T.V. are still notable in each session.

I tried to lead the session on the 3rd of December. This time, no one is surprised, I used some skills learned thanks to the professor, like the instrument who make “diiiiing” to give some rhythm. All the group is focus and in a routine mode, even if it is not with the professor. T.V. is very relax, as well as V.L. even if he keeps having his eyes open at some moments, he is very calm.

On the 11th of December, the main observations noted are about the limits of T.V. in his endurance to keep being focus during too much time. V.L. and F.D. are the most active at the oral, by asking more questions. The sessions are well done, in a focus group mood, for the whole class.

The 18th of December was the last session before the Christmas holidays, which was a thematic of conversation at the beginning of the session. Asking where we will go during this time and if we will continue the practice after. The main observation made is how impressive the practice became a routine for the participant on this day.

On the 15th of January, we came back from holidays, it was also a subject of conversation. After this break, there is no difference in the practice, participants kept being as focus as they were before, on their routine, as same as for the mantra's exercises.

The 22nd of January is the last session where I am present. The professor said to the students that he will come back, he kept giving sessions there until the middle of February. The main conclusion that we can do from this last session is that the practice and all the exercises are part of a real group routine.

4.2.2.1. Second cycle conclusion from fieldnotes analysis

The different points noted for this second cycle are the following.

- Changes in the class compositions had benefices on the global mood of the class during the sessions. P.R. left the group.
- Improvement of participants in the exercises and capacity to be focus longer.
- Routine and habits of the practice.

4.2.3. Comparisons with a second group

From the 23rd of October we started doing extra session, 7 in total, right after the session with our initial's participants, on the same day. It was the opportunity to practice more. But also, to compare with our 1st group, and see their evolution. The population of each group is similar, the number of people in the 2nd group is just more important, around 12. I know all the peoples of this second group, except 2, because I already did internship with them last year. Even if the conditions of study are not identic enough to literally call this group has a control group, observing the reactions and the evolution of this global second class all long of the sessions will help us to realize the progress of our initial group.

I leaded the 1st session with this second group, on the 23 of October. The contact with this group is very friendly because I know them well already. They were curious about the Professor and asked him a lot of questions to him. I use some examples to explain the practice, like how it can help to lead with stress during concerts for one participant who is a musician. After doing the exercise of "Bola dourada" which worked well, I introduced the "ôôômmmmmm" mantra. Some started to laugh during the mantras, like for our first group at the beginning of the program. Also, two participants said that they were feeling sleepy at the end of the session.

The second session, 13th of November, was in a different place. The professors tried to introduce again the mantra exercise. It worked better than last time, but some participants didn't join, and the teacher present with this group was forcing some of them to do, which was not necessary, I think. The mantras were better than last time, but not in a synchronized way between all the participants. The participants were globally focus

On the 20th of November I leaded the session, after the "bola dourada" exercise, we kept working on the mantra one. Even if the participants still not in the same rhythm, they stopped to laugh about it. But they are not as synchronized as our initial group. Also, we noted how the behaviour of someone can impact the global class mood, one of the participants was going to toilet, made noise, ate and spoke a lot.

The 3rd of December, the group was smaller, some participants were missing. They are starting to improve in the mantras, even if the rhythm is not perfect. Globally the group is calm and relax. One of the reasons is that there are less people than usually today, and no one is perturbing the class.

The 11th of December, the context of the session is the same as the week before, with less participants (around 6), I do lead the session, because the Professor needed to leave earlier. I

introduced new exercises, like the one with the candle, it worked well. The group is giving good feedbacks about the exercises, but they look tired particularly this day.

On the 18th of December, both the Professor and I are leading the session, the participants are asking about holidays, etc..., the thematic of conversations are similar than with our initial group. The group is full, (around 12), they are focus, taking all the exercises seriously, even the mantra one, even if it is harder for them than for the first group. Also, comparing to our first group, they look sleepy in some point of the session and their posture is not always correct.

The last sessions happened on the 22nd of January, the session happens has usual, with a lot of conversation at the end, wondering where I was going, etc, ... which are again similar conversations than with the first group. The observations during the session are the same as last time, even if the group is calm and relax during the exercises, some are almost sleeping and don't a good posture for their back.

4.2.3.1. Conclusions compared to the group 1

-Like for the group 1, a big part of participants was laughing on the first sessions during the mantra exercise.

-One or two perturbators in the class can have an impact on the global mood of the class as well

-In comparison, our first group look much more advanced, by doing the exercises in a more independent way, mantras are more synchronized, in the first group they have a better posture, compared to the second group with a lot of participants who don't have the back straight. Also, most of the 2nd group look sleepier at the end, compared to the 1st group who look more "awake" and focus, which is the goal of the practice.

Doing the sessions with this second group made us realize how important were the progress of our initial group since the beginning of the program.

5. Discussion

The purpose of our study, according to our initial objectives, is to observe from all kind of different feedbacks, potential changes on stress and anxiety decreases, focus and concentration increases, better emotional control, and changes in prosocial behaviours. Those observation were made at different levels that are all inter-related. The one of the participants itself, of one family member and of the staff members of the centre. Also, other colleagues' opinions, fieldnotes analysis and comparison with another group gave us an even more global and large point of view. Those analysis presented on the result part will be discussed here altogether, because of their inter-relation and interdependence, which is from our initial idea that the individual need to be taken in consideration in his globality.

Findings

The main findings of the study are described here according to the different level of collecting data which correspond to our objective's structures. But, by being inter-related between each other we must sometimes cross our different point of views in the discussion of our findings.

From the participants point of view, by realizing the interviews with them, we noticed that globally, the **feelings and opinions about the practice are positive** from the feedbacks given by the participants and they kept going in this good direction, as we could see in the 2nd cycle, participants feel well during and after the session and are motivated to continue the program. Also, the place of **mantras exercises was more and more appreciated** by the group and appeared most part of the time as the most liked exercise of the sessions. We suppose that this participated to a better adhesion in the program. The ones that had a better program adhesion noted positive changes on themselves, particularly F.D., D.S. and J.D. Doing a self-analysis is a difficult exercise for everyone, therefore external feedbacks were essentials. Some participants gave us feedbacks about their colleagues, like J.Q. who had more facilities to describe the behaviour of others like M.M., than on themselves.

Families members gave us differentiated feedbacks, particularly about how their children started using the practice at home and how it starts to have positive effects, like **stress and anxiety reduction** mostly. Some has shown signs of **pro-social behaviour** with their parents or their family's members like siblings (J.Q.), cousins (V.L.), by communicating more or having more patience with them.

The feedbacks from the staff members variated a lot in the first cycle, sometimes in opposition between each other about potential changes observed. The second cycle, the two staff members interviewed gave more similar feedbacks about a **good evolution of the group cohesion**, focus of the

participant and individual changes like a better focus during tasks in the classroom, more patience and communication with their colleagues.

The feedbacks from the families and staff members interviews were satisfying in their evolution, from one cycle to the other. Their external point of view about the participant are inter-related, therefore, they must be discussed together. Because some staff members gave us feedbacks about what was happening at home for the participants sometimes, especially for D.S., with who we didn't make any family interviews and at the opposite some family members had a point of view about what was happening in the classroom, from their discussion with the participants.

By crossing the feedbacks with the ones coming from the family members and the analysis of the interviews between each-other we can say that the main findings of the study are that the globality of the class integrated the practice as a **routine**, a **habit**, in their weekly rhythm. Wednesday morning became in their routine an important day in the week and for some of them in their daily routine. The ones who made it more as a habit in their daily life were the most susceptible to present results of reduction of stress and anxiety, in different context in the centre, the classroom with their colleagues and staff members or at home with their family. Those stress and anxiety reduction can be correlated by changes of behaviour. Those changes of behaviour are having an impact on the social aspect. Some participants have shown signs of prosocial improvements, with their colleagues, staff of the centre and family members. We notice by the different feedbacks that **five of the eight final participants**, which are M.M., T.V., D.S., F.D. and J.D. were frequently using the practice in their **daily routine**. Those are also the ones who are **more conscient** about how the practice can help them in their **global well-being** and reported us those **effective changes**, which are about **less stress and anxiety, better emotional control, and better focus**. The interviews with their parents (except for D.S.) let's suppose a **correlation, between how the parents feel concern about the program and encourage their child on it and the practice of their child with potential changes observed by both sides, participants, families and staff members**. Also, all the **families members** interviewed of those participants who show the better results, are the ones who **reported more stress and anxiety in their daily life**, due to complicate family situation, like lonely mother, disease of family member, work or even having in charge a child with ASD, like is the case of the mother of M.M.

T.M. as an extra participant not part of the sample, gave us an additional and unique point of view, he confirmed **the positive class mood evolution**, particularly for the day of the practice, which show one **short term result** and how the program has benefices for the group in general and specially for the participants already mentioned.

Finally, the fieldnotes and the comparison with a second group, proved the **progress that were made in the focus during the practice, the group cohesion and the mantra technics improvements**, which confirm that giving a larger place to this technic in the program was a challenge but also a right and beneficial choice. Those exercises and the facility of the participants to do them was more and more important all long of the program, progressive and regularly, session after session, months after months, we can say at the end of the second cycle that **our group of the participants for the study is not a group of beginners anymore**. The comparison with the second group showed us also the importance of a global group cohesion in the practice, if some participants are perturbing the session, it can affect the whole rest of the group, like it was the case of both groups. In the case of our initial group, the changes on the class organisation, like we saw in the part related about spatial description (3.5.), by separating a small group inside the group considered as perturbators and with the departure of one element who show some anger and aggressive behaviours, we suppose that the new composition and organisation of the classroom was favourable to a better global group focus associated with a general improvement in the technic of the practice.

Strengths

The unicity of this study is her main strength. Unicity in different aspects, by the sample chosen, the practice used, the design and the mode of research, which is qualitative, global and large, by considering many different points of view. We didn't find any study in our literature review which used a similar program than our, also from our literature we just found one other study, the one of Black and Rosenthal (2015) which used a similar way to collect data, based on qualitative interviews. Also, our openness during the interviews, to listen all kind of potential feedbacks, in order to know as much as we could about our participants is a strength in our objective to consider them in their globality, with all the aspects of their daily life, personality and feelings. Doing a program on a long term, allowed a better program adhesion especially during the second cycle and more practice in autonomy for the participants especially at the end of the second cycle. We suppose and we hope that this strategy allowed to have an impact on the lifestyle of our sample, on the long term for the future. The mix of technics that we used in our program, mindfulness and mantras exercises as we will explain better in the next paragraph in comparison with our literature, is a challenge and a strength because unique, we didn't find any other identic program and we can consider our choice like successful because of the results that we obtained and different feedbacks which confirm that was a beneficial choice.

Comparison with revision of literature

Compared to other study, the strength of our research is how large and global we tried to get information from interviews to different point of views. Most part of research presented in the literature review are about quantitative study. However, the results, are like the ones we obtained, about anxiety, stress, diminution of rumination for the participant who had (T.V.), and increase if prosocial behaviour. The program we used is different than the others, we can describe it as a mix of mindfulness exercises and used of mantra exercises. Therefore, our study obtained similar results than the ones of Spek et al. (2013) and Black and Rosenthal (2015). Also, our study can be defined as a mix about the practice used, between those two researches, Spek et al. (2013) are using specific mindfulness program and Black and Rosenthal a program based on mantra exercises. Therefore, our practice used is at the middle of those two studies. The one of Spek et al. (2013), which is a quantitative study, observed reduction on *“depression, anxiety and ruminations”* after 9 weeks of a Mindfulness Based Training for adults with ASD and the one of Black and Rosenthal (2015), which is a qualitative study, with benefices in *“reduced stress and anxiety, and improved emotion and behaviour regulation”* after a meditation program based on mantra exercises for individuals with ASD between 10 and 30 years old. Both methods, used in an independent way gave results. We saw thanks to our program that the two types of exercises, that we joined, and used in inter-dependence also gave results. We describe this mix and plurality of exercises, related to classic mindfulness in association with mantra technics as a strength, because it is unique, and we didn't find similar program in our literature research. For example, the study of Rosenblatt (2011) integrated in her program a lot of body-mind technics, including Meditation, Yoga, Music and Dance for example. At the opposite, some studies like the one of Singh et al. (2011a) and (2011b) are focusing their attention on one specific type of meditation called *“Meditation on the Soles of the Feet”* to help adolescents with ASD and more particularly Asperger syndrome to control their aggressive behaviour. The focus of their studies, about aggressive physical behaviour, doesn't concern our sample, even if we observed some anger behaviour, physical aggressive behaviour were mentioned just once, about D.S. by the psychologist/technical director, but at the beginning of his arrival in the centre only, it was not the case anymore when we started the program.

By using exercises based on mindfulness, we continue the work of several researches showing the therapeutic benefices in stress and anxiety reduction, globally mental and psychological well-being, like the study of Reibel et al. (2001) who use a Mindfulness-Based Stress Reduction (MBSR), invented by Kabat-Zinn et al. (1985), this specific type of Meditation became more and more studied since the middle of the 80's. By including to those exercises, mantra technics we constructed a complete Meditation program adapted to our public, thanks to the facility of this technic about focusing on an

internal and collective support, which is a sound and vibration, compared to basic mindfulness, where the focus on the breath as an internal support can be harder and more abstract, particularly for our public. Even if studies who compared Mindfulness with Mantra meditation like the one of Schoormans and Nyklicek (2011) didn't find significant differences about stress between the two programs, the qualitative study of Black and Rosenthal (2015) confirms our feelings that mantras because it *“does not emphasize the need to concentrate and control the mind, and the practitioners maintains alertness during meditation”* are a good didactic and method for our sample, compared to mindfulness which is sometimes compared to a kind of concentrative gymnastic, with analogy related to bodybuilding of the mind (André, 2018) that can be a powerful self-restraint for the practitioners (Hamard, 2013).

Meaning

The meaning of this study is important nowadays. Because treating about two “sensitive” thematic. The first one is about the practice of Meditation that we experimented all long of this program and how nowadays we should surpass the cartesian dualism of body and mind (Midol & Chenault, 2017) to have a positive therapeutic impact on the well-being of the persons. More than surpassing this idea, the challenge of integrating a practice from oriental roots with an occidental population (Hamard, 2013), who doesn't have any background about it is meaningful and important. Even if nowadays mindfulness program, like with Mindfulness-Based Stress Reduction are considered more and more seriously by the scientific community, programs which uses and are based on mantra exercises are still considered like folkloric and not as serious in the scientific, therapeutic and clinical point of view. Therefore, it gives even more importance to this research and further one to explore and study those practices, which are plurals. The second “sensitive” aspect who shows the meaningful of our study is the clinical point of view about how Autistic Spectrum Disorder is perceive. We believe, that by having an inclusive point of view of people with special condition and considering them as people in “handicap of situation” depending on how the society is ready to include them. That, ASD people should not be considered as having a disease to cure but as having a spectrum, which is a part of the person and different for everyone. And that our practice can be a catalyser of their inclusion in the society. Nevertheless, by considering our society as not inclusive enough, we should consider the practice of Meditation as a societal necessity for everyone else and at least as much for neurotypical people who also suffer stress and anxiety and also need to develop their empathy, emotional intelligence, prosocial behaviour to be more aware and open mind to everyone and especially in our case to non-neurotypical people for example, which as Poovathinal et al. (2018) showed the prevalence of ASD is increasing over the last 50 years.

Future researches

In future research, it would be very interesting to associate to what we did, quantitative methods like electroencephalogram to see and study what is happening in the brain of the participants for example during the practice and at different moment of the cycle or depending of which meditative exercises is used. Also, it would be interesting to compare if mindfulness basic exercises can have different results than mantras exercises and mix of both, by experimenting the different exercises on different groups and control groups. In our literature research, just one study made a similar comparison Schoormans and Nyklicek (2011), but didn't find out special differences, more studies are needed in this objective. Another aspect which will be interesting to develop and study on the next researches about this thematic is about some particular traits that are sometimes associated to ASD, like for example epilepsy and the specific impact that could have meditation on this problematic. Also, on the same idea, we wonder what the isolated and specific impact on rumination reduction is, like we could observe on one participant, who is R.S., if on a larger sample, with participants that have ruminations, a meditation program can have a positive impact by reducing them. Finally, we failed one of the initial objectives of our study, due to the absence of answers from the families of the participants, that was to at least introduce the practice to them and even doing the second cycle with them. As we saw in our literature review, from the study of Ferraioli and Harris (2012) and also by interviewing them, family of children with ASD have a higher level of stress and anxiety and a family adhesion to a meditation program, like it was experimented on the program of Bogel et al. (2008), by practicing meditation with adolescents with ASD and their parents can help to the well-being of the family and help to improve on the own goal of each other. About this last point, we noticed that the participants with who we obtained less results are the ones that have family members without background in the practice and without special interest about this. We hypothesize that if those parents tried or start an introductive program about this practice, they would be more susceptible to encourage their child on practicing it more frequently and therefore obtaining better results. Our own weekly encouragement to the participant, for them to have a daily practice is not enough, this kind of program need to be in a global collaboration between participants, staff members and most of them, family members. This aspect would be interesting to continue to study with our sample for the next years maybe, in future study.

Also, as we could see during the session realized on the swimming-pool for the competition, the practice had a positive impact on the short term and well-being of the participants, like J.Q. during the competition. This aspect must be interesting to develop, not only for natation competition, but maybe also for dance representation like is the case for M.M. or other participants hobbies and see how the practice of Meditation can give benefices on those specific activities and moments.

6. Conclusion

To conclude this study, our program, for the participant who adopt it as part of their daily life routine has shown results in reduction of stress and anxiety as well as a better focus, concentration and prosocial improvements in the class environment and better communication at home with family members. The variety of points of views, from the family, staff members of the centre and the participants themselves globally present a progressive and positive evolution all long of the two cycles.

The feedbacks differences between the first and the second cycle are important. The practice adhesion as part of a life habit observed during the second cycle allowed more positive feedbacks about potential evolutions.

We suppose that our results can be better if the practice adhesion is higher. We also hypothesise that this practice adhesion can be correlated to family encouragements in the practice. And once again we suppose that this family encouragement can be higher if those family members start practicing as well.

Limitations (or challenges?)

The weaknesses and limitations of this study could be associated to her design, but as we said before we made from this unicity her main strength, or by the sample which is not important in number. Of course, it would be better having more participants in our sample, in order to be more objective in our results and the fact that we just have one participant with female gender can be considered as a weakness. But from my personal point of view, by leading and analysing the interviews, observing and reporting each session, I would say that the main weaknesses of this study are about the difficulty to analyse the results. It is difficult and a challenge to analyse the finding that we obtained, because changes in mood and behaviour of the participants can be due to a lot of different factors, like emotional life, taking of medicine or recent changes of family situation, like families and staff members mentioned in their interviews. Therefore, the interpretation of the results depends of our own subjectivity. Also, the feedbacks that were given between different staff members were sometimes in conflicts between each other, as for the feedbacks of the participants that were sometimes in contradiction with the ones of their family members. The thematic chosen, by her complexity, modernity, novelty and maybe strangeness for people of our different samples, for the one who didn't have previous experience from it can explain those contradictions in the different feedbacks given. This complexity explained here, appeared all long of the study as a challenge to surpass, more than a limitation. Which made the different observation and feedbacks obtained being unlimited in their way to be analysed and interpreted, which is the passionate challenge to work with human being in their whole globality, complexity.

7. References

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8. Annexes

8.1. Interview design

8.1.1. 1st cycle

8.1.1.1. Participants

Olá (nome do participante)! Como estás? Estás bem-disposto?

Estou muito feliz que fizemos essas sessões de meditações juntos! Era a primeira vez para mi e gostei muito desta experiência contigo! (Breaking the ice, advices of Dr Pedro Gaspar)

Eu queria saber um bocadinho mais sobre ti.

Que idade tens?

Onde vives?

Tens irmãos?

Vives sozinho ou com os teus pais?

A quanto tempo estudas na escola?

Speaking about stress: Using an indirect way first and speaking about myself “Quero falar contigo sobre a noção do stress e da ansiedade. Por exemplo, eu quando eu faço um exame na faculdade, as vezes eu tenho muito stress, e quando fecho os olhos e faço algum exercício de respiração, estou a sentir me melhor...”

Sentes ansiedade durante o dia? À noite?

Example of specifying question (Kvale): for example, if one participant is speaking about stress in daily life or crisis: “O que que tu fazes quando estas a sentir ansiedade?”

Eu queria discutir um bocadinho contigo sobre essas últimas semanas, em particular sobre as sessões que foram realizadas semanalmente na sala da APPDA?

Esta foi a tua primeira experiência em meditação?

Se não: “O que que tu te lembras disso? E podes me dizer um bocadinho mais sobre?” (Introducing Questions, Kvale 1996)

Se sim: Proxima pergunta

O que que tu achas da meditação que fizemos durante essas sessões? (Opinion values questions, Quinn Patton)

Indirect question (Kvale) : “ O que que tu achas que os teus amigos da turma, os teus colegas da turma, sentiram e experimentaram nas sessões?”

O que sentiste praticando Meditação nas aulas? (Feeling Question, Quinn Patton)

Example of following probing Questions (Kvale) : “Podes dizer mais detalhes sobre isso ?”

O que fizeram nessas sessões?

O que que estas a sentir dentro de ti quando fazemos exercícios como o exercício de respiração?
(Sensing question, Quinn Patton)

O que que estas a sentir dentro de ti quando fazemos exercícios como o exercício da bola dourada?
(Sensing question, Quinn Patton)

Como te sentes no final da prática nas sessões?

+probing question

Achas que há uma utilidade de fazer este tipo de exercícios? (Knowledge Questions, Patton)

Conseguiste praticar meditação em Casa?

E se sim, achas que vais continuar?

O que sentiste que mudou contigo depois da prática de meditação?

+probing question

Na tua vida pessoal, na escola, nos teus colegas e formadores...

Os teus pais notaram alguma mudança em ti com a prática da meditação?

Os teus Irmãos notaram alguma mudança em ti com a prática da meditação? (se tiver irmãos)

E os professores e formadores?

Muito Obrigado para partilhar as tuas emoções comigo! A mais uma coisa que achas importante que não falaste? O mesmo se não é “importante”, uma pequena coisa que queres partilhar o me dizer sobre tudo isso? (debriefing, Kvale)

Achas boa ideia sugerir aos teus pais que façam meditação também?

Those questions are just a design, because the interview is semi-structured, I need to adapt myself since the first answers and add to all this question different other type of little questions like: Follow-up Questions (Kvale).

8.1.1.2. Family member

Olá, tudo bem? Muito prazer de conhecer você! E muito obrigado por me permitir fazer esta entrevista!

Eu sou Gaston, estudante da faculdade de desporto da Universidade de Coimbra, sou Francês e cheguei em Portugal dois anos atras para fazer Erasmus, e fiquei depois para fazer o meu mestrado. Se você não percebe quando eu falo português, é normal e posso repetir a vontade.

Briefing: Estou fazendo a minha tese de mestrado sobre um programa de meditação, com o professor Pedro Gaspar, e o seu filho que é um dos 10 participantes. Começamos o programa 7 semanas atras e queria fazer uma entrevista com você para saber se este programa teve algum efeito, benefícios, mudanças, ... no seu filho essas últimas semanas.

Primeiro, posso gravar a nossa conversa? E totalmente confidencial e em nenhum momento as gravações serão cedidas a terceiros, e somente utilizadas para a investigação.

Qual é a vossa idade?

A vossa profissão?

Você mora onde?

Qual é o seu estatuto? (Casado, Solteiro, Separado) O que se passou para a separação se for o caso?

O seu filho é único o tem irmãos?

E possível de me contar um bocadinho mais sobre ele por favor? O seu nascimento, crescimento, desenvolvimento?

Ele está muito em casa?

A sua personalidade? Que tipo de jovem ele é? Que descrição você pode fazer?

O seu filho está a sentir stress o ansiedade?

E você?

Quais são as atividades que ele pratica?

Você já teve uma experiência com a meditação?

E o seu filho?

Sabe o que é?

Se sim: “O que que se lembra disso? E podes me dizer um bocadinho mais sobre? “ (Introducing Questions, Kvale 1996)

Se não: Próxima pergunta

O que que você acha da meditação? (Opinion values questions, Quinn Patton)

Indirect question (Kvale) : “ O que que seu filho acha, sentira e experimenta nas sessões de meditação?”

Example of following probing Questions (Kvale) : “Pode dizer mais detalhes sobre isso ?”

Nos dias em que ele realizava meditação no centro da APPDA, ou durante a semana, notou alguma diferença nele?

Acha que há uma utilidade de fazer este tipo de exercícios? (Knowledge Questions, Patton)

O seu filho conseguiu praticar em casa?

Você notou alguma mudança no seu filho que durante o tempo que teve as sessões e depois?

Quais foram?

O que que você acha de participar em um programa similar de prática de meditação?

Muito Obrigado para compartilhar as tuas emoções comigo! A mais uma coisa que achas importante que não falaste? O mesmo se não é “importante”, uma pequena coisa que queres compartilhar o me dizer sobre tudo isso? (debriefing, Kvale)

Those questions are just a design, because the interview is semi-structured, I need to adapt myself since the first answers and add to all this questions different other type of little questions like : Follow-up Questions (Kvale)

8.1.1.3. Staff members

Olá, tudo bem? Muito obrigado por me permitir fazer esta entrevista!

Eu sou Gaston, estudante da faculdade de desporto, sou Francês e cheguei em Portugal dois anos atras para fazer Erasmus, e fiquei depois para fazer o meu mestrado. Se você não percebe quando eu falo português, é normal e posso repetir a vontade.

Briefing: Estou fazendo a minha tese de mestrado sobre um programa de meditação, com o professor Pedro Gaspar, e a turma dos 10 participantes. Começamos o programa 7 semanas atras e queria fazer uma entrevista com você para ver se este programa teve algum efeito, benefícios, mudanças, ... nos participantes essas últimas semanas.

Primeiro, posso gravar a nossa conversa?

Qual é o vosso nome?

Qual é a vossa idade?

Qual é a vossa formação?

Onde mora?

Qual é o vosso estatuto, casado, solteiro?

Você tem filhos? Se sim, quantos?

Qual é a vossa profissão e atribuições na instituição?

Queria saber quantas vez por semana e durante quanto tempo está em contacto com estes alunos?

E em que contexto você está em contacto com esta turma? Qual as suas atribuições ou funções ou formação que lhes dá?

Qual é a sua relação com esta turma?

Qual é o comportamento deles normalmente?

E nas aulas?

Algumas participantes desta turma sentem stress ou ansiedade?

Algumas participantes desta turma têm algum problema de saúde ou comportamento, para alem do autismo?

Você já teve uma experiência com a meditação?

Se sim: “O que que se lembra disso? E podes me dizer um bocadinho mais sobre? “ (Introducing Questions, Kvale 1996)

Se não: Próxima pergunta

O que que você acha da meditação? (Opinion values questions, Quinn Patton)

Indirect question (Kvale): “O que a turma acha, sentira e experimenta nas sessões de meditação?”

Example of following probing Questions (Kvale): “Pode dizer mais detalhes sobre isso?”

Acha que há uma utilidade de fazer este tipo de atividade? (Knowledge Questions, Patton)

Você notou alguma mudança nos participantes desta turma apos as sessões de meditação?

Você notou alguma mudança nos participantes desta turma nessas últimas semanas?

Muito Obrigado por compartilhar as tuas emoções e experiências comigo! A mais uma coisa que achas importante que não falaste? O mesmo se não é “importante”, uma pequena coisa que queres compartilhar o me dizer sobre tudo isso? (debriefing, Kvale)

Those questions are just a design, because the interview is semi-structured, I need to adapt myself since the first answers and add to all this questions different other type of little questions like: Follow-up Questions (Kvale).

8.1.2. 2nd Cycle

8.1.2.1. Participants

Olá! Como estas?

Estas bem-disposto?

Hoje eu quero fazer uma entrevista, da mesma forma do que fizemos no final de junho, lembraste?

Pronto, era para falar e discutir das sessões de meditação que fizemos juntos durante esses últimos meses.

O que que tu te lembras disso? E podes me dizer um bocadinho mais sobre? (Introducing Questions, Kvale 1996)

O que que tu achas da meditação que fizemos durante esses meses? (Opinion values questions, Quinn Patton)

Indirect question (Kvale): “ O que que tu achas que os teus amigos da turma, os teus colegas da turma, sentiram e experimentaram nas sessões?”

O que sentiste praticando Meditação nas aulas? (Feeling Question, Quinn Patton)

Example of following probing Questions (Kvale): “Podes dizer mais detalhes sobre isso?”

O que fizeram nessas sessões?

O que que estas a sentir dentro de ti quando fazemos exercícios como o exercício de respiração? (Sensing question, Quinn Patton)

O que que estas a sentir dentro de ti quando fazemos exercícios como o exercício dos mantras? (Sensing question, Quinn Patton)

Como te sentes no final da prática nas sessões?

+probing question

Achas que há uma utilidade de fazer este tipo de exercícios? (Knowledge Questions, Patton)

Conseguiste praticar meditação em Casa?

E se sim, achas que vais continuar?

O que sentiste que mudou contigo depois da prática de meditação?

+probing question

Na tua vida pessoal, na escola, nos teus colegas e formadores...

Com quem tu falaste sobre isso?

Os teus pais notaram alguma mudança em ti com a prática da meditação?

Os teus Irmãos notaram alguma mudança em ti com a prática da meditação? (se tiver irmãos)

E os professores e formadores?

Muito Obrigado para compartilhar as tuas emoções comigo! A mais uma coisa que achas importante que não falaste? O mesmo se não é “importante”, uma pequena coisa que queres compartilhar o me dizer sobre tudo isso? (debriefing, Kvale)

Individual and specific questions:

J.D.:

Praticaste com a tua mãe?

D.S.:

Ainda estas a praticar em casa?

M.M.:

Como que está a correr com as atitudes dos colegas? Melhor? Como é de ficar ao lado do T.V.?
Achas que a meditação pode ser útil na tua prática de dança?

R.S.:

No specific questions.

F.D.:

Contínuas a fazer ginastica com o teu pai? Atitudes dos colegas?

V.L.:

É difícil para ti relaxar? Fechar os olhos, porque não fazes os mantras? Ainda tens muito stress?

T.V.:

Consegues a praticar melhor agora? Relaxas mais?

J.Q.:

Atitudes dos colegas? Crises? Piscinas? Stress? Tudo bem em casa com a sua irmã? Agora tens um tapete não? Praticaste em casa?

8.1.2.2. Family members

Olá, tudo bem? Muito obrigado por me permitir fazer esta entrevista!

Posso gravar?

Eu sou Gaston, não sei se você se lembra que fizemos uma entrevista juntos em junho?

Pois, era para falar da meditação ainda, para ver se havia algumas desde a última vez que falamos sobre esta prática.

Não sei se o seu filho costuma falar disso com você?

Indirect question (Kvale) : “ O que que seu filho acha, sentira e experimenta nas sessões de meditação?”

Example of following probing Questions (Kvale) : “Pode dizer mais detalhes sobre isso ?”

A sua opinião sobre a meditação mudou? (Opinion values questions, Quinn Patton)

Acha que há uma utilidade de fazer este tipo de exercícios? (Knowledge Questions, Patton)

O seu filho está a sentir stress o ansiedade nesses dias em geral?

Em que contexto?

E você?

Há algumas novidades na rotina do seu filho esses últimos meses?

Nos dias em que ele realizava meditação no centro da APPDA, ou durante a semana, notou alguma diferença nele?

O seu filho conseguiu praticar em casa?

Você notou alguma mudança no seu filho que durante o tempo que teve as sessões e depois?

Quais foram?

Muito obrigado pela entrevista, foi um grande prazer praticar meditação com o seu filho.

8.1.2.3. Staff members

Olá, tudo bem? Muito obrigado por me permitir fazer esta entrevista de novo!

Não sei se você se lembra da entrevista que fizemos juntos em junho? Pois, então era para falar da meditação ainda, para ver se havia algumas desde a última vez que falamos sobre esta prática e os participantes.

Não sei se você conversa com os participantes da turma sobre isso?

A sua opinião sobre a meditação mudou? (Opinion values questions, Quinn Patton)

Como está a sua relação com esta turma atualmente ? Mudou?

Qual é o comportamento deles atualmente?

Algumas participantes desta turma sentem stress ou ansiedade esses dias?

Indirect question (Kvale) : “ O que a turma acha, sentira e experimenta nas sessões de meditação?”

Example of following probing Questions (Kvale) : “Pode dizer mais detalhes sobre isso ?”

Você notou alguma mudança nos participantes desta turma após as sessões de meditação?

Você notou alguma mudança nos participantes desta turma nessas últimas semanas?

Muito obrigado!

8.2. Codes and Items from interviews

8.2.1. 1st cycle

8.2.1.1. Participants

8.2.1.1.1. J.D.

Codes	Items
Personal sensation during meditation	“bem” “tranquilo” “sempre tranquilo” “atitude”
Stress in daily life	“Dias stressante”,
Opinion about the practice	“muito bom” “muito interessante” “saudável” “continuar” “bom para nós” “ficamos mais relaxados” “mais tranquilos” “saudável”
No Previous experience	“ouvido falar” “nunca experimentei” “todo novo” “muito novo” “diferente para mi”
Mother opinion	“muito interessante” “atitude” “tranquilo”
Other practice	“vinte anos de bodyboard”

8.2.1.1.2. D.S

Codes	Items
Personal sensations during meditation	“aliviado” “mente vazia” “mais calmo” “sinto bem” “mais aliviado” “sem stress” “alma nova” “meu próprio completamente novo” “cada vez mais calmo”
Stress in daily life	“menos stress” “paro e faço meditação”
Opinion about the practice	“bom” “bem” “mantemos o calmo” “dum dia mau a um dia normal”
No Previous experience	“não”, “não conhecia” “irmã prática não muito tempo”
Home practice	“sim” “diariamente” “antes de dormir”
Colleagues opinion	“alguns não acham é tanto bom”
Colleagues relation	“melhorar cada dia”
Meditation Practice description	“inspirar pelo nariz” “canções” “focos numa imagem” luz”

8.2.1.1.3. M.M.

Codes	Items
Personal sensation	“mais tranquila” “corpo tranquilo” “calma” “equilibrado” “muito bem” “calor no peito” “senti-me melhor” “irrito menos”
Stress in daily life	“muitas vezes” “durante o dia”
Opinion about the practice	“gostei muito” “gostei de tudo”
Previous experience	“tinha feito” “três anos atras” “gostava muito” “exercícios der respiração” “meditação do poder do amor”
Home practice	“as vezes” “a noite”
Colleagues opinion	[colleagues] “maioria ficava mais calma” “mais tranquilos” “calma no dia”
Mother opinion	“as vezes fazemos”
Colleagues relation	“rir dos colegas, desconcentrava” “está melhor”
Other practice	“dança” “ballet contemporânea”

8.2.1.1.4. P.R.

Codes	Items
Personal sensation	“energia” calma”” mais calma” “boas sensações” “sono”
Stress in daily life	“as vezes” “durante a noite” falo a noite” “gritar a noite” tomar medicação”
Opinion about the practice	“bem” “agora gosto” “antes não gostava” “gostei mais de tudo” bom”
No Previous experience	“primeira vez”
No Home practice	“não lembro me” “não gosto” “muito barulho”
Colleagues opinion	“gostaram” “mais que eu”
Colleagues relation	“esta bem”

8.2.1.1.5. R.S.

Codes	Items
Personal sensations	“mais lento” “mais descansado” “mais calmo” “sentir calor” “melhor” “no dia, muito melhor”
Stress in daily life	“não” “muito corrido”
Opinion about the practice	“bom”
Previous experience	“já tinha feito” “era mais pequeno” “deitado” “coisas boas” “foi bom”
No Home practice	“não”
Colleagues opinion	“bom para eles” “maior parte gosta” “alguns não tanto”
Parents opinion	“era bom”
Practice description	“respirar com o nariz” “sentados”

8.2.1.1.6. F.D.

Codes	Items
Personal sensation	“mais relaxado” “pó da luz” “calor no peito” “muito relaxados” “mais tranquilo” “calor e tranquilidade” “completamente tranquilo no final” “relaxado” “mudou a tranquilidade”
Stress in daily life	“as vezes” “qualquer hora” “stress” “cansa” “posso fazer meditação”
Opinion	“gostei” “foram boas” “muito bom”
Home practice	“uma vez” “livro de Yoga” “vou continuar”
Colleagues opinion	“gostaram mais o menos como eu”
Parents opinion	“que fiquei tranquilo” “bom”
Colleagues relation	“riam”
Other practice	“ginástica com meu pai”

8.2.1.1.7. V.L.

Codes	Items
Personal sensations	“muito pensamento” “relaxando, mas volta ao normal” “volto aos pensamentos que tinha” “mais calma”
Stress in daily life	“sim” “autocarro” “noite” “acordar cedo” “ocaso do P.” “P. Ligou-me” “emoção” “muita gente” “muita ansiedade” “dias complicados” “stress”
Opinion	“depende das pessoas” “não tava habituado” “inicio não apreciava” “deve ser bem tentar”
No Previous experience	“primeira vez”
No Home practice	“nunca pratiquei” “tenho horários” “correr” “tomar medicação”
External observation about changes	“me disseram que estou mais calmo”
Colleagues relation	“barulho” “riam” “não dá para concentrar”
Other practice	“natação”
Description of the practice	“papeis” “ôôôômm, nunca fiz” “bola a crescer”

8.2.1.1.8. T.V.

Codes	Items
Personal sensation	“senti bem” “bem”
Stress in daily life	“sem stress” “jogo de horror”
No Previous experience	“acho que não”
Other practice	“piscina”

Codes	Items
Personal effects	“muito bem” “desanimado quando rio” “fico muito bem” “bem calma” “sem stress” “aleijar o stress” “stress vai embora” “mais calma” “mais aliviado” “tira tudo que tenho dentro de mi” “não penso em outras coisas” “mais aliviado” “mais animado” “ficar melhor” “estou a sentir melhor”
Stress in daily life	“crise” “raramente” “doença” “mau disposto” “distraído” “agora estou estável” “luz do portátil bate os olhos” “coração bate forte” “tento ficar calma” “respirar fundo” “agora estou mais calmo” “perdi minha mãe e avo” “filmes de horror” “muitas roupas e fico quente no autocarro” “internado no hospital” “epilepsia” “nem posso brincar”
Stress during the night	“mau sonhos” “sonhos horríveis” “transpirar a noite”
Stress related to natation	“na piscina” crise na piscina” “antes de ontem” “prova de natação” “perder a toca na prova de natação” “olhos irritados” “batei a mão na parede da piscina” “não consegui a cambalhota” “mão a mexer tudo”
Opinion about the practice	“gostei” “era muito bom” “ajudou” “gostei imenso” “não pensar sobre as coisas” “ajudar a escrever bem” “espetáculo para nos” “fantástico”
Opinion about meditation related to natation	“acabar a prova” “poer coisas no sitio”
No Previous experience	“primeira vez”
Hypotetical Home practice	“já tenho um tapete” “vou fazer” “interessante” “vou arranjar um sitio” “quarto não dava”
Colleagues relation	“gostei dos colegas” “não gostei do F.” “ôômmmm do F.”
Other practice	“natação”
Description of the practice	“tocar os sinos” “gosto do ôômmmm” “respiração” “com as mãos” “pelo nariz” “musica do mar”

8.2.1.2. Family members

8.2.1.2.1. Mother of P.R.

Codes	Items
Description of childhood, growing, personality	“criança normal” “problema na escola” “hospital pediátrico” “pai faleceu” “complicações” “instituição” “precisava trabalhar” “problemas com professores” “internado” “andava desorientado”
Description of nowadays, personality	“bom aqui” “esta vivente” “melhor” “bem ensino” “tava bem assim” “ouvem problemas” “tava muito bem” “internado duas semanas” “correr tudo muito bem”
No Meditation background of the parent	“nunca praticou” “ex-colega fazia meditação” “P. Fez Yoga com ela uma vez 8 anos atras”
No Discussion with the children about the practice	“nunca me falou”
Effects observed	“acho ele diferente” “associo ao tratamento” “continuar o tratamento” “se calhar há influencia da meditação” “conjunto do tratamento e de meditação” “pode ser da meditação”
Difficulties Lifestyle information of the parent	“não tenho muito tempo” “muito cansada” “só quero descansar”

8.2.1.2.2. *Mother of J.D.*

Codes	Items
Description of childhood, growing	“tive dislexia” “dislexia não ajuda a equilibrar os miúdos” “agitação” “stress” “problema da fala” “aprendeu muito com as psicólogas” “terapeutas da fala” “três anos, foi no infantário” “precisava de outro professor, para a parte da linguagem” “professora juntou ele com uma menina muda e surda” “deixam de dizer todo” “começou a imitar a menina” “não conseguiu dizer as coisas” “desenvolvimento atrasas” “passou muito para o divorcio, não foi fácil” “tivemos de tentar ultrapassar isso”
Description of nowadays, personality	“como se tivesse 20-25-26” “fez voluntariado na apcc” “curso de 5 anos de assistente administrativo” “tenta a ajudar os outros quando eles têm mau comportamentos” ““esta contente comigo” “tem os amigos” “não há ninguém que não gosta do J.” “cria empatia” “amizade” “gosta de ajudar” “adora crianças” “queria subir mais um bocadinho” “precisa de ganhar” “se pudesse tirar curso de desporto, mas não tem o ensino secundário”
Activities of the children	“bodyboard” “paddle” “correr” “gosta de desporto”
Children opinion about the practice	“extremamente contente” “reagiu muito bem” “ganhar gosto”
J.D. feedback about the class	“colegas muito agitados” “tenta transmitir para os”
Parent opinion about the practice	“bem-haja” “esses jovens precisam estar mais calmos” “muito bem” “muito bem transmitido” “feedback muito positivo” “pena que esta disciplina nao tem a mesma integrada” “fundamental”
Meditation background of the parent	“uma prima professora de meditação e reiki” “vejo muito programa” “J. Começou a me ensinar” “programa na televisão” “comecei a poer em pratica certas coisas” “não sei fazer” “tento me relaxar no sofá” “direito” “olhos fechados” “gostava de aprender” “gostava de ler um livro” “ambiente melhor”
Discussion with the	“disse que tinha meditação” “a mostrar tudo” “falou no almoço com a família” “mostrou os posterzinhos na família” “irmão ficou encantado” “minha nova focou muito encantada”

children about the practice	
Effects observed	“chegou mais calma” “muito mais calma” “ele tornou-se mais calmo” muuuuuito mais calmo, mas isto é verdade! Que estou a dizer!” “muito grande” “cada vez que ele teve meditação ele teve mais calmo” “desde que começou, comecei a notar e ele como deve se sentir bem”
Effects observed on Wednesday afternoon	“quando chega em casa, o dia que ele tinha meditação, vai extremamente relaxado”
Difficulties Lifestyle information of the parent	“tenho ansiedade” “focar nos problemas” “necessidade de respirar fundo” “consegui combater um bocadinho os stresses” “problemas familiares” “divorcio” “stress e cansas”
Practice at home of the children	“praticar no quarto” “respirar fundo”

8.2.1.2.3. *Mother of V.L.*

Codes	Items
Description of childhood, growing, personality	“não consegue dar beijo/abraços” “ainda melhor” “é adotado” “tinha 3 anos e meio” “foi maltratado” “negligenciado” “irmão gêmeo” “buscar numa instituição” “era um bicho” “irmãs ajudaram” “pai faleceu”
Parent opinion about the practice	“deve ter sido bom” “me parecia impensável” “não tenho opinião formada” “não tenho paciência para meditar” “não sei nada”
Description of nowadays, personality	“tem mudado muito” “fui ensinado” “lhe dei apoio” “ele é muito ativo” “anda em tudo” “converso com ele”
Stress and anxiety of the children	“muito stress” “tomou medicação” “pics de ansiedade”
Activities of the children	“hip-hop” “dança” dança folclórico” “integrado num grupo” “muitas atividades” “staff em trail e corridas”
No Meditation background	“nunca fiz” “não sei nada”
No Discussion with the children about the practice	“nunca me falou”
Effects observed	“ultimamente esta mais calma” “mais ponderado” “fala mais comigo” “mais sociável comigo” “conversa mais comigo” “não era habito” “sempre a melhorar” “minhas filhas notaram ele mais calmo” “tem sido indescritível”
Difficulties Lifestyle information of the parent	“fiz tudo que pude” “administrativa” “marido faleceu há um ano” “não tenho tempo” “tomo medicação” “tenho stress” “complicado sem marido” “muito difícil sem marido” “tomo ansiolítico”
Practice at home of the child?	“não sei se ele faz”

8.2.1.2.4. Mother of R.S.

Codes	Items
Description of childhood, growing, personality	“criança normal” “crescimento normal” “correu tudo bem”
Parent opinion about the practice	“não sei” “nunca pesquisei” “não tenho opinião”
Description of nowadays, personality	“as vezes sente ansiedade” “tem stress” “semana mais tempo fora da casa” “fins de semana, descansa em casa”
Activities of the children	“equitação” “caminhada”
No Meditation background	“nunca fiz”
No Discussion with the children about the practice	“é a segunda vez?” “nunca falou” “tee-shirt da meditação”
Effects observed	“mais calmo desde a um mês” “poderia ser” “a rotina é toda normal” “meditação é única recente novidade”
Lifestyle information of the parent	“casada” “não tenho disponibilidade”

8.2.1.2.5. Sister of J.Q.

Codes	Items
Description of childhood, growing, personality	“já foi agressivo” “problemas familiares”
Children opinion about the practice	“ele gosta”
Parent opinion about the practice	“parece bastante bem” “irei procurar para ele” “bem” “área interessante” “gostaria de provar”
Description of nowadays, personality	“calmo” “distraído” “falta de concentração” “morra comigo há dois anos” “sentimentos amorosos” “fala mais” “stress e ansiedade desde pequenino” “fica nervoso” “é um miúdo como é”
Activities of the children	“terapia de cavalos” “playstation”
No Meditation background of the parent	“nunca tive experiência”
Discussion with the children about the practice	“falar das aulas da meditação” “falar do professor” “falar de si”
Effects observed	“ficou mais tranquilo do que ele estava” “aparece bem” “mais tranquilo” “nervosidade diminui essas últimas semanas” “mais calmo”
Lifestyle information of the parent	“25” “auxiliar de laboratório”
Difficulties lifestyle of the parent	“tenho muito stress” “stress do trabalho” “stress familiares”
No Practice at home of the children?	“não praticou” “só se praticou no quarto”

8.2.1.2.6. *Father of F.D.*

Codes	Items
Description of childhood, growing, personality	“criança com problemas que tem” “não consegue estar muito concentrado durante muito tempo” “só se for uma coisa que ele gosta muito” “não sou a pessoa mais indicada para falar da sua infância, porque trabalhava muito” “rapaz com os problemas dele” “autismo” “algumas coisas, ele aprende fácil” “doença” “grande qualidades” “grande defeitos”
Description of nowadays, personality	“se ele não gosta, não gosta” “nos somos mais tolerantes, e ele não é tanto tolerante” “uma criança” “menino sentido” “chantagista por natureza” “há coisas que aprende muito facilmente” “há outros aspetos que ele tem muito dificuldade” “a dificuldade é ele trabalhar com as mãos” “pouca agilidade para o desporto” “tem dificuldade com uma faca a cortar” “falta de concentração”
Gymnastic at home	“ginástica a noite” “porque ele ainda muito forte” “acho que ele gostou (da ginástica)” “penso que ele está a fazer muito bem” “não controla muito bem a respiração” “algumas dificuldades” “esta a perder peso” “nas anchas” “barriga mais pequena” “mais magro” “medico diz para ele ter cuidado do coração” “seu entusiasmo varia” “é obrigação” “ginástica é duma base militar” “gosta da ginástica”: “meia hora” “abdominais” “corrida” “bicicleta”
Activities of the children	“se refugiou como autista no computador” “refugiasse muito nessas coisas” “as vezes estudar” “coisas que ele gosta” “musica” “não é assim muito do desporto” “faz natação aqui” “jogo de computador”
Stress and anxiety of the children	“bocado stressado com certas coisas” “parece para ele que o tempo nunca chega” “stress de esperar” “olhar a hora”
Parent opinion about the practice	“tudo que for a de bom para o F., ta bom” “a meditação pode ajudar na concentração” “penso que há uma utilidade” “tal vez ele se concentre” “para mi tudo que é bom para o meu filho é bom para mi” “ajuda muito” “a gente sente se bem, psicologicamente” “pode fazer muito bem” “controlar a respiração”
No Meditation background of the parents	“nunca tive experiencia” “primeira vez do F. também” “nunca fez antes”

Knowledge of the parent about the practice	“muito pouco” “televisão” “arte” “budismo” “conheço muito pouco” “sei que há dois ou três tipos” “amigos Belgam que praticavam”
No Discussion with the children about the practice	“não falou muito” “fecha-se muito” “vou tentar acompanhar” “até estava a pensar que ele ia a começar” “também não tem puxado muito para ele, para saber sobre isso”
Difficulties Lifestyle information of the parent	“estou muito stressado também” “desde que estou andando doente, tenho ainda muito mais” “tem tido acompanhamento dum psicólogo” “ainda ontem lá fui” “também estou estressado” “a idade que eu tenho” “queria trabalhar e não tem”
Hypothetical Practice at home of the children	“se é obrigatório vai fazer, como trabalho de casa”

8.2.1.2.7. *Father of T.V.*

Codes	Items
Description of childhood, growing	“coisa errada para ai os três anitos” “movimentos repetitivos” “fala também não fui espontânea” “algumas dificuldades na fala” “brinquedos, eram muito repetitivos” “arrumação das coisas” “forma muito arrumada” “foi diagnosticado” “escola normal” “limitações e adaptações de problema” “conseguiu sempre chegar”
Description of nowadays, personality	“objetivos” appda é um ambiente excelente” “gosta das coisas rigorosas, com objetivo” “gostas das coisas avisadas” “gosta de ser oriente e saber as coisas que vão fazer” “tudo organizado” “antipático”
Parent opinion about the practice	“uma coisa que acho estranho”
Activities of the children	“faz as coisas que ele gosta com o computador” “dia tudo ocupado aqui com o curso” “já fez várias coisas”
no Meditation background	“não “se calhar meditação intuitiva”
No knowledge about meditation of the parents	“conhecimento empírico” “não conheço nenhuma técnica”
Discussion with the children about the practice	“não questionei muito sobre isso” “vou ficar mais atento” “por a mãe já falou” “para mi ainda não” “vou aprofundar” não fala muito” “não conta muito” “não é espontânea contar tudo”
Other types of the discussion	“outro tipo de conversa” “desenhos animados”
No Effects observed	“não vi nada de especial” “também não vi nada de mal” “parece-me tudo ok” “não vejo mais irritado, normal” “não mudanças” “acho que ele era já mais calmo” “não vejo assim nenhum comportamento” “pelo menos nao há nenhuma coisa diferente” “uma ansiedade que é controlada”
Difficulties Lifestyle information of the parent	“também tenho stress” “no trabalho” “nada de especial” “trabalho muito” “horário meio estranho”
No Practice at home	“nunca vi” “agora se calhar vou puxar ele” “tenho de perguntar” “se calhar fez e não diz nada a ninguém”

8.2.1.2.8. *Mother of M.M.*

Codes	Items
Description of childhood, growing, personality	“otimismo” “vontade de fazer coisas” “prazer em viver” “alguma situação que deixa ela ansiosa” “medo da opinião dos outros” “medo de falar” “sua infância é uma pessoa com vontade de fazer coisas e desenvolver projetos”
Description of nowadays, personality	“mais ansiosa quando tem de frentear uma situação nova” “gosta do curso, colegas, formadores” “alguma paragem” “dificuldade quando muda a rotina” “muda os planos, fica mais ansiosa” “plano mudou na ultima hora, fica desorientada”
Practice of dance	“companha de dança desde os 16” “pratica dança desde os 3” “três vezes por semana”
Parent opinion about the practice	“tenho pena que quando ela volta stressada em casa, não aplica” “acho que é ótimo”
Meditation practice effect on the parent	“acaba por ser pro ativo no nosso dia-dia” “preocupo-me com o futuro ou penso no passado” “consigo no dia dia estar na maio parte do tempo, no tempo presente”
Meditation background of the parent	“também pratico meditação” “eu segui também um curso de meditação” “acostumo de praticar quase diariamente e a M. também” “de vez em quando fazíamos as duas” “boa experiência” “meditação do poder do amor” “treinos de respiração” “pensar em coisas positivas” “tento a manter a focada só no momento” “ajuda-me bastante” “realmente a estar tranquila”
Discussion with the children about the practice	“falou e gostava muito” “gostava de continuar” “tinha alguma pena dos colegas interromper” “gosta de ficar em silêncio” “ficar com as suas interações” “dizia que muitas colegas estavam a falar e interromper” “era um mudava um bocado” “estava a sentir bem e gostava de continuar”
No Effects observed on Wednesday	“não sei porque vi ela no final do dia, depois da dança”
Effects observed	“começou a andar um bocadinho mais agitada e agora andava bem” “continuou bem” “não sei se isso esta a ver com a meditação, mas ela andou bem” “mais tranquila”

“esta a andar muito bem” “toma medicação” “toma menos” “agora ela está mais agitada, mais ansiosa” “fizer meditação nesta altura ajudava, a ficar mais calma” “já esta um bocadinho mais ansiosa outra vez”

Difficulties Lifestyle “separada” “mais preocupada” “mais stressada” “mais ansiosa” “por causa
information of the de lidar com a M.M.” “o seu estatuto variável condiciona o meu espirito”
parent “normalmente sou uma pessoa tranquila”

8.2.1.3. Staff members

8.2.1.3.1. Teacher 1

Codes	Items
Relation with the class	“Boa”
Description of the class	“Muitas diferenças” “alguns mais conversadores” “temporada” “controlo do impulso” “outros não” “sustados” “atendes” “focados” “duas vertebraas”
Description of one participant (T.V.)	“Falar sobre experiência individual” “mais dificuldades”
Meditation feedbacks from participants	“Nenhum falou” “alguns falam logo a seguir” “F.D. da mais feedbacks” “V.L. um bocadinho”
Conflicts and stress in the class	“Impulsividade” “dificuldade na gestão das próprias emoções” “razão dos conflitos na turma”
Previous meditation experience of the teacher	“Pratica profissional” “mindfulness” “habilitação na respiração” “corpo” “não há parte energética”
Opinion about meditation	“Pode resultar” “focarem numa imagem/fotografia/coisa mais palpável” “difícil focar na respiração numa primeira fase de contacto com a meditação” “pode ter efeitos brutais” “para continuar” “boa politica”
Effects observed right after the session	“Calma se instala” “diferença entre antes e depois” “apaziguados” “efeito imediato obvio”
Observation on the long term	“Não consigo determinar diferença”
Evolution long term on one participant (V.L.)	“V.L. em geral é mais calma”

8.2.1.3.2. Teacher 2

Codes	Items
Description of the class	“Bocadinho agitados” “pequenos barulho” “movem a cadeira” “logo em pânico” “gritam” “muito reativo” “dificuldade manter a calma” “grande dificuldade”
Conflicts and stress in the class	“picadas entre eles” “pouca tolerância entre eles” “pouca paciência”
No Meditation feedbacks from the participants	“Nunca falaram comigo”
Stress or anxiety of the class	“Sentimos” “pequenas coisas do dia-dia” “não conseguem esperar” “alguma ansiedade”, “ansiedade natural deles”
Current meditation experience of the teacher	“Estou a fazer um curso de meditação” “introdução” “trabalho da respiração” “aprender a respirar” “dentro de nos”
Opinion about meditation	“Fundamental” “muito bom”, “bom para toda gente” “sobre tudo com este publico” “efeitos concretos”
No Observation of the teacher during meditation session	“Nunca participei com eles”
Observation on the long term	“Ainda não sentimos os efeitos”
Description of one participant (D.S.)	“Pessoa bastante calma” “participativo” “compartilha suas experiências” “capta muito bem nossas ordens” “não fica chateado ou ansioso quando chamamos atenção” “capacidade de pedir desculpa” “nesses dias anda bastante bem”

8.2.1.3.3. Teacher 3

Codes	Items
Relation with the class	“Boa relação”
Presence with the class	“Há alturas duas tardes” “há alturas mais tempo” “muito variável”
Description of the class	“Muito variável” “há dias que estão bem e trabalham bem” “há dias que estão calmos”
Agitation in the class	“um ou dois elementos agitados, F. e P.” “depois o T. e V., agitam a turma” “quando estes elementos estão bem todos trabalham bem” “esses 4 têm mais dificuldades em concentração”
Description of one participant (T.V.)	“Imita muito bem (cartoons)” “pessoas gostam das suas imitações” “natural que ele faça isso” “achei que não absorbia a aula”, “mas compreende tudo” “bons testes” “ele consegue” “um dia com mais alguém se calhar pode conversar”
Stress or anxiety of the class	“V. é muito ansioso, faz 100 vezes a mesma pergunta” “J. é um bocado estressado as vezes”
Stress of one specific participant (J.Q.)	“têm ansiedade de pânico” “parte o lápis” “nervoso” “estressado” “ansiedade” “acontece com os testes” “dificuldade em explicar”, “bloqueia” “não consegue reagir” “dificuldade” “não consegue”
No meditation experience of the teacher	“Nunca” “acho interessante” “positivo de certeza”
Relaxation experience of the teacher	“no avião técnicas de relaxamento” “oxigenar bem o cérebro” “respirar fundo” “palmas da mão para cima”
Opinion about meditation	“Baixar nível de stress” “relaxamento” “muito bom” “devia ser nas escolas todas” “toda gente” “auto relaxamento” “níveis melhor de concentração” “não bloquear em stress” “não sei como que se faz mas eu sei que é importante”
Hypothetic observation on the long term	“podem não se ver logo os efeitos” “relaxamento faz bem” “continuidade acaba por ajudar e ver os outros efeitos positivos” “não noto no F.” “capaz de funcionar com o J.” “com os outros também vai ajudar”

V.L. observations on the long term	“V.L. anda mais calma”
J.Q. observations on the long term	“ainda muito mais calma” “em junho esta melhor do que maio”
F.D. observations on the long term	“estava numa fase bem comigo” “muito alterado” “ultimamente esta melhor”
J.Q. description	“Não consegue explicar uma ideia” “não consegue construir uma frase” “mistura” “não sei se consegue perceber” “escrito e falada é muito difícil”
M.M. description	“Muito tímida” “muito dócil” “fiável” “muito bem” “não diria nada de extraordinário” “um bocadinho tímida” “anda bem” “não exterioriza”
Description of one activity (dance) for one participant (M.M.)	“é bailarina” “tranquila” “outra realidade” “bem” “sente-se bem” “se calhar o mesmo com a meditação” “outro lado” “tranquilo” “calma” “tamanho diferente” “faz bem”
Description of anxiety crisis of one participant (M.M.)	“tinha ataques de pânico” “saia a correr da sala” “chorar muito” “falar nada” “acontece pontualmente (ataques de pânico)”
Description of Meditation perception for one participant (M.M.)	“gosta muito da meditação” “a defender a meditação contra opinião dos colegas”

8.2.1.3.4. Technical motors

Codes	Items
Relation with the class	“Boa” “há situações que eles extrapolam um bocadinho”
Description of the class	“Ambiente bom” “bastante positivo” “muitos solidários” “se apoiem bastante”
No Meditation feedbacks from discussion with participants	“não falaram” “nunca aconteceu”
Stress or anxiety of the class	“Por vezes sim” “ansiedade contagia os outros” “ultimamente andam muito mais calmos”
Current Meditation experience of the staff member	“Neste momento estou a frequentar um curso” “início a meditação” “tem uma parte mais espiritual”
Opinion about meditation	“Acho que é fantástico” “ajudar a desenvolver a concentração” “ajudar eles a calmar-se concentrar-se” “ter o foco”
Observation of the staff member after the session on Wednesday	“De regra geral estão mais calmas” “bastante agitados antes da sessão e muitos estressados” “depois da sessão ficavam fantásticos”
observation of evolution for 1 participant (V.L.)	“aquele com quem mudou mais” “imensa diferença” “principalmente o V.L.” “tem mudava muito mesmo”
observation of evolution for 1 participant (P.R.)	P.: “também notei alguma diferença”
observation of evolution for 1 participant (T.V.)	T.V.: “difícil avaliar” “esta um bocadinho mais concentrado”
Hypothetical observation of evolution for 1 participant (M.M.)	M.M.: “não é tao visível” “acredito que esteja a fazer também” “problemas a expressar-se” “acredito que tinha a ver modificações” “muito sensitiva” “muito consciente” “muito alta consciência” “é capaz de haver transformação”

observation of evolution for 1 participant (V.L.)	V.L.: “na sala não tem tanta ansiedade” anteriormente falava muito mais muito repetitivas” “mais controlada”
observation of evolution for 1 participant (J.Q.)	J.Q.: “bocadinho mais confiante” “não se enerva tanto com terminar as coisas” “bastantemente menos ansioso” “acho também ainda mais calma”
Observation on the long term of the class	“Quando estou a dar a formação eles estão muito mais calmos” “no longo termo mudou” “menos conflitos” “menos tensão entre eles”
Contact with the class	“Portfolio” “25 horas” “qualquer modulo”
Description of D.S.	“Ligeiramente melhor” “não tem tantos episódios de impulsividade” “esta a perder a sua impulsividade” “mais relaxado”

8.2.1.3.5. Training coordinator

Codes	Items
Contact with the class	“intervalo” “almoço” “sistema” “alguma documentação” “alguma orientação” “observação”
Indirect contact with the class	“contacto mais indireto” “não trabalho diretamente na sala”
Description of the class	“turma com características muitos especiais” “muitos especiais” “padrões de comportamento muito, muito diferentes” “comportamento da turma não é sempre o mesmo”
Instability of the class	“não é uma turma que seja propriamente estável” “depende muito das fases” “depende de muitos fatores”
Agitation of the class	“agitação de alguns influencia o comportamento geral do grupo” “V.L., T.V, P., quando estão mais instáveis, agitados, acabam por interferir com o resto dos elementos” “no geral esta um bocadinho mais agitado”
Recent instability	“até o comportamento instável por parte de alguns” “podem não ter influencia da meditação” “alguma instabilidade”
Description of one participant (M.M.)	“personalidade um bocadinho complexo” “tem um mudo muito próprio” “forma de pensar muito própria” “nem sempre é fácil abrir aos outros e permitir aos outros chegar até ela” “muito dócil” “muito compreensiva” “momentos dela” “stress” “difícil ajudar lha” “fica muito alterada”
Description of one participant (T.V.)	“tem características muitas próprias” “pode não conseguir perceber exatamente qual é que é o alcance da meditação, o qual é o objetivo da meditação” “muito difícil falar com o T.” “nem sempre é fácil conseguirmos, chegar, chegar la e captar-lhe atenção”
Description of one participant (D.S.)	“tem muito falta de efeitos” “falta dos lares familiares” “apoio da sua tia e de um primo mais velho” “falta la o aspeito maternal” “não compreendem o autismo” “não compreendem algumas necessidades, comportamentos dele” “miúdo muito dócil” “muito afável” “interessado” “stressado” “desequilibrado com alguma situação” “alguma situação pode lhe tornar numa pessoa mais violenta, agressiva” “poderia ser uma pessoa deste tipo de terapias”
Meditation recommendations	“contexto da sala” “espaço diferente” “no jardim” “no exterior”

Stress or anxiety of the class	“no contexto do grupo, sento stress, muitas vezes”
Past Meditation experience of the staff member	“já tive uma outra experiência sim” Lembro “processo convicto a nossa estabilização” “procurar da tranquilidade” “promover o encontro do corpo físico com a mente, com equilíbrio” “meditação do relaxamento”
Opinion about meditation	“feramente interessante” “forma sistemática, repetitiva” “pode ajudar algumas técnicas” “aprender a controlar o nosso comportamento no dia dia” “para nos desligar um bocadinho do stress”
No Observation of the staff member during meditation session	“não estou na sala” “não consigo avaliar diretamente”
No Observation on long term	“necessitaríamos duma fase de trabalho maior” “8 semanas não suficiente” “pode ser uma terapia interessante” “alongar no tempo” “repetição melhor” “feramente de trabalho interessante” “tempo não está assim suficiente” “com o trabalho que continuo, lá podemos chegar”
Conversation with the participant about the practice	“uma a outro falaram” “acho que falaram sobre isso no início” “mostraram vontade com nos, com os pais” “acabaram por relatar em casa o que tinha feito” “vários falaram disso”

8.2.1.3.6. *Psychologist and technical director*

Codes	Items
Relation with the class	“boa relação”
Contact with the class	“todos dias” “acompanhamentos terapêuticos” “intervalos” “almoço”
Description of the class	“turma de jovens muito imaturos” “as cadeiras deles são brincadeiras” “arranjo muito infantil” “também infantil” “turma muito difícil” “muito diferente” “desafio para nos formadores, para conseguir chegar as diferentes pessoas” “grupo muito diferente”
Past descriptions of one participant (M.M.)	Description of M. when she arrives to the center: “conhecemos ela numa fase que ela tinha acabado de sair do hospital” “tinha esta internado num hospital do dia” “não conseguia estabelecer contacto visual com ninguém” “completamente fechada sobre si própria”
Current description of one participant (M.M.)	Description of nowadays: “M. Muito mais sociável” “relação fantástica com os colegas” “super protetora com os que tem mais dificuldades” “mais liberta” “será das tuas, que esteira mais a beneficiar com o curso” “em termos clínicos não tenho qualquer dúvida que ele está mais estável, sem dúvida nenhuma”
Description of one activity (photography) for one participant (M.M.)	“muito persiva” “nível da comunicação não verbal” “é modela fotográfico e ela tem fotografias lindíssima e fantásticas” “coisa fenomenal” “os que nos tentamos de conservar aqui é a M. que nos vimos nas fotografias” “fantástica ao nível da comunicação não verbal” “ao nível da comunicação verbal está um bocadinho mais difícil”
Description of anxiety crisis of one participant (M.M.)	“o curso numa fase inicial foi difícil” “sair de paralisação e a correr” “ninguém conseguia a apanhar” “fugia literalmente e isso acontece algumas vezes” “já algum tempo que não acontece”
Description of Meditation perception for one participant (M.M.)	“aderiu muito bem” “não consigo ver” “esta muito reservada” “não compartilha estas coisas com nos” “não consegui perceber se ela continua a fazer em casa o não” “si ela reconhece o benefício vai fazer de forma autónoma, sem dúvida alguma”
Phone problematic solved for T.V.	“despertador no telemóvel” “larga o jogo e vai para sala” “compreendeu” “aceitou esta regra” “foi negociado e ele aceitou” “nunca usou mais o

	telemóvel fora das horas” “não preciso de ir controlar isso” “tenho a certeza que ele não faz” “é regra é regra” “interiorizou e compreendeu” “não há questão mais nenhuma” “parte dos ruídos é difícil, continua e não conseguimos a chegar la”
Hypothetical benefices of meditation for T.V.	“se tivemos ali alguém a alertar o sentido” “acredito que sim” “se ele começa a reconhecer os benefícios, ele próprio vai passar a fazer sozinho”
Behavior during intervals of T.V.	“nos primeiros intervalos, foram horríveis” “não sabia o que era para fazer” “não sabia o que eu esperava dele” “ele sente-se completamente perdido” “agora já esta la fora a brincar com os colegas e os colegas a brincar com ele.” “foi difícil” “aprendeu muito em condição”
Type of pedagogy used for one participant	“temos de estar um bocadinho vigoroso com o T. em relação a isso” “aos intervalos e tudo proibimos o telemóvel” “se não, ele não ia interagir com ninguém, estava o tempo tudo no telemóvel”
Challenge of the integration in society for T.V.	Integration in the society: “trabalho muito ardo da nossa parte aqui” “tem competências” “ao nível de saber estar” “falha na parte do saber estar” “para não estar imitado pelos outros” “tem piada sobre o T.” “os outros não sabem o que ele esta a imitar” “para ele não estar confuso, aqui não permitido isso” “num trabalho não vão ser permitido” “no estagio não vai ser permitido falar como os desenhos animado” “é impossível em qualquer entidade aceitar uma coisa desta”
Description of rumination and imagination life of T.V.	Living in a cartoon and “ruídos”: “é muito difícil” “vive num mundo de desenhos animados” “constantemente num outro mundo” “vive os jogos de telemóvel” “vive os desenhos animados” “leva ali no extremo” “reproduzir o que dizem as personagens” “funciona duma forma rígida (from the staff member)” “barulhitos de desenho animados” “ruídos” “esta a pensar nas personagens” “temos de trabalhar na integração dele na sociedade”
Ability of T.V. to come by bus	Coming by bus: “ele vem de autocarro” “autocarro é grande conquista” “desde a casa por aqui” “uma das questões que me preocupava” “mora longe” “autocarro me preocupava” “tinha a certeza que consegui vir sozinho” “me preocupava era os outros” precisamente por este tipo de ruídos”

Description of one participant in his current phase in the center (D.S.)	“esta passado por aqui momentos muitos diferentes” “acompanho-lhe nas consultas psiquiatras” “a medicação da manhã é tomava aqui connosco” “não garantimos que ele toma a noite” “esta muito mais calmo” “sai uma capa” “muito mais controlada” “muito mais acessível para falar” “muito mais disponível durante as aulas” “esta completamente diferente”
Description of one participant in his initial phase in the center (D.S.)	First phase: “muito tranquilo, pacifico” “fase de completa destabilização” “super instável do ponto de vista emocional e comportamental” “mandou um burrão num colega da turma” “não consegui falar com ele” “lhe mostrei medo” “levou me a recorrer a psiquiatra” “a medicação com que ele andava estava completamente desajustada” “alguns dias tomava a medicação, outros dias não tomava” “medicação prescrita pelo medico de família eram completamente contrários daquela medicação prescrita pela psiquiatra”
Description of recent love emotions of J.Q.	“acredito que a irmã diz que ele está mais calma” “há a parte do amor que tem contribui duma forma positiva” “esta mais calmo porque a rapariga ja lhe diz que sim” “ele já esta mais calmo” “isso tem estabilidade ele muito”
Description of how J.D. is involved in Meditation	“se identifica muito com o T., pela primeira vez ele alerta o T. para aderir na meditação” “surpreendente me muito” “umas das primeiras vezes que eu vi o J.D. recetivo e a contraria a opinião do T.” “esta fase de familiarização já fui ultrapassada” “os outros foi o primeiro contacto” “já há algum contacto” “não foi totalmente novo” “não é o primeiro “choc”” “resultados surgem duma forma mais rápida” “novidade para os outros”
Familiarization to meditation for J.D. due to interest of mother	“a mãe do J.D. também faz meditação” “ela estava mais desperta para esta área” “vê o por do sol com a mãe” “ficam os dois duma forma muita relaxada” “mãe falou me disto” “relaxar os dois” “familiarização inicial” “ele aderiu duma forma que nenhum dos outros tinha aderido” “já estava familiarizado com este meio” “já estava familiarizado com esta temática e isso para ela não era totalmente novidade”
P.R. difficulties to get involve in Meditation	“primeira fase inicial de adaptação” “na fase inicial o P. resistiu imenso” “não queria fazer” “é todo novo” “é preciso algum, mais tempo do que outras pessoas para se adaptar o que é”
Description of how F.D. is involved in Meditation	“pernas cruzadas” “a fazer o ôôômmmm” “fora”

	<p>“estive algumas crises de ansiedade” “tinha ido com ele for a para respirar e sinto que ele adere muito mais facilmente do que antes e eu acredito que a meditação também tem um contributo para isso”</p>
<p>Meditation feedbacks for the group</p>	<p>“alguns estavam desconfiados” “eles abriram todos numa forma muito positiva a iniciativa” “quarta-feira meditação já faz parte da rotina” “estas atividades são fantásticas para eles” “são muito importantes” “a única coisa no meio disto é que os resultados demoram mais tempo a surgir”</p>
<p>Stress or anxiety of the class</p>	<p>“sim, sim, sim...” “quanto há alguma fuga” “alguma alteração a que que é normal para eles de regra geral é motivo de ansiedade” “são muito ansiosos” “muitas questões sobre o futuro” “questões que constantemente os preocupam” “questões que deixam eles muito ansioso ou algumas deles sem motivo aparente” “situação de ansiedade que exige uma intervenção da minha parte”</p>
<p>First Meditation experience of the staff member during the center session</p>	<p>“só convosco na primeira sessão” “foi uma novidade” “algo novo” “acredito que sim”</p>
<p>Opinion about meditation</p>	<p>“muito interessante” “com este grupo faz todo sentido” “estes jovens tem alguma dificuldades em termos de autocontrolo e a meditação acho que poderia permitir trabalhar precisamente esta dificuldade” “gerir aquelas emoções” “conseguir reduzir o nível de ansiedade” “muito positivo”</p>
<p>No Observation on long term</p>	<p>“a este nível, não conseguimos identificar alteração”</p>
<p>No observation of the staff member the Wednesday after session</p>	<p>“não consegui identificar” “sempre outros fatores” “não consegui identificar”</p>

8.2.2. 2nd cycle

8.2.2.1. Participants

8.2.2.1.1. F.D.

Codes	Items
Day state	“ta tudo bem” “pregunta o que quiseres” “bem-disposto”
Description of the last sessions	“muita calma” “muitas relaxadas” “sentimos sempre uma sensação muita agradável de calor”
Description of the recent exercises	“exercícios de respiração, 4 vezes, 8 vezes” “respiração boca a boca” “nariz” “mantras”
Opinion about last sessions	“gosto”
Feelings	“canto do mantra”
Discussion with colleagues	“sim” “com as pessoas da minha sala” “com M.” “com todos eles” “acham que faz bem” “calmo e relaxante”
Opinions of the colleagues	“acham que faz bem”
Discussion with professors	“já “alguns saíram”
Discussion with family	“sim”
Practice at home	“pratico com a minha mãe” “pratico no banho” “sinto uma agua” “mantras” “respiração boca a boca” “quase todos dias” “quando tenho tempo” “de manha” “tomo banho de manha”
Extra practice	“também aqui na formação” “depois ou antes da meditação” “antes das quartas” “pelo menos terça”
Feeling after session	“muito mais calma” “mais relaxado” “sensação agradável de calor”
Stress and anxiety evolution with meditation	“nunca” “já tive stress” “já acalma com a meditação” “agora não” “acalmo com a meditação na mesma” “stress que eu tive” “meditação ajuda a tirar o stress”
Stress and anxiety in general	“sim” “em tudo” “as vezes tenho este comportamento” “já consegui melhorado” “mas tem de ser melhorado ainda”
Stop of sport activity	“já não consigo fazer” “o meu pai esta muito doente” “mas consigo fazer mais meditação” (gymnastic at home)

Utility of the practice	“usar o instinto do oceano e ficar muito calmo” “silencioso e relaxado” “ajuda” “em tudo”
Description of the current class environment	“esta a correr bem” “alguns colegas irritam-me” “por isso é melhor relaxamos” “a sala com calor” “quentinha” “ar condicionado esta a me afeitar”
Problematic relation with colleagues	“T.M. Irrita-me” “não parar” “não pode ser” “mandei a formadora” “não posso assim poer ordem” “não posso avisar” “os formadores são la por isso” “mandar cavalos aos outros também não pode ser” “T.M. Tem que aprender a controlar ele também” (about T.M.)
Meditation utility for colleagues	“são mais concentrados”
Changes on the participant	“acho que sim” “mudanças foram feitas” “agora é lidar com essas mudanças” “tenho aqui do passado”
Objectives for the future	“sonhar alto” “quero ser administrativo” “quero ficar mais calma” “ficar com calma é única coisa que nos precisamos” “todos nós temos este direito”
Continuity of meditation	“estamos a acabar a meditação não é verdade?” “o Professor P. vai continuar, não é?” “vou continuar a fazê-lo” “estou a gostar” “meditação me ajuda” “é pedido”

8.2.2.1.2. D.S.

Codes	Items
Day state	“bem-disposto” “ultimamente tenho algumas coisas nos olhos” “qualquer coisa”
Description of the last sessions	“correndo mais ou menos bem”
Difficulty on the practice	“não consigo em três vezes” (mantra)
Opinion about last sessions	“gosto”
Feelings	“correndo bem” “sinto concentrado”
Discussion with colleagues	“não tanto” “aceito a opinião de cada um”
Discussion with professors	“já falei” “faz bem”
Discussion with family	“tia pensa que faz bem”
Extra practice	“no comboio” “antes de vir para ca” “fecho um bocadinho mais os olhos”
Practice at home	“sim” “correndo bem” “inspirar e expirar pelo nariz” “aquela coisa da barriga ao nariz, de inspirar e expirar”
Stress and anxiety	“tenho” “quando sinto perturbado com qualquer coisa” “se estou concentrado numa coisa e há alguém a fazer barulho e eu sinto um bocado irritado” “aqui na sala” “fora não tanto”
Utility of the practice	“controlar as emoções”
Description of the current class environment	“não mudou tanto” “F.D., T.V. são muito distraídos” “no resto, não há nada”
Changes on the participant	“acho que estou diferente” “da cabeça” “sinto mais responsável” “mais saber controlar as coisas”
Controlling emotions	“controlar emoções é o mais difícil” “alguma coisa boa” “emoçar-me muito” “quando estou mau, também é a mesma coisa” “não sinto tanto mais estável”

8.2.2.1.3. R.S.

Codes	Items
Day state	“estou bem”
Description of the recent exercises	“parte da vela” “mantra xanti”
Opinion about last sessions	“gosto” “diferente experiências” “gosto mais dos recentes” “mantras” “posso dizer coisas diferentes”
Feelings	“o xanti” (favorito)
Discussion with colleagues	“nunca” “devem ter de gostar”
Discussion with family	“só nas primeiras aulas” “disseram que esta bem”
Practice at home	“não” “tenho outras coisas para fazer” “só na turma”
Feeling after session	“bem” “antes me sentia bem”
Stress and anxiety	“horários” “tenho de chegar a hora”
Utility of the practice	“acho que sim” “descansar um bocadinho” “daqui o dia dia”
Routine difficulties in the center	“muito cedo”
Description of the current class environment	“bem” “estou melhor com eles” “antes eu não conhecia eles tao bem”
Recommendations	“gostamos de ouvir uma música relaxante durante a meditação” “para não ouvir o barulho de carro la fora” “lugar sem barulho”

8.2.2.1.4. T.V.

Codes	Items
Day state	“estou bom”
Description of the last sessions	“costas direitas e agarrar os joelhos” “ooomm shanti”
Description of the recent exercises	“fechar os olhos e também de levantar a voz” “ não acostumo fazer isso”
Opinion about last sessions	“gosto” “parece mais do Yoga”
Feelings	“sinto bem” “a sentir tirar cancro no cerebral para não morrer, e da epilepsia” “desenhos animados”
Discussion with professors	“sim” “não sei”
Discussion with family	“não” “acho que sim, não sei” “a mãe diz me” “não sei”
Not Practice at home	“nunca fiz meditação em casa mais ou menos, eu nunca tive, nunca fiz” “só nas aulas”
Utility of the practice	“ajuda” “a mãe diz me”
Changes on the participant	“acho que eu não vi”

8.2.2.1.5. J.D.

Codes	Items
Day state	“eu to bem, e contigo também?” “sempre (bem-disposto)”
Description of the last sessions	“novas experiências” “muito diferente com as outras”
Description of the recent exercises	“ooooomm” “nova experiência”
Opinion about last sessions	“desde que começamos as novas experiências da meditação, estou sempre a melhorar as minhas perspetivas” “gostei muito”
Feelings	“diferença em mi” “poe mais tranquilo” “mais calmo” “ainda mais com o novo ciclo)” “prefiro fazer o oooooomm” “poe me tranquilo” “ficar bem” “concentrada numa coisa” “poe me bem na hora”
Past health problems	“problemas respiratório” “quando era bebe” “sino” “é tranquilo”
Discussion with colleagues	“não” “comentamos só” “para alguns é positivo” “para outros pode ser negativo” “digo sempre bem”
Discussion with family	“falo com a minha mãe” “não esta interessado na meditação” “não tem tempo para isso” “quando a minha mãe vem aqui”
Not practice at home	“não tenho tempo para isso” “limpezas em casa” “ajudar minha mãe” “a minha vida não esta nada a ser nada fácil”
Hypothetical future home practice	“vou tentar” “se tiver hipótese” “vou tentar, mas eu não prometo nada.” “vou tentar na minha pessoa” “consciência plena”
Stress and anxiety	“muito raramente” “quando tenho uma hora” “hora marcado para ir em algum sitio” “coisas marcadas assim” “isso faz mal a uma pessoa, até ao nosso coração faz mal”
Utility of the practice	“quando nos ficamos stressado” “cabelos brancos”
Problematic relation with colleagues	“não tanto com o F.” (boa relação com a turma) “F. Não esta a respeitar nos” “tem de fazer mais meditação” “precisa de mais concentrar e pensar nele próprio”
Positive changes on the participant	“antes de vir nesse curso” “estava um bocado stressado” “sempre a correr” “agora não”
Objectives for the future	“um dia que começar em trabalhar tenho de me concentrar em que vou fazer e como que vou fazer” “ficar tranquilo, não stressar” “trabalhos que tem muito stress”

8.2.2.1.6. M.M.

Codes	Items
Day state	“Estou bem” (antes de gravar)
Description of the last sessions	“exercícios de respiração” “cantamos os mantras” “bola de luz” “a crescer” “preencher todo o espaço”
Opinion about last sessions	“gosto de imaginar a bola de luz” “deixa-me mais tranquila” “sinto uma grande paz dentro de mi” “deixa nos mais tranquilos” “sinto mais serena” “mais calma”
Feelings	“gosto”
Discussion with colleagues	“não muito” “alguns que gostam e que sentem bem” “outros que não, não gostam muito” “nem se quer tentar fazer”
Discussion with professors	“as vezes falamos” “dizem que algum faz bem e pode nos ajudar no nosso dia dia”
Discussion with family	“com os meus pais” “a minha mãe faz também meditação” “sozinha” “já onze anos” “é igual” “meu pai não faz”
Practice at home	“sim” “as vezes” “a noite antes de me deitar” “faço um bocado de respiração” “exercício da bola de luz”
Stress and anxiety	“sou um bocado ansiosa” “não sei bem, explicar”
Utility of the practice	“acho que sim” “nos ajuda a estar mais calmos e a nos concentrar melhor”
Description of the agitation on the class environment	“as vezes esta um bocado agitado” “fazem um bocadinho de barulho” “tenho dificuldade em concentrar”
Positive evolution of the class environment	“esta um pouco melhor”
Changes on the participant	“estou mais calma” “controlo mais quando estou ansiosa”

8.2.2.1.7. J.Q.

Codes	Items
Day state	“Estou bem”
Description of the last sessions	“lembro-me da respiração, volta ao nariz” “fazer isso com as mãos” “lembro dos “oommmmm”” “também pelo nariz”
Opinion about last sessions	“mudou” “estava mais contraído” “eu acho bem”
Feelings	“bem” “de forma a estar bem” “respirar pelo nariz” “sinto duma forma mais relaxante” “as vezes fico destressado”
Discussion with colleagues	“só alguns” “falo as vezes com o T.V.” “também com a M.M.” “já sei que ela tem problemas mesmo”
Feedbacks about T.V.	“acho que é bom para ele” “tem alguns ruídos, mas pronto é normal, toda gente” “aceito isso” “ainda fala muito sobre isso” “não faz isso para fazer mau, de vez ele faz isso para chamar a atenção” “mas quando ele esta na meditação, se concentra muito”
Discussion with professors	“as vezes falo” “dizem sobre a continuara assim” “Não deram feedbacks”
Discussion with family	“acham bem” “para praticar mais” “(irmã) ainda não tive tempo para praticar ainda” minha irmã, sua opinião, diz que não vale a pena de ligar aos colegas e continuar a fazer o trabalho e aulas” “tem de evitar, enganar as pessoas”
(not ?) Practice at home	“so faço um bocadito” “não faço muitas vezes” “ainda não comprei um tapete”
Feeling after session	“estou tudo bem descontraído”
Description of the agitation in the class	“sinto me um bocado ruido a fazer o barulhar assim” “agora temos colegas que fazem barulho” “parece-me que não deixam-me concentrar”
Positive evolution of class environment	“fica mais calmo” “agora esta mais calmo”
Changes on the participant	“já consegui mudar” “estar mais normal” “faço como os outros colegas, a sair” “as vezes ir com os colegas” “para não evitar ser pior” “já estou mais calmo” “já passou isso”

8.2.2.1.8. V.L.

Codes	Items
Day state	“estou bem” “estava um bocadinho, esta muito nervoso com o F.” “ele quere tudo para ele” “estava a fazer uma apresentação”
Problematic relation with colleagues	“tem de aprender a respirar mais suavemente” “tem de aprender a fazer o som mais baixinho” “para não fazer tao, tao muito alto, o ambiente” (F.D.)
Description of the last sessions	“não tenho muito para dizer porque estou chateado com a vida” “fizemos os mantras” “fiz só algumas mantras”
Feelings	“depende quando tiver à vontade para fazer” “estou pensando nua coisa e a que me faz pensar, não posso fazer mais nada”
No discussion with colleagues	“nunca”
Discussion with family	“falei um bocadinho com a minha mãe” “diz que eu faço” “ele não diz nada” “o que que ela tem de achar? Não tem assim que ela tem de achar”
Feeling after session	“nas aulas, são mesmas complicadas”
Stress and anxiety	“a vida não corre como nos queremos” “espetáculo a porta” “uma cansada” “chateado com as coisas” “estou numa fase e que cai tudo em ti” chega o natal” “toda gente nesta altura é toda estressada” “minha vida foi sempre complicada por coisa disso” “representação na quarta-feira” “não há nada que me relaxa neste momento, porque é muito complicada” “queres estar livre e estar com o pessoal da tua terra, mas não da” “as vezes temos de pensar na vida” “temos de tomar decisões” “reagi bem ou não com a situação” “associações de reixo”
Routines difficulties in the center	“aqui trabalho muito” “trabalhar muito” “ainda fazer mais” “não tens tempo” “quero ir para casa” “quero sair um bocadinho daqui porque eu preciso”
Routine ath home	“não parei em casa” “em casa ainda bem”
Speaking about mother difficulties	“ela ainda” “ela não trabalha” “esta época é um bocadinho complicado para ela” “já perdeu pessoas”
Speaking about the death of family member (father)	“nesta época de festas, pensas no pessoal que já não estas ca contigo” “estas habituada a estas rotina, e não vêm” “se havia pessoas que estive ca sempre, é diferente” “podia ter morrer ca” “morreu for a” “doente la”

	<p>“quando esta ca em Portugal, é diferente” “é o mais difícil” “Angola”</p> <p>“quando chega essas datas (natal, ferias,...), fica mais tristes” “não é stress, é assim” “não é para mi, é mais para a minha mãe” “não é positivo o familiar morrer” “para os seus pais,, o seu marido”</p>
Extra sport practice	“esta andando, tem de ser né?” (swimming pool)
Changes on the class environment	“esta mudando” “muita gente diferente” “dificuldade e comunicação entre os mesmos”
Description of the agitation on the class	“o T., o J., a M., todo mundo diferente e que as vezes faz psshshhiit” “o intervalo é muito stress”
Changes on the participant	“depende dos dias” “quando estou cansado, também não há nada que da”
Continuity of meditation for himself	“se é para fazer” “tenho de fazer” “não há hipótese” “é para todos” “não sou o único a decidir” “não vou dizer nada, há pessoas que gostam disso e pessoas que não” “prefiro continuar”
Opinion of staff members about continuity	“é da equipa ca em baixo” “se acham que não esta produtivo, ia tinha acabado”
Continuity of meditation for the others	“alguns faz bem” “pessoas que deviam fazer todos dias, porque lhe faz bem, o F.” “todos dias” “a tarde da mais jeito” “o F., o T.”
Recommendations	“devia ser mais vezes por semana” “devia ser a tarde” “meia horinha”

8.2.2.2. Family members

8.2.2.2.1. Father of T.V.

Codes	Items
Conversation of the children about meditation	“fala com os primos” “estou a meditar” “boa relação com os primos”
Practice at home of the children	“de vez em quando, faz” “porque esta muito barulho” “as vezes ele fecha os olhos” “estou a meditar”(diz)” “as vezes pratica sim” “uma das coisas mais incríveis, dele” “todos dias, não consigo dizer” “vi ele varias vezes a fazer” “imagino que seja concentração” “fechar os olhos” “olhar para dentro”
Focus difficulties of the children	“tem alguma dificuldade a estar parado” “esta com telemóvel” “dizemos para ele de não estar com o telemóvel” “ele diz que ele esta a meditar”
Benefices of the sessions	“tem funcionado sim” “tem utilizado sim”
Limited feedbacks from the children	“ele não é muito de exprimir” “exprimir as coisas, não”
Opinion of the parent	“meu diretor de serviço pratica Yoga, e então as vezes conversamos um bocadinho sobre isso” “
No Effects on the participant	“acho o comportamento dele tem sido aproximadamente o mesmo” “não tenho notado mais isso ou mais aquilo” “nem mais irritado” “nem menos irritado” “mesma coisa, mais ou menos”
Changes on the routine of the participant those days	“temos de ir no hospital” “ver os avos dele” “esta andando um bocadinho agitado esses últimos tempos” “temos doenças dos avos”
Feedbacks about wednesday	“volta aqui mais tardito” “piscina” “acho ele normal” “não vem mais irritado” “nem menos irritado” “é normal”
Opinion of the participant	“pode ser que sim” “acho que sim” “se ele não gostava, ele dizia”

8.2.2.2.2. Sister of J.Q.

Codes	Items
Conversation with the children about meditation	“ele ainda não me falou” “ultimamente não” “até pensava que ele já não tinha”
Opinion of the parent	“deve ser bons efeitos sim, pelo menos” “ainda não fiz”
Difficulties lifestyle of the parent	“tenho de ir mais logo ao trabalho” “chego mais cansada a casa” “acabo por deitar mais cedo também”
Effects on the participant	“eu notei que ele começou a falar mais” “sobre os problemas dele” “sobre a escola” “começou a falar mais” “desde um mês e meio ou dois para cá” “esta mais bem-disposto” “fala mais”
Changes on the routine of the participant those days	“vamos mudar de casa em breve” “isso não interferiu muito com ele” “ele sabe que depois vamos construir e vai ter o superfície dele na mesma”
no effects observed on Wednesday	“acostuma a estar sempre alinear” “esta sempre da mesma forma” “so quando há uma coisa que lhe chateie” “ainda sempre disposto”
no stress and anxiety these days	“não, não”

8.2.2.2.3. Mother of R.S.

Codes	Items
Conversation with the children about meditation	“não falou muito” “qualquer coisa” “diz que ele está a fazer exercícios com meditação, não sei”
no Practice at home of the children	“do que eu tinha percebido, não”
Opinion of the parent	“pode ser benéficos, sim” “deve ser alguns efeitos, sim” “devem ter benefícios para as pessoas”
Effects on the participant	“ele está assim mais calmo” “já há bastante tempo” “mudou, mudou muito” “mais sociável” “fala mais com as pessoas” “já criou amizades” “já criou amizades na turma si” “agora parece-me que ele já fala mais e já quando encontra as pessoas na rua, ele já cumprimenta”
Positive extraverti effects	“sempre fui uma criança muito fechada” “não falava muito” “as vezes encontrava lá os colegas na rua e só”
No effects observed on Wednesday	“anda normal os dias todos, eu não sabia que fazia na quarta feira” “não estou a ver se ele fica mais calmo a quarta feira ou não” “não faço ideia”
no feedbacks from the participant about the class environment	“não fala muito da escola” “já falou qualquer coisa” “já começou a falar” “ele não fala muito, muito da escola, dos colegas, das aulas”

8.2.2.2.4. *Mother of M.M.*

Codes	Items
Conversation with the children about meditation	“não acostuma falar muito” “no início sim” “agora não tem falado” “quando começou, falava” “ultimamente não” “este ano ainda não falou”
No Practice at home of the children?	“acho que não” “não sei” “nunca lo percebi”
Meditation practice of the parent	“pratico, sim” “nem sempre” “de vez em quando” “duma maneira geral pratico” “concentro-me na respiração” “coisinhas curtas” “tento não pensar em nada” “já praticava também antes” “com a M. ao mesmo tempo não” “em grupo sim, agora assim só com a M., não” “temos um grupo que fazemos meditação” “na altura da lua”
Benefices of the sessions	“acho que lhe faz muito bem” “acho que é ótimo” “acho que é muito positivo” “aumentar o autocontrolo” “é um bocadinho impulsiva” “aprender a respirar” “é positivo” “dar alguma tranquilidade” “focar, se calhar nas coisas positiva da vida, do que mesmo negativas”
Positive effects on Impulsivity of M.	“acho que sim (podia reduzir)” “tem” “quando a coisa lhe dam ansiedade” “fobia social que as vezes tem” “fugir dos espaços” “em alguma situação, esta falta de autocontrolo” “acho que esta melhor” “sim, acho também que sim (melhor por causa da meditação)”
Opinion of the parent	“mantei, acho que é uma coisa boa” “nos ajuda a concentrar nos pelas atividades do dia dia” “nos ajuda a manter a calma” “muito bom” “já tinha esta opinião pronto e continua a ter a mesma opinião”
Effects on the participant	“sim, acho que ela está mais calma”
Changes on the routine of the participant those days	“agora ela está a viver com o pai” “há mais ou menos um mês” “no mesmo prédio” “andar de cima” “eu assino essas coisas que costume ver” “hoje estava com ela”
no effects observed on Wednesday	“não sei, não consigo dizer”
Feedbacks from the participant about the class environment	“no iniciou falou” “diz que alguns colegas faziam um bocadinho d barulho durante as sessões” “nesta situação de alguns colegas a não gostar de fazer meditação e perturbarem um bocadinho”

8.2.2.2.5. *Mother of J.D.*

Codes	Items
Conversation with the children about meditation	“ele fala” “ele uso fala muito sobre a meditação” “mesmo as vezes diz-me “eu preciso de estar no meu quarto, vou me-di-tar”
Practice at home of the children	“quando ele se sente, mais cansado” “com mais stress” “retira-se um pouco” “poe uma música calma de jazz” “com os olhos fechados” “durante algum tempo e faz lhe muito bem” “se ele faz meditação, por acaso não lhe perguntei” “pratica [...] ele teve muitos testes” “olhos fechados” “ponha uma musica baixinha” “muito calmo, relaxante” “musicas relaxante” “ovou mar” “ponho musica assim relacionadas para fazer o relaxamento” “ele não faz todos os dias” “agora esta deitada no sofá a ouvir uma musica muito calma” “fones” “muito alegre” “a sua propria meditação” “é o relaxamento dele” “outras vezes vai para o quarto”
Practice of the parent	“quando estou assim mais stressada, mais cansada, sinto bem, os olhos fechados” “ponho tudo em silencio” “ponho uma luz mais branda” “respiro fundo e ai expirou devagarinho e faço este tipo de exercício” “faço um exercício ao nível respiratório” “focalizo-me num sitio que eu gostava de estar” “pronto e estou assim durante bastante tempo e acabou por adormecer” “acabo adormecer” “nunca fiz meditação” “nunca fiz meditação” “quem me explicou foi você, foi o J.” “de vez em quando” “pratico este tipo de exercícios, que me tem feito muito bem” “ele também me ensinou a mi” “prima que faz meditação, yoga, reiki” “ambiente muito calmo, não estou a fazer meditação, mas estou a me sentir tranquila”
Effects on the participant	“esta mais calmo quando ele está mais stressado” “fica mais tranquilo” “foi muito bom mesmo, que vocês aprender” “agora ainda bastante calmo” “muito mais relaxada”
Benefices of the sessions	“consegue controlar bem as suas ansiedades o seu stress” “através da prática que vocês ensinaram” “uma grande valia” “foi muito bom para ele controlar a sua autoestima”
Opinion of the parent	“foi muito bom” vocês ter ensinado esta disciplina” “eu gostei” “pelo menos J.” “para mi também foi bom, porque aprendi” “muito bom” “toda gente

	devia aprender” “nos todos devíamos fazer” “para nos tranquilizar” “para nos relaxamos” “é positivo” “muito bom mesmo, muito bom”
Effects observed on wednesday?	“não sabia” “ele ontem (4a feira) estava muito bem disposto” “calminho” “muito alegre” “fez-me o jantar” “não sabia que ele fazia ainda meditação, pronto, ele vinha tao calmo e tao bem-disposto”
Stress and anxiety of the participants these days	“ele andava um bocado cansado e também estava um bocado stressado (testes) “muitas vezes saiu pelo quarto” “teve muitos testes” “esses miúdos que tem esses problemas é um bocadinho difícil” “as vezes ficam baralhado” “ficam um bocado stressado” “”pelo menos o J.” “não estão habituado a fazer tantos testes” “o curso esta a terminar e eles tem de acelerar mais” “há módulos ou cadeiras que tem de terminar” “teve de estudar mais” “necessita mais disso” “quando acaba de estar isolado”

8.2.2.2.6. *Mother of V.L.*

Codes	Items
Conversation with the children about meditation	“não costuma” “sobre a meditação, nunca me falou, ainda não sabia que ele fazia” “não fala sobre nada” “é capaz de falar mais com as irmãs” “a minha filha mais velha”
no Practice at home of the children?	“não faço ideia, não sei”
Relation between the parent and the children	“filha mais velha da idade da mãe, irmã do V.” “o V. vê se calhar nela, ele gosta dela como mãe” “não me diz que não me ia trocar para outra” “mas ele tem muita dificuldade em exprimir para mi” “foi sempre assim” “ele não tem pessoas de carinho” “não percebo porque” “aceitei e mais nada” “capaz de falar mais com as irmãs” “comigo não, não tanto” “não sei se é por a diferença de idade” “eu podia ser a avo dele”
Benefices of the sessions	“que se continua” “acho que foi bom para ele” “pelo menos foi uma boa, foi uma experiência”
Opinion of the parent	“não mudou (opinion)” “nunca pensei nisso a serio” “não sei como se faz” “não sei o que se faz” “para mi é desconhecido” “não sei” “a quem diga que é muito bom” “penso que faz bem, pelo menos na ansiedade” “acho que foi muito bom para ele e para a associação, e possivelmente a meditação, eu sei que ele faz, não sei, também ajudou um bocado”
Anxiety of the parent	“eu também estou a haver muita ansiedade e muito... em relação ao futuro”
Positive effects on the participant	“realmente, acho que ele esta numa fase muito boa” “menos ansiedade, sim” “não alguns tempo para ca” “agora ele estabilizou muito na associação” “mais sereno” “mais calmo”
Positive effects on his family relations	“em casa, ele agosta-se muito com os sobrinhos” “não” “ele não quiere invasões” “as vezes reage muito mau” “ultimamente não tanto” “fizemos dois almoços da família aqui em casa e correu tudo bem” “mais pacienci” “leva as coisas, mais ... doutra maneira”
no Changes on the routine of the participant those days	“não, não rotina dele é sempre a mesma”

Effects observed on Wednesday?	“ele ontem (4ª feira) vinha muito bem”
Feedbacks from the participant about class environment	“tem falado” “não fala muito bem” “não os que falam muito, a outros menos” “ultimamente não tem falado tanto”
Stress and anxiety these days, of the participant	“para ele é difícil tomar decisões”

8.2.2.2.7. *Father of F.D.*

Codes	Items
Conversation with the children about meditation	“o miúdo já me falou qualquer coisa” “o F. fala”, “fala muito sobre isso” “ele gosta” “fala muito da meditação e gosta, gosta imenso”
Activities of the children	“mais no internet” “computador” “playstation”
Practice at home of the children	“no duche” “no banheiro” “poe um bocadinho de água “ele diz que está a fazer meditação”
Benefices of the sessions	“tem”
no more Gymnastic at home	“já não temos” “já não fizemos” “há mais de dois meses tal vez” “faz bicicleta de vez em quando” “ele até começou a dizer que ele tinha uma dor no peito” “fui ao medico”, “medico diz que em princípio não era nada” “pode ser por causa do crescimento” “vamos lá ver quando ele quiser” “ele agora não tem ginástica”
Opinion of the children	“ele adora andar na meditação” “gosta muito” “acredito que ele gosta muito”
Opinion of the parent	“penso que faz bem” “ele gosta” “faz lhe bem” “devia continuar na APDA” “integrado isso no quadramento” “penso que isso lhe faz bem”
No special changes on the participant	“tem os problemas normal dele” “normalmente ele é um rapaz meio, um rapaz tranquilo” “mais ou menos a mesma coisa que era” “ele está assim o nosso menino” “não há nada que falta que eu vejo” “esta num outro meio que ele estava mais”
Changes on the routine of the participant those days	“agora com o tempo como esta, com o tempo mau, chuva e assim, são dias terríveis para ele” “não dorme muito bem a noite” “ele dorme quase nada” “bocado sério” “não consigo perceber se ele tem medo” “televisão com o máximo de som [...] para não ouvir o vento e a chuva”
Affinity of the participant for meditation	“a outras coisas que ele gosta também, mas a meditação é uma coisa que lhe faz bem”

8.2.3.3. Staff members

8.2.3.3.1. Psychologist/Technical director

Codes	Items
Conversations with the participants about meditation	“nas aulas” “aqueles que eles dizem é que quando eles são ansiosos, que aquele que eles dizem que vão meditar” “acostumado a falar isso”
Observation of the teacher about meditation routine evolution	“é algo que eles têm recorrido com a frequência no dia dia deles, isso sim” “tem funcionando como uma ferramenta para eles” “uma ferramenta” “importante para o dia dia deles” “contribui para que eles estabilizam” “sempre sobretudo para que eles têm uma ferramenta própria” “para usar quando eles necessitam” “sem que eles têm a recorrer a outras pessoas” “eles próprios já esta esta ferramenta que podem utilizar em qualquer situação que eles precisam” “a meditação já faz parte do dia dia deles” “é muito positivo”
How T. use meditation in his routine	“o T. é o que fala com muito frequência (sobre meditação)” “por vezes durante as sessões faz isso” “nem sempre da forma educada” “as vezes usa a meditação para dormir” “é um dos jovens que com muita frequência nesses dias recorre a meditação”
F. meditation perception	“o F. também acostuma a falar isso” “o F. também (recorre a meditação)”
Evolution of the class environment	“houve uma mudança” “portanto a saída de algum elemento” “contribui sem duvida para que a turma estabiliza assim” “não sei se isso esta a ver com a meditação” “de certeza absoluta que a saída dum elemento contribui para o estável atual das coisas em relação a turma” “são muito mais tranquilos” “espírito do grupo, mais desenvolvido sim, sem duvida”
No observations on Wednesday after the session	“no imediato, nos não notamos uma diferença, isso não” “mante-se igual, sim”
Positive evolution of participants behavior	“algumas estereotipas que eles apresentam que também temos vindo a trabalhar com eles” “notamos uma redução desse comportamento” “tirando isso, o grupo está muito mais entrosado entre eles”
Positive stabilization of stress and anxiety	“sim” nesses dias [...] nada assim muito significado” “não ouve nenhum que esta manifestando isso de forma mais intensa esses últimos dias”

Stress of one participant, V.	“O V. vai sempre dizer que tem”, “tem sempre stress” “é normal diz ele” “ele tem sempre uma coisa que lhe preocupa” “isso está recorrente na história dele” “já é muito antigo” “desde o início” “agora está menos intenso”, “mas sim, continuar a acontecer”
D. feedbacks	“tem andando muito melhor do que na fase inicial quando ele viu para aqui” “muito mais calmo” “muito mais controlado” “em termos comportamentais” “notamos uma redução dos comportamentos de ansiedade” “temos notado muitas alterações nele” “ele é dos jovens que temos notado mais alterações sem dúvida” “pelo lado positivo” “sem dúvida alguma”

8.2.3.3.2. Teacher A.

Codes	Items
Contact with the participants	“entre 6,9 horas, depende sempre das semanas” “passo bastante tempo com eles” “quanto mais eles estejam nos corredores” “estão sempre em contacto comigo”
First practice of the teacher during the centre session	“primeira vez foi aqui” “sensação de alívio, e de calma que se tem” “muito prazerosos” “faz me sentir bem com o nosso próprio” “momento de encontro”
Observation of the teacher of positive evolutions	“muito mais ativos” “são mais participativos” “desde março, abril” “tenho notado muitas evoluções ao longo do tempo” “estão muito mais pacíficos” “muito mais calmos” “desde maio, junho” “acredito que a meditação realmente tinham atrevido alguma calma” “e saber estar, que é muito importante” “saber estar na sala da aula” “não sentar de lado” “falar se eu levanto o dedo” “curiosamente, e nos momentos de pausa, por exemplo eles estão a fazer um exercício” “ao longo do dia, ao longo do tempo, nota se realmente efeitos, eles mudaram muitos as suas atitudes,” “muita evolução, muito interessante, muito interessante” “saber estar” “até mesmo ao nível da aprendizagem” “muito mais concentrados nas coisas” efetivamente os resultados estão a vista, eu noto diferenças” “eu próprio eu noto diferenças neles, hmmm efetivamente, mesmo que muito deles não gostam o que que façam até contra dialhos, o que é certo é que está a fazer muito bem!” “eles melhoraram muito” ”o sentido de responsabilidade deles, também esta maio” “calminho” “serenos” ”aprestar atenção” ”calma” ”menos stress e ansiedade” “não esta intencionado” ”já o fazem como um habito” “comportamento dele que melhorou bastante”
Opinion of the teacher	“é muito importante” “como estar numa sala de aula” “o saber esperar calmamente” ”noto que eles têm evoluído muito, muito neste aspeto” “acho que é muito importante” “tudo que seja alternativo, daquele que nos fazemos em nosso dia dia” “é sempre bom” “fazemos varias coisas de forma diferente” ”tudo que seja alternativo, daquele que nos fazemos em nosso dia dia” “é sempre bom, porque, fazemos varias coisas de forma diferente” ‘trabalha muito ao nosso foco” ”a própria meditação,

	que seja uma vez por semana, seja um pouco mais regularmente ou até muito vez em quando, eu acho que é muito, muito, muito positivo”
Positive evolution of T.V.	“o T.V. que faz muitos ruídos” “diminuíram imenso” “apesar dali a continuar a fazer, mas diminuíram” “esta muito mais focado” “mesmo ao nível da concentração” “noto ele muito mais concentrados” “tem um foco, muito, muito melhor” “sinto que ele está muito mais focado” “principalmente” “o T.V., vejo muita evolução no T.V.”
Positive evolution of F.D.	“esta muito mais focado” “saber estar” “acho que com a meditação nos conseguimos muito trabalhar o saber estar”
Nonappreciation of meditation for T.M.	“o T.M. não gosta nada de meditação” “muito intransigente” “esta a ver com a mentalidade” “o T.M. é aquele pessoalmente ele não aprecia”
Perception of meditation for V.	“também é muito difícil (with meditation)” “mas pois, colabora” “até colabora” “é para chamar a atenção” “não que ele não gosta efetivamente” “cria sempre um problema” “sempre quando há uma coisa nova” “mais, é dele, é dele”
Observation of the teacher about meditation routine evolution	(quando um termine um exercício mais rápido do que os outros) “a quem começa a fazer a meditação quando esta a espera” “por exemplo o F., o T.” “a M., o D. também” “principalmente estes quatro” “principalmente o T.” “o T. faz muito meditação” “então vou fazer um pouco de meditação” “é um habito” “é um habito efetivamente” “criaram isso como um habito” “T. Fica mesmo..., e fecha os olhos, fica, coloca as mãos para cima, fica ali, com uma serenidade e com uma calma” “muito tranquilo e depois a evolução dele ao longo do tempo, é muito bom, é muito bom”
Observations on Wednesday after the session	“claro que sim” “é sempre um dia diferente” numa quarta e vocês chegaram” “estava a começar a dar a aula e eles “não, não, não, não, não! Não pode começar a aula porque nos temos a meditação”
Positive evolution of D.	“aquele que eu noto é que ele tem estado extremamente focado” “muito focado” “sempre foi um aluno focado” “mas agora ainda mais” “muito mais calmo”

8.2.4. Codes and Items T.M.

8.2.4.1. First cycle

Codes	Items
No stress, no anxiety	“não, não” “perdi a carteira, mas eu não fiquei estressado assim, estava calmo” “estou tranquilo”
Opinion about Meditation	“acho é interessante, não é muito meu gênero, mas é interessante” “não sou muito disso” “gosto mais das coisas radicais”
Conversation with colleagues about the practice	“quando saímos da meditação” “nada assim especial”
Colleagues opinion	“gostaram”
Personal feeling during practice	“senti um bocadinho mais calmo” “bocadinho mais relaxado” “sinto-me um bocadinho mais calmo quando faço isso”
Description of the practice	“som do ôômmmmmm” “aquele que gostei mais das sessões” “sessão com os sinos” “para relaxar um bocado” “respirar fundo” “controlar a respiração para não cansarmos muito” “respirar calmo e isso ajudou-me, essa parte eu gostei”
Extra activities	“bicicleta” “vtt” “ginásio”
Meditation associated to extra-activity	“quando vou para descer, tentar calmar para concentrar” “aprendi esta tecnica, vou, expiro fundo e vou”
No personal effects	“acho nada, esta, ta igual”
No practice at home	“não, não”
Discussion with family	“só digo que pratiquei meditação, mas passou, andou”
Discussion with staff member	“falamos um dia ao outro” “comentamos sobre a meditação” “também dizem que é muito bom fazer”
Utility of the practice	“aquelas pessoas que estão mais estressadas com o trabalho ou assim” “estão sempre cansadas, também podem um bocado relaxarem” “acho que algumas pessoas reagem bem a meditação”

8.2.4.2. Second cycle

Codes	Items
Day state	“estou bem”
No practice at home	“não, a meditação não é para mi”
Benefices for colleagues	“alguns ajudam, sim, nota-se a diferença” “o F., por exemplo a M., o V. estão assim um bocadinho mais calma por causa da meditação” “ajuda mais para eles a ficar mais calmo” “antes estavam muito stressados nas aulas e agora estão mais calmos, estão mais compreensivos, compreendem melhor os colegas” “acho que estão melhor desta parte”
Effects from Wednesday	“eu acho que estão melhor a partir de quarta feira para feira para frente” “quarta feira e para frente estão bem”
Perturbation in the class	“estão assim muito stressados, as vezes estão descordamos com os outros” “alguns passam assim na marmita” “mais agitados” “depois de quarta feira para frente não tanto”
Stress of some participants	“ela assa de sangue um bocado” “o V. também, mas o V. nem tanto, mas é mais a M.”
No Meditation utility for himself comparing to others	“eu” “acho mais ninguém” “acho todos precisam, agora que eu não, não apreço muito a meditação” “não preciso, já consigo controlar o stress, os outros, não, os outros têm mais problemas e não conseguem controlar, mas eu acho que com as minhas capacidades eu consigo controlar mais isso”
Utility for the colleagues	“sim, sim, sim”
Conversation with colleagues about the practice	“já comentei, perguntei se eles fazem meditação, se eles estão a gostar, alguns estão a gostar, alguns fazem em casa, outros não fazem” “agora não sei se eles dizem só para dizer ou se eles fazem mesmo, se estão a mentir” “é difícil saber se eles estão a fazer ou não”
Problematic of one participant behaviour in the class	“esta a correr bem, hoje o F. que esta um bocadinho agitado” “esta a falar muito” “quando o F. não esta na aula, o ambiente está sempre melhor” “o F. é muito agitado, fala muito” “esta as vezes baralhadas” “eu acho que é ele que precisa mais, muito mais da meditação”
Current environment of the class	“bastante bem” “tirando com a situação do F. a turma esta bem”

8.3. Fieldnotes Highlights

Those are representing the notes that were made after each session, we revealed the different highlights that were the most interesting. What is wrote in Portuguese represent what the participants said by themselves, what is wrote in English, the major part of the items, are the notes that I wrote. Those notes can't be exhaustive about what happened during the sessions, but at least they allow to give an idea of the evolution of the group, each participant, even myself feelings, all long of the two cycles. The sessions at the end of the first cycle and at the end of the second cycle have less notes, because I was more focus on doing the individual interviews in those moments.

On the second cycle, will be added more observations from another group of participants of the association who started practicing meditation. Even if we have not used the same rigorous protocols, no interviews, irregular sessions, this will allow us to make a small comparison with our study group. I personally realised due to this comparison, the improvement on the meditative technics of our study group and how this practice became "natural" and a "routine".

8.3.1. Participant group from the study

8.3.1.1. First cycle

May 8 th Wednesday morning	
Codes	Items
Setting and context	"professor do first session" "introduction" "questions" "practice background"
Processes	"phone alarm at 9h28 (T.V)" "turn off the video game (T.V.)"
Strategies	"diiiiing instrument" "meditation image"
Perspective held by participants	F.D: "ôôômmmmmmmm" "fiquei relaxado" "senti a luz", "com meditação todos os sonhos podem se realizar" "posso mover o rio até aqui?" (begun confuse after analogy with the river)
	J.Q: "pode ser com música?"
	J.D: "muito mais tranquilo" "question about buddhism" "question about flow"
	T.M.: "estou na mesma" (feedback after session) "todas as quartas feiras?"
Activities, observation of the participants	V.L: "move position" "laugh" "move in his chair" "question about hypnose" (showing the instrument)
	P.R: "biting his nails" "stress"
	M.M: "said that she practiced"

May 15th, Wednesday morning	
Codes	Items
Setting and context	"classroom" "professor do session" "diapason"
Processes	"exercises well done" "except three in the class background"
Strategies	"image"
Perspective held by participants	F.D: "ôôômmmmmmmmmm"
Activities, observation of the participants	F.D: "speaking a lot"
	M.M: "really implicated"
	P.R: "biting nails" "bad position" "watching others" "background of the classroom" V.L: "really interested" "deep" "focus" "usually in movements" (I know him from 1y)
Relationship and social structure	P.R. + T.M. + J.D: "laughing" "not focus" Group: "laugh when F.D do ôôômmmmmm"

May 22nd, Wednesday morning Natation competition	
Codes	Items
Setting and context	"swimming pool" "competition" "three participants of our sample"
Processes	"load music" "reggaeton" "different round"
Strategies	"meditation in bathroom with the three" "meditation in public with J.Q." "straight" "eyes closed" "breathing deeply" "focus in breathing"
Perspective held by participants	J.Q: "estou com medo, ansioso de voltar la, nadar" (before 2 nd meditation) "obrigado" (after 2 nd meditation)
Activities, observation of the participants	F.D., J.Q., V.L.: "deep in the practice" "meditated fast" "eyes closed" "calm" "especially F.D."
	J.Q: After his first round came to sit close to me: "stressed" "lost his glasses" "lost his hat" "during the diving "I asked him to be straight, keep his eyes closed, breathing deeply, just focusing on that, nothing else: "did the exercise well" "more focus" "relax" "start cheering for colleagues" "waiting for his second round"

May 29th, Wednesday morning

Codes	Items
Setting and context	"classroom"
Activities, observation of the participants	V.L.: "late" "sweating" "going and coming back to organize his stuff" "sit down just in front of me" "get used fast" "sit in front of me" "fast in the right position" "goof attitude" F.D.: "even more late" "get fast into the exercise" P.R.: "not leaving his phone" "playing video game" "don't want to start the session" "crises" "hit the table" "isolate himself on the balcony" "hitting with a stick on the iron of the balcony"
Relationship and social structure	T.M. + J.D.: "they unfocused V.L." "V.L. open his eyes and look at them laughing" Group: "everyone is doing very well the exercise of the lightly ball" "except T.M. and J.D." "watch each other" "laughing" "the whole of the group is very focus"

June 5th
Wednesday Afternoon

Codes	Items
Setting and context	"group had another activity in the morning" "afternoon session"
Processes	"some tension in the room" "little fight between P.R. and V.L." "session harder than usually" "professor told me was harder for him" "needed more patience than usually" "was harder for me also" "lot of movements in the classroom background"
Activities, observation of the participants	T.V.: "really excited" "moving a lot on his chair" V.L.: "with a lot of tension all long of the session" "upset" "altercation with P.D." "about Portfolio" "moving a lot" "stress" F.D.: "as always" P.R.: "sit in a bad position" "relatively calm" "sneered"
Relationship and social structure	T.M. + J.D.: "more focus than usually" "sneering a bit during the ôôômmmm" Group: "a bit unfocussed" "10 minutes were necessary to have a bit of silence"

June 11th
Tuesday Morning

Codes	Items
Setting and context	“Tuesday” “participants surprised that the session was on Tuesday” “change of routine way easier compared to las week (afternoon session)”
Processes	“well done” “participants are in a kind of routine” “exercises are repetitive” “they start to enter in a meditation state faster”
Activities, observation of the participants	V.L: “small tension at the beginning” “looking for his images” P.R.: “doing efforts”
Relationship and social structure	T.M. + J.D: “more and more focus all long of the sessions”

June 19th
Wednesday Morning

Codes	Items
Setting and context	“classroom”
Processes	“start speaking about interviews”
Strategies	“routine”
Perspective held by participants	“asking about the summer”
Activities, observation of the participants	“group focus in general”

The 26th June was the last session that I was present. I didn't participate to it because I started doing the interviews on this day with the different participants of the study.

The professor went back to the centre three more times before the summer break and the second cycle.

8.4.1.2. Second cycle

September 18th Wednesday Morning	
Codes	Items
Setting and context	"classroom" P.R.: "not here" "interned"
Processes	"participants are in a routine practice" "relatively calm" "no more laugh in exercises like mantras"
Activities, observation of the participants	T.V.: "lot of tics" "couldn't relax in this first session"

September 25th Wednesday Morning	
Codes	Items
Processes	"group is participating a lot" "exercises well done" "personally, really satisfied" "sense to this work"
Activities, observation of the participants	T.V.: "get relax" "tics stopped" "asked question about epilepsy during debriefing"

October 2nd Wednesday Morning	
Codes	Items
Setting and context	"professor in UK" "i did the session"
Strategies	"used a candle" "exercise of 2-8-4"
Perspective held by participants	V.L.: "falta as piadas do professor"
Activities, observation of the participants	T.V.: "get relaxed" D.S.: "like a lot the exercise of 2-8-4"

October 9th Wednesday Morning	
Codes	Items
Setting and context	"professor came back from England"
Processes	"difficult session"
Strategies	"exercise of the candle"
Activities, observation of the participants	T.V.: "could not relax" V.L.: "sit in the floor during the candle exercise"

October 23rd
Wednesday morning

Codes	Items
Setting and context	"mantras are becoming a habit" "participants are used to it and like it" "possible to try other mantras at every session" "F.D. asked to do it again at the end of the session"
Activities, observation of the participants	P.R.: "came back from interned hospital" "full of medicine" "calm" "under medicine" "not straight in his chair" "relax but not because of meditation" T.V.: "no do all mantras" "but really calm during it" "stop ruminations"" stop moving" "his face his calm"

November 6th
Wednesday morning

Codes	Items
Setting and context	"professor a bit late" "I start the session" "participants are speaking a lot to me" "agitation" "professor arrive" "session continuer more calmly"
Processes	"participants more and more used to mantras"
Relationship and social structure	M.M.: "stand up" "leave the room running" "other participants not surprised"

November 13th
Wednesday morning

Codes	Items
Setting and context	"professor do the whole session" "participants happy that we arrived"
Activities, observation of the participants	T.V.: "calmer during mantras" "if mantras are too long, start his tics again" V.L.: "ask to the teacher to leave alone, to let us cosy" "satisfied that we arrived" D.S.: "said that he meditated in the train" "yesterday" "problem in the train"
Relationship and social structure	"group calm and focus"

November 20th
Wednesday morning

Codes	Items
Setting and context	"I did the session" "quite difficult" "participants didn't get why I was doing the session"
Processes	"most part of participants were focus" "mantra routine" "half of the group were following the 2-8-4 exercise", "Interesting session", "participants did follow really well the mantras"
Activities, observation of the participants	T.V: "did follow very well the mantras until the half of the session" V.L: "V.L. the most confuse one that I was doing the session" "looking on his back to check the professor didn't leave, all long of the session" "organizing his stuff a lot of time" F.D: "happy to see us" "really like mantras" "started to be e bit "too much" on his voice with the mantras" D.S.: "D.S. was the most implicated one" "also on the 2-8-4 exercise" "asking questions" "saying that was practicing at home" M.M. "said that she was practicing at home as well"
Relationship and social structure	"load F.D. mantras started to perturbate T.V." "started his tics again"

November 27th
Wednesday morning

Codes	Items
Setting and context	"we speak a lot"
Processes	"participants happy that we are coming" "group is focus" "mantras oommmm, xanti and maaaa are well done and appropriated" "new mantra, oommm nama bagavata" "work well"
Strategies	"professor stop the discussion with the diiiiiing" "everyone become quiet" "really impressive"
Perspective held by participants	F.D: "ja estava a meditar (when we arrived)"
Activities, observation of the participants	T.V: "relatively calm" V.L: "the one who resist the more, as the professor said" "calm" "but keep open eyes" "sometimes organise his stuff" F.D: "asked to learn new mantra" D.S.: "one of the most focus"

December 3rd
Wednesday morning

Codes	Items
Setting and context	"I do the session", "no-one is surprised", "I use the diiiiiing to give the rhythm", "I start to find my own style"
Processes	"all the group is focus", "good session", "we are really in a routine mode"
Activities, observation of the participants	T.V.: "really relax" V.L: "really calm" "but resist by keeping the eyes open"

December 11th
Wednesday morning

Codes	Items
Processes	"participants focus" "good session" "well done"
Activities, observation of the participants	T.V: "hard for T.V. to be focus for a long time" "lot of ruminations" V.L: "participating a lot at the oral" F.D: "participating a lot at the oral"

18th December
Wednesday morning

Codes	Items
Atmosphere in the class	"discussions" "thematic of holydays" "who go where" "will we continue the meditation"
Session conclusion	"routine"

15th January
Wednesday morning

Codes	Items
Atmosphere in the class	"wishing happy new year" "holidays feedbacks"
Group observation	"came back fast to the routine" "no difference with before the holydays"
Session conclusion	"routine"
Mantras	"mantras perfect"

January 22nd
Wednesday morning

Codes	Items
Atmosphere in the class	"last session for me" "saying goodbye" "professor will stay a bit" "I will be back"
Session conclusion	"routine"
Mantras	"routine"

8.4.2. Second group/Comparative/Control group?

From the 23rd of October we started doing some session with a second group in the same institution, right after the session than with our participants, on the same day. It was the opportunity to practice more. But also, to compare with our 1st group, and see their evolution. The population of each group is similar, the number of people in the 2nd group is just more important, around 12. I know all the peoples of this second group, except 2, because I already did internship with them last year.

October 23rd, Wednesday morning	
Codes	Items
Setting and context	First session with this group. Glad to see me. The teacher practiced once Meditation with them. We speak a bit about it. I lead the session.
Processes	Exercise of "Bola Dourada" to start. Then after debriefed the first one, we did a Mantra exercise, the "ôôômmmmm"
Strategies	To explain the practice, I spoke Music and how it could help one of the participants who is a musician also and feel stress before a concert.
Perspective held by participants	Participants liked the exercise.
Activities, observation of the participants	All look calm and relax. Two said that they started being sleepy. During the mantra exercises, some started to laugh.
Relationship and social structure	Most part of them are asking questions to the Professor about his life, travels, is the first time that they meet him.

November 13rd

Codes	Items
Setting and context	Second session. Different place. Last floor of the centre. Disposition in circle. Professor leaded the session.
Processes	Mantras were done with the teacher, better than last time, at the end of the session not a lot. They didn't laugh
Strategies	The teacher was speaking load to ask everyone to join the mantras. Not sure that this strategy was necessary. If someone don't want to participate, they don't need to. Professor brought the images; they were focus on it.
Activities, observation of the participants	Participants were focus. Asked a lot of questions to the professor and me. M....a was glad that I asked about her concert, it was good, she felt well.

November 20th

Codes	Items
Setting and context	I did the session.
Processes	We need to keep working on the mantra "ôôômmmmmm" because the participants of this group are not synchronized and not in rhythm. Exercise of bola dourada is working well.
Activities, observation of the participants	Group start to understand the mantras, but for some it still difficult. The group is also not synchronized when they do it. No one laughed during the mantra this time.
Relationship and social structure	Some were perturbing a bit, by going to toilet, eating, speaking a lot. One was really not in the rhythm with the others during the mantras.

December 3rd

Codes	Items
Setting and context	Small group today, some are missing. Doing package of Christmas chocolates before we start the session. Professor is doing the session.
Processes	Mantras are done well.
Activities, observation of the participants	Group is very calm, relax. M...A is speaking a lot. C.....S is speaking about football.
Relationship and social structure	The interactions between us and the participants are friendlies.

December 11th

Codes	Items
Setting and context	I am leading the session because the Professor needed to leave. Group in a reduced number again.
Processes	Taking the advantage to use new exercises, like the one with the candle, it is going very well.
Activities, observation of the participants	There are good feedbacks. The group look a bit tired this day.

December 18th

Codes	Items
Setting and context	With the professor and me.
Activities, observation of the participants	Questions about holydays. Where do we go, etc... Discussion similar than with our initial group. Participants well focus, but mantras are harder than with the first one. Also, some they are sleepy during the practice, which is not the case of the 1 st group anymore.

January 22nd

Codes	Items
Setting and context	Last session.
Processes	We do the session has usual. A lot of conversations at the end.
Activities, observation of the participants	Observations are similar than last time. Compared to the first group, they are less synchronized during mantras exercises. Also, some still have bad posture and become very sleepy during the session.
Relationship and social structure	Participants are asking where I am going. Questions about Slovenia. C.....s asked me to bring him a tee-shirt from the club of Maribor.
