# FAMILIES AND DISABILITY IN ADULTHOOD: ANALYSIS AND EVALUATION OF AN INTEGRATED PARENT TRAINING PROJECT

# FAMIGLIE E DISABILITÀ IN ETÀ ADULTA: ANALISI E VALUTAZIONE DI UN PROGETTO INTEGRATO DI PARENT TRAINING

**Stefania Morsanuto** 

Università degli Studi Niccolò Cusano – Roma stefania.morsanuto@unicusano.com

#### **Abstract**

This action-research work stems from the need of a substantial group of parents, consisting of 109 statistical units, who requested an educational intake to improve their relationship with their children and consequently, act more effective and efficient educational interventions. In order to accompany the families involved in the planning, a pragmatic neuro-educational intervention capable of enhancing the complexity of the family system. Thus, it was not a matter of teaching "what to do," but of educating "how to do it" and "why to do it" beyond the "intention and consistency" (Orsenigo, 2018) present, in a given family, at a given time. This approach opened up the need for co-design between educational agencies (family and day care centres) in which asymmetry in the educational relationship (Tramma, 2018) was dialectically connected to symmetry in the development of educational goals and their verification.

Questo lavoro di ricerca-azione nasce dall'esigenza di un sostanzioso gruppo di genitori, composto da 109 unità statistiche, che hanno chiesto una presa in carico a scopo educativo per migliorare la relazione con i figli e di conseguenza, agire interventi educativi più efficaci ed efficienti. Per accompagnare le famiglie coinvolte nella progettazione si è optato per un intervento neuro-educativo pragmatico capace di valorizzare la complessità del sistema famiglia. Non si è trattato dunque di insegnare "cosa fare", ma di educare a "come farlo" e "perché farlo" oltre "l'intenzione e la coerenza" (Orsenigo, 2018) presenti, in una determinata famiglia, in un dato momento. Questo approccio ha aperto la necessità di una coprogettazione fra agenzie educative (famiglia e centri diurni) in cui l'asimmetria nella relazione educativa (Tramma, 2018) fosse dialetticamente connessa alla simmetria nell'elaborazione degli obiettivi educativi e nella loro verifica.

**Keywords:** Family; adult cognitive disability; integrated intervention; education;

Parole chiave: Famiglia; disabilità cognitiva adulta; intervento integrato; educazione;

#### Introduction

The subject and his family environment are involved primarily within a specific path of identity building. The purpose of this contribution is to deepen the plurality of research plans through which intervention with disability can be read, emphasizing the generative elements that such plans impose in the definition of the psychological reality of the person. The representations of self, of relationships and of one's own space of action by the subject with cognitive disability, are also generated by the definitions and the choices of intervention that the different educational agencies (family, school and educational centers) They build around the shared idea of disability. This process constitutes a principle of social co-construction that permeates the action of every member of a society (Contarello,

Nencini, Sarrica, 2007); in the case of the disabled person it can be noted that the potential constraints that it generates often appear particularly "true". This results in the appearance of "facts" that limit the person's alternative possibilities of being. In summary, it could be said that discourses on disability channel the person towards a single social role, that of the "prototypical" disabled. Some considerations are necessary. First, what is meant by personal identity, that is, what elements intervene in the way a person perceives and is perceived by others. Second, what is referred to with the broad and nuanced label of "disability" and how it seems to overlap with that of personal identity. Each form of self-knowledge, any dimension of self-assigned meaning, is the fruit of a symbolic preinteraction that generated and made it available. Personal identity is inevitably relational in that it bears the existence of the other (Gergen, 1999). Consequently, the identity of each individual is the result of the social construction that involves the actors who inhabit his life contexts. Therefore, in interacting with a person, that is with his identity understood as a story of himself, one cannot ignore the question about the sources that allowed that story to be told (to oneself and to others) in that peculiar way (Bigazzi and Nencini, 2008). The Embodied approach recomposes the cleavage body/mind looking at the human organism as a complete dynamic unit in connection with the environment. In other words, attention to the body can also allow the expression of the intimate meanings of the human organism. Like a compass, it indicates to the subject how he is experiencing the situation not only on a cognitive level, but above all on a physical level. In a disabled person, the integration between mind-body and environment is lacking and needs an educational space in which he can experience the functionality of his own body, increasing the development experience of childhood, a constituent element of body identity. The attention to the bodily experience of a disabled person allows to give an answer to his family context. Although studies on the psychosocial impact and consequences in a family facing disability have seen a progressive enrichment of perspectives, the focus is still on the role of "de-synchronization" during the life cycle of the family (Valtolina, 2007). In other words, the family faced with disability would be on the border between health and disease, between regulatory and deviant aspects. The birth of a child with disabilities is considered as a "para-normative" or unexpected event, which puts the family in front of a high level of emotional stress, for which each family reacts according to its own internal and social energies and resources. The path through this event is tortuous and painful. Contemplating the adulthood of the child is very difficult: subjects with cognitive disabilities are considered eternal children, often you run the risk of "replacing" the other, choosing for him and not leaving him free to act in various everyday life contexts. Thus a dysfunctional relationship is generated that transforms the other into an employee and dominated, imprisoning him in a "presentistic" dimension (Caldin, 2007). The birth of a disabled child is a traumatic event that can stop the course of time for the family, blocking the ability to go beyond the present moment: the future is emotionally unpredictable or unimaginable; The past, with all the hopes and fantasies related to the period of pregnancy, is erased. Parents become prisoners of a present that seems to have no end. The social value, limited to illness, also assumes a negative connotation: the disability of a child becomes the disability of the whole family, which interrupts or inhibits interactions with other families or with the community, losing the emotional capacity and symbolic emotional functions related to the process of intermediation with the outside world (Garro, Merenda, & Salerno, 2016). After the initial shock and during the restructuring of family roles, parents (especially the mother) perform a function of support and care for the child. It tends to develop, an attitude of hyper protection on the part of parents that can sometimes prevent the development of personality and residual skills, amplifying its emotional and relational difficulties (Garro, Merenda, Salerno, 2016). People with disabilities who attend community centers or public and private services have greater opportunities to build relationships and create friendships, because

the sharing of the same reality unites them and allows them to feel understood or part of a group (Castelli & Mariani, 2005). L. 104/92, art. 12, c. 3; L. 17/1999 report verbatim: through «communication, socialization and interpersonal relationship» the educator chooses, and co-decides in educational team and in formative alliance with the family, the most effective pedagogical interventions to create the conditions for the educational success of each, within a very wide spectrum of actions. The involvement of the Educational Service can thus represent, in the sphere of planning and realization of the Individual Project of life, the link between the training agencies (ASL- local health authority-, local authorities) and the family, in order to ensure socialization and encourage, As a result, the prevention of discomfort.

## 1. Style of Attachment - Experiences in Close Relationships

The communication of the diagnosis of cognitive disability of your child is an event triggering a series of complex reactions that affect not only parenting but also the life of a couple, belonging to an enlarged system of families of origin and participation in the social community, in a series of concentric spirals increasingly extended the more the affected nucleus is inserted in significant links (Bronfenbrenner, 1979).

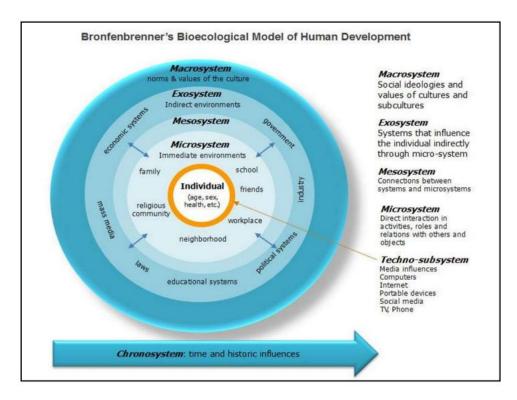


Figure 1 Bronfenbrenner's Bioecological Model of Human Development

The nature of these reactions has a defensive purpose from the suffering announced and the anguish that comes to hit the parents. This pain excludes the child, unaware of what is happening around him, but the results of the need will be his contaminated food, and contributory causes of the compromise of his development and the quality of his future life (Sorrentino, 2006).

The first negative consequence on the growth is just linked to the caregivers, in particular to the mother who generated him who, after enduring pregnancy and childbirth, falls into the ruinous role of those who "were not able" to make a healthy child. Guilt, uncertainty, shame, anger, anguish and self-apprehension are intertwined with the emotions felt for the child who struggles to live as his own. The more early the diagnosis is (a positive feature for the child's rehabilitation and education) in the life of this mother (who is facing the evolutionary transition between being an adult woman and a mother) the more these complexes experienced are devastating. If the woman has become a mother at a good time in her life, she is mature and stable, if her relationship with her partner is solid and she is also an adult and responsible man, if his childhood has been positive and can count on the emotional and empathetic support of his family and friends, if he has already had healthy children (who have reassured his generative ability), after a period of severe stress (similar to the post traumatic one)It is very likely that he will recover and meet the needs of himself, of the child, of the other children, of marriage. But, it is very complex to control all the variables of the "if" and it is therefore understandable that the trauma is combined with other defensive dimensions that will compromise the emotional response of the mother to the attachment needs of the son (Sorrentino, 2006). The setting of this work on an ecological basis leads to reflection in triadic mode, if not multiadic, taking into account, therefore, different levels of interaction. Think then of the father figure that will have to support, if not replace the partner and the child. If we try to empathize with the child we should try to understand the implicit communications that are transmitted to him and based on all the neuroeducational considerations examined in this work, his subjective perceptions first of all that of being seen "through" the diagnosis that stands between him and the care-giver giving life to the sequence that Liotti (Liotti, 2005) describes as "dramatic triangle". The child will be alternately experienced as a "victim of misfortune, a persecutor of his mother and family members, a consolation and a purpose of life for these same figures". The result is a disorganized attachment that can lead to the manifestation of problematic behaviour. As has been described previously in this work, being in front of the face of the troubled mother, will involve in the child a further difficulty in the already complex evolutionary path. His curiosity, his desire to know the world and his confidence in his ability to explore it are already very unstable. In addition, "autistic defences" could be developed precisely as a result of the unsustainability of a task, exceeding the residual competences. Task also does not receive the right help from caregivers. The disorganization of attachment may last for a long time or be resolved more quickly as the care-giver is sustained to overcome the traumatic dimension (Sorrentino, 2006). Proper educational and pragmatic support for parenting (in addition to psychological support) would help families react differently to trauma and develop effective parenting strategies. In reality (of this action-research project), on the other hand, the retrospective story of so many hard-tried parents' stories of disabled adults, which testify to absolute solitude, in all phases of life, without any supportive presence. Placing the family with children with disabilities at the centre of a pedagogical reflection allows to express and capitalize on the abilities of families and put them in a position to overcome disorders (Giaconi, Del Bianco, D'Angelo, & Sarchet, 2022). The child is therefore seen, and sees himself, through the filter of affliction and bewilderment. Over time, family life settles down and depending on the prevailing attachment style, dysfunctional behaviours will be strengthened or not. In most parents the child will become the purpose of their

life, for others the victim of an adverse fate to be compensated (feeling of sympathy and guilt), for others it will be the persecutor to be removed from their life (rarely) or more often an object from "heal" with resentment for bad results (Sorrentino, 2006). Specifically, the most observed profiles are:

- The son/a "victim": benefits, initially, centrality that makes him feel favoured and facilitated. He has poor perception of limits, which are not imposed on him and with which he is avoided as much as possible that he has to confront himself. He believes he has no difficulty in demanding the satisfaction of his needs and desires, which his parents and siblings owe him. He lives with despair, frustration and anger the experiences in which he is not granted. He is flawed and unrealistic, immature and incapable of commitment, dependent on the help of others. In other cases a ruler who can command to get. Positive reinforcements are "given" from the outside.
- The child/ "purpose of life": tries to meet the expectations of parents and develops their abilities to please them. This helps him to build good premises for his future and, if he can give them satisfaction, despite the immense efforts, he builds a feeling of himself as a valid and valuable subject. When parents show frustration, they will feel themselves collapsing, they will hate their limit, they will aggressively rebel against their parents' claims, responding to the symbiotic bond with anger, ambivalence and anguish.

In general, placing one's existential purpose in the life of another, being the task of another, exposes us to harm ourselves and at the same time those we love. These problems are widespread.

The son "persecutor": oscillates between depressive and oppositional experiences that herald the autistic dimension, accentuate apathy and mental fragility, active responses of decomposed protest, which, interacting with suffering caregivers and incapable of empathy, They can lead him to psychiatric frameworks that will facilitate his expulsion from the family unit and the initiation of a poor destiny, without reference affective life. Sometimes, fortunately, as we have mentioned, the maturity of parents has the upper hand over despair and the rotation between the different polarities of the dramatic triangle that Liotti tells us (2005) covers a fairly short period of growth, without fixations in one role rather than another. The resumption of daily life will see the child and his caregivers capable of a realistic mutual perception of himself and the relationship: the child will be perceived as a child, despite his problems, and parents will live as resources for his growth, but also as adults with their own lives beyond that of parents of a disabled person. In this case, in which the upheaval was short and the maturity of the parents prevailed over the disturbance, the picture of personality of the subject in the age of development will appear to the most rosy observer. The anxiety pictures that we see so frequently associated with even severe disability, ie neonatal onset, belong to these subjects raised in families with good resilience, well supported by family members, often children of parental couples rarely at the first generative test. In these subjects the numerous "ifs" listed, had seemed to come true. If his health then requires invasive health interventions that will make him live the body as an unpleasant place, object in the hands of others, this alarm will skyrocket, becoming a distinctive feature of his character. The mental capacity and the commitment to improve their performance will be affected by making it oscillate between underestimating their resources or, on the contrary, their difficulties.

## 2. The family empowerment intervention

This action-research work stems from the need for a substantial group of parents, composed of 109 statistical units, who have asked for an educational support to improve the relationship with their children and consequently, Acting more effective and efficient educational interventions. To accompany the families involved in the design, a pragmatic neuro-educational intervention was chosen, capable of enhancing the complexity of the family system. So it was not a matter of teaching "what to do", but of educating to "how to do it" and "why to do it" beyond the "intention and coherence" (Orsenigo, 2018) present, in a given family, at a given moment. This approach has opened up the need for co-design between educational agencies (family and day centres) in which asymmetry in educational relations (Tramma, 2018) is dialectically linked to symmetry in the elaboration of educational objectives and their verification.

Although with different but convergent aims, the project has set itself the objectives of:

- Develop a diversified training plan for educators and families;
- Strengthening the educational alliance between families and services;
- Structuring services as educational contexts for the social (Cerocchi & Dozza, 2018) in support of the family;
- Set up a mediated space, periodic, of comparison for families in which it is possible to carry out checks on home educational management and be able to report and share their experiences (Cerocchi & Dozza, 2018).

The training intervention for parents was developed in five meetings of three hours each:

- 1. Analysis and understanding of the dimension of need;
- 2. Reflection on the main educational subjects, in particular the role of the family and the socio-educational operators;
- 3. Cognitive functions: understand to accompany;
- 4. Reading and managing problematic behaviors in the relational, emotional, affective and social spheres;
- 5. Support for parenting, in reference to the evolutionary paths of children.

Currently, the mediation and support group for parenting is still active. The tests were administered T0 (before the beginning of the course) and T1 at the end of the five training sessions and as many parenting support. There will be a follow-up survey at the end of the aid journey.

#### 3. Tools

Several validated survey tools have been administered, respecting privacy and the code of ethics:

The Scale "Experiences in Close Relationships" (ECL), a new tool for evaluating Attachment in adults: translation. Adaptation and validation of the Italian version.

It is based on the analysis of attachment theory, which historically was developed as a variant of the psychoanalytic theory of object relations (Bowlby, 1982) and then gradually came to be established as a separate discipline, It also has important points of contact with cognitive psychology and systemic theories. It is a theory still in full development, which provides a conceptual frame of reference that has proved extremely fruitful and useful for psychotherapeutic practice, in both the psychoanalytic and the cognitive and relational.

In the ECL scale, to test the hypothesis of the existence of two fundamental dimensions of "avoidance" and "anxiety", a second order factor analysis has been carried out, using as variables the factors extracted during the first analysis (Picardi, Bitetti, Puddu, & Pasquini, 2000).

The Likert rating scale is used on 7 numerical indices, covering 36 statements.

The seven levels of the scale were defined as follows: 1 = completely false; 2 = quite false; 3 = a little false; 4 = neither true nor false; 5 = a little true; 6 = quite true; 7 = completely true.

The scoring procedure simply involves the sum of the scores of the items of each subscale, keeping in mind that, as in the original version, the score of some items is encoded inversely: these are items number 3, 15, 19, 22, 25, 27, 29, 31, 33 and 35.

The subscale "Avoidance" consists of odd items, while the subscale "Anxiety" is formed by even items.

Self-Compassion Scale.

The self-compassion construct includes different aspects (Neff, 2010) such as: having kindness and understanding towards oneself, rather than using severe self-criticism and harsh judgment; considering one's own experience as part of a broader human experience, rather than as a separate and isolated experience; keep your painful thoughts and feelings in a balanced awareness rather than hyper-identifying with them. Self-compassion is linked to positive mental health outcomes and increased life satisfaction (Neff, 2010). To evaluate the self-compassion was used the Italian version edited by Di Fabio (Di Fabio, 2016) of the Self-Compassion Scale SCS (Neff, 2003). The instrument is composed of 26 items with 5-point Likert scale response format: from 1 (almost never) to 5 (almost always).

## Locate 6 dimensions:

- 1 Self-kindness: kindness and tolerance of one's own limitations and inadequacies (item example: «I am tolerant of my defects and deficiencies»);
- 2 Self-judgement: the opposite of self-kindness, as negative judgment and intolerance towards one's own weaknesses (example of item: «I am intolerant and intolerant towards those aspects of my personality that I don't like»);
- Common Umanity: a sense of sharing one's own limitations and weaknesses with the rest of humanity (item example: «When I'm down and feeling bad, I remind myself that there are many other people in the world who feel like me»);
- Isolation: on the contrary, as a sense of isolation and separation from others (item example: «When I think about my shortcomings, this tends to make me feel more separated and cut off from the rest of the world»);

- 5 Mindfulness: in terms of a positive mobilization of feelings and emotions in the face of difficulties (item example: «When I feel down I try to approach my feelings with curiosity and openness»);
- 6 Over-identification: on the other hand as self-pity and focusing on one's negative feelings. (item example: «When I don't succeed in something important I'm worn out by the sense of inadequacy»).

Scale of perceived self-efficacy in the management of complex problems

The scale allows to obtain four distinct scores for each subject, in relation to each of the factors emerged:

- 1. Emotional maturity: beliefs that people have about their ability to handle stressful situations; to face unforeseen circumstances; to have good self-control over difficult events and situations;
- 2. Finalization of action: people's convictions about their ability to set concrete and achievable goals, prioritizing them and adapting them to their skills and pursuing the set goals;
- 3. Relational fluidity: beliefs that people have about their ability to interact and confront others; to give and ask for help, maintaining good relations with others and managing interpersonal conflicts;
- 4. Context analysis: Beliefs that people have about their ability to "read" the context in which they operate by grasping the links between the different events and the different situations; to understand the requests coming from the people of the environment; to use language appropriate to the different circumstances. The calculation of the scores obtained in each factor of the questionnaire is obtained adding the answers given to the questions/items that make up the reference dimension (Likert scale its base 5: 1 = Not capable at all, 2 = Not capable, 3 = Quite capable, 4 = Very capable, 5 = Quite capable).

Balanced Emotional Empathy Scale (Mehrabian, 1996)

Adaptation and Italian Validation

The analysis of the scientific literature on empathy highlights how most of the authors agree today in supporting its character as a psychological construct of a multifactorial nature. Although cognitive processes play an important role in the genesis of experience, it remains primarily an affective experience (Hoffman, 1982); (Hoffman, 1984); (Hoffman, 1987); (Stayer, 1987). His peculiar aspect is the emotional activation (Hoffman, 1987), without which there is no talk of empathy but of *role taking or perspective taking*. (Mehrabian, 1997) clearly distinguishes the two aspects of the experience, calling them "cognitive empathy" the first, that is, the ability to accurately understand things from the perspective of the other (Hogan, 1969), and "emotional empathy" The second, namely, the tendency to experience vicariously the emotions of others (Stotland, 1969); (Mehrabian, Young, Saro, 1988); (Mehrabian, Epstein, 1972).

The value to the items is assigned with Likert Scale from 1 to 7 (1 = Quite the contrary, 2 = Disagree, 3 = quite agree, 4 = very agree, 5 = Fully agree)

# 4. Data analisys

# **Descriptive statistics**

The descriptive statistics of the data collected are summarised in the tables below. The sample consisted of 89 statistical units and the control group of 20.

Sample/Control Group

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Control	20	18.3	18.3	18.3
	Sample	89	81.7	81.7	100.0
	Total	109	100.0	100.0	

Table 1 - Sample/Control Group

Both Sample and Control Group show a female majority of the parent (70-80%).

Parent Gender - Sample

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	70	78.7	78.7	78.7
	Male	19	21.3	21.3	100.0
	Total	89	100.0	100.0	

Parent Gender - Control

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	16	80.0	80.0	80.0
	Male	4	20.0	20.0	100.0
	Total	20	100.0	100.0	

Table 2 - Parent Gender

In contrast, the gender of the children is practically equally distributed between males and females in the two groups.

Child Gender - Sample

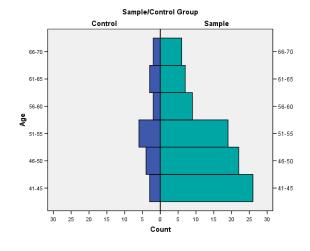
					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Female	41	46.1	46.1	46.1
	Male	48	53.9	53.9	100.0
	Total	89	100.0	100.0	

Child Gender - Control

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Female	9	45.0	45.0	45.0
	Male	11	55.0	55.0	100.0
	Total	20	100.0	100.0	

Table 3 - Child Gender

The distribution of the age of the parent, in relation to the sample and the control group shows, that the largest number of statistical units is under the age of 55, although in the sample the number of statistical units decreases as age increases, whereas in the control group we have an inverse behaviour.



## Figures 2 - Age

Analysing how marital status is distributed between the control group and the sample, here too the data is fairly homogeneous, even though the categories separated/divorced and widowed/widowered are not present in the control group, whereas they are present, but with low percentages, in the sample (3.4% and 1.1% respectively).

Marital Status - Sample

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single	13	14.6	14.6	14.6
	Married	72	80.9	80.9	95.5
	Separate/Divorced	3	3.4	3.4	98.9
	Widowed	1	1.1	1.1	100.0
	Total	89	100.0	100.0	

Marital Status - Control

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single	5	25.0	25.0	25.0
	Married	15	75.0	75.0	100.0
	Total	20	100.0	100.0	

Table 4 - Marital Status

Regarding the level of education, there is a practically mirror-image situation between the control group and the sample.

Education - Sample

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	High School	64	71.9	71.9	71.9
	Bechelor's degree	11	12.4	12.4	84.3
	Master's degree/PhD	14	15.7	15.7	100.0
	Total	89	100.0	100.0	

Education - Control

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High School	13	65.0	65.0	65.0
	Bechelor's degree	3	15.0	15.0	80.0
	Master's degree/PhD	4	20.0	20.0	100.0
	Total	20	100.0	100.0	

Table 5 - Education

#### Statistical tests used

The following tests were used to analyse the data:

## **Independent Samples T-Test (SPSS)**

- [1] It is used to determine whether there is a difference between the averages of two independent groups on a continuous dependent variable. More specifically, it will determine whether the difference between these two groups is statistically significant.
- [2] The main conditions for applicability of the test are

# • Independent observations

Each statistical unit represents a different person. The condition applies to our data.

# Normality

The dependent variable must follow a normal distribution in the population. This is only necessary for samples smaller than about 25 units. With 109 statistical units, the normality test is deemed unnecessary.

#### Homogeneity

the standard deviation of our dependent variable must be equal in both populations. We only need this assumption if our sample size is (clearly) unequal. SPSS checks whether this is true when we perform our t-test. If not, we can still report the correct test results.

# Paired-sampled T-Test (SPSS)

- [3] It is used to determine whether the mean difference between paired observations is statistically significantly different from zero. The statistical units are the same individuals tested at two different time points or in two different conditions on the same dependent variable.
- [4] The main condition for the applicability of the test is

## Normality

The dependent variable must follow a normal distribution in the population. This is only necessary for samples smaller than about 25 units. With 109 statistical units, the normality test is deemed unnecessary.

In conclusion, we can consider the verified conditions for the two tests.

## **One-Way Anova Test (SPSS)**

- [5] It is used when the independent variable is qualitative with more than 2 categories, to determine whether **statistically significant differences** exist **between the averages of several independent groups** (greater than 2).
- [6] A requirement for the ANOVA test is that the variances of each comparison group are equal. This condition is tested using the Levene statistic. What is sought here is a significance value greater than 0.05, as a different result would suggest a real difference between the variances (Homogeneity of Variances).
- [7] To obtain the test result, one looks for whether the value of F reaches the **significance level** (Sig. < 0.05). Otherwise, the null hypothesis cannot be rejected.
- [8] If the null hypothesis can be rejected, we still do not know specifically in which of the categories this difference is significant. We can find this out in the table of multiple comparisons containing the results of **Tukey's post hoc test**.

## **Pearson's Product-moment Correlation (SPSS)**

[9] It is used to determine the strength and direction of a linear relationship between two continuous variables.

- [10] The first step in interpreting the results is to understand the value of the Pearson correlation coefficient (r or  $\rho$ ), which is a measure of the strength and direction of the association between the two variables. The correlation coefficient can take values from +1 to -1, indicating a perfect positive (+1) or negative (-1) association. A correlation coefficient of zero (0) indicates no association.
- The second step in the interpretation of the results is to determine whether the value of the Pearson correlation coefficient is statistically significant. This will make it possible to determine whether the null hypothesis can be accepted or rejected. If we set  $\alpha = 0.05$  (i.e. p < .05), we will obtain a statistically significant Pearson correlation, which means that there is less than a 5% chance that the strength of the relationship that was found (the correlation coefficient) occurred by chance if the null hypothesis value was true.

#### **Analysis strategy**

The chosen testing strategy is summarised in the Figure 3 - Test strategy.

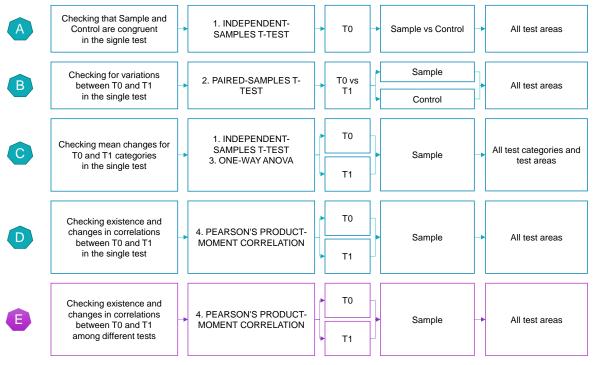


Figure 3 - Test strategy

The objectives of the test, the type of test, the time period involved (T0/T1), the type of statistical units involved (Sample/Control), the areas and categories involved are indicated.

Groups A-B-C-D identify statistical tests performed on a single survey test, while group E refers to a search for correlations between the various survey tests.

#### Main results

We present the test results below, highlighting the most significant ones with the relevant tables.

## **Self-Compassion**

Regarding **Self-Compassion** at time T0, we do not reject the hypothesis that the sample and the control group are homogeneous and any differences between the averages of the various areas are not statistically significant - p-value > 0.05 (2-tailed) for all areas.

	Independent Samples Test										
		Levene's Test for Equality of Variances				t-test for Equality of Means					
				95% ( Inter			Interva	6 Confidence erval of the Difference			
		F	Sig.	t	df	Sig. (2-tailed)	Difference	Difference	Lower	Upper	
T0_SC_Self-Judgment	Equal variances assumed	.163	.687	1.388	107	.168	.2757	.1987	1182	.6696	
	Equal variances not assumed			1.421	28.935	.166	.2757	.1941	1213	.6727	
T0_SC_Over-Identification	Equal variances assumed	.142	.707	.360	107	.719	.08708	.24162	39191	.56607	
	Equal variances not assumed			.365	28.608	.718	.08708	.23842	40083	.57499	
T0_SC_Common Humanity	Equal variances assumed	.893	.347	.180	107	.858	.04003	.22242	40089	.48094	
	Equal variances not assumed			.165	25.828	.871	.04003	.24331	46026	.54031	
T0_SC_Isolation	Equal variances assumed	.007	.934	1.541	107	.126	.40941	.26563	11717	.93599	
	Equal variances not assumed			1.500	27.392	.145	.40941	.27303	15042	.96924	
T0_SC_Sef-Kindess	Equal variances assumed	.148	.702	1.048	107	.297	.2166	.2066	1930	.6262	
	Equal variances not assumed			.964	25.968	.344	.2166	.2247	2452	.6784	
T0_SC_Mindfulness	Equal variances assumed	1.153	.285	296	107	.768	06798	.23003	52399	.38804	
	Equal variances not assumed			320	30.972	.751	06798	.21253	50146	.36550	

Table 6 - Independent Samples Test - A - Self Compassion T0

It can be concluded that the differences between the averages of all areas can be considered statistically significant, with an improvement in results at time T1, i.e. after the training intervention. The area of **Over-identification has the** greatest improvement in absolute value (+0.82), while the area of **Isolation has the** lowest improvement in absolute value (+0.68).

	railed samples rest - sen compassion - roample to vs rr								
			Paired Differences						
				Std. Error	95% Cor Interva Differ	l of the			
		Mean	Std. Deviation	Mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1	T0_SC_Self-Judgment - T1_SC_Self-Judgment	78652	.44802	.04749	88089	69214	-16.562	88	.000
Pair 2	T0_SC_Over-Identification - T1_SC_Over-Identification	82022	.42805	.04537	91039	73006	-18.077	88	.000
Pair 3	T0_SC_Common Humanity - T1_SC_Common Humanity	76404	.42700	.04526	85399	67410	-16.881	88	.000
Pair 4	T0_SC_Isolation - T1_SC_Isolation	68258	.44237	.04689	77577	58940	-14.557	88	.000
Pair 5	T0_SC_Sef-Kindess - T1_SC_Sef-Kindess	80899	.40442	.04287	89418	72380	-18.871	88	.000
Pair 6	T0_SC_Mindfulness - T1_SC_Mindfulness	70225	.39326	.04169	78509	61941	-16.846	88	.000

Paired Samples Test - Self Compassion - TSample T0 vs T1

Table 7 - Paired Samples Test - Self Compassion - Sample T0 vs T1

The Control, on the other hand, shows no statistically significant improvement between T0 and T1, apart from in Self-Judgment and Isolation, but with little change.

Paired Samples	Tact - Salf	Compacsion -	Control T	n ve T1

		Paired Differences							
					95% Confidence Interval of the				
				Std. Error	Difference				
		Mean	Std. Deviation	Mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1 T	Γ0_SC_Self-Judgment - T1_SC_Self-Judgment	22000	.35482	.07934	38606	05394	-2.773	19	.012
Pair 2 T	Γ0_SC_Over-Identification - T1_SC_Over-Identification	02500	.45811	.10244	23940	.18940	244	19	.810
Pair 3 T	Γ0_SC_Common Humanity - T1_SC_Common Humanity	08750	.31701	.07088	23586	.06086	-1.234	19	.232
Pair 4 T	Γ0_SC_Isolation - T1_SC_Isolation	31250	.36160	.08086	48174	14326	-3.865	19	.001
Pair 5 T	Γ0_SC_Sef-Kindess - T1_SC_Sef-Kindess	12000	.38607	.08633	30069	.06069	-1.390	19	.181
Pair 6 T	Γ0_SC_Mindfulness - T1_SC_Mindfulness	12500	.27506	.06151	25373	.00373	-2.032	19	.056

Table 8 - Paired Samples Test - Self Compassion - Control T0 vs T1

Let us now go into the details of the different categories.

At time T0, except for Self-Kindness, for all other areas of the Self-Compassion test there is a statistically significant difference in the mean between the **male and female** gender of **the parent.** In particular, the areas **Self-judgment** (+0.63), **Over-identification** (+1.06), **Isolation** (+0.79) and **Mindfulness** (+0.55) show a statistically significant higher mean value for the <u>male gender</u>. The **Common Humanity** area shows a statistically significant difference in mean value in favour of the female gender of the parent (+0.47). All effects can be considered large.

Independent Samples Test - Self Compassion - T0 - Parent Gender Levene's Test for Equality of Variances t-test for Equality of Means 95% Confidence Interval of the Difference Mean Std. Error Difference -.63579 Difference .19887 Upper -.24052 Lower T0\_SC\_Self-Judgment Equal variances assumed .159 -3.197 .004 27.912 Equal variances not assumed -3.143 -.63579 20230 -1.05025 -.22133 .220 T0\_SC\_Over-Identification -4.646 .24816 25.775 Equal variances not assumed -4.273 .000 -1.06034 -1.57065 .55002 2.136 T0 SC Common Humanity Equal variances assumed .03281 Equal variances not assumed 2.055 27.167 .050 .47331 .00079 .94582 .23036 T0\_SC\_Isolation Equal variances assumed 3.835 -2.989 87 -.78853 .26385 -1.31297 -.26409 37.408 .001 .78853 22373 -1.24169 Equal variances not assumed T0 SC Sef-Kindess .131 Equal variances assumed -1.395 167 .29203 .20934 -.70811 12405 Equal variances not assume -1.325 196 -.74445 26.749 -.29203 .22040 16039 T0 SC Mindfulness Equal variances assumed .406 -1 02759 - 07542 Equal variances not assume

Table 9 - Independent Samples Test - Self Compassion - T0 - Parent Gender

At time T1, after the training intervention, for **Self-Kindness** and **Mindfulness there were** no statistically significant changes. For all other areas, however, there are. In particular, the areas **Self-judgment** (+0.45), **Over-identification** (+0.57), **Isolation** (+0.59) show a statistically significant higher mean value for the <u>male gender. The Common Humanity</u> area shows a statistically significant value of difference between the averages in favour of the <u>female gender of</u> the parent (+0.41). All effects can be considered large.

	Independent Samples Test - Self Compassion - T1 - Parent Gender												
			Test for Variances	t-test for Equality of Means									
							Mean	Std. Error	95% Confidence Interval of the Difference				
		F	Sig.	t	df	Sig. (2-tailed)	Difference	Difference	Lower	Upper			
T1_SC_Self-Judgment	Equal variances assumed	.457	.501	-2.554	87	.012	45218	.17703	80404	10032			
	Equal variances not assumed			-2.807	32.899	.008	45218	.16109	77996	12440			
T1_SC_Over-Identification	Equal variances assumed	1.166	.283	-2.863	87	.005	56955	.19893	96495	17415			
	Equal variances not assumed			-2.924	29.396	.007	56955	.19475	96763	17147			
T1_SC_Common Humanity	Equal variances assumed	.016	.900	2.147	87	.035	.40752	.18978	.03031	.78472			
	Equal variances not assumed			2.142	28.450	.041	.40752	.19027	.01805	.79699			
T1_SC_Isolation	Equal variances assumed	5.426	.022	-2.690	87	.009	58985	.21924	-1.02560	15410			
	Equal variances not assumed			-3.347	41.818	.002	58985	.17625	94557	23413			
T1_SC_Sef-Kindess	Equal variances assumed	.001	.981	780	87	.437	14677	.18811	52066	.22712			
	Equal variances not assumed			753	27.278	.458	14677	.19487	54642	.25289			
T1_SC_Mindfulness	Equal variances assumed	.137	.712	-1.325	87	.189	27763	.20955	69414	.13888			
	Equal variances not assumed			-1.241	26.314	.226	27763	.22373	73724	.18198			

Table 10 - Independent Samples Test - Self Compassion - T1 - Parent Gender

Between the T0 and T1 periods for the **gender of the parents**, the medians shifted from the range 2.5 to 4 to the range 3.8 to 4.5. In the transition from T0 to T1 the female gender catches up in

- Mindfulness (no differences)
- Self-judgement, Over-identification and Isolation (gap reduction) while reducing the average difference for the common Humanity.

The training, therefore, was useful for both parents, but particularly for the female parent.

Continuing with the analysis of the categories produced other results, which we summarise below. At time T0 there is a statistically significant mean difference for the area **Isolation** (+0.55) to the male gender of the son. For all other areas there is no difference in the mean between the male and female gender of the child. The effect for Isolation can be considered large (+1.04).

At time T1 there is no statistically significant difference between the averages of all areas regarding the gender of the children.

For the gender of the children, the medians moved from the range 2.5 to 3.9 to the range 3.8 to 4.5. Parents with female children recovered the gap after the training period in the only area where there was a difference, **Isolation**.

It is also apparent that the male and female genders of the children obtained similar values in the test, but with a clear improvement between T0 and T1.

At time T0, there **is** a statistically significant difference between the medians for the <u>Higher Diploma</u> and <u>Master's Degree/Doctorate</u> categories, but at time T1 there are no more statistically significant differences for the different Degrees of Education. Between time T0 and time T1 for all Degrees of Education, the medians moved from the 2-4 range to the 3-5 range, resulting in an overall improvement in results after education.

At time T0, there is a **strong positive correlation** between all areas, except between Common Humanity and Isolation where there is a normal correlation. There is no significant correlation only between Self-judgment and Common Humanity.

Correlations -	Self	Compa	ssion - TO
Contenations -	3611	Compa	331011 - 10

		T0_SC_ Self- Judgment	T0_SC_ Over- Identification	T0_SC_ Common Humanity	T0_SC_ Isolation	T0_SC_ Sef-Kindess	T0_SC_ Mindfulness
T0_SC_Self-Judgment	Pearson Correlation	1	.585**	.087	.683**	.577**	.453**
	Sig. (2-tailed)		.000	.415	.000	.000	.000
	N	89	89	89	89	89	89
T0_SC_Over-Identification	Pearson Correlation	.585**	1	.192	.641**	.482**	.704**
	Sig. (2-tailed)	.000		.071	.000	.000	.000
	N	89	89	89	89	89	89
T0_SC_Common Humanity	Pearson Correlation	.087	.192	1	.227*	.369**	.512**
	Sig. (2-tailed)	.415	.071		.032	.000	.000
	N	89	89	89	89	89	89
T0_SC_Isolation	Pearson Correlation	.683**	.641**	.227*	1	.657**	.592**
	Sig. (2-tailed)	.000	.000	.032		.000	.000
	N	89	89	89	89	89	89
T0_SC_Sef-Kindess	Pearson Correlation	.577**	.482**	.369**	.657**	1	.586**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	89	89	89	89	89	89
T0_SC_Mindfulness	Pearson Correlation	.453**	.704**	.512**	.592**	.586**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	89	89	89	89	89	89

<sup>\*\*-</sup> Correlation is significant at the 0.01 level (2-tailed).

Table 11 - Correlations - Self Compassion - TO

At time T1, there is a **strong positive correlation** between all areas, except between Common Humanity and Isolation and Common Humanity and Self-Kindness where there is a normal correlation. There is no significant correlation only between Self-Judgment and Common Humanity. Comparing the correlation matrices at times T0 and T1, it can be seen that **the correlation** between Common Humanity and **Self-Kindness** has **lost intensity** after the training.

 $<sup>^*\!\</sup>cdot$  Correlation is significant at the 0.05 level (2-tailed).

Correlat	ions - Se	If Compa	assion - T1

		T1_SC_ Self- Judgment	T1_SC_ Over- Identification	T1_SC_ Common Humanity	T1_SC_ Isolation	T1_SC_ Sef-Kindess	T1_SC_ Mindfulness
T1_SC_Self-Judgment	Pearson Correlation	1	.418**	.013	.519**	.444**	.413**
	Sig. (2-tailed)		.000	.904	.000	.000	.000
	N	89	89	89	89	89	89
T1_SC_Over-Identification	Pearson Correlation	.418**	1	.301**	.530**	.407**	.687**
	Sig. (2-tailed)	.000		.004	.000	.000	.000
	N	89	89	89	89	89	89
T1_SC_Common Humanity	Pearson Correlation	.013	.301**	1	.244*	.263*	.510**
	Sig. (2-tailed)	.904	.004		.021	.013	.000
	N	89	89	89	89	89	89
T1_SC_Isolation	Pearson Correlation	.519**	.530**	.244*	1	.505**	.581**
	Sig. (2-tailed)	.000	.000	.021		.000	.000
	N	89	89	89	89	89	89
T1_SC_Sef-Kindess	Pearson Correlation	.444**	.407**	.263*	.505**	1	.567**
	Sig. (2-tailed)	.000	.000	.013	.000		.000
	N	89	89	89	89	89	89
T1_SC_Mindfulness	Pearson Correlation	.413**	.687**	.510**	.581**	.567**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	89	89	89	89	89	89

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed).

Table 12 - Correlations - Self Compassion - T0

## Perceived self-efficacy in handling complex problems

With regard to **perceived self-efficacy in dealing with complex problems**, the differences between the averages of all areas can be considered statistically significant, with an improvement in results at time T1, i.e. after the training intervention. The area of **Emotional Maturity is** the one with the highest absolute improvement (+4.9).

Paired Samples Test - Scale of perceived self-efficacy in handling complex problems - Sample - T0 vs T1

			Paired Differences						
					95% Co	nfidence			
						l of the			
				Std. Error	Differ	ence			
		Mean	Std. Deviation	Mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1	T0_PSC_Emotional Maturity - T1_PSC_Emotional Maturity	-4.944	2.080	.220	-5.382	-4.506	-22.423	88	.000
Pair 2	T0_PSC_Action Finalization - T1_PSC_Action Finalization	-3.910	2.219	.235	-4.378	-3.443	-16.624	88	.000
Pair 3	T0_PSC_Relational Fluidity - T1_PSC_Relational Fluidity	-3.978	2.174	.230	-4.436	-3.520	-17.259	88	.000
Pair 4	T0_PSC_Context Analysis - T1_PSC_Context Analysis	-3.978	2.110	.224	-4.422	-3.533	-17.780	88	.000

Table 13 - Paired Samples Test - Scale of perceived self-efficacy in handling complex problems - Sample - T0 vs T1

Let us now go into the details of the different categories.

At time T0, for the area of **Emotional Maturity there is** a difference in the mean between the male and female gender of the parent. In particular, the area in question shows a statistically significant higher mean value for the <u>male gender (+2.54)</u>. The effect can be considered large (4.10).

<sup>\*</sup> Correlation is significant at the 0.05 level (2-tailed).

Inde	pendent Samples Test - Scale	of perceive	d self-effica	cy in handlir	ng complex	problems - Sar	n ple - Pare nt	gender - T0		
			Test for Variances	t-test for Equality of Means						
							Mean	Std. Error	95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Difference	Difference	Lower	Upper
T0_PSC_Emotional Maturity	Equal variances assumed	.043	.837	-2.397	87	.019	-2.543	1.061	-4.652	434
	Equal variances not assumed			-2.286	26.878	.030	-2.543	1.112	-4.826	260
T0_PSC_Action Finalization	Equal variances assumed	.169	.682	-1.949	87	.055	-2.200	1.129	-4.444	.044
	Equal variances not assumed			-1.895	27.525	.069	-2.200	1.161	-4.580	.180
T0_PSC_Relational Fluidity	Equal variances assumed	.771	.382	.099	87	.921	.109	1.098	-2.073	2.292
	Equal variances not assumed			.091	25.762	.928	.109	1.195	-2.348	2.566
T0_PSC_Context Analysis	Equal variances assumed	.114	.737	081	87	.935	074	.907	-1.876	1.729
	Equal variances not assumed			076	26.179	.940	074	.973	-2.072	1.925

Table 14 - Independent Samples Test - Scale of perceived self-efficacy in handling complex problems - Sample - Parent gender - T0

At T1 time, for **Emotional Maturity**, **Finalisation to Action** and Context **Analysis there is** a difference in the mean between the male and female gender of the parent. In particular, the areas Emotional Maturity (+2.61) and Finalisation to Action (+2.43) and Context Analysis (+0.50) show a statistically significant higher mean value for the <u>male gender</u>. All effects can be considered large.

Inde	pendent Samples Test - Scale	of perceive	ed self-effica	cy in handli	ng complex	problems - Sar	n ple - Parent	gender - T1		
			Test for Variances	t-test for Equality of Means						
						Mean		Mean Std. Error		nfidence I of the ence
		F	Sig.	t	df	Sig. (2-tailed)	Difference	Difference	Lower	Upper
T1_PSC_Emotional Maturity	Equal variances assumed	8.308	.005	-3.332	84	.001	-2.601	.781	-4.153	-1.049
	Equal variances not assumed			-4.680	45.663	.000	-2.601	.556	-3.720	-1.482
T1_PSC_Action Finalization	Equal variances assumed	16.327	.000	-3.358	84	.001	-2.443	.728	-3.890	996
	Equal variances not assumed			-5.477	69.248	.000	-2.443	.446	-3.333	-1.553
T1_PSC_Relational Fluidity	Equal variances assumed	.052	.820	173	85	.863	126	.729	-1.576	1.324
	Equal variances not assumed			169	23.705	.868	126	.747	-1.670	1.418
T1_PSC_Context Analysis	Equal variances assumed	4.206	.043	932	85	.354	498	.535	-1.561	.565
	Equal variances not assumed			-1.165	34.468	.252	498	.428	-1.367	.371

Table 15 - Independent Samples Test - Scale of perceived self-efficacy in handling complex problems - Sample - Parent gender - T1

Continuing with the analysis of the categories produced other results, which we summarise below. Between period T0 and period T1 for the gender of the parents, the medians shifted from the range 20-25 to the range 26-28. The **difference between the medians widens to the advantage of the male gender,** as in the area of Emotional Maturity the mean difference between the two genders increases (from +2.54 to +2.91) and the area Finalisation of Action with a statistically significant mean difference (+2.60) is also added.

At time T0, for the area **Fluidity Relationship**, **between** the age groups 41-45 and 61-65 (+5.92), and between the age groups 51-35 and 61-65 (+5.00), there is a statistically significant difference between the averages, but at time T1 all statistically significant differences disappear. At time T0, there is a **strong positive correlation** between all areas.

		T0_PSC_ Emotional Maturity	T0_PSC_ Action Finalization	T0_PSC_ Relational Fluidity	T0_PSC_ Context Analysis
T0_PSC_Emotional Maturity	Pearson Correlation	1	.342**	.298**	.358**
	Sig. (2-tailed)		.001	.005	.001
	N	88	88	88	88
T0_PSC_Action Finalization	Pearson Correlation	.342**	1	.317**	.469**
	Sig. (2-tailed)	.001		.003	.000
	N	88	88	88	88
T0_PSC_Relational Fluidity	Pearson Correlation	.298**	.317**	1	.546**
	Sig. (2-tailed)	.005	.003		.000
	N	88	88	88	88
T0_PSC_Context Analysis	Pearson Correlation	.358**	.469**	.546**	1
	Sig. (2-tailed)	.001	.000	.000	
	N	88	88	88	88

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

Table 16 - Correlations - Scale of perceived self-efficacy in handling complex problems - Sample - TO

At time T1, there is a **strong positive correlation** between all areas, except between Emotional Maturity and Relational Fluency and Emotional Maturity and Context Analysis where there is **no correlation**. Comparing the correlation matrices at times T0 and T1, it can be seen that the strong positive correlation between Emotional Maturity and Relational **Fluency and Emotional Maturity and Context Analysis has disappeared**.

Correlations - Scale of perceived self-efficacy in handling complex problem - Sample - T1

		T1_PSC_ Emotional Maturity	T1_PSC_ Action Finalization	T1_PSC_ Relational Fluidity	T1_PSC_ Context Analysis
T1_PSC_Emotional Maturity	Pearson Correlation	1	.288**	.160	.071
	Sig. (2-tailed)		.007	.141	.517
	N	86	86	86	86
T1_PSC_Action Finalization	Pearson Correlation	.288**	1	.325**	.332**
	Sig. (2-tailed)	.007		.002	.002
	N	86	86	86	86
T1_PSC_Relational Fluidity	Pearson Correlation	.160	.325**	1	.424**
	Sig. (2-tailed)	.141	.002		.000
	N	86	86	87	87
T1_PSC_Context Analysis	Pearson Correlation	.071	.332**	.424**	1
	Sig. (2-tailed)	.517	.002	.000	
	N	86	86	87	87

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

Table 17 - Correlations - Scale of perceived self-efficacy in handling complex problems - Sample - T1

## **Emotional Empathy Scale**

With regard to the **Emotional Empathy Scale**, the differences between the averages can be considered statistically significant, with an improvement in the results at time T1, i.e. after the training intervention (+0.92). The effect size of this improvement is calculated as small (around 0.2).

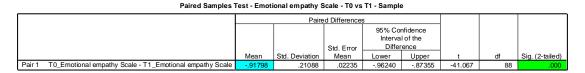


Table 18 - Paired Samples Test - Emotional empathy Scale - T0 vs T1 - Sample

Let us now go into the details of the different categories.

At time T0 there is a difference in the mean between **the male and female gender of the parent**. The largest statistically significant mean value is for the <u>male gender (+0.33)</u>. The effect can be considered higher than the mean, but not large (0.64).

	Independent Samples Test - Emotional empathy scale - T0 - Parent Gender										
			Test for Variances			t-test fo	r Equality of N	y of Means			
							Mean	Std. Error	95% Confidence Interval of the Difference		
		F	Sig.	t	df	Sig. (2-tailed)	Difference	Difference	Lower	Upper	
T0_Emotional empathy Scale	Equal variances assumed	.658	.419	-2.025	87	.046	33376	.16480	66131	00621	
	Equal variances not assumed			-1.929	26.845	.064	33376	.17298	68878	.02126	

Table 19 - Independent Samples Test - Emotional empathy scale - T0 - Parent Gender

Even at time T1, there is a difference in the mean between the male and female gender of the parent. The largest statistically significant mean value is for the <u>male gender (+0.28)</u>. The effect can be considered higher than the mean, but not large (0.51).

Independent Samples Test - Emotional empahy scale - T1 - Gender											
		Levene's Equality of									
							Mean	Std. Error	95% Confidence Interval of the Difference		
		F	Sig.	t	df	Sig. (2-tailed)	Difference	Difference	Lower	Upper	
T1_Emotional empathy Scale	Equal variances assumed	.704	.404	-2.173	87	.032	28414	.13075	54402	02425	
	Equal variances not assumed			-1.968	25.353	.060	28414	.14436	58124	.01297	

Table 20 - Independent Samples Test - Emotional empathy scale - T1 - Parent Gender

Between period T0 and period T1 for the gender of the parents, the medians moved from the range 3.4-3.7 to the range 4.4-4.7. The difference between the medians narrowed in <u>favour of the male</u> gender (from +0.33 to +0.28).

At time T0, the macro age group 41-55 (approx. 3.3) scored lower than the macro age group 56-70 (approx. 4.4) and the difference in averages is statistically significant.

## Test of Homogeneity of Variances

T0 Emotional empathy Scale

re										
Levene Statistic	df1	df2	Sig.							
1.458	5	83	.212							

Table 21 - Test of Homogeneity of Variances - Emotional empathy Scale - TO - Age

#### **ANOVA**

T0\_Emotional empathy Scale

To_Emotional cities	I ,				
	Sum of				
	Squares	df	Mean Square	F	Sig.
Between Groups	17.079	5	3.416	14.252	.000
Within Groups	19.894	83	.240		
Total	36.973	88			

Table 22 - ANOVA - Emotional empathy Scale - TO - Age

#### **Multiple Comparisons**

Dependent Variable: T0\_Emotional empathy Scale

Tukey HSD

Tukey F	150					
		Mean Difference			95% Confide	ence Interval
(I) Age	(J) Age	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
41-45	46-50	.05967	.14182	.998	3541	.4734
	51 <i>-</i> 55	03259	.14776	1.000	4637	.3985
	56-60	94487*	.18934	.000	-1.4972	3925
	61-65	-1.13535*	.20847	.000	-1.7435	5272
	66-70	91154*	.22173	.001	-1.5584	2647
46-50	41-45	05967	.14182	.998	4734	.3541
	51-55	09226	.15333	.991	5396	.3550
	56-60	-1.00455*	.19372	.000	-1.5697	4394
	61-65	-1.19502*	.21245	.000	-1.8148	5752
	66-70	97121*	.22548	.001	-1.6290	3134
51-55	41-45	.03259	.14776	1.000	3985	.4637
	46-50	.09226	.15333	.991	3550	.5396
	56-60	91228*	.19811	.000	-1.4902	3343
	61-65	-1.10276*	.21646	.000	-1.7343	4713
	66-70	87895*	.22926	.003	-1.5478	2101
56-60	41-45	.94487*	.18934	.000	.3925	1.4972
	46-50	1.00455*	.19372	.000	.4394	1.5697
	51 <i>-</i> 55	.91228*	.19811	.000	.3343	1.4902
	61-65	19048	.24672	.971	9103	.5293
	66-70	.03333	.25803	1.000	7194	.7861
61-65	41-45	1.13535*	.20847	.000	.5272	1.7435
	46-50	1.19502*	.21245	.000	.5752	1.8148
	51 <i>-</i> 55	1.10276*	.21646	.000	.4713	1.7343
	56-60	.19048	.24672	.971	5293	.9103
	66-70	.22381	.27237	.963	5708	1.0184
66-70	41-45	.91154*	.22173	.001	.2647	1.5584
	46-50	.97121*	.22548	.001	.3134	1.6290
	51-55	.87895*	.22926	.003	.2101	1.5478
	56-60	03333	.25803	1.000	7861	.7194
	61-65	22381	.27237	.963	-1.0184	.5708

<sup>\*-</sup> The mean difference is significant at the .05 level.

Table 23 - Tukey - Emotional empathy Scale - TO - Age

The differences can be appreciated even more graphically

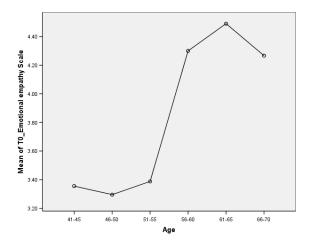


Figure 4 - Emotional Empathy Scale - TO - Age

At T1 time, the 41-45 age group had a lower average than the 56-70 macro bracket; the 46-50 age group had a lower macro bracket 56-65; as did the 51-55 age group. All differences are statistically significant and to the advantage of the larger age groups.

#### Test of Homogeneity of Variances

T1\_Emotional empathy Scale

		iai ompanij i	ouio .	
	Levene Statistic	df1	df2	Sig
	Otation	uii	uiz	oig.
ı	1.030	5	83	.406

Table 24 - Test of Homogeneity of Variances - Emotional empathy Scale - T1 - Age

#### **ANOVA**

T1\_Emotional empathy Scale

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	9.167	5	1.833	10.666	.000
Within Groups	14.267	83	.172		
Total	23.434	88			

Table 25 - Table 22 - ANOVA - Emotional empathy Scale -T1 - Age

## **Multiple Comparisons**

Dependent Variable: T1\_Emotional empathy Scale

Tukey HSD

_ I ukey F	180					
		Mean Difference			95% Confide	ence Interval
(I) Age	(J) Age	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
41-45	46-50	.04277	.12010	.999	3076	.3931
	51-55	.04764	.12513	.999	3174	.4127
	56-60	66581*	.16034	.001	-1.1336	1980
	61-65	80073*	.17654	.000	-1.3158	2857
	66-70	67692*	.18777	.007	-1.2247	1291
46-50	41-45	04277	.12010	.999	3931	.3076
	51-55	.00486	.12985	1.000	3739	.3837
	56-60	70859*	.16405	.001	-1.1872	2300
	61-65	84351*	.17991	.000	-1.3684	3186
	66-70	71970*	.19095	.004	-1.2768	1626
51-55	41-45	04764	.12513	.999	4127	.3174
	46-50	00486	.12985	1.000	3837	.3739
	56-60	71345*	.16777	.001	-1.2029	2240
	61-65	84837*	.18331	.000	-1.3831	3136
	66-70	72456*	.19415	.005	-1.2910	1582
56-60	41-45	.66581*	.16034	.001	.1980	1.1336
	46-50	.70859*	.16405	.001	.2300	1.1872
	51-55	.71345*	.16777	.001	.2240	1.2029
	61-65	13492	.20894	.987	7445	.4746
	66-70	01111	.21851	1.000	6486	.6264
61-65	41-45	.80073*	.17654	.000	.2857	1.3158
	46-50	.84351*	.17991	.000	.3186	1.3684
	51-55	.84837*	.18331	.000	.3136	1.3831
	56-60	.13492	.20894	.987	4746	.7445
	66-70	.12381	.23066	.994	5491	.7967
66-70	41-45	.67692*	.18777	.007	.1291	1.2247
	46-50	.71970*	.19095	.004	.1626	1.2768
	51-55	.72456*	.19415	.005	.1582	1.2910
	56-60	.01111	.21851	1.000	6264	.6486
	61-65	12381	.23066	.994	7967	.5491

<sup>\*</sup> The mean difference is significant at the .05 level.

Table 26 - Table 23 - Tukey - Emotional empathy Scale - T1 - Age

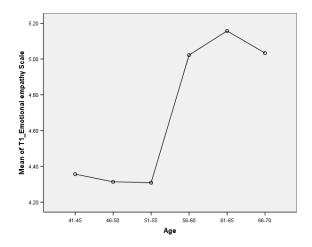


Table 27 - Emotional empathy Scale - T1 - Age

Between T0 and T1 for both periods, the 41-55 macro-band (approximately at T0 3.3 and T1 4.4) performed lower than the 56-70 macro-band (approximately at T0 4.4 and T1 5.0), with a clear overall improvement from T0 to T1. The 65-70 bracket after training, however, recovered against the 46-55 macro bracket.

## **Experiences in close relationships**

With regard to **Experiences in close relationship**, the differences between the averages can therefore be considered statistically significant, with an improvement in results at time T1, i.e. after the training intervention in both areas (Avoidance: +8.03; Anxiety: +7.61). The effect size of this improvement is calculated as large (greater than 0.8).

	Paired Differences							
			Std. Error	95% Confidence Interval of the Difference				
	Mean	Std. Deviation	Mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1 T0_ECL_Avoidance - T1_ECL_Avoidan	e -8.034	4.455	.472	-8.972	-7.095	-17.011	88	.000
Pair 2 T0_ECL_Anxiety - T1_ECL_Anxiety	-7.607	4.572	.485	-8.570	-6.644	-15.697	88	.000

Paired Samples Test - Experiences in close relationship - Sample - T0 vs T1

Table 28 - Paired Samples Test - Experiences in close relationship - Sample - T0 vs T1

Let us now go into the details of the categories.

At time T0, for the Anxiety area there is no difference in the mean between the male and female gender of the child. For the area **Avoidance**, on the other hand, the difference between the mean of +10.35 for the <u>female gender of the child</u> is statistically significant.

At time T1, for the Anxiety area there is no difference in the mean between the male and female gender of the child. For the **Avoidance** area, on the other hand, the difference between the medians

of +9.67 for the <u>female gender of the child</u> is statistically significant. Between period T0 and period T1 for the gender of the children the medians moved from the range 38-60 to the range 48-68.

Between period T0 and period T1 for the **age groups there is** an increase in the area medians (from 28-65 to 40-75).

At time T0, the statistically significant differences between the averages for the area of **Avoidance** are between the marital statuses **Single** and **Separated/Divorced** (-45.62 in favour of the latter), and between **Married** and **Separated/Divorced** (-49.50 again in favour of the latter). For the **Anxiety** area, on the other hand, there are no statistically significant differences between the averages.

#### Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
T0_ECL_Avoidance	.691	2	85	.504
T0_ECL_Anxiety	1.875	2	85	.160

Table 29 - Test of Homogeneity of Variances - Experiences in close relationship - TO - Marital Status

#### ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
T0_ECL_Avoidance	Between Groups	7096.912	2	3548.456	7.640	.001
	Within Groups	39479.077	85	464.460		
	Total	46575.989	87			
T0_ECL_Anxiety	Between Groups	1750.272	2	875.136	2.287	.108
	Within Groups	32527.808	85	382.680		
	Total	34278.080	87			

Table 30 - ANOVA - Experiences in close relationship - T0 - Marital Status

#### **Multiple Comparisons**

Dependent Variable: T0\_ECL\_Avoidance

Tukey HSD

Tukey HSD							
		Mean Difference			95% Confidence Interval		
(I) Marital Status	(J) Marital Status	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound	
Single	Married	3.885	6.494	.821	-11.61	19.38	
	Separate/Divorced	-45.615*	13.804	.004	-78.54	-12.69	
Married	Single	-3.885	6.494	.821	-19.38	11.61	
	Separate/Divorced	-49.500*	12.699	.001	-79.79	-19.21	
Separate/Divorced	Single	45.615*	13.804	.004	12.69	78.54	
	Married	49.500*	12.699	.001	19.21	79.79	

<sup>\*</sup> The mean difference is significant at the .05 level.

Table 31 - Tukey - Experiences in close relationship - TO - Avoidance - Marital Status

At T1 time, the statistically significant differences between the averages for the area of **Avoidance** are between the marital statuses **Single** and **Separated/Divorced** (-44.67 in favour of the latter), and between **Married** and **Separated/Divorced** (-46.49 again in favour of the latter). For the **Anxiety** area, on the other hand, there are no statistically significant differences between the averages.

#### Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
T1_ECL_Avoidance	.228	2	85	.797
T1_ECL_Anxiety	.619	2	85	.541

Table 32 - Test of Homogeneity of Variances - Experiences in close relationship - T1 - Marital Status

#### **ANOVA**

		Sum of Squares	df	Mean Square	F	Sig.
T1_ECL_Avoidance	Between Groups	6309.219	2	3154.610	7.053	.001
	Within Groups	38019.678	85	447.290		
	Total	44328.898	87			
T1_ECL_Anxiety	Between Groups	1777.078	2	888.539	2.316	.105
	Within Groups	32612.547	85	383.677		
	Total	34389.625	87			

Table 33 - ANOVA - Experiences in close relationships - T1 - Marital Status

#### **Multiple Comparisons**

Dependent Variable: T1\_ECL\_Avoidance

Tukey HSD

Tukey Hob						
		Mean Difference			95% Confide	ence Interval
(I) Marital Status	(J) Marital Status	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
Single	Married	4.640	6.373	.748	-10.56	19.84
	Separate/Divorced	-41.846*	13.546	.008	-74.16	-9.53
Married	Single	-4.640	6.373	.748	-19.84	10.56
	Separate/Divorced	-46.486*	12.462	.001	-76.21	-16.76
Separate/Divorced	Single	41.846*	13.546	.008	9.53	74.16
	Married	46.486*	12.462	.001	16.76	76.21

<sup>\*-</sup> The mean difference is significant at the .05 level.

Table 34 - Tukey - Experiences in close relationship - T1 - Avoidance - Marital Status

Between period T0 and period T1 for all civil states, the medians remained at about the same level.

Between time T0 and time T1, the **correlation** between the two areas remains strongly positive.

Correlations - Experiences in close relationship - T0											
		T0_ECL_ Avoidance	T0_ECL_ Anxiety								
T0_ECL_Avoidance	Pearson Correlation	1	.313**								
	Sig. (2-tailed)		.003								
	N	88	88								
T0_ECL_Anxiety	Pearson Correlation	.313**	1								
	Sig (2-tailed)	003									

Sig. (2-tailed)	.00
N	8
**. Correlation is significant at the 0	.01 level (2-tailed).

Correlations	- Experiences ir	n close	relationship - T
--------------	------------------	---------	------------------

		T1_ECL_ Avoidance	T1_ECL_ Anxiety
T1_ECL_Avoidance	Pearson Correlation	1	.303**
	Sig. (2-tailed)		.004
	N	88	88
T1_ECL_Anxiety	Pearson Correlation	.303**	1
	Sig. (2-tailed)	.004	
	N	88	88

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

Table 35 - Correlations - Experiences in close relationship - T0 vs T1

Looking for **correlations between all four tests**, it can be seen that at time T0, there are **strong positive correlations** especially between the test areas of **Self Compassion and Perceived Self-efficacy in dealing with complex problems**. The **Emotional Empathy Scale does** not seem to have any particular correlations with the other three tests, while **the Experiences in Close Relationship** (ECL) test shows **strong negative correlations** only with some specific areas of the other tests (Self-Judgment, Over-identification, Isolation and Emotional Maturity for Anxiety; Isolation and Action Finalisation for Avoidance).

						Corr	elations - T0							
		T0_SC_ Self- Judgment	T0_SC_ Over- Identification	T0_SC_ Common Humanity	T0_SC_ Isolation	T0_SC_ Sef-Kindess	T0_SC_ Mindfulness	T0_PSC_ Emotional Maturity	T0_PSC_ Action Finalization	T0_PSC_ Relational Fluidity	T0_PSC_ Context Analysis	T0_Emotional empathy Scale	T0_ECL_ Avoidance	T0_ECL_ Anxiety
T0_SC_Self-Judgment		1	.583**	.081	.683**	.578**	.449**	.395**	.214*	.277**	.212*	066	082	364**
	Sig. (2-tailed)		.000	.455	.000	.000	.000	.000	.045	.009	.048	.541	.450	.000
	N	88	88	88	88	88	88	88	88	88	88	88	88	88
T0_SC_	Pearson Correlation	.583**	1	.187	.641**	.483**	.702**	.666**	.430**	.282**	.234*	.000	226*	410**
Over-Identification	Sig. (2-tailed)	.000		.082	.000	.000	.000	.000	.000	.008	.028	.998	.034	.000
	N	88	88	88	88	88	88	88	88	88	88	88	88	88
T0_SC_Common	Pearson Correlation	.081	.187	1	.226*	.370**	.507**	.278**	.143	.164	.137	233*	094	030
Humanity	Sig. (2-tailed)	.455	.082		.034	.000	.000	.009	.184	.127	.202	.029	.386	.782
	N	88	88	88	88	88	88	88	88	88	88	88	88	88
T0_SC_Isolation	Pearson Correlation	.683**	.641**	.226*	1	.657**	.593**	.375**	.469**	.348**	.236*	144	307**	330**
	Sig. (2-tailed)	.000	.000	.034		.000	.000	.000	.000	.001	.027	.180	.004	.002
	N	88	88	88	88	88	88	88	88	88	88	88	88	88
T0_SC_Sef-Kindess	Pearson Correlation	.578**	.483**	.370**	.657**	1	.588**	.398**	.424**	.463**	.308*	210*	199	225*
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000	.000	.000	.004	.049	.063	.035
	N	88	88	88	88	88	88	88	88	88	88	88	88	88
T0_SC_Mindfulness	Pearson Correlation	.449**	.702**	.507**	.593**	.588**	1	.686**	.418**	.369**	.251*	062	111	152
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.000	.000	.019	.567	.304	.156
	N	88	88	88	88	88	88	88	88	88	88	88	88	88
T0_PSC_Emotional	Pearson Correlation	.395**	.666**	.278**	.375**	.398**	.686**	1	.430**	.413**	.417*	.115	117	332**
Maturity	Sig. (2-tailed)	.000	.000	.009	.000	.000	.000		.000	.000	.000	284	.276	.002
	N	88	88	88	88	88	88	88	88	88	88	88	88	88
T0_PSC_Action	Pearson Correlation	.214*	.430**	.143	.469**	.424**	.418**	.430**	1	.361**	.507*	.031	392**	271*
Finalization	Sig. (2-tailed)	.045	.000	.184	.000	.000	.000	.000		.001	.000	.773	.000	.011
	N	88	88	88	88	88	88	88	88	88	88	88	88	88
T0_PSC_Relational	Pearson Correlation	.277**	.282**	.164	.348**	.463**	.369**	.413**	.361**	1	.613*	266*	125	130
Fluidity	Sig. (2-tailed)	.009	.008	.127	.001	.000	.000	.000	.001		.000	.012	244	.226
	N	88	88	88	88	88	88	88	88	88	88	88	88	88
T0_PSC_Context	Pearson Correlation	.212*	234*	.137	.236*	.308**	.251*	.417**	.507**	.613**	1	.007	107	242*
Analysis	Sig. (2-tailed)	.048	.028	.202	.027	.004	.019	.000	.000	.000		.945	.321	.023
	N	88	88	88	88	88	88	88	88	88	88	88	88	88
T0_Emotional	Pearson Correlation	066	.000	233*	144	210*	062	.115	.031	266*	.007	1	.176	001
empathy Scale	Sig. (2-tailed)	.541	.998	.029	.180	.049	.567	.284	.773	.012	.945		.100	.989
	N	88	88	88	88	88	88	88	88	88	88	88	88	88
T0_ECL_Avoidance	Pearson Correlation	082	226*	094	307**	199	111	117	392**	125	107	.176	1	.313**
	Sig. (2-tailed)	.450	.034	.386	.004	.063	.304	.276	.000	.244	.321	.100		.003
	N	88	88	88	88	88	88	88	88	88	88	88	88	88
T0_ECL_Anxiety	Pearson Correlation	364**	410**	030	330**	225*	152	332**	271*	130	242*	001	.313**	1
	Sig. (2-tailed)	.000	.000	.782	.002	.035	.156	.002	.011	.226	.023	.989	.003	
	N	88	88	88	88	88	88	88	88	88	88	88	88	88

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed)

\* Correlation is significant at the 0.05 level (2-tailed).

Table 36 - Correlations - All tests - TO

At T1 time, strong positive correlations are noted above all between the test areas of **Self Compassion** and **Perceived Self-efficacy in dealing with complex problems** (except for the area of Context Analysis). The **Emotional Empathy Scale does** not seem to have any particular correlations with the other three tests, while the **Experiences in Close Relationships** (ECL) test shows **strong negative correlations** only with some specific areas of the other tests (Isolation and Action Finalisation by Avoidance).

						Corr	elations - T1							
		T1_SC_ Self- Judament	T1_SC_ Over- Identification	T1_SC_ Common Humanity	T1_SC_ Isolation	T1_SC_ Sef-Kindess	T1_SC_ Mindfulness	T1_PSC_ Emotional Maturity	T1_PSC_ Action Finalization	T1_PSC_ Relational Fluidity	T1_PSC_ Context Analysis	T1_Emotional empathy Scale	T1_ECL_ Avoidance	T1_ECL_ Anxiety
T1_SC_Self-Judgment	Pearson Correlation	1	.389**	044	.487**	.404**	.379**	.207	.204	.256*	.164	011	120	211*
	Sig. (2-tailed)		.000	.683	.000	.000	.000	.053	.057	.016	.127	.917	.267	.048
	N	88	88	88	88	88	88	88	88	88	88	88	88	88
T1_SC_	Pearson Correlation	.389**	1	.296**	.536**	.394**	.670**	.717**	.321**	.213*	040	.025	167	311**
Over-Identification	Sig. (2-tailed)	.000		.005	.000	.000	.000	.000	.002	.047	.708	.818	.121	.003
	N	88	88	88	88	88	88	88	88	88	88	88	88	88
T1_SC_Common	Pearson Correlation	044	.296**	1	.246*	.239*	.478**	.340**	.308**	.139	.097	164	176	113
Humanity	Sig. (2-tailed)	.683	.005		.021	.025	.000	.001	.003	.197	.371	.126	.102	.293
	N	88	88	88	88	88	88	88	88	88	88	88	88	88
T1_SC_Isolation	Pearson Correlation	.487**	.536**	246*	1	.492**	.560**	.402**	.435**	.368**	.188	116	304**	235*
	Sig. (2-tailed)	.000	.000	.021		.000	.000	.000	.000	.000	.079	282	.004	.028
	N	88	88	88	88	88	88	88	88	88	88	88	88	88
T1_SC_Sef-Kindess	Pearson Correlation	.404**	.394**	239*	.492**	1	.541**	.344**	.336**	.446**	.199	237*	139	236*
	Sig. (2-tailed)	.000	.000	.025	.000		.000	.001	.001	.000	.064	.026	.196	.027
	N	88	88	88	88	88	88	88	88	88	88	88	88	88
T1_SC_Mindfulness	Pearson Correlation	.379**	.670**	.478**	.560**	.541**	1	.573**	.437**	.345**	.134	103	197	170
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.000	.001	.214	.340	.065	.113
	N	88	88	88	88	88	88	88	88	88	88	88	88	88
T1_PSC_Emotional	Pearson Correlation	.207	.717**	.340**	.402**	.344**	.573**	1	.426**	.286**	.134	.139	157	232*
Maturity	Sig. (2-tailed)	.053	.000	.001	.000	.001	.000		.000	.007	.214	.197	.143	.029
	N	88	88	88	88	88	88	88	88	88	88	88	88	88
T1_PSC_Action	Pearson Correlation	.204	.321**	.308**	.435**	.336**	.437**	.426**	1	.346**	.290**	.093	432**	163
Finalization	Sig. (2-tailed)	.057	.002	.003	.000	.001	.000	.000		.001	.006	.390	.000	.129
	N	88	88	88	88	88	88	88	88	88	88	88	88	88
T1_PSC_Relational	Pearson Correlation	.256*	213*	.139	.368**	.446**	.345**	.286**	.346**	1	.458**	228*	146	134
Fluidity	Sig. (2-tailed)	.016	.047	.197	.000	.000	.001	.007	.001		.000	.033	.175	.212
	N	88	88	88	88	88	88	88	88	88	88	88	88	88
T1_PSC_Context	Pearson Correlation	.164	040	.097	.188	.199	.134	.134	.290**	.458**	1	072	113	126
Analysis	Sig. (2-tailed)	.127	.708	.371	.079	.064	214	.214	.006	.000		.502	294	.242
	N	88	88	88	88	88	88	88	88	88	88	88	88	88
T1_Emotional	Pearson Correlation	011	.025	164	116	237*	103	.139	.093	228*	072	1	.152	.015
empathy Scale	Sig. (2-tailed)	.917	.818	.126	.282	.026	.340	.197	.390	.033	.502		.158	.890
	N	88	88	88	88	88	88	88	88	88	88	88	88	88
T1_ECL_Avoidance	Pearson Correlation	120	167	176	304**	139	197	157	432**	146	113	.152	1	.303**
	Sig. (2-tailed)	.267	.121	.102	.004	.196	.065	.143	.000	.175	.294	.158		.004
	N	88	88	88	88	88	88	88	88	88	88	88	88	88
T1_ECL_Anxiety	Pearson Correlation	211*	311**	113	-235*	236*	170	-232*	163	134	126	.015	.303**	1
	Sig. (2-tailed)	.048	.003	293	.028	.027	.113	.029	.129	.212	.242	.890	.004	
	N	88	88	88	88	88	88	88	88	88	88	88	88	88

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed)
\* Correlation is significant at the 0.05 level (2-tailed).

Table 37 - Correlations - All tests - T1

Comparing the correlation matrices at times T0 and T1, it can be seen that the correlation between the two areas has lost its intensity.

## **Discussions and conclusions**

In conclusion, we can argue that, with regard to **Self-Compassion**, the differences between the averages of all areas can be considered statistically significant, with an improvement of the results at time T1, that is after the training and support to parenthood (although still in progress). The area of **Over-identification** is the one with the greatest improvement in absolute value, while the area of **Isolation** is the one with the lowest absolute value improvement. At time T0, excluding Self-kindness, for all other areas of the Self-Compassion test there is a statistically significant average difference between the **parent's male and female gender**. In particular, the areas of **Self-judgment**, **Over-identification**, **Isolation and Mindfulness** have a higher average statistically significant for the male gender. The **Common Humanity** area shows a statistically significant difference in the average for the female parent gender. All effects can be considered large. At time T1, after the training intervention, for **Self-kindness and Mindfulness** there are no statistically significant variations. For all other areas, yes. In particular, the areas **Self-judgment**, **Over-identification**, **Isolation** have a higher value than statistically significant average for the male gender. The **Common Humanity** area shows a statistically significant difference in the average for the female parent gender. All effects can

be considered large. Between period T0 and period T1 for parent gender medians have moved from range 2,5 to 4 to range 3,8 to 4,5. In the transition from T0 to T1 the female gender recovers in Mindfulness (no differences), Self-judgment, Over-identification and Isolation (gap reduction), while reducing the average difference for the common Humanity. The intervention, therefore, has been useful for both parents, but in particular for the female parent, improving the perception of self, the sense of frustration towards one's limits by reducing the severity of self-judgment. At time T0 there is a statistically significant average difference for the Isolation area to the advantage of the male gender of the child. For all other areas there is no average difference between the male and female gender of the child. The effect for Isolation can be considered large. At time T1 there is no statistically significant difference between the averages of all areas relative to the gender of children. For the genus of the children the medians have moved from the interval 2,5 to 3,9 to the interval 3,8-4,5. Parents with female children recover the gap after the empowerment period in the only area where there was difference, Isolation. It also shows that the male and female gender of the children obtained similar test values, but with a marked improvement between T0 and T1. At time T0, for the Isolation area between the Higher Diploma and Master's Degree/Doctorate categories there is a statistically significant difference between the averages, but at time T1 there are no more statistically significant differences for the different grades of Education. Between period T0 and period T1 for all grades of education the medians moved from interval 2-4 to interval 3-5, resulting in an overall improvement in results after training. At time T0, there is a strong positive correlation between all areas, apart from common Humanity and Isolation where there is a normal correlation. There is no meaningful correlation only between Self-judgment and common Humanity. At time T1, there is a strong positive correlation between all areas, apart from Common Humanity and Isolation and Common Humanity and Self-kindness where there is a normal correlation. There is no meaningful correlation only between Self-judgment and common Humanity. Comparing the correlation matrices at times T0 and T1, we note how the correlation between common Humanity and Self-kindness has lost in intensity after the formation. Regarding the perceived Selfeffectiveness in the management of complex problems, the differences between the averages of all the areas can be considered statistically significant, with an improvement of the results at the time T1, that is after the training intervention. The area of **emotional maturity** is the one with the highest absolute value improvement. Going into the details of the different categories it is possible to observe that at time T0, in the area of **emotional maturity** there is a difference of the average between the male and female gender of the parent. In particular, the area in question has a higher average statistically significant for the male gender. The effect can be considered large. At time T1, for Emotional Maturity, Action Finalization and Context Analysis there is a difference in the average of the parent's male and female gender. In particular, the areas Emotional Maturity Action Finalization and Context Analysis have a higher value than statistically significant average for the male gender. All effects can be considered large, Emotional Maturity and Action Finalization. Between period T0 and period T1 for parent gender medians have moved from interval 20-25 to interval 26-28. The difference between the averages for the benefit of the male gender is widened, since in the area of emotional maturity the average difference between the two genders increases and the Finalization of the action is added with a statistically significant average difference.

At time T0, for the **Fluidity** area there is a statistically significant difference between the averages, but at time T1 all statistically significant differences disappear. At time T0, there is a **strong positive correlation** between all areas. At time T1, there is **a strong positive correlation** between all areas, apart from Emotional Maturity and Relational Fluidity and Emotional Maturity and Context Analysis where **there is no correlation**.

Comparing the correlation matrices at times T0 and T1, we can see that the strongly positive correlation between **emotional maturity and relational fluidity and emotional maturity and context analysis has disappeared.** 

Regarding the **Emotional Empathy Scale**, the differences between the averages can be considered statistically significant, with an improvement of the results at time T1, that is after the training intervention. The measure of the effect of this improvement is calculated as small.

Going into the details of the different categories it is observed that at time T0 there is a difference in the average between **male and female gender** of the parent. The highest statistically significant average value is for the male gender. The effect can be considered to be above average, but not large. Even at time T1, there is an average difference between the male and female gender of the parent. The highest statistically significant average value is for the male gender. The effect can be considered to be above average, but not large. At time T0, the age group 41-55 achieved lower results than the 56-70 macro range (about 4.4) and the difference in averages is statistically significant. At time T1, the age group 41-45 has an average lower than the macro range 56-70; the fascia 46-50 with a macro range smaller than 56-65; as well as the fascia 51-55. All differences are statistically significant **and benefit the older age groups**. Between T0 and T1 for both periods the macro range 41-55 (around T0 3,3 and T1 4,4) achieved lower results than the macro range 56-70 (around T0 4,4 and T1 5,0), with a clear overall improvement from T0 to T1. The range 65-70 after training, however, recovered against the macro range 46-55. Regarding EXPERIENCES IN CLOSE RELATIONSHIPS, the differences between the averages can therefore be considered statistically significant, with an

improvement of the results at time T1, that is after the training intervention. The measurement of the effect of this improvement is calculated as large (greater than 0.8). Specifically: at time T0, for the Anxiety area there is no average difference between the male and female gender of the child. For the area **Avoidance** instead the difference between the averages of +10.35 for the benefit of the female gender of the child is statistically significant. At time T1, for the Anxiety area there is no difference of the average between male and female gender of the child. For the area Avoidance instead the difference between the averages of +9.67 for the benefit of the female gender of the child is statistically significant. Between period T0 and period T1 for the gender of children the medians have moved from the interval 38-60 to the interval 48-68 approximately. Between the T0 period and the T1 period for age groups there is an increase in the medians of areas (from 28-65 to 40-75). At time T0, the statistically significant differences between the averages for the **Avoidance** area are between the Unmarried/Unmarried and Separated/Divorced (-45.62 for the latter), and between Married and **Separated/Divorced** (-49.50 for the latter). For the **Anxiety** area there are no differences between the statistically significant averages. At time T1, the statistically significant differences between the averages for the Avoidance area are between the Unmarried/Unmarried and Separated/Divorced (-44.67 in favour of the latter), and between Married and Separated/Divorced (-46.49 in favour of the latter). For the **Anxiety** area there are no differences between the statistically significant averages. Between the T0 period and the T1 period for all civilian states the medians remained about the same. Between time T0 and time T1 the **correlation** between the two areas goes from strongly positive to positive.

Looking for **correlations between all four tests**, we note that at time T0, there are **strong positive correlations** especially between the test areas of **Self Compassion and Perceived Self-efficacy** in **the management of complex problems**. The **Emotional Empathy Scale** <u>does not seem to have particular correlations</u> with the other three tests, while the **Experiences in close relationships** (ECL) test shows **strong negative correlations** only with some specific areas of the other tests (Self-judgment, Over-identification, Isolation and emotional maturity for Anxiety; Isolation and Finalization of action for Avoidance).

At time T1 there are strong positive correlations especially between the areas of **Self Compassion** and **Perceived Self-efficacy testing in the management of complex problems** (except for the Context Analysis area). The **Emotional Empathy Scale** does not seem to have particular correlations with the other three tests, while the **Experiences in close relationships** (ECL) test shows **strong negative correlations** only with some specific areas of the other tests (Isolation and Action Finalization by Avoidance).

Comparing the correlation matrices at times T0 and T1, we can see that the correlation between the two areas has lost in intensity.

What can be inferred with determination from the analysis of the data is that the family should remain at the centre of pedagogical attention and educational research (Pavone, 2009). Due to lack of funds, but often also of perspective, public agencies are not able to cope with the meta-needs of families, mainly dealing with the health aspect. Having overcome the logic of the Welfare State in the perspective of the model of subsidiarity, the bet on the family remains open: an intervention is needed to enhance the family as a Primary Educational Agency, offering empowerment proposals that put you in the opportunity to demonstrate the skills acquired with experience and share them with other families, creating a social network of mutual help. Competent pedagogical mediation makes it possible to orient the experiences, often settled and anchored, of individual nuclei in a constructivist vision capable of transforming problems into resources.

#### References

Bowlby, J. (1982). Attachment and loss: retrospect and prospect. American Journal of Orthopsychiatry. 52, 664-678. Washington, US: American Psychological Association.

Bronfenbrenner, U. (1979). Teoría ecológica. México.: Editorial Pretince Hill.

Caldin, R. (2007). Accessibilità e strumenti didattici e formativi come fattore di inclusione e qualità. Bologna, Italia: Fondazione ASPHI Onlus.

CastelliI, G., & Mariani, V. (2005). L'educazione sessuale delle persone disabili. Milano, Italia: Ares.

Cerocchi, L., & Dozza, L. (2018). Contesti educativi per il sociale. Milano, Italia: Franoc Angeli.

Di Fabioa, A. (2016). Compassion scale (CS): proprietà Compassion scale (CS): proprietà. Trento, Italia: Erickson.

Garro, M., Merenda, A., & Salerno, A. (2016). Qualità della vita e sessualità tra le persone con disabilità mentali e fisiche nel contesto italiano. British Journal of Education, Society & Behavioral Science, 15. Oxfordshire, United Kingdom: Taylor & Francis.

Gay, R., & Di Bona, M. (2000). Eros e disabili. Milano, Italia: Ancora.

Giaconi, C., Del Bianco, N., D'Angelo, I., & Sarchet, T. (2022). Famiglie con giovani con disabilità intellettiva profonda e multipla: crisi o rinascita? MeTis-Mondi educativi. Temi indagini suggestioni, 12(1), 178-195. Bari, Italia: Progedit.

Hoffman, M. (1982). The Measurement of Empathy. Canbridge, Unitend Kingdom: Cambridge university Press.

Hoffman, M. (1984). Interaction of affect and cognition in empathy. Cambridge, United kingdom: Cambridge University Press.

Hoffman, M. (1987). The contribution of empathy to justice and moral judgment. Cambridge, United Kingdom: Cambridge University Press.

Liotti, G. (2005). Il ruolo dell'attaccamento nella conoscenza e regolazione delle emozioni – In Nuovo manuale di psicoterapia cognitive. Torino, Italia: Bollati Boringhieri.

Mehrabian, A. (1996). Manual for the balanced emotional empathy scale (BEES). unplubished.

Mehrabian, A. (1997). Relations among personality scales of aggression, violence, and empathy: Validational evidence bearing on the Risk of Eruptive Violence Scale. Hoboken, New Jersey, US: Wiley.

Mehrabian, A., & Epstein, N. (1972). A measure of emotional empathy. Journal of Personality, 40(4), 525–543. Rockville, US: The American Physiological Society.

Mehrabian, A., Young, L., A., & Sato, S. (1988). Emotional empathy and associated individual differences. Berlin, Germany: Springer Nature.

Neff, D. (2003). The development and validation of a scale to measure self-compassion. Self and Identity, 2(3), 223-250. Milton Park, United Kingdom: Taylor & Francis.

Neff, K. D. (2010). The Development and Validation of a Scale to Measure Self-Compassion. Milton Park, United Kingdom: Taylor & Francis.

Orsenigo, J. (2018). Famiglia. Una lettura pedagogica. Milano, Italia: Franco Angeli.

Pavone, M. (2009). Famiglia e progetto di vita: Crescere un figlio disabile dalla nascita alla vita adulta. Erikson.

Picardi, A., Bitetti, D., Puddu, P., & Pasquini, P. (2000). La scala "Experiences in close relationships" (ECL), un nuovo strumento per la valutazione dell'attaccamento negli adulti: Traduzione, adattamento e validazione della versione italiana. Roma, Italia: Il Pensiero Scientifico Editore.

Salonia, G. (2008). La Psicoterapia della Gestalt e il lavoro sul corpo. Per una rilettura del fitness, In: S. Vero (ed), Il corpo disabitato. Semiologia, fenomenologia e psicopatologia del fitness. Milano, Italia: Franco Angeli.

Sorrentino, A. (2006). Figli disabili. Milano, Italia: Raffaello Cortina Editore.

Stayer, F. M. (1987). The sound production of autistic children and adolescents: a psychometric study (language development, emerging, vocalization, assessment). Tuscaloosa, AL, US: University of Alabama Press.

Stotland, E. (1969). Exploratory investigations of empathy. New York, US: Academic Press.

Tramma, S. (2018). Pedagogia sociale. Roma, Italia: Carocci.

Valtolina, G. (2007). Famiglia e disabilità. Milano, Italia: Franco Angeli.

Contarello, A., Nencini, A., & Sarrica, M. (2007). Sé, identità e cultura. BM Mazzara.

Cajola, L. C., & Traversetti, M. (2018). L'educatore professionale socio-pedagogico nei servizi educativi e scolastici tra sviluppo sostenibile e governance inclusiva: alcuni dati di ricerca. Journal of Educational, Cultural and Psychological Studies (ECPS Journal), (17), 113-138.