

# Going by Sea: Group Rehabilitation of Subjects with Mental Health Problems through Sailing

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## Abstract

The objective of the survey is to observe whether patients affected by psychiatric pathologies can be rehabilitated through sailing. Consequently, two groups took part in the study: a clinical group and a control group. The study shows that the individuals rehabilitated through sailing (clinical group) underwent significant changes compared to the those who were not subjected to the same rehabilitation treatment (control group). Sailing physically reintroduces the aspect of dependence on the object and, subsequently, separation towards autonomy, the duality of inside and outside. The transformation process occurs by sharing a highly emotional experience, with a view to cohesion, empowering parts of oneself in order to share them with others, achieving confidence in the experience of intimacy.

**Keywords:** Sailing; Rehabilitation; Sea

## Introduction

### Transformation of the individual within a group

Rehabilitation of adult individuals through a group marks the psychological transformation of their relationship with themselves and others. The group is where the same process that brought the person to identify themselves in the initial phases of their existence is triggered once again on a subconscious level. For Winnicott [1], it is an area within which the subject relives the same childhood dramas before becoming an individual: through regressive shifts, they re-enact painful experiences caused by the fragmentation of their sense of self. In fact, through this multi-personal dimension, the individual blends with the entire group and loses the boundaries of their identity [2]. They subconsciously enter their internal world and resuscitate things that they had removed, forcing them to confront the confusion arising from a chaotic magma of emotions that the group itself, in its rational organisational structure, will have the function of reorganising. These individuals find it painful to confront the emotional issues they had removed and come to terms with their mental functions. Only if a therapeutic role is activated will it then be possible to reorganise and transform the “bad” sensations and emotions into something productive.

It is these very characteristics that transform the group dynamic into a sort of “psychological skin” [3] for these individuals, a vessel able to carry out a maternal role at essential moments [4]. It is the metabolic function of the group that makes it possible for the individual not to be overly alarmed by the inner threats that gradually reappear and that trigger a defence need. Making mental space for the group will enable each member to accept their solitude, developing within themselves a certain tolerance for not always being acknowledged by others, who will be equally respected in painful times and experiences.

In a rehabilitation context, the group provides an instrument that is useful for the prevention and care of distress. Sharing a group space allows the individuals who take part in it to have a greater openness. To recognise oneself in the difficulties of another, to empathetically feel and experience their suffering is an extremely important therapeutic and/or rehabilitating aspect, as it shows the individual that they are not alone in their distress.

Coming out of isolation activates one’s need to be with others and simultaneously view their own solitude as being productive. It is through

this contact with themselves that the path leading to change becomes possible. In fact, the members of the group remain more visible due to the fact that each of their difficulties is identified through mirroring with others [5].

The group dynamic allows individuals who are inadequate from an interactive point of view to increase their willingness to socialise, strengthen their capacity to carry out useful activities in order to achieve this task and generate change, in relation to their willingness to reflect upon themselves and on their own manner of functioning, as well as through identification raised by the other members of the group.

The group experience that accompanies rehabilitation through sailing will help adults to redefine their identity through a renewed capacity to feel.

## The Project “Sailing: Going by Sea”

### Hypothesis

The sailing project<sup>1</sup> arose from the necessity to rehabilitate, through the group and through sailing, adults with severe psychiatric pathologies and psychomotor deficiencies, opening up new paths towards rehabilitation.

Numerous therapeutic elements contribute to this kind of rehabilitation through sailing: the sea for the perception and feeling of

<sup>1</sup> The work and research team comprises CRISIA – Center for Research and Studies on Infancy and Adolescence, from Urbino Carlo Bo University, I.R. Onlus, the Institute of Neuro-psychoanalysis Research and two social co-operatives - Ce.I.S. and Ginestra - from Pesaro, which defined projects for therapeutic rehabilitation through sailing. Outings on the sea were organised for individuals afflicted by psychic distress, and their reactions were observed.

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infinity that it creates, which however also instils fear; the boat which allows you to reach any place that you desire, but on the inside provides limited space; the group that supports and encourages, but can also be the cause of conflicts; time that prompts infinite opportunities, but is limited; equilibrium... difficult to maintain, but necessary; and feelings to be experienced yet controlled.

The hypothesis is that such elements play an important role in getting the patient to confront their personal experiences, shared in a group setting while guiding them towards significant psychomotor and interactive transformation. Actively participating in managing a sailboat stimulates the patient towards object dependency, renewing their basis of trust and enabling them to achieve a sense of recognition.

An individual who is inadequate from an interactive standpoint can relate to the others by optimising on their capacity to carry out their task within the group, through identification mechanisms and development of the capacity to both listen to others as well as to themselves.

The sailboat becomes a potential space [6], or rather an internal place where it is possible to come into contact with parts of one's own inner world and bring them into play through creativity and sharing with the group. The sea, an open environment par-excellence, represents our unconscious, characterised by its infinite potential and resources but also for its sense of danger; the sailboat is a closed area that passes through open space over an extended period time, containing and allowing the individuals to become closer to one another, fostering trust and cooperation. In such a scenario, the sea and the boat form an environment capable of producing changes: in fact, collective and personal growth mechanisms are activated even in subjects suffering from psychic distress. Within this sailing microcosm, it is possible to work, through the group, in a variable therapeutic setting in which uncertainty and compliance are necessary elements, with the aim of bringing patients closer to one another and reducing signs of denial or physical attack, confiding in the trust and the warmth of interpersonal and object relationships.

Being in a group makes it easier to face reality and reactivates the healthy part of the ego [7], which encourages a return to socialisation and imitating behaviours that are useful in improving quality of life. The climate of the sailboat setting stimulates autonomy and responsibility towards oneself and others, leading the person to face their fears and insecurities, and to have a greater tolerance towards their frustrations while stimulating them to cooperate and socialise.<sup>2</sup>

## Procedure

Participants in the experiment were tested in random order. The experimenter was blind as to whether the participant was a patient or a control individual.

## Participants

The study involved a sample of 66 individuals, of which 24 females and 42 males, with severe psychiatric pathologies and psychomotor deficits, ranging in age between 20 and 40 years. In particular, 18 individuals had an average age of 22 and the remaining 15 had an average age of 38. For the former, the average age of onset of the disease was 15 years, and for the latter, 21 years.

All patients continued to follow their pharmacological treatment

<sup>2</sup>The sailboats used are: NOVA 30 and ALPA MAICA 37, a classic sailboat of English design by J. Hillingworth for cruise and regatta crafts, intentionally not specific for the physically disabled.

plan for the entire duration of the study, with no changes. The medical records indicate the following pathologies: autistic syndrome with early psychosis 8-12%, moderate/severe intellectual disability 12-18%, borderline personality with severe narcissistic neurosis 12-18%, schizophrenic psychosis 8-12%, bipolar disorders with episodes of manic excitement 8-12%, sensory impairment 6-9%, dissociative psychosis and cyclothymic syndromes 12-18%. Comorbidity with substance abuse and the acute stage of the disease were considered as exclusion criteria.

The individuals attend the Daycare Centre for the Disabled and use the Support Services of the Italian Solidarity Centre (CeIS) of Pesaro, which provides listening and individual, social and family support services. The sample was divided into two groups: clinical and control, each comprising 33 numerically equivalent individuals in terms of gender, age, onset of the disease and type of diagnosis.

The clinical group was subject to rehabilitation through sailing. This was conducted over a period of 5 months, with 25 outings and an average on-board stay of between 2 and 3 hours. This variability in duration was due to weather conditions. The rehabilitation setting comprised two boats, one with capacity of 7 people, the other with capacity of 6 people. The activities took place at Baia Vallugola in Pesaro; the activities and itineraries during the various days were subject to variation. The crew for the outings consisted of: 1 psychotherapist skipper, 4 individuals with pathologies, 1 healthcare professional. The individuals in both groups (clinical and control) participated in the same institutional rehabilitation activities of freestyle gymnastics, cycling and walking; therefore, the sailing variable acted solely within the clinical group.

## Research stages

In order to analyse whether going sailing constitutes a potential space where it is possible to play ("create and destroy"), bring together those parts of oneself [8] that are not organised and act as an essential factor for the social integration of patients with mental disorders, a structured research analysis was undertaken in different stages: pre-treatment, rehabilitation through sailing and re-testing.

Pre-treatment involved the administering of a valid and reliable instrument in order to analyse some personality traits of the participants. The test used was the Survey of interpersonal values (SIV), a forced-choice questionnaire for diagnosis and evaluation of the main facets of personalities that identify an individual according to their interpersonal behaviour. It is important to underline that the individuals, before the experimental treatment, underwent training in order to improve their equilibrium and coordination, which is essential for an outing on a sailboat. Prior to each outing, physical strengthening exercises and perception activities were also conducted.

The rehabilitation stage<sup>3</sup>, following administration of the test, envisaged an introductory course on sailing, for a total of 12 hours, with an approach aimed at rehabilitation, and a Pilate's course in order to improve equilibrium and posture. The outings were on sailboats which are cabin vessels suitable for navigation without limits from the

<sup>3</sup>Implementation of the project involved a major effort that was aimed at maximum reduction of risks for the participants by improving the level of safety at sea and finding equilibrium between healthcare assistants and the individuals with mental health problems, using the necessary technology for weather reports, communication, GPS nautical charts, Navtex and a nautical computer. Moreover, new sails were employed to work with greater safety when navigating in the open sea or during the regattas. The healthcare staff was well trained to ensure safety of the participants and to better manage any critical situations. The results have been highly satisfying thus far and fully justify taking on the aforementioned risks.

coast, on which it was possible for participants to acquire the essential rudimentary skills of sailing and using instruments such as a helm, a sail, ropes and knots, as well as make the necessary manoeuvres for navigation, such as changes in direction, luffing and gybing. The group also learned about functioning of the helm compass, the sails and how to use radio communications, as well as how to interpret crucial weather reports in order to identify wind types and the indicators for the vessel's progress. This enabled them to acquire greater autonomy, self-confidence and responsibility.

For the re-test, they underwent a new Survey of interpersonal values (SIV) test in order to verify any changes following their rehabilitation experience in the sailboat outings.

The control group only participated in the pre-treatment and re-testing phase.

### **Testing and re-testing: Instruments employed**

The Survey of interpersonal values (SIV) is a forced-choice questionnaire that explores important personality components and the values that predispose individuals in their interpersonal relationships. The SIV analyses which values are important for each individual. It is an instrument which is both accessible and objective. It illustrates the characteristics of each individual's personality and enables the assessment of any changes in their values, following the training, rehabilitation and therapy [9]. The instrument is composed of 30 items and 6 scales: Support, Conformity, Recognition, Benevolence, Independence and Leadership. The S-Support scale provides information with regard to the need to be treated with understanding, receive encouragement, be supported externally, and gain approval and be treated with consideration.

Conformity shows the individual's aptitude to follow what is considered to be socially correct behaviour by respecting the shared norms, behaving in an appropriate way and being a conformist. Recognition is a scale that refers to the individual's predisposition for being at the centre of attention, admired and favourably considered. Benevolence analyses the capacity to care for others and to offer help. Independence indicates the individual's tendency to make their own decisions autonomously and feel that they have the right to do all that they desire, while Leadership refers to the capacity to take on responsibility for others, assuming a position of authority and guidance. In addition to the quantitative aspects described, interviews also revealed the sensations and emotions of the experiences, with analysis of the answers using Bruner's indicators for emotional categories.

### **Comparison of pre-treatment and re-testing phases: Answers to the interpersonal values survey**

The control group did not show any statistically significant changes between the pre-treatment phase and the re-testing phase. In fact, the answers provided were consistent between the two phases.

This indicates that control group, which did not participate in the rehabilitation through sailing, did not undergo those important transformations which, conversely, occurred in the clinical group.

In the clinical group, analysis of the clusters highlighted the differences in answers to the Survey of Interpersonal Values (SIV), in the stages of testing and re-testing. In fact, contrary to what took place during the first survey, the participants were grouped more homogeneously, based on their disorders.

The difference in response to testing with the Survey of Interpersonal

Values (SIV), administered during the pre-treatment and later for the rehabilitation activity on the sailboat, were examined using the statistics test *t* for students, which indicated that the individuals who participated in the study underwent interesting changes. In fact, the analysis shows a statistically significant difference in the following scales: Support-S (0.371), Conformity-C (0.307), Recognition-R (0.379), and Leadership-L (0.076).

As pointed out previously, the Support-S scale analyses the need to receive support, to be encouraged, approved and considered. Comparing the average results, the groups appear to be divided in two parts: the scores of 15 participants increased, while those of the other 15 decreased; 3 of them had the same score results. This underlines a change that confirms greater flexibility by the sample to undergo the effects of the group work. In cases where there is a decrease in this necessity, participants become capable of taking on challenges with more autonomy, at times even supporting members of the crew that show a greater need for encouragement. This fact confirms the rehabilitating effect of the group activities aboard the sailboat, as many individuals were observed to have greater confidence in their own actions and responsibility for themselves and others.

The predisposition to accept shared norms, examined by the Conformity-C scale, revealed changes in two parts of the group: an increase/decrease (15-12) in two subgroups, and no change in a small part of the group (6). Therefore, the results indicate that the conformists of the group tend to follow the rules and orders of those who guided them during the course of the sailing excursions, an essential factor for preservation of the group and their need for a sense of protection. Even those who had decreased their need for conformity and appeared to be more obstinate were increasingly more active and had a greater level of autonomy that was, in any case, profitable for the group. Following the directions of the psychotherapist skipper, developing transference towards them and respecting the socially shared norms in the context of the sailing experience is essential for the success of the excursion and to reduce risks and danger. Being "too" independent in such a context could lead the group into highly critical situations, yet at the same time, maintaining a certain level of self-sufficiency is crucial in order to provide the group, even if in a conformist manner, with innovative elements that are useful for the entire crew. In this multi-personal context, although enriching for each single individual, it is also essential to safeguard individual space for the benefit of the group. The essential and necessary norms for sailing that may be exposed to new variables must at times be readjusted for the good of the crew. In going sailing, a closed location in an open space, each single person must count on their own resources and on the ability of the group to deal with extreme external variables such as: sun, light, darkness, equilibrium, heat, cold and external stimuli such as marine animals etc.

For the Recognition-R scale, this evaluates the predisposition for being at the centre of attention, participants received lower scores due to the psychic distress that made them aware of their personal difficulties in expressing their potential. However, a comparison of the average scores indicate evidence of their overcoming this situation; in fact, they were able to express their need to be acknowledged, not only among their group members but also by people outside the group [10], a sign of a greater ability to go beyond their pathology. This identity recognition is fundamental, because being acknowledged and accepted by the external world strengthens them and helps them to mend their psychic fragmentation by restoring the damaged aspects of their interpersonal relationships. This did not happen for some of the participants (12), who were probably left with a feeling of a lack of benevolent consideration on the part of the other group members.



Leadership is the scale that demonstrates the greatest change from the first to the second survey. Highly significant statistical differences emerged, and the comparison of averages indicates that 18 individuals increased their predisposition for having a greater sense of responsibility for the other members. They assume a greater capacity to conduct successful productive and effective actions for the group. Being aware of working better for the group increased their ability to represent themselves as being efficient.

This predisposition declined in the remaining members of the group (12). Such a decrease in the scores was due to their awareness of their personal limits and to the importance of fitting in with the group in order to “function” as a crew.

### Exploring the experiences of the participants: Reorganisation and self-discovery

After the rehabilitation stage, participants were interviewed in order to record their experiences and examine their ability to come into contact with their sense of self. Their sensations and emotions were explored in their encounters with wind, heat, cold, the sunrise, the sunset, their fears, their enjoyment etc., and their answers were examined by means of Bruner’s indicators [11]. These indicators focus on measuring the individual’s sense of self (selfhood) and, by identifying the narrative verbal markers, analyse their identity according to the following criteria: action (voluntary actions or actions of free choice), commitment (adherence and/or opposition to actions implied by norms), *resources* (powers, privileges and means available while exercising voluntary actions), qualities (the quality of emotional states), reflexivity (the more meta-cognitive part of Self), and location (place in time, space and social position).

For questions related to the sensations felt when the wind was blowing, when the sea was calm or when the sea was rough, the majority of those interviewed emphasised the quality of their feelings, and they were capable of describing their own emotions and sense of self. In fact, some reacted to the perception of wind by declaring such things as: “the waves were turning the boat over”, “I was feeling a bit anxious”, “I like it”, “a caress that passed over my body among the rays of sun”, and “I like the wind in my face”. The stimulus of the calm sea created a sense of well-being, as demonstrated by some of the responses: “I was relaxed”, “a sense of peace, you’re there watching the water... a nice atmosphere”, “It made me feel good”. The rough sea evoked contrasting and very lively feelings, such as: “I was a little afraid”, “I wasn’t afraid, it’s great”, “I was holding the helm”.

A sizeable portion of the sample used reflexivity indicators, revealing a good ability to describe the most internal images of one-self and the internal emotional states, indicating the thought strategy used to examine reality. This was obvious when interviewees made statements such as: “It seems like your falling even when you’re not”, “It’s really nice, but if you’re not used to it, it would be better to keep your feet on firm ground” (wind); “We were waiting to be lulled by the wind”, “It made me feel good” (calm sea); “It overwhelms you”, “I was nauseous so I don’t have the best memories”.

Even for the emotions triggered by the sunrise, sunset and night, there was a predominance of indicators of the quality of feelings, with reactions such as: “it’s really beautiful”, “it’s a marvellous sight, I felt really good”, “I was afraid with all that up and down”.

The sensations of being hot or cold caused responses of reflexivity for the majority of the group: “I didn’t mind, it’s normal at sea”, “I feel better with a cool wind” or “it was very hot, I was sweating a bit”, “I

suffer a bit when it’s hot”. It is clear that this rehabilitating, enriching and unique experience has tapped into the internal potential of the group which, after finding itself immersed in this reality, was able to work on its own resources, developing the capacity to reflect with a certain precision on the inner states of being.

The cause for reflection with respect to the more dangerous activities on the sailboat bring the majority of individuals to use quality indicators for their emotions, as observed in the following phrases: “the mainsail scares me a bit because it hurts”, “climbing up and down was a little scary”. A sizeable portion of the individuals used verbs of *action* that indicate the ability to react according to their own will; in fact, they state that “climbing” and “manoeuvring the sailboat” are dangerous. Use of these narrative markers highlights the individuals’ ability to become involved in operative and effective behaviours. Even the state of reflexivity appears amid the responses used by a significant portion of the group: “nothing is too dangerous but we must be careful, it depends on how you move around”. This indicates the ability to adequately evaluate oneself based on the degree of danger.

For the question regarding, the things feared most before having to do them, the sample relied above all on action indicators in this case as well, demonstrating the ability to act voluntarily with a goal in sight and allowing for the possibility to prove themselves, as demonstrated by one of their responses: “Don’t keep the boat too close to the wall”.

The best things that occurred on the boat were experienced, even in this case, mainly with narrative markers that revealed action indicators: “steering the sailboat, taking in the sun, sheeting the mainsail”, “steering...a challenge for skippers”, followed by the quality of their feelings: “I really enjoy steering”, and reflexivity, such as “it’s the best thing possible: relaxing and the white of the dolphins”, “you can chat, we have snacks and try steering”. The things that participants would have liked to do but didn’t lead almost all participants to use action indicators: “staying out for a whole day, I would have slept on the boat”. The question the nicest things about being out in natural surroundings forced them to confront their feelings and explore their emotions: “the dolphins are beautiful” and “I really liked the scenery”. Therefore, the most common emotions that they experienced were linked to positive sensations of serenity and tranquility.

The consideration of others compared to their own abilities stimulated the use of quality indicators of feeling; the other group members are predominantly seen in a positive light: “it depends, sometimes I was better than the others who were afraid”, “we’re more or less at the same level”, “everyone is good, I can’t criticise anyone”. It becomes evident, therefore, that the group has an ideal function, where each individual can demonstrate their abilities, yet simultaneously, through mirroring, witness in others the reflection of one’s own actions and identification.

Finally, the group experience tends to show the participants on two sides: the textual analysis highlights the ability for a subgroup to use the quality of feelings indicators, such as “FAN-TA-STIC”, while others use those of reflexivity: “it’s nice, now I’ve got experience...I like going”. This shows us that the individuals have processed their experiences and are capable of understanding them in an in-depth way and elaborate on them. The experience of going by sea through sailing proved to be an important rehabilitating moment that triggered calming abilities, acting on the group, on the potential space - games and creativity - and on their commitment. It was therefore possible to restore some of the fragmented parts of their identity, allowing the individuals to become more confident, capable and autonomous.

Belonging to a group or team, identifying themselves collectively and mirroring themselves in others, and participating in events where it is possible to encounter and compete with “normal” people, has provided the participants of this initiative with greater permeability towards the world of others. At the same time, they have a greater capacity to identify with their emotions, interact with others, communicate, and open up to themselves and others in a scenario of active participation. The expected results in terms of acquired skills, socialisation, relaxation and awareness are efficiently integrated into an articulated therapeutic strategy aimed at long-term changes, also in synergy with pharmacological treatments, psychotherapy and family support. A significant fact is that for some participants, the context of sailing facilitated contact with the outside world in a way that was “possible”, helping to ease the anxiety that had pushed them towards regressive behaviour and social withdrawal. We believe that continuation of this therapeutic activity is necessary for rehabilitation, in order for the participants to become emotionally closer to the healthcare assistants and so that the flexibility of these relationships can offset and/or decrease the use psychiatric drugs and hospitalisation.<sup>4</sup>

## Discussion

The work, carried out with the objective of improving the state of well-being and quality of social interaction by individuals with severe psychiatric pathologies and psychomotor deficits, involved 66 subjects. The selected form of rehabilitation was sailboat outings, since the sailboat represents a potential space, where it is possible to integrate the conflictual parts of oneself with the outside reality. These aspects are represented, for example, by the sea, for the feeling of infinity that it triggers, but also fear; the boat, which may lead towards unlimited destinations but provides a limited environment; the group, which supports and facilitates, but can also generate conflict. The hypothesis, therefore, is that sailing increases confidence in the relationship with others, encouraging an examination of reality and triggering the healthy parts of the Ego. Collaborating in the management of the sailboat stimulates group dependence, rebuilding the underlying trust and enabling individuals to distinguish themselves.

According to the literature, in a study conducted in 2014 in Sardinia [12], it was observed that, following the rehabilitation through sailboat outings, albeit for a limited amount of time, patients afflicted by severe mental disorders showed an improvement in scores in the diagnostics tests administered before and after the rehabilitation and a significant recovery in the healthy parts of their Ego.

The rehabilitative effect of the group activity can be seen in a comparison of the answers to the Survey of Interpersonal Values (SIV) administered to the clinical and control group in the pre-treatment and retesting phase. In fact, application of test t for students revealed a statistically significant difference in some interpersonal characteristics such as, for example, the need to receive support and to be encouraged and approved (Support- S 0.371), demonstrating the rehabilitative effect of the group activity where subjects acquire greater confidence in their actions and in taking responsibility for themselves and for others; the Leadership - L (0.076) aspect shows the most significant change triggered by the sailing experience. In fact, the subjects show greater ability in terms of their capabilities and awareness of knowing how to conduct productive and effective actions for themselves and for others. The attitude of accepting shared rules, examined through the Conformity C (0.0307) scale, reveals changes in two parts of the

<sup>4</sup>A similar study carried out by the ASL of Genoa on the tendency of psychiatric hospital admissions revealed a decline from 47% before the sailing activity to 16% after the outings at sea (ASL no.3 Genoa, 2006).

group; an increase/decrease in two sub-groups, and a lack of change in a small portion. In the Recognition - R (0.379) scale, which assesses the inclination to be at the center of attention, subjects obtained lower scores, reinforcing a group identity that confirms the results of Support-S. Contrary to the clinical group, the control group showed no changes.

The data that emerged from the clinical study, applying Bruner's indicators to the contents of the interview on the quantity and quality of emotions experienced, are highly interesting and deserve further examination. In particular, in subjects with bipolar disorder, an increased congruence between words and emotional attitudes was observed. The recognition of one's emotions, in fact, assigning meaning to what were previously confused, oriented behaviour's that were previously disorganized. Subjects showed greater awareness of themselves as well as of their interaction modes with others. Almost all verbal expressions were categorized based on the reflexivity indicator, which reveals a good level of description of one's self-image and emotional states, highlighting the thought strategies through which an examination of reality is conducted, such as when they say “you feel like you're falling even when you're not”.

Also of significance were the changes in the individual abilities to recognize and evaluate the affective states with discretion, such as discomfort, anxiety, fear, loneliness and silence, and to plan for their containment, leveraging on the greater self-confidence and on the ability to ask for help. The best things that I did on the boat were catalogued, in the majority of cases and, unexpectedly, even in subjects with narcissistic neurosis, according to the action indicator: “taking the helm, sunbathing, hauling the rope tight”, followed by the quality of the mood: “I enjoy taking the helm” and reflexivity “it's the most wonderful thing: relaxation!; watching dolphins swim by under the boat”.

The need to evaluate the permanent nature of what has been achieved on one's own affective states and on those of others requires repetition of this scheme at annual intervals. The complexity of this work made it impossible to keep under control the many other factors that also contributed to the recovery of subjects. In particular, numerous additional lessons may have had an impact, such as the use of weather information to recognize winds, use of the radio transmitter, the helm, sails, ropes and knots and carrying out the necessary manoeuvres for navigation.

## Conclusion

This study highlights the fact that rehabilitation through sailing, conducted on subjects with severe psychiatric pathologies and psychomotor deficits, can improve their state of well-being, their emotional awareness and their quality of interaction, increasing confidence in their relationships with others and reactivating the healthy parts of the Ego. Such rehabilitation could also be supplemented with standard rehabilitation protocols or rehabilitation of patients with severe mental disorders: results of a cross over randomized controlled trial, sailing for rehabilitation of patients with severe mental disorders: results of a cross over randomized controlled trial. Given the positive results achieved with subjects suffering from severe psychiatric pathologies, the sailing variable could also be extended to other disadvantaged groups.

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and Studies on Childhood and Adolescence from Urbino University, with boats, university processors, interns, social operators and skippers working for free to implement the pilot project, in the hope that it will be replicated in Italy and abroad with the appropriate funding.

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