

“Smile Park”, UTR Grottaglie, Taranto center of educational activities and the animal-assisted therapy

by Anna Maria D’Urso^{*}, Lucia Pastore^{**}, Stefano Costa^{***}

With the misnomer of Pet Therapy indicates a mode of action to improve health and well-being with the aid of animals, a practice that is attracting a growing interest from the public and medical personnel. "The use of pets for the Pet Therapy" has been recognized as a cure in Journal of the Decree of the President of the Council of Ministers of February 28 2003. Such Decree sanctioned for the first time in the history of our country the role that an animal can have the emotional life of a person and the therapeutic value of animals company. However, in Italy there isn't currently a specific legislation, although there have been some initiatives in their individual regions. This legal vacuum has fostered a flowering of initiatives that use animal subjects for therapeutic purposes. The definition of valid methodological tools and guidelines governing these practices is need felt by all professional groups working in this field in order to safeguard both human health and welfare of animals used in therapies. It should be stressed that those involved are more often represented by the elderly or children, especially vulnerable groups and need of targeted interventions, particularly in the case of specific diseases.

The results of recent scientific studies clearly indicate that the interaction with an animal promotes interpersonal relationships, encouraging laughter and playfulness and providing opportunities for interaction. The animal can act as a cushion under specific conditions stress and conflict and can be a valuable aid for patients with problems social behavior and communication, but also for those suffering from certain forms of disabilities and mental retardation and psychiatric patients. From an operational point of view we had to distinguish between "Animal Assisted Activities" (AAA) which aim to improve the quality of life of certain categories of people (blind or disabled psycho-physical) and Animal-Assisted Therapies (TAA). The purpose of TAA is in assisting traditional therapies using animal subjects with specific characteristics " The TAA may be used to improve the physical, social, emotional and cognitive patients therefore are useful in the treatment of mental and relational disorders: psychosis, autistic disorders, emotional and behavioral disorders, bullying, borderline behavior and neuromotor disorders in the elderly. Are made in large and different contexts and can involve groups or individuals. (Cirulli & Alleva, 2007, p. 1). The document of the National Bioethics Committee (2005) promotes the use of dogs to beyond race or select, in assisted therapy programs, belief that are to pursue those projects requiring the application of specific research protocols, in addition to ensuring full respect for the animals used. The spontaneous interactions with the animal undoubtedly produce a direct effect, yet to qualify and evaluate in their effectiveness. We do not believe at all that such interactions can be decisive for disease treated, but can contribute as a complementary therapy – as under the protocol of investigation prepared by ARES (Agency for Healthcare Research Puglia Region) - provide operators engaged in rehabilitative and Therapeutic a "key" against closures and caps with autism. This possibility speaks Alessandro Meluzzi, psychiatrist who in his book "The Way animal spirits" (1997) reviews the relationship between man and animals over time. In particular, the text presents the relationship with the family pet as a support to the relational needs of affective psycho type that we each trial, the child, adults and the elderly. In this context, then shows how the resulting emotional arises in us from the care of our pets, is connected on the basis Neurophysiological with a condition of well being. "A therapeutic practice, therefore, to stimulate and make known - said

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D'Agostino, then president of NBC (2005) - also because for many experts the beneficial effects of Pet-therapy, especially for particular types of patients, are tangible and often decisive. However - he explained - until it is rigorously defined the scientific status of these healing practices, it is unfair that they can rely on public contributions through the National Health Service" (NBC, 2005, p. 5). At this point the document is clear: "The Pet Therapy is at present in many of its applications a working hypothesis that awaits verification by appropriate scientific methodology and that deserves public support only in research projects." (NBC, 2005, p. 6).

At the "Territorial Unit Rehabilitation" Grottaglie for about 10 years held Assisted Therapy Animals programs, Dolphin Therapy and Equestrian Rehabilitation. The Center for Animal-Assisted Therapy of the ASL of Taranto is located in an elegant residential structure of the last century set in a verdant park of about one hectare named "Smile Park". Here are placed with local health clinic rehabilitation gyms, treatment rooms, indoor and outdoor spaces equipped to accommodate residential animals participate in programs, there are also a field of Agility Dog, stables, large enclosures for animals and a large wooded area. The rehabilitative treatment follows the outpatient protocol providing, behind reporting family, school or specialist, the assumption of small users, teens and adults. The clinical interview with the user and his family is followed by an initial series of observing sessions: psychodiagnostic, psychomotor and approach the animal sessions. Then begins rehabilitation program, established in content, duration and terms by the multidisciplinary team consisting of psychologists, educators, professional educators, locomotion, physiotherapists and doctors. Individual sessions, planned with the help of therapists, medical Veterinary and dog handler, are observed by video recording. After the program is made an user observation to assess effectiveness. Evaluations are conducted through the use of observation schedule for the collection of behavioral data, rating scales for specific individual diseases and refined methods of biofeedback, designed to detect psycho - physiological parameters in relation to cognitive emotional and behavioral changes. Therapy Assisted sessions were held in gyms and garden of the structure rehabilitation, by couples therapists and certified pet partners^o following a operative protocol consolidated over the years.

Is presently being considered the start-up phase of a research program – specifically differential analysis - conducted by experts from the Animal Assisted Therapy with advice of the Department of Bioethics and Department of Psychology, University of Bari. The hypothesis is that it can detect conditions of effectiveness of combining traditional therapy sessions and therapy assisted animal sessions than the ordinary therapy, through the detection of positive elements in the relation user - animal and consequently user - operator. In our project idea A.A. T. Help to activate mechanisms of emotional enriching and pressures motivational, how to improve the relationship, communication with the environment and the operator you work during therapy routine and adaptive behavior (self-control, personal responsibility ...). The following data on two clinical cases with follow with this procedure, we have shown, preliminary, how the relationship with the animal is gradually consolidated allowing to use this tool for effective rehabilitative ordinary, consequently a more positive and relaxing relation with the operator.

Application of T.A.A. with a child diagnosed with Autistic Disorder

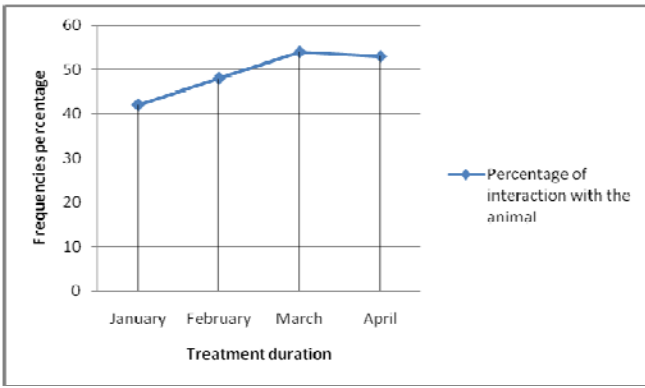
The child I.Q. of 5 years receiving treatment at the Territorial Riabilitative Unit (U.T.R.) Grottaglie (Taranto) for about two years, was subject to assessments made by observation of spontaneous behavior and gaming sessions. From the evaluation protocol CARS (Childhood Autism Rating Scale) - a scale designed to identify children with autism by two years of age based on behavioral data, providing an evaluation on the gravity of the disorder - showed a value 41 ("Severely Autistic"). The child showed difficulty adjusting to their new environment, inconsolable crying, especially in rapidly changing environmental situations. In the interaction with components of the room, she shared physical space and accepted passively their present, however, she showed no initiative or social sharing during the activities. The eye contact was minimal and fleeting, more present with familiar figures, the reference name sometime evoked a reaction. The cooperation in the various sessions was very variable, with consequent difficulties in completing the standardized tests. Overall were identified lack of awareness, reduced interest in the proposed material and

instrumental use of the adult. The child was left to engage in certain activities so stereotyped ignoring or refusing to play with the rest of the material. In particular it was possible involvement in movement activities in which she showed evidence of reciprocity. The verbal comprehension was felt good for simple orders, which were often performed in a time lag. The verbal language was limited to one or two words, modulated sounds and vocalizations not used for communication; was not present the required or declarative pointing. The child also showed low frustration tolerance which was followed by a reaction of screams and tears almost always consoled by his mother. The proposed material used was not always so functional and spontaneous play was mostly constructive simple and stereotyped; the symbolic play was being acquired. Regarding the motor is signaled low motor coordination and mannerisms (walking on toes, flapping hands). The child was placed in a program of speech therapy and occupational therapy to increase the time attention, to stimulate visual, tactile and auditory perception, to develop body awareness and learning processes. She had been scheduled to speak to speech therapy and occupational therapy once a rising time attention to stimulation of the visual, tactile and auditory development body awareness and development of learning processes. The child was included in the program of Animal Assisted Therapy with the dog because it was assumed that the presence of the animal could facilitate the achievement of rehabilitation goals as highly motivating factor for those who have a predilection towards these animals, involving an emotional point of view for the emotions arising from the characteristic reciprocity of that relationship - with a partner non-judgmental and demanding as the animal, placed to demonstrate loyalty and emotional availability - and therefore as the facilitator of interpersonal relationships. A preliminary assessment has found it possible treatment with Animal Assisted Therapy since there were no contraindications (specific phobias towards animals, presence of immunodeficiency, allergy, hypochondria, etc. ...). Were performed weekly meetings - for four months from January to April, lasting 20 minutes each, with individual sessions held in gym - in a circumscribed place that avoided further distractions for the child (unlike the garden), already itself inconsistent. How animal for the therapy was chosen a Border Collie of 4 years trained according to the criteria imposed by the Delta Society. For data collection it was decided to using video recordings in order to obtain detailed information about the modes of interaction which might otherwise be lost. It was thus possible to use videos for an accurate compilation of observation schedule and to allow a comparison with other experts independent observers. To reduce the reactivity of the child due to the camera, has left become familiar with the tool until the collapse of his curiosity. To avoid behavioral changes due to the presence of the observer who videotaped the session, we preferred to adopt a neutral attitude to the child remaining in the background without never take part in the activities. The evaluation was conducted through a detection event by calculating the absolute frequency of the events and in some cases the percentage of their occurrence.

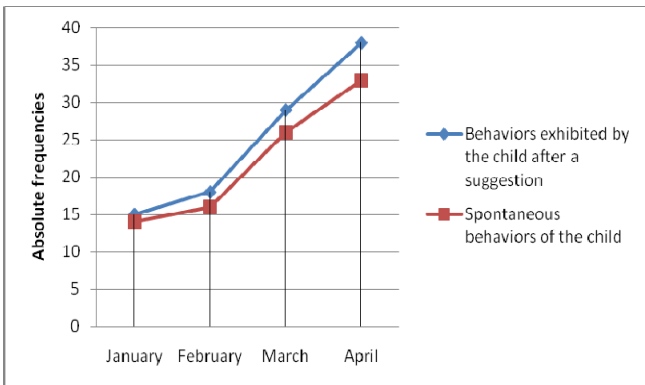
The following areas were investigated:

- Interaction with the animal
- The area of language and stereotypes linked to language
- The area of behavior and stereotypic linked to behavior
- The area of relational

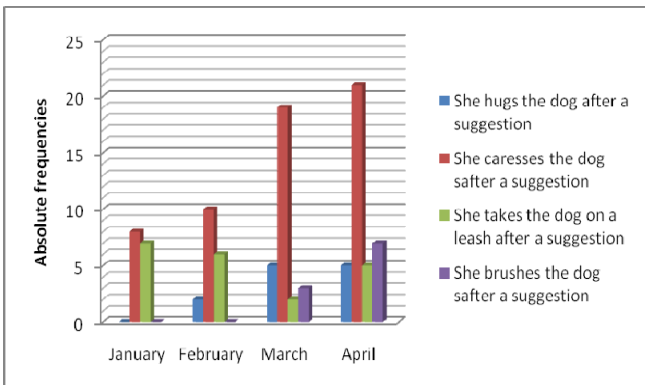
Interaction with the animal



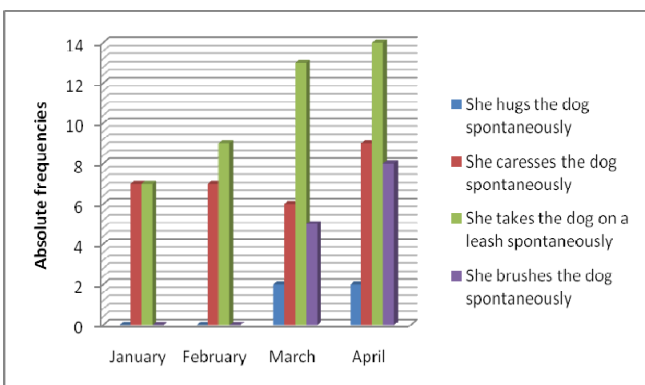
Graph 1.1



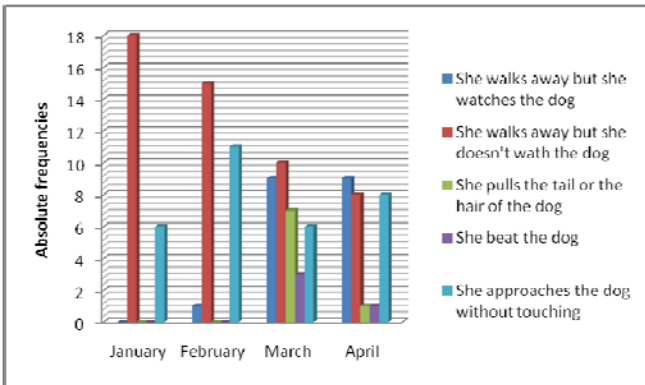
Graph 1.2



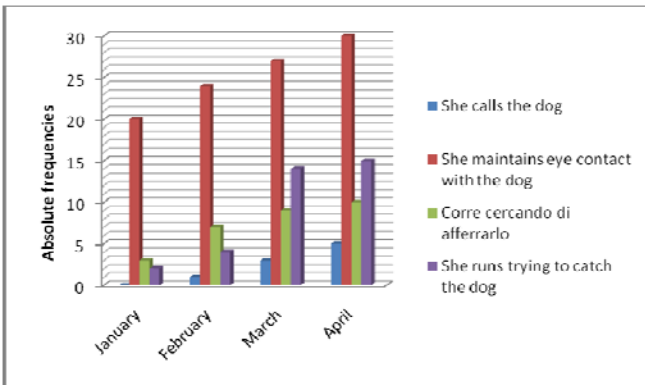
Graph 1.3



Graph 1.4

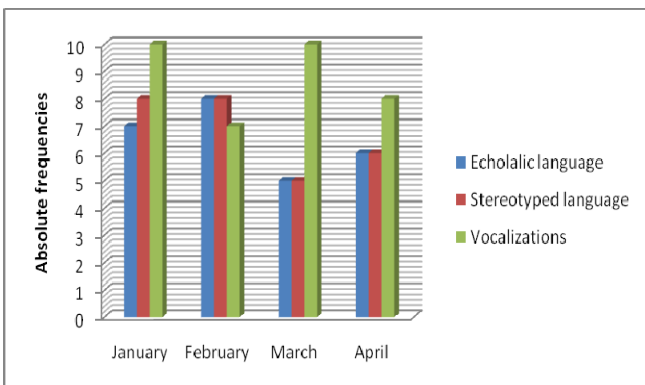


Graph 1.5

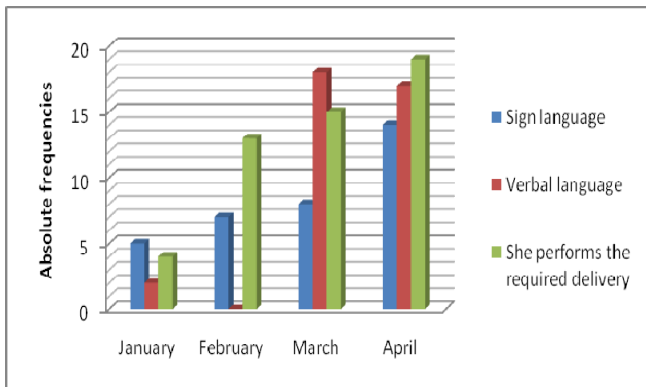


Graph 1.6

The area of language and stereotypes linked to language

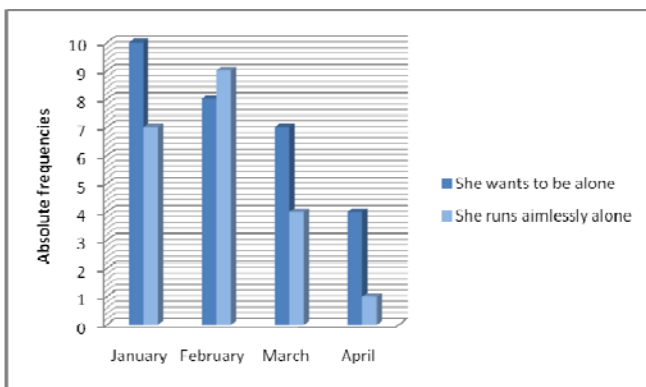


Graph 1.7

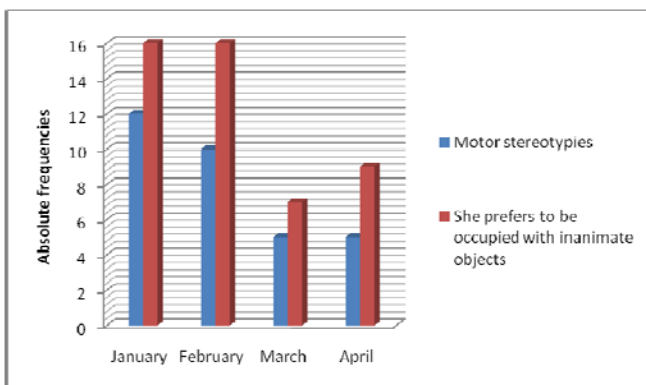


Graph 1.8

The area of behavior and stereotypic linked to behavior

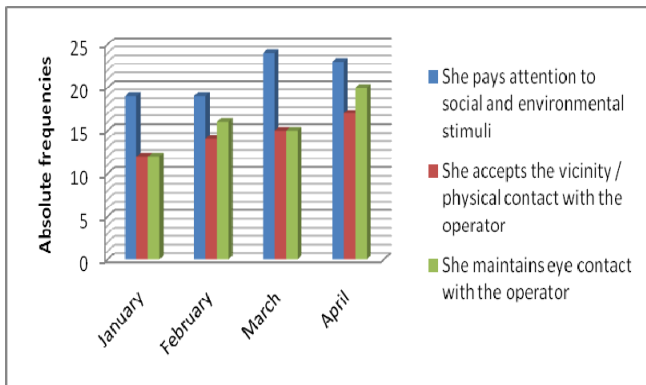


Graph 1.9

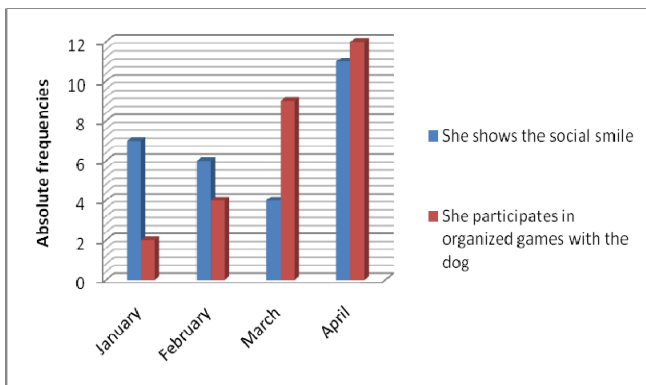


Graph 1.10

The area of relational



Graph 1.11



Graph 1.12

Conclusions

Participation in the sessions has been assiduous and regular and this has contributed relevant to the birth of an emotional relationship with the animal, a fundamental requirement to achieve beneficial effects on relational, behavioral, emotional and cognitive. Over time the child has proven to adapt well to environment and people accepting their presence, enough to consider that in the first four sessions the child was reluctant to stay in the room with an operator, reacted with tears when her parent left her and fled from activities that were organized for her; currently the child responds with a smile and watches her family person (hers operators). She formed a strong attachment to his therapist, sometimes researching her pampering. Spontaneously she orients herself toward the other children that sees, touches and shakes gently. The game-type preferred is sensomotor, usually spontaneous; symbolic play and imitation need to be enhanced. Than isolation prevalent in the first two months and the preference for inanimate objects brought in the sessions (as her doll), the child in time used that object as mediation in contact with the animal, then replacing the doll to a closer contact with the animal. Faced with an improvement interaction with the animal, there has been a decrease in negative or passive behaviors against dog. From the second month, the child has always follow what was done by the operator: If interested approached, smiling, shared activity, even for a few minutes (make soap bubbles, play with balloons and curling). The child showed to comprehend verbal messages that require the performance of simple actions (close the door, threw the paper into the trash, put toys in place), as well as reprimands and suggestions. She learned to identify certain objects in a communicative context and, parallel, improved in the ability to pay attention to stimuli. The vocabulary has been enriched by 5 - 6 words using appropriate for communication. In fact when the girl is presented to UTR uttered only words "Mother" "children" "no", not in a functional way; now she has not only finalized the use of the words to communicate, but she has learned to use new words like "dog",

"Frilla" (the dog's name) and "come". The girl has gained modest capacity in planning and managing the game symbolic as evidenced by its tendency arrival to arrange the circles and pins to form a path to be made with the dog. Even at times when the girl shows little collaborative in the activities programmed by her therapist, she maintains eye contact with a dog, index of the relation that she has established with him. The interview with the teachers did emerge as many achievements made by the child during the course of the sessions were exhibited in other environments such as in the classroom, with peers and with teachers. The reference is to social skills such as smiling, making eye contact, functional language, consolidation use of the words used with animals (mainly controls), the response to emotional expressions of others. However there were no generalized improvements of the global stereotypes so you might assume that for now only the presence of dog is experienced by the child as a interesting and positive stimulate so that she doesn't want other stimulations (In the literature these behaviors are interpreted as a way in which child try to feel her body and get through to them, feelings). The child still tends to isolate in class and prefers playing with an inanimate object respect to interaction with her peers: this could reinforce the idea previously expressed that the interaction with the animal helps the child to open herself providing a relation free from bias, direct, more easy to manage. However, the goal of therapy is to use the animal as a mediator in relation to the adult. This result was reached in part because the child is able to interact with his therapist, but it would be preferable that the child extends this effect also to other people. This will be the target of future sessions. The final administration of CARS encountered a score of 38 , the category of "severely autistic" but with a slight improvement. We can't say with certainty that the improvements are only the result of this therapy or the result of targeted action carried out by various measures that the child has received, as the involvement of speech and occupational therapy. However, her occupational therapist confirms that the effects are more noticeable when the child is with the animal, progress are faster when the animal is used in traditional therapy in a referential way (Asking the child to draw a dog, to define what a dog eats, to define the size of an object reference the dog, etc ...). Moreover, the therapist noted that using the referential value of the dogs child's attention span is greatly increased to the point that she is sitting more time or firm to perform a task.

Application of T.A.A. with a patient with Secondary Depressive Disorder

Mr. D.P. treated at the Territorial Rehabilitation Unit (U.T.R.) Grottaglie (Taranto) about two years, has expressed early symptoms ten years ago: deflection mood, loss of initiative, conceptual impoverishment, unstable equilibrium and limb dyskinesia. The neurological examination revealed apathy, poor design, difficulty in recalling memories, low voice volume, unstable walking, rare choreic hyperkinesia distal end of arts. The brain MR revealed a discrete and widespread reduction in tissue volume brain; the neuropsychological examination showed a deficit of attention, speech and verbal comprehension, in the planning and construction practice. Molecular Genetic testing confirmed the diagnosis of Huntington disease. There was a partial improvement of dyskinesias and mood disorders after treatment with atypical antipsychotics. A preliminary assessment made by the team considered as possible treatment the patient with the animal-assisted therapy, since there were no contraindications (specific phobias towards animals, presence of immunodeficiency, allergy, hypochondria, etc. ...). One aim has been to evaluate the main psychological and cognitive aspects compromised by the disease and their change after rehabilitative intervention planned with the help of the animal. As assessment of entry is used the Hamilton Rating Scale for Depression for depressive symptoms - A rating scale with 21 items graded to assess the severity of the symptoms - which is showed a score of 20 (moderate depression).

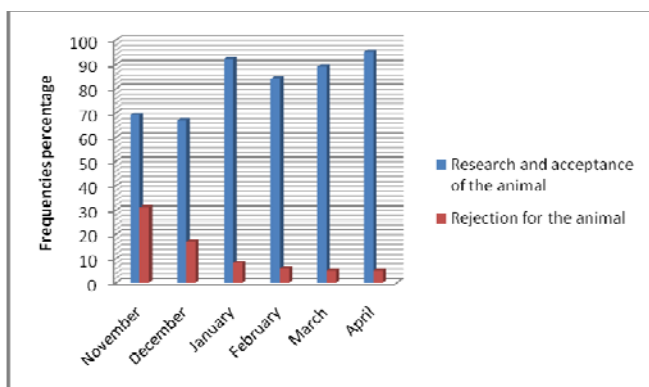
Preliminary observation with patient revealed his initial inability to establish social relations or emotional reciprocity with operators; an avoidance of visual and physical contact with people other than family members; a verbal response limited to a few words, only in response to specific requests, coupled with a verbal comprehension apparently deficient; lack of adequate visual expression to his state of mind; a low mood and low interest for work and the passions of the past.

Absent also the cognition of the passing of time. It was decided to proceed with the animal-assisted therapy in the rehabilitation program for him with the hypotheses to be tested of an increase in motivation to undergo ordinary therapy and thus of an improvement of social and affective-emotional skills. 24 individual sessions were scheduled with a weekly meeting for six months, from November to April. The sessions, totaling 20 minutes, were conducted mainly in garden of the rehabilitation center at the request of the patient. Mr D. showed, after the first session, a predilection toward a Italian Wolf and its conductor, with whom he continued to relate to the duration of the program. For data collection we were preferred to avoid videotapes for fear that they could influence the patient's behavior and we were made use of grids of observation with molecular markers, made by two observers independent of each other and not informed about the purpose of observation. The measurements were carried out after two minutes of observation for a minute of transcription by a horn that has marked the time. The following areas were investigated in relation to difficulties displayed by patients in the observation stage:

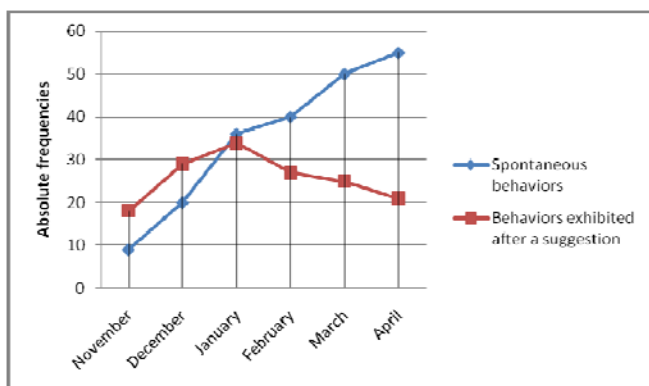
- Interaction with the animal
- Interaction with the assigned operator
- Level of interest / disinterest and pleasure towards the AAT

The areas listed above were also assessed through communication skills, the attentional capacity and the degree of acceptance of physical and visual contact with the operator and the dog.

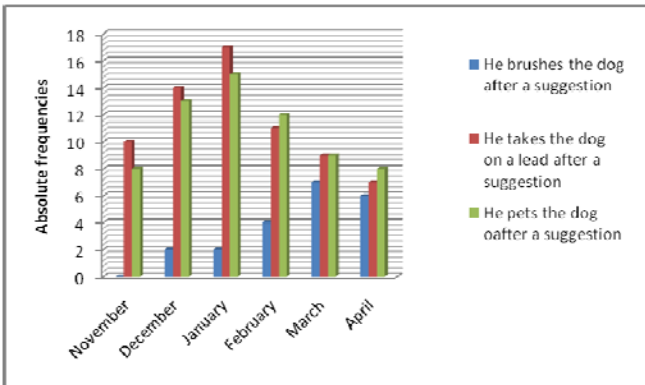
Interaction with the animal



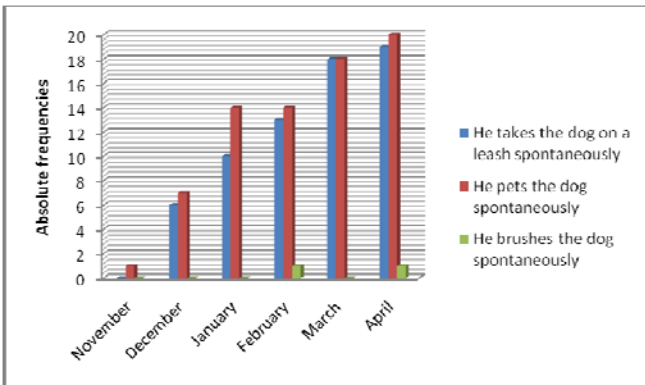
Graph 1.1



Graph 1.2

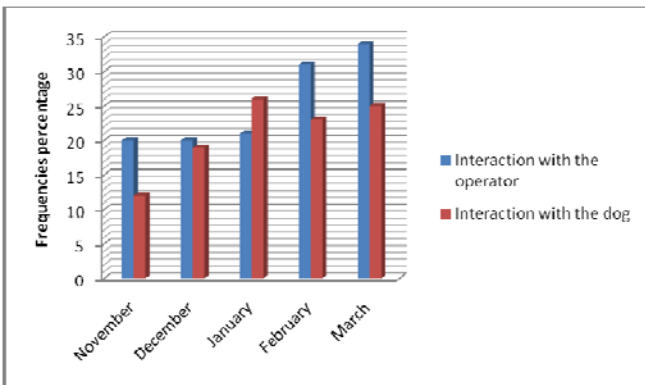


Graph 1.3

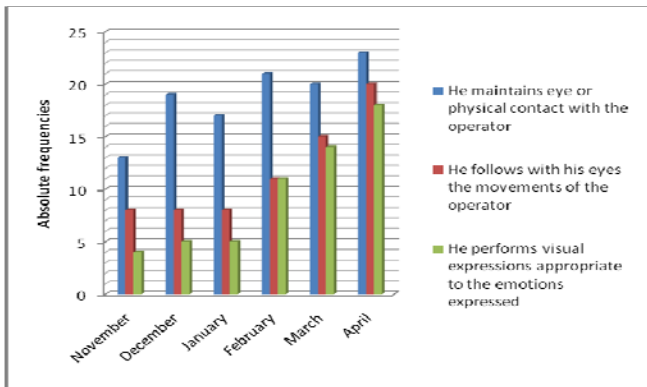


Graph 1.4

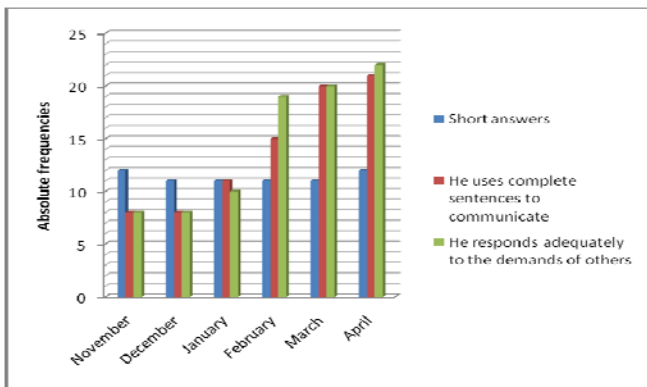
Interaction with the assigned operator



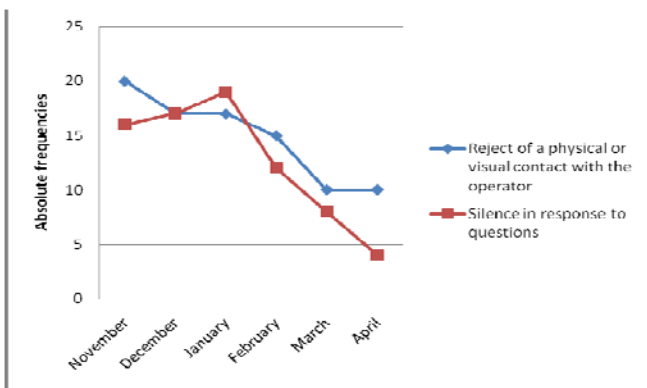
Graph 1.5



Graph 1.6



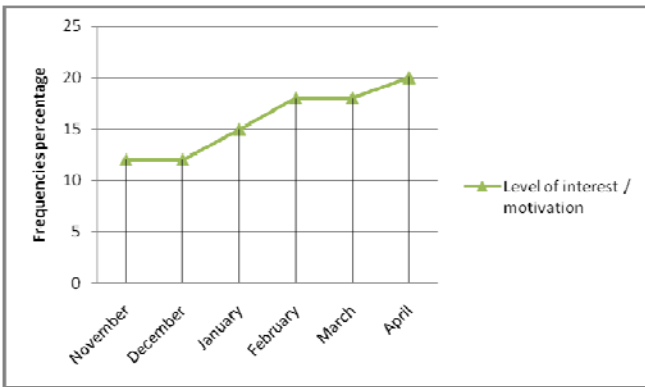
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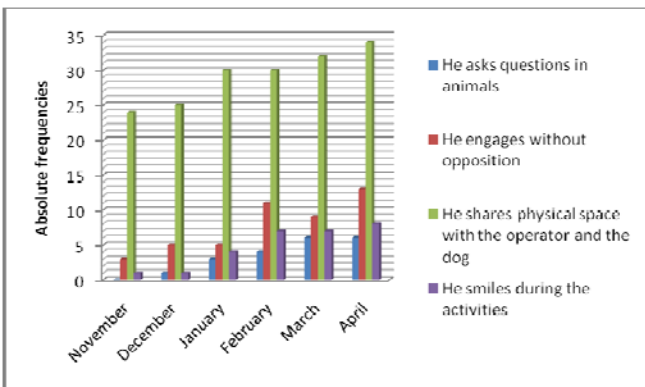
Graph 1.8

Level of interest / disinterest and pleasure towards the AAT

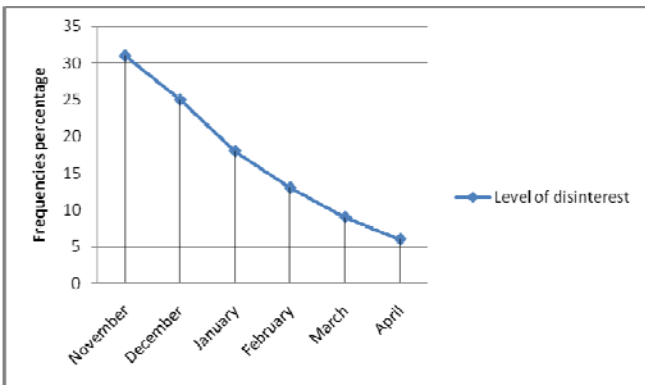
Assuming that these effects of positive interaction with the operator and the animal were due to increased motivation resulting from the presence of the animal, were observed some behavioral indicators related to the interest / pleasure and disinterest experienced in the situation.



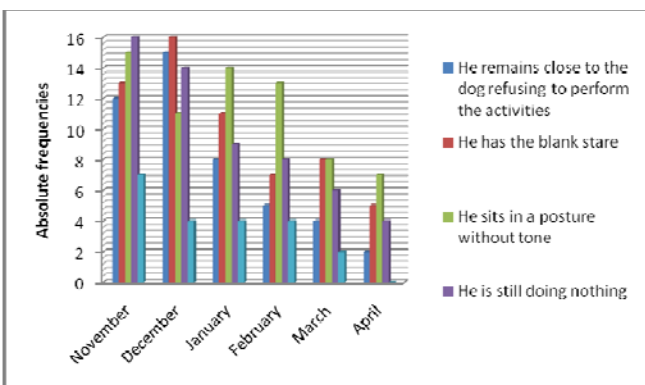
Graph 1.9



Graph 1.10



Graph 1.11



Conclusions

The frequency of meetings has been regular. There was a rise in the level of motivation associated with an increased willingness to make hard claims treatment that was provided, resulting in a reduction of the opposite behavior. The gradual acceptance of the animal has allowed not only to increase physical contact and proximity to the dog, but also to establish a loving relationship with the dog so that the choice of the animal to work was becoming selective, determining its level of participation in therapy. Over time the patient has learned to lead the dog perfectly (though large) acquiring greater stability and coordination of the limbs. The interview with his wife revealed that patient in recent months had expressed feelings of expectation towards dog therapy, showing impatience at earlier in the session. This activity provided a time reference, to mark the passing of days, innovative element in his current existence. Please note that the dog was used by the team as mediator in the relationship with the person making it possible to open a communication channel more attractive and alternative. In demonstration of just said, the final administration of HAM-D revealed an improved depressed mood, the absence of suicidal ideation and feelings of guilt (from the initial score of 20 to final score of 14.) The objective of the next meetings will be to generalize the benefits from this new therapeutic situation in other areas of behavior and other contexts of everyday life. The lack of a control situation prevents us from attributing certain benefits effects found in the interaction with the operator simply to the presence and mediation of the animal. The values that denote optimal interaction with the animal, though increasing with advancing the rehabilitation program, is not yet verified or disproved the initial hypothesis, that the interaction with the animal, more spontaneous and immediate, would cause improving the interaction with the operator. Consequently, we need to determine if the animal is a therapeutic instrument more effective than others in promoting improvements relational and affective-emotional in addition to traditional therapy. The next step will be to conduct a differential analysis between ordinary treatment and Animal Assisted Therapy by the animal as an adjuvant, for the same user at different times (in the protection effect of order and sequence) or for two groups as homogeneous as possible for age of the involved people, for diseases and the level of impairment of relational, emotional and cognitive-behavioral skills. It is clear that it is an operation methodologically incorrect to ascribe the observed changes in the patient only to the A.A.T. which, we recall, is part of a therapy protocol more complex and articulated. Similarly, an observation made on one patient does not authorize immediate or easy generalizations of observed effects on other patients in similar circumstances or on the same patient in different contexts. However, the results seem broadly positive, reconfirming as the A.A.T. can be a co – therapy with great individual variability.

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