

THE EMOTIONAL INTELLIGENCE CASCADING MODEL APPLIED TO ANDRAGOGIC TRAINING STRATEGIES TOWARDS THE PREVENTION OF VAC (VIOLENCE AGAINST CHILDREN)

ABSTRACT

Violence Against Children (VAC) has been proven to be prevalent in many European societies. With the concern to define effective preventive training for parents, caretakers, and trainers; the Erasmus+ KA2 Project DEPCIP (Digitized Education of Parents for Children Protection, 2019-1-TR01-K204-077577), has developed a training for parents and trainers based on Emotional intelligence (EI). Such training was necessarily taking into account the promotion of children's rights and the overall concept of positive parenting in order to contribute to the prevention of violence against children in the five partner countries: Turkey (leading partner), Greece, Italy, Lithuania, and Spain.

The initial stages of research involved a literature review aiming to narrow down definitions of the phenomenon and their cultural biases, and the training practices prevalent in each partner country were described. Moreover, a survey to 100 parents and an in-depth interview to 12 parents per country took place. Surveys and interviews aimed to showcase prevalent violent parental discipline strategies and related attitudes and to suggest methodologies aiming to prevent it by means of parental / care providers emotional education on prevention of VAC (Violence Against Children).

The survey and in-depth interviews proved:

- a. The prevalence of the phenomenon (see below) as reported by parents.
- b. A definite cultural bias/ filter as to what violent discipline involves.
- c. Parents' demand for training in emotion self-management, conflict management and – broadly speaking – of EI (Emotional Intelligence).

A curriculum was designed (after adequate needs analysis) and a coherent training methodology design for trainers and parents crystalized into a programme design. Such training framework was to be disseminated in each country by local cascading methodology.

Existing and documented do's and don'ts were described by means of a specific Training of Trainers' programme (TOT). This TOT was designed on the basis of the EI Cascading Model of Salovey, Mayer & Caruso, (1997) by M&M Profuture Training based in Catalonia (Spain). It is a fact that EI is widely known and most teachers, teacher trainers, and trainers of trainers

have had exposure to it. Yet, a systemic weakness remains about how not just designing structured and academically sound training programs; but to somehow ensure predictable outcomes.

The theoretical framework chosen is based on research-tested items that can foresee certain types of high self-management performing trainers and enhance behavior modification concurrent with high verbal expression capacity for example. In coherence with this model, the training design involved a journey from emotion perception to emotion understanding, to emotion regulation, from which parents and caretakers alike are expected to be influenced in order to prevent VAC. In order to ensure training results self-referential ("I-based") and dialogic (cooperative learning based on dialogue) learning techniques.

This article wants to document variables that are known to positively influence such a training as the one that took place in Barcelona (October 2020) designed in a Cascading Model cascading success in terms of awareness, influence and well-being and if nothing else, to suggest a path to be tested by further diachronic research.

KEY TERMS

Violence against children children's rights, violent and non-violent parenting styles, El Cascading Model, 4-Branch Model, Self-referential learning, dialogic learning.

RESEARCH RESULTS, PREVALENCE OF VAC, AND EXPECTED PROJECT IMPACT

In Spain, data stemming from 100 survey questionnaires and 12 in-depth interviews to parents of children within compulsory school age groups- (6 to 16) and below, revealed the prevalence of physical punishment aiming to tackle (mismanage) situations of conflict in daily family life. The interviews were performed during the first COVID-19 lockdown in April-May 2020.

Lockdown & pandemic features in Spain: In Spain, children and families were in lockdown from 16 March to 26 April. This meant 8.3 million children locked down for 43 days. According to our data, parents informed in a timely manner (70 % did so at the onset of the pandemic) their offspring about what the situation was and why they would not be allowed to go to outside. This allowed kids to be more resilient, as suggested by the relative lack of lockdown-specific conflict situations according to our data. On 26 April, lockdown was gradually eased, with accompanied children being allowed to leave home for one hour within 1 km distance from home.

Our findings:

- All parents rejected using “violent disciplining methods”; yet the definitions of what “violence” was, were diverse. For some, (40%) spanking, threatening, and shouting were not violent methods. Deprivation from digital devices was also much resorted to as a disciplining method (42.9%).
- Corporal punishment is still prevalent, yet parents presented it as an “occasional”/ “one time” event (10.9%).
- There were no specific situations linked to COVID lockdown, as said, in which parents indicated to have lost their temper; but already existing ones which became aggravated (screen & ICT use in the first place, homework and school issues, and chores and hygiene in the third place).
- In-depth interviews indicated that 33.3 % of parents do not punish but rather explain things, dialogue, and allow children time to calm down.

It was expected that interviews' results were going to be consistent with new situations generated by the Pandemic's lockdown that may have resulted in heightened sequences of conflict related to a set of four obvious (new) factors for family life in that period of time, namely:

- a. Lack of privacy on the parents' side.
- b. The difficulty to combine teleworking with catering to the children's needs.
- c. The difficulty for children to have some exercise and play freely in the open.
- d. The amount of time spent together against family weekly routines.

Not that these factors do not appear at all in parents and caretakers' answers, but their prevalence is rather small. Surprisingly, as indicated by the above data, what the lockdown context triggered for adults and children's conflict situations is an aggravation of already-existing conflicts.

1. Are there any national surveys' percentages/data on VAC in your Country? Please compare the first results of covid questionnaire (e.g. percentages of parents who physically punish their children) with data from national surveys, in order to verify whether they are consistent or not with the country average.

What parents «usually» do to discipline						
	Overall	Lithuania	Spain	Turkey	Italy	Greece
I shout at them	21%	15,5%	5,0%	7,1%	34,1%	21,9%
I force them to do household chores (wash dishes, tidy-up)	6%	10,1%	15,1%	5,3%	2,8%	5,1%
I stop talking to them	4%	2,0%	2,5%	9,7%	2,4%	3,5%
I send them to their bedrooms	8%	6,9%	7,6%	11,5%	,8%	14,5%
I physically punish them (slap them, spank them)	0,40%	0,0%	0,0%	0,0%	1,6%	0,0%
I take their favourite toys away	8%	5,9%	8,4%	12,4%	7,9%	6,8%
I force them to do an activity (read, study)	11%	21,8%	8,4%	24,8%	4,4%	10,0%
I turn the tv/tablet/videogames off	34%	37,6%	33,6%	21,2%	28,7%	44,1%

What parents «sometimes» do to discipline						
	Overall	Lithuania	Spain	Turkey	Italy	Greece
I shout at them	63,1%	75,6%	68,1%	50,0%	63,5%	68,5%
I force them to do household chores (wash dishes, tidy-up)	34,2%	49,5%	42,9%	35,4%	31,5%	32,5%
I stop talking to them	23,9%	18,8%	16,0%	31,9%	27,9%	24,1%
I send them to their bedrooms	30,6%	43,6%	45,4%	40,7%	10,6%	37,6%
I physically punish them (slap them, spank them)	12,1%	5,0%	10,9%	8,8%	27,3%	5,5%
I take their favourite toys away	33,3%	32,7%	42,9%	34,5%	35,3%	32,2%
I force them to do an activity (read, study)	39,4%	53,5%	42,0%	49,6%	33,6%	40,2%
I turn the tv/tablet/videogames off	44,8%	45,5%	47,1%	52,2%	46,5%	42,1%

Image 1. Global prevalence data of VAC according to DEPCIP project preliminary research.

Parents replied in general with a great degree of sincerity as indicated by answers that did not avoid self-criticism and displaying parents' own discipline strategies under a negative light. As indicated, parents did not pretend that physical violence was absent at all from their own conflict management with their offspring, but they described it more than once as a "one-time event".

Findings about parents' needs.

From the above-mentioned items researched, a set of needs appeared that parents did not fail to clearly state and list down as items they would need help and training with. In general; most of them fell within the spectrum of EI and basically involving:

- Successful self-regulation strategies (anger-management being mentioned a few times).
- Coaching strategies (positive influence applied to conflict management).
- Age appropriate parenting strategies.
- Positive parenting strategies as a summary of all the above.

THE EMOTIONAL INTELLIGENCE CASCADING MODEL (SALOVEY & MAYER & CARUSO)

Over time, Emotional Intelligence has become a “household concept” and popular interpretations of the concept have taken over in a “reactive pattern” of sorts, if one wills, by contrast to a previous stage of understanding about “intelligence” that viewed it merely as a cognitive reality. As neurobiological models of the nervous system, the mind and the brain have evolved, the concept of “intelligence” has had to expand its definition and the postulate of a diversity of intelligences has had to face its own contradictions; what Emotional Intelligence in itself adds to hardcore science has been a matter of much dispute, as Mayer, Salovey and Caruso indicate (2004):

Many people have expressed opinions about the scientific viability of emotional intelligence (EI). EI has been said to matter twice as much as IQ (Goleman, 1998, p. 31). Yet, it has been labeled an "elusive concept" (Davies, Stankov, & Roberts, 1998, p. 989). It has also, according to some, "proven resistant to adequate measurement" (Becker, 2003, p. 194). Others have claimed that a "considerable body of research" suggests that EI provides the basis for competencies important in almost any job" (Cherniss, 2000, p. 10). But, "EI appears to be more myth than science ... (Matthews, Zeidner, & Roberts, 2002, p. 547). The study of EI even raises the question of whether there can be too many intelligences (Holland & Stenberg, 2000).

Divide in the field plus popular interpretations about IE as an obstacle; what is the origin of these so-called “popular interpretations”?

Part of the apparent diversity of opinion on EI reflects a divide in the field. Initial, broad public exposure to EI or "EQ," was the result of a series of newspaper and magazine articles (e.g., Gibbs, 1995) that drew on a tradebook about EI (Goleman, 1995). These naive representations are sometimes reacted to by psychologists who are

concerned that some of the popular ideas will be taken seriously by other psychologists (e.g., Davies et al., 1998; Epstein, 1998).

According to the authors, EI exists ("it fits the criteria they define an intelligence" and "**it predicts matters of consequence**" and they describe it as one of the "hot" intelligences because:

We view EI as a member of a class of intelligences including the social, practical, and personal intelligences that we have come to call the hot intelligences (Mayer & Mitchell, 1998; Mayer & Salovey, in press). The label refers to the fact that **these intelligences operate on hot cognitions-cognitions dealing with matters of personal, emotional importance to the individual** (Abelson, 1963; Zajonc, 1980).

So, it is the self-referential nature of EI that is at its core as a "hot" skill. So, our training, as devised, needs to take self-referential techniques into account (I-oriented, autobiographical, intrapersonal elements need to be included as trigger points for intrapersonal well-being and interpersonal success in the training).

Salovey & Mayer & Caruso define EI based on the prevalent knowledge about the interaction between limbic circuitry and rational circuitry of the brain's interaction. Research has argued over time on the interaction of cognition and emotion:

Neuropsychological studies of the interrelation of emotion and cognition also reflected the increased interest in the interaction of these processes (Cacioppo, 2002; Damasio, 1994; TenHouten, Hoppe, Bogen, & Walter, 1985) (...)

"In 1990, we wrote two articles on EI that explicitly defined EI and developed a theory and demonstration measure of it (Mayer, DiPaolo, & Salovey, 1990; Salovey & Mayer, 1990); we also editorialized for its further study (Mayer & Salovey, 1993). To address the concept of EI seriously, one must understand something about both intelligence and emotion. It is to those concepts and their interconnection that we next turn.

So, they formulate a definition of EI that does not fail to reveal this view:

the capacity to reason about emotions, and of emotions to enhance thinking. It includes the abilities to accurately perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional knowledge, and to reflectively regulate emotions so as to promote emotional and intellectual growth (e.g., Mayer & Salovey, 1997).

Emotional information is by no means as institutionalized culturally as language information, for example Authors found perception of emotion

has a pretty universal value, emotion understanding and management are strongly culturally influenced. Yet, the integration of the skill will depend on the individual personality:

El and the four-branch ability model. In our reviews of the existing psychological literature, we have found it convenient to divide the abilities and skills of El into four areas: the ability to (a) perceive emotion, (b) use emotion to facilitate thought, (c) understand emotions, and (d) manage emotion. These four areas became known as the four-branch model, after an earlier figure we employed (Mayer & Salovey, 1997).

The order of the branches, from perception to management, represents the degree to which the ability is integrated within the rest of an individuals' major psychological subsystems-that is, within his or her over all personality (Mayer, 1998, 2001).

It is remarkable that El as a capacity improves over the age groups proving its psychological evolutionary nature, as it involves a management strategy unique for each individual, since:

... emotions are managed in the context of the individual's goals, self-knowledge, and social awareness (Averill & Nunley, 1992; Gross, 1998; Parrott, 2002).

Authors have devised their own test to measure El, where it is found that El is not different from verbal or other intelligences:

The Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT). We have constructed a series of scales to measure El (Mayer, Caruso, & Salovey, 1999; Mayer et al., 1990; Mayer & Geher, 1996). The most recent of these is the MSCEIT (Mayer, Salovey, & Caruso, 2002). The MSCEIT has eight tasks: two to measure each of the four branches of El.

Why El meets the criteria of being an intelligence?

El appears to be an intelligence. For example, in a neuropsychological study, Jaulsovec, Jausovec, and Gerlic (2001) found that those individuals who scored high on El, as assessed with the MSCEIT, required less cognitive effort to solve problems, as measured by patterns in theta and alpha frequency bands of electroencephalographic activity of the brain. This is a standard pattern for intelligences.

So, yes, we have the capacity to perceive right from wrong solutions regarding behavior and conflicts. This basis needs to be established in order to help manage the demand from parents at DEPCIP project to

assist them with behavioral issues of self-management in conflict with their children by resorting to EI.

DEPCIP'S TRAINING DESIGN BASED ON APPLIED EI

About the aims of the training:

The goal of the activity is to develop the trainers' ability to use emotional/intrapersonal intelligence techniques applied to activities to be implemented in the trainings on prevention of Violence Against Children (VAC) to take place and be adapted in each country. The need to build the TOT on emotional intelligence techniques is justified by the sensitivity of the subject at hand and by the nature of the secondary target audience that will benefit from the trainings; that is: parents.

The training aims to making participants feel capable of transmitting the knowledge to other trainers once in their countries and lead further trainings organized in a manual featuring a 4-module structure. Such modules are the basis of a five-session programme that follows a progressive strategy of EI cascading focus and method. The training creates a narrative of its own when it comes to trainers and fosters a progressive learning structure and experience to be translated finally into the delivery of parents' training. The training unfolds along the following "landmarks":

PHASE OF THE "4-BRANCH" MODEL	LEARNING STAGE FOR PROJECT TRAINEES
(a) To perceive emotion.	Session 1: Becoming aware of his/her subjective connection with VAC
(b) To use emotion to facilitate thought.	Session 2: Identifying personal introjects about one's connection with VAC, as items that define own conflict-management attitudes.
(c) To understand emotions.	Session 3: Distinguishing feelings and needs about our conflict management style and reflecting upon alternative courses of action.
(d) To manage emotion.	Session 4: Testing own alternative courses of action in role-plays and alternative narrative exercises.

Table 1. Phases of the TOT organized in the 4-Branch Model involving each a learning stage.

So, the sessions' description and planning in itself reflects the 4-Branch structure:

- Session 1 (Children's Rights):

This session deals with:

- Awareness of children's rights' violations suffered.
- Developmental biographies of individuals' childhoods.
- Working on childhood memories and integrating violence suffered and exerted as a learning experience.

The aim of this session is to empower trainers to foster the reflection about children's Rights not as the knowledge of an objective reality; an "outside" object; but as something lived and experienced by oneself and by close ones in one's own context. Thus, with subjective connection to participants (be they trainers or parents) based on the learning impact of self-referential topics or topics managed in a self-referential ("I-based") methodology at the same time.

Session 2 (children's evolutionary stages):

This session deals with:

- Stages of child development (as subjectively experienced by trainees).
- Reflection about age-developmental stage appropriate messages for children based on Chip Wood's work "Yardsticks".

The aim of this session is identifying one's acquired beliefs: an artistic exercise is devised to visually display one's own personal evolution through the child's five stages (baby, infant, toddler, preschooler, school child). A personal reflection is articulated about messages received during childhood, validated by the family-care taker value system as the way "things" / "people" / "you" *have to be* ... ("introjects" in Gestalt theory). This is a way to reflect about possible messages justifying having suffered or exerting VAC.

Session 3 (Distinguishing feelings and needs in conflict management)

This session deals with:

- Introduction to communication malfunction in humans; broken picture (broken telephone variation). How to communicate with the child?

- Become the child (again) creating a play-doh imaginary friend with personality and introducing it to all. Children can talk about themselves by talking through their imaginary friends.
- Broad description of parenting styles, and the role of non-violence in communication with children, based on the Rosenberg's method of NVC (Non-Violent communication).
- The role of authentic needs when it comes to children; parents need to distinguish desires from authentic needs to honor them as such (and they are connected with developmental and neurobiological needs, which makes them authentic).

Session 4:

The aim of this session is Distinguishing feelings and needs about our conflict management style and reflecting upon alternative courses of action. Authentic needs consist in fundamental relational and neurobiological needs that have to do with eye contact, dialogue and brain attuning that are not causing stress in the child but quite the opposite. Positives parenting involves respecting authentic needs and helping the child fulfil these: The respect for such needs is the basis for EI-based relationships. Such awareness is the basis of positive parenting.

This session deals with:

- Brainstorming: can conflict be a positive thing?
- Practicing a NVC sequence (Rosenberg method adapted starting from the difference between feelings and authentic needs): from Facts to Feelings to Needs, to Actions.
- Describing an alternative course of action with an actual conflict our participants had.
- How to adapt it all to managing conflict with children?

The aim of this session is testing an alternative conflict management style specially geared to the children in our lives. A certain type of conflict management style based on one's acquired introjects has been identified in previous sessions. Now the aim is to identify a new alternative course of action specifically thinking of the children or our life. Role plays and alternative narrative exercises will be tested.

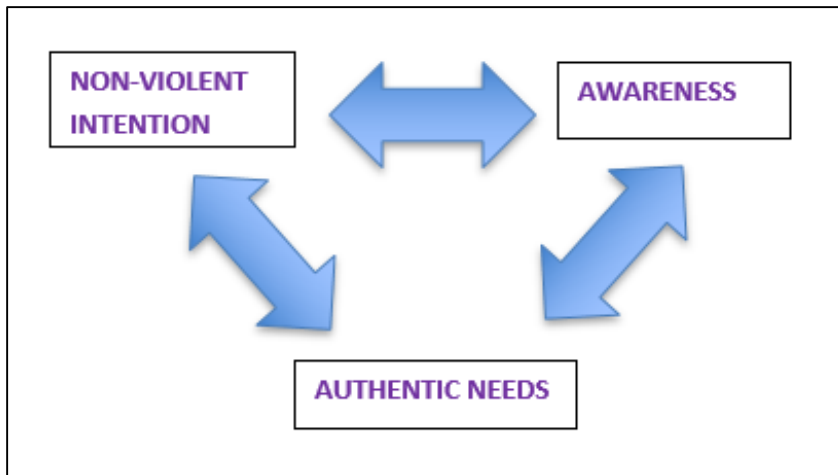


Image 2: The cycle of authentic needs; the perception of authentic needs of the child and mine, allows me to strengthen my non-violent intention. Image by: M&M Profuture Training.

Session 5 (Training assessment by means of training methodologies):



Images 3 and 4: constructing and celebrating a Multiple Intelligences Mind Map” in order to assess the training in the last session. Images by M&M Profuture Training.

The group’s evaluation of the activity is consistent with the andragogic focus of the entire training as it involves the group’s realization of its journey about the existence of a shared narrative by means of a technique that has been called “The Treasure Map”. “The Treasure Map” is a visual layout of the parkours followed from session 1 to session 4. The Map (an “excursion” into the group’s “shared mind” map) once completed, will display:

- Self-referential elements as one's own contribution to the "excursion". (intrapersonal value).
- Outcomes of dialogic sequences in group work (interpersonal value).
- The Map will be in itself a materialization of the multiple intelligences approach used in the training (emotional, artistic, kinesthetic intelligences ...).

The training generates positive bonding base since it resorts to core safe attachment strategies. The evaluation allows to assess participants' satisfaction about "productivity" of the training based on the actual integration of the point of view fostered, which can only be observed in a trust-fostering setting. It is thus, a qualitative assessment resorting to multiple intelligences in a way that is relevant, integrative, dialogic, dynamic and self-referential too. We will justify below the special impact of the self-referential element. The final round of the group "contemplating on the Map" has the skill to reinforce individual learning outcomes as embodied experience.

During the assessment phase the role of the trainer is akin to the *Servant's* role at the "Clos-lieu" in Arno stern's description of the one whose task is helping and facilitating materials and guidance when requested; yet being clearly in a secondary silent and respectful place.

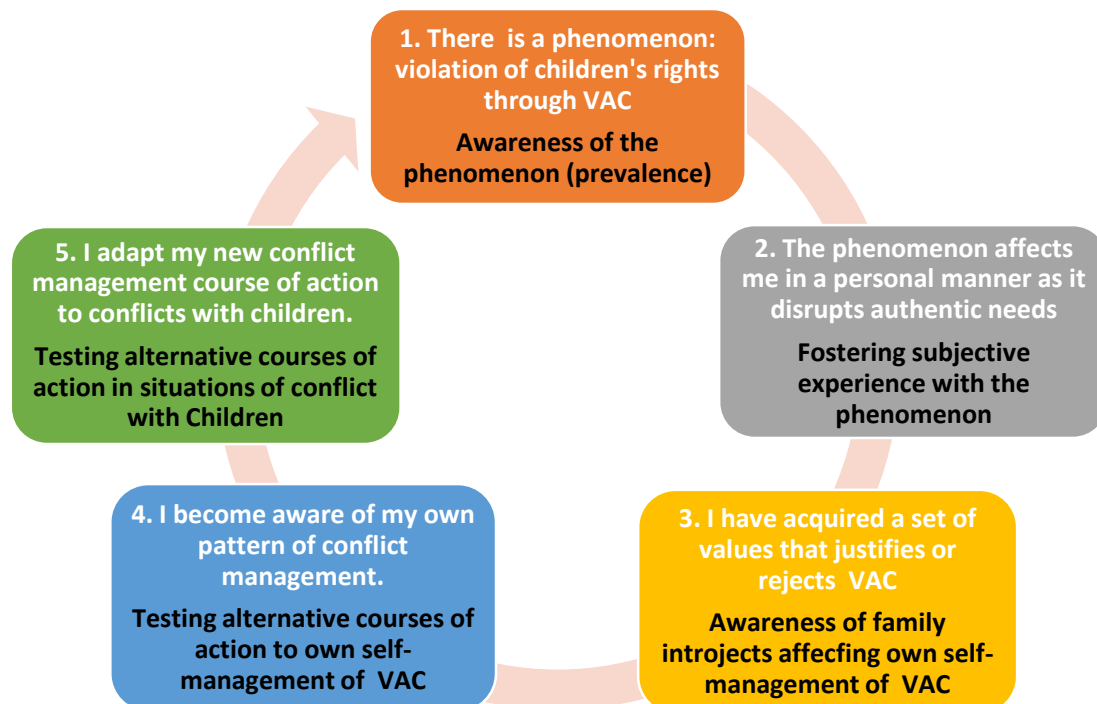


Image 5: the 4-Branch journey towards VAC prevention. Image from: M&M Profuture Training.

The training involves a journey that departs from (step 1) becoming aware of the prevalence of the phenomenon in the participant's country. The next step (step 2) consists in realizing that one has a personal experience with the phenomenon; so, the knowledge acquired and practiced in connection with it has a subjective (self-referential value) to be shared about (dialogic value). Once this personal link with the phenomenon has been established, work on identifying the introjects that filter / facilitate/ hinder, their attitudes towards VAC (step 3) will take place. In order to come to a practical stage about the items realized, participants work on acknowledging the difference between feelings and needs based on applied NVC (Non-violent Communication) to explore alternative courses of action to their usual patterns shaped by the acquired introjects. Finally, such new alternative courses of action with children have to be tested in role plays and alternative narrative exercises. The "Map" needs to reflect this journey.

CONCURRENT FACTORS THAT SUPPORT THE EFFECTIVENESS OF EI CASCADING METHODOLOGY-BASED VAC-PREVENTION TRAININGS

While reasoning about the validity of the proposed training design, some concurrent factors need to be considered:

- **Overall validity**, namely: would parents' behavior changes in EI positively affect children?
- **Universality and cultural filters**: can the 4 steps-based training have universal validity and to which extent?
- **Ensuring participants' involvement** by means of self-referential techniques; does it work?

One could wonder as to the efficacy of EI to ensure what the validity of this training structure is?

Is it a sound strategy to target parents in order to affect children? During the interview to parents in Spain, it so happened more than once that parents volunteered their own opinion as to the cause and origins of VAC, and when they did that they invariably said when referring to those that perpetrate VAC that: "they had suffered it themselves when they were children..."

A study by Cabello and others (2021) links EI capacity to parental EI capacity, specially the maternal one:

The EI of parents was associated with that of their offspring, although the link with maternal EI was greater than the link with paternal EI, even controlling for certain demographic covariates such as the

gender of the offspring. Moreover, the EI of fathers has an effect on the EI of their offspring especially when the EI of the mothers was low. These findings suggest that parental EI — particularly that of the mother — was significantly associated with the ability EI of their offspring during the lifespan.

So, although one cannot assess the overall validity of the popular intuition for each case, transgenerational and systemic interpersonal psychology would find evidence for their tenets in such research evidence. Such research indicates the validity of training parents in order to enhance their children's EI capacity.

At the same time, what is the validity of such training universal? given the diversity of cultural local and national understandings of the phenomenon of VAC, this needs to be considered.

A research article of Bo Shao, Lorna Doucet, David R. Caruso (2014) aims to define what the universality of the three domains of EI as described by the cascading model of EI (emotion perception, emotion understanding, and emotion regulation) were universal or culture-specific. This article concludes:

However, as it has become clear that emotions have both universal and culture-specific features, recent research has focused on distinguishing the aspects of emotions that are more universal from those that are more culture-specific. We tested the extent to which the three emotion domains in the cascading model of emotional intelligence (emotion perception, emotion understanding, and emotion regulation) are universal versus culture-specific. In the first study, data from China, the United States, Japan, India, and Argentina provided support for our hypotheses that emotion perception is the more universal domain of emotional intelligence, and emotion understanding and emotion regulation are more culture-specific domains.

So, emotion understanding and regulation are more dependent on cultural factors. This study aimed too to predict whether EI was able to predict performance in emotionally taxing jobs, and it was found that:

The cascading model of EI is empirically confirmed via meta-analytic data, although relationships between ability-based EI job performance are shown to be inconsistent (i.e., EI positively predicts performance for high emotional labor jobs and negatively predicts performance for low emotional labor jobs).

This reinforces the need and validity within the proposed training structure to foster a reflection about one's own personality trend (that appear

around one's own feelings, authentic needs, and conflict management and style in connection with the introjects acquired) as done during the training. Awareness of one's own personality type should thus simplify the road to define alternative courses of conflict management. Our proposed training method aims to move from one domain to the next one by taking into account the culturally-based difficulties linked to navigating understanding and regulation of emotions as factors strongly dependent from culture.

Why to use self-referential (and dialogic) learning strategies?

We, human beings are naturally "egotic"; that is said in a Gestalt theory manner, which indicates a positive inclination toward the self as an interesting "form" or object of perception. In other terms: to oneself, oneself is what is most relevant and important. This ties nicely with the concept of what is "significant" in education; the concept of "impact" comes to mind; but it is even beyond that: Self-referential learning has been widely proven to have great validity in language and writing acquisition by children; but research in adults is scanty. Yet, all trainers know that when we bring in the "I", attention activates around any task. It is the case that research proves, as documented below, that self-referential learning fosters: memory, neural activation, and social cognition. When the "I" factor is activated in learning settings motivation levels rise:

A 2009 article by Glisky EL, Marquine MJ. Proves that:

The beneficial effects of self-referential processing on memory have been demonstrated in numerous experiments with younger adults but have rarely been studied in older individuals. In the present study we tested young people, younger-older adults, and older-older adults in a self-reference paradigm, and compared self-referential processing to general semantic processing. (...) These results suggest that reference to the self, engages qualitatively different processes compared to general semantic processing. These processes seem relatively impervious to age and to declining memory and executive function, suggesting that they might provide a particularly useful way for older adults to improve their memories.

Another article by Shuo Zhao and others (2018) indicated in a research that measured neural activities in connection with neutral versus I-oriented cues that:

These results suggest that when a stimulus is associated with the self, it modulates subsequent attentional neural processes. This process

may be triggered by self-reference to automatically and effectively capture relevant information.

Finally, another article by Stejara Dinulescu and others (2021) indicated that there exists behavioral evidence for a relation between self-referential processing and social cognition:

Self-referential processing is critical for making sense of others. However, there remains surprisingly little research examining associations between behavioral assessments of self-referential processing and social cognition (i.e., tasks assessing one's understanding of others' thoughts and emotions). This study (n = 396) examined this link by associating accuracy in a self-referential processing task with two assessments of social cognition (i.e., theory of mind and empathic accuracy). Exploratory analyses included an examination of the relationship between self-referential processing and autism-related traits, as well as depression symptoms, both of which have been previously associated with decreased social cognitive ability. Self-referential processing was positively related to performance in both social cognition tasks, and these relationships were not valence-specific or moderated by gender. Moreover, no associations were found between self-referential processing and autism-related traits or depressive symptoms. Our findings provide behavioral evidence for a relation between self-referential processing and social cognition.

To sum-up: memory, neural activation and social cognition will be activated by means of rendering personal (I-oriented) each step of the training design. Naturally, self-referential techniques involve a dialogic factor too towards their implementation. So, caring for this factor brings much to win for a training that relies upon participants' perceived impact of the 4 stages journey, as dialogic techniques foster a great deal of engagement and motivation.

The Salovey-Mayer-Caruso EI Model, provides an academically sound structure featuring predictability factors which are concurrent with high oral expression that is appropriate for programs that feature self-referential and dialogic techniques.

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