

ATTITUDES TOWARDS DISABILITY: THE EXPERIENCE OF “CONTACT” IN A SAMPLE OF ITALIAN COLLEGE STUDENTS

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Abstract - The theoretical frameworks of this study were the model of action-research and the contact hypothesis (Allport, 1954) considered a strategy to modify prejudice towards disability (Corrigan *et al.*, 2010) expressed by teachers, families, and health service staff (De Caroli and Sagone, 2011; Arvaniti *et al.*, 2009). The purpose of study was the exploration of changes in social attitudes towards disability as a result of exposition to a contact with disabled subjects housed in a rehabilitation centre. Participants were 83 college students divided into: experimental group (contact) and control group (no contact). Materials were composed by questionnaire on attitudes towards the disabled person, social/scholastic integration, and rehabilitative-health services and Semantic Differential on “Disabled person”.

Results showed that, after the contact, students of the experimental group increased perception of disabled person as a resource, sociable person, burden for the society, limitation for the family, unintelligible subject, and different person; they improved evaluation of integration as useful strategy to facilitate positive contact, and of rehabilitative services; they assessed the disabled person as competent and appreciable subject, but even more problematic.

Keywords: attitudes toward disability, action-research, contact hypothesis, college students.

Introduction

Scientific research deepened the analysis of social attitudes toward disability in teachers of students with special needs, in teachers who are attending courses teaching for students with disability, in staff care, and in college students (Forlin *et al.*, 1999; Deng, 2008; De Caroli and Sagone, 2008; Licciardello and Di Marco, 2010, Ahlborn *et al.*, 2008). It was pointed out a discrepancy between the positivity expressed towards disabled person at ‘declared’ level and the negativity emerging at ‘representative’ level (De Caroli *et al.*, 2007; De Caroli and Sagone, 2008); in addition, it was found that teachers showed positive attitudes toward the inclusion of disabled students in special schools, but, at the same time, they were in favour of the mainstreaming (Deng, 2008).

Scientific studies in this area were focused on the best strategies to change social attitudes towards disabled people, e.g., the contact, which, as pointed out by the Allport’s model (1954), is characterized by institutional support, long and extensive interaction, equal status, cooperative and interdependent relationships. In this regard, Eichinger *et al.* (1991) posed emphasis on the importance of frequency of contact, noticing that college students, exposed for 10 weeks to a multi-face intervention consisting of information, contact and persuasive message, compared with control group, significantly improved attitudes towards disabilities. Forlin *et al.* (1999) found that teachers attending to training course who had daily contact with disabled people perceived less discomfort with such interactions than did those who had contact less than every three months. Campbell *et al.* (2003) documented positive effects of training of one-semester addressed to pre-service teacher education students, focused on formal instruction with structured fieldwork experiences, revealing more positive attitudes towards the inclusive education of children with Down syndrome and greater ease when interacting with people with disabilities.

Corrigan *et al.* (2001) proposed a trinity of strategies grounded in social attribution theory as the most effective way to challenge mental health stigma. They compared the strategies of “education” (based on the replacement myths about mental illness with correct information) and of “protest/advocacy” (consisting in presentation of a morally untenable position regarding a minority group followed by a rebuke against these thoughts) with the strategy of “contact” (realized by listening of 10-minute presentation by a person who discussed his history of severe mental illness, followed by 5-minute discussion). The authors showed that “contact” produced a more positive change than “education” and “protest” for persons with psychoses and depression, and “education” had greater effects on attitudes towards mental retardation than “contact”. These strategies were considered useful ways to support mental illness de-stigmatization programs.

Au and Man (2006) revealed that the quality of the contact was found to be a dominant factor on the reduction of negative attitudes towards people with disability in health care professionals and in their students. Similarly, McManus *et al.* (2010) noted that greater quality of contact was related with more positive attitudes toward disability.

Arvaniti *et al.* (2009) noted that familiarity with mental illness was associated with less negative attitudes with disabled people: in detail, familiarity was negatively related with “social discrimination” and “social restriction” and positively related with “social integration”. Fichten *et al.* (2005) found a reduction of social distance perceived toward disabled adults in a group of volunteers who worked with disabled children. Also, Wong (2008) found that inclusion of disabled people, realized in competitive and achievement orientation, created formidable barriers to the adoption of effective inclusive practices in the classroom.

Siperstein *et al.* (2007) found that the youth believed that students with intellectual disability can not participate in their academic classes, viewed inclusion as having both positive and negative effect on them personally; when they perceived that students with intellectual disability were competent in academic tasks, they were willing to interact with these students and to support their inclusion in middle school system.

Based on these evidences and with reference to action research model (Licciardello *et al.*, 2007), this study aimed to explore the effects of congress activities, focused on deepening the knowledge of intellectual disabilities and methods of approach to them, realized into a rehabilitation centre that houses people with intellectual disabilities, attending activities of ergo-therapy. The congress activities have provided further a direct contact with disabled people living in the centre and engaged in daily activities indicated in the programs of rehabilitation.

1. Hypotheses

The purpose of this study was to verify, in college students of psychology, whether and to what extent participation in activities of scientific congress including the contact with people with intellectual disability modified social attitudes towards disability and the representation of disabled person. We assumed that participants to activities of the congress (experimental group), compared to no-participants (control group), showed positive changes in reference to:

- 1) social attitudes towards disability in relation to achievable objectives, individual characteristics, most common prejudices, feelings towards people with disability, views on scholastic and social integration and on rehabilitation centres;
- 2) representation of disabled person.

2. Method

2.1. Participants

The sample consisted of 83 students (8 boys and 75 girls), aged between 19 and 28 years ($M=19,12$, $SD=1,68$), attending the degree course of Psychology at the Faculty of Educational Science (University of Catania, Sicily). Students were divided in two groups: the experimental group (36 students who participated in activities of the congress) and the control group (47 students who don't participated in those activities).

2.2. Materials and procedures

Materials were administered in small group setting and were constituted by:

a) questionnaire on social attitudes towards the disability (see, De Caroli and Sagone, 2008 De Caroli and Sagone, 2011), divided into 7 areas consisting of items valuated in a 7-points scale (from 1=totally disagree to 7=totally agree), connected to:

-achievable goals area: 7 items (it1 – to be accepted as he/she is; it2 – to be inserted into the world of work; it3 – to achieve personal autonomy; it4 – to go out of the condition of disability; it5 – to contribute to greater awareness of disability; it6 – to get married and build own family; it7 – to take part in political life);

-individual characteristics area: 9 items (it1 – disabled person is a problematic element for the classroom; it2 – a resource for others; it3 – a person with difficulties in social integration; it4 – a special and sensitive person; it5 – a person like other people; it6 – a person who needs care and attention; it7 – a person socially excluded by others; it8 – an unfortunate person; it9 – a child who puts a strain on the skills of parents);

-most common prejudices area: 9 items (it1 – disabled people are a limitation for the family; it2 – they are irrecoverable students; it3 – they do not lead a normal life because of their difficulties; it4 – they elicit tenderness ; it5 – their life-expectancies are short-term; it6 - they are sociable people; it7 – they are aggressive people; it8 – they are a burden to society; it9 – they are unintelligible people);

-feelings area: 7 items (it1 – feelings toward disabled person are warmth and tenderness; it2 – sorrow; it3 – inadequacy and powerlessness; it4 – suffering; it5 – protection against external difficulties; it6 – anger for their condition of disability; it7 – personal professional realization for the improvements achieved by disabled people;

-scholastic integration area: 9 items (it1 – scholastic integration is an utopia; 2 – a difficult experience to realize; it3 – an high form of civilization; it4 – practicable only in special contexts; it5 – a useful project but not always completed; it6 – useful to encourage a positive contact with other pupils; it7 – a struggle against discrimination of disabled people; it8 – a limitation for the development of whole society; it9 – achievable with support of the institutions);

-social integration area: 8 items (it1 – social integration is a precious asset that must be protected; it2 – an integral part of our population; it3 – people with many elements of diversity; it4 – children with the same opportunities offered to the others;

it5 – people with factual access to all services; it6 – a protected category to which the jobs are reserved; it7 – obstacles in the development of whole community; it8 – a “mistake of nature”);

-health-rehabilitation centres area: 7 items (it1 – health-rehabilitation centres are hard to find; it2 – they offer unsatisfactory therapies; it3 – they are adequate to the needs of disabled people; it4 – they offer highly specialized activities; it5 – they are satisfactory to guarantee the improvements to disabled people; it6 – they provide a strong link with the family; it7 – they are devoid of professionally prepared team).

b) a Semantic Differential (Osgood *et al.*, 1957; Di Nuovo and Licciardello, 1997), with 36 pairs of bipolar adjectives, each evaluable on a 7-points scale (with the intermediate value equal to 4), to assess the representation of “the disabled person”.

Materials were administrated to all students before and after the congress activities and the contact realized in a rehabilitation centre that housed people with intellectual disabilities, engaged in activities of ergo-therapy.

2.3. Data analysis

The examination of the statistical significance of results was carried out using the SPSS 15.0 software (Statistical Package for Social Science), by means of *t for paired sample*.

3. Results

3.1. Attitudes towards disability

From the comparison between results obtained before and after the activities significant differences only for experimental group were found, in the sense that degree of agreement of students increased in the following areas:

- *achievable goals area*: a person with disability can achieve the objective to get out of the condition of disability (before: $M=4,11$, $SD=1,51$ vs. after: $M=4,67$, $SD=1,31$) ($t_{(35)}=-2,046$, $p=.048$);
- *individual characteristics area*: a person with disability is a resource for others (before: $M=4,72$, $SD=1,65$ vs. after: $M=5,72$, $SD=1,31$) ($t_{(35)}=-4,437$, $p<.001$); a child who puts a strain on the skills of parents (before: $M=2,61$, $SD=1,73$ vs. after: $M=3,72$, $SD=1,68$) ($t_{(35)}=-4,537$, $p<.001$);
- *most common prejudices area*: disabled people are a limitation for the family (before: $M=3,50$, $SD=1,73$ vs. after: $M=4,22$, $SD=1,81$) ($t_{(35)}=-2,476$, $p=.018$); they do not lead a normal life because of their difficulties (before: $M=3,94$, $SD=1,80$ vs. after: $M=4,56$, $SD=1,73$) ($t_{(35)}=2,255$, $p=.031$); they elicit tenderness (before: $M=4,61$, $SD=1,92$ vs. after: $M=5,22$, $SD=1,49$) ($t_{(35)}=-2,547$, $p=.015$); they are sociable people (before: $M=4,72$, $SD=1,30$ vs. after: $M=5,39$, $SD=1,31$) ($t_{(35)}=-2,958$, $p=.006$); they are a burden to society (before: $M=2,83$, $SD=1,95$ vs. after: $M=3,72$, $SD=1,75$) ($t_{(35)}=-3,538$, $p=.001$); they are unintelligible people (before: $M=2,39$, $SD=1,59$ vs. after: $M=3,28$, $SD=1,50$) ($t_{(35)}=-5,017$, $p<.001$);
- *feelings area*: feelings toward disabled person are inadequacy and powerlessness (before: $M=3,22$, $SD=1,87$ vs. after: $M=3,72$, $SD=1,81$) ($t_{(35)}=-$

2,772, $p=.009$) and personal professional realization for the improvements achieved by them (before: $M=5,11$, $SD=1,26$ vs. after: $M=5,61$, $SD=,96$) ($t_{(35)}=-2,023$, $p=.051$);

- *scholastic integration area*: scholastic integration is a strategy useful to encourage a positive contact with other students (before: $M=6,17$, $SD=,84$ vs. after: $M=6,50$, $SD=,70$) ($t_{(35)}=-2,236$, $p=.032$);
- *social integration area*: society considers the disabled person a precious asset that must be protected (before: $M=3,61$, $SD=1,44$ vs. after: $M=4,67$, $SD=1,17$) ($t_{(35)}=-4,763$, $p<.001$) and a person with many elements of diversity (before: $M=4,72$, $SD=1,26$ vs. after: $M=5,28$, $SD=1,11$) ($t_{(35)}=-2,140$, $p=.039$);
- *health-rehabilitation centers area*: they provide a strong link with the family, (before: $M=3,72$, $SD=1,00$ vs. after: $M=5,06$, $SD=1,14$) ($t_{(35)}=-4,934$, $p<.001$), they are adequate to the needs of disabled people (before: $M=3,11$, $SD=,95$ vs. after: $M=4,83$, $SD=1,40$) ($t_{(35)}=-5,337$, $p<.001$), they offer highly specialized activities (before: $M=3,06$, $SD=,86$ vs. after: $M=4,83$, $SD=1,23$) ($t_{(35)}=-6,796$, $p<.001$), they are satisfactory to guarantee the improvements to disabled people (before: $M=3,17$, $SD=,84$ vs. after: $M=4,78$, $SD=1,04$) ($t_{(35)}=-6,536$, $p<.001$).

Degree of agreement decreased in relation to the following items: rehabilitation centers are hard to find (before: $M=5,06$, $SD=1,09$ vs. after: $M=3,83$, $SD=1,32$) ($t=3,449$, $p=.001$) and offer unsatisfactory therapies (before: $M=4,94$, $SD=1,24$ vs. after: $M=3,06$, $SD=1,80$) ($t=5,004$, $p<.001$).

3.2. Representation of disabled person

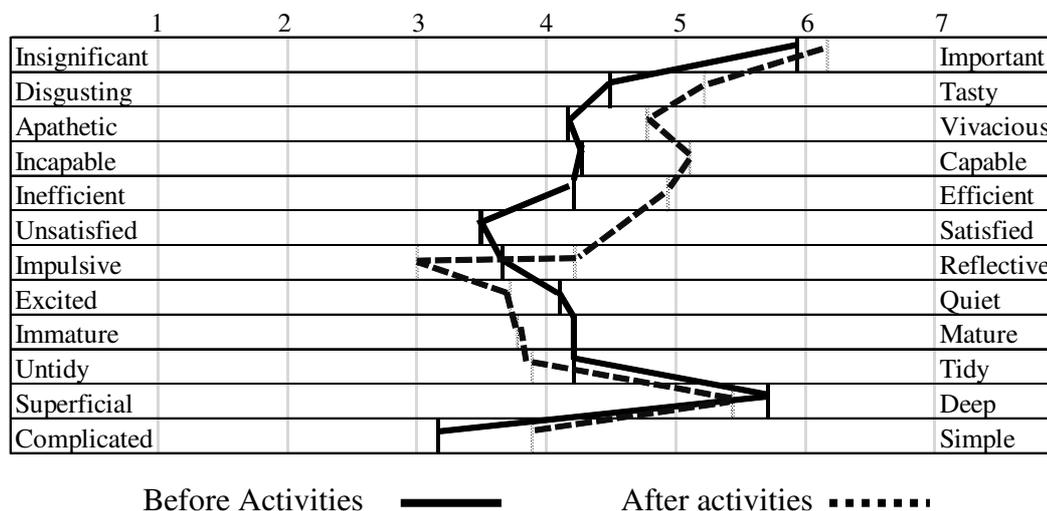
From the comparison between results obtained before and after activities (Fig.1), significant differences in the analysis of pairs of bipolar adjectives were found. Students of experimental group assessed disabled persons more important ($t_{(35)}= -2,09$, $p=.04$), tasty ($t_{(35)}= -5,32$, $p<.001$), vivacious ($t_{(35)}= -2,70$, $p=.01$), capable ($t_{(35)}= -3,67$, $p=.001$), efficient ($t_{(35)}= -,31$, $p=.002$); satisfied ($t_{(35)}= -2,88$, $p=.007$), impulsive ($t_{(35)}=4,47$ $p<.001$), excited ($t_{(35)}=2,17$ $p=.04$), immature ($t_{(35)}=2,35$ $p=.02$), untidy ($t_{(35)}=2,64$ $p=.01$). At the same time, disabled persons were valued less deep ($t_{(35)}=2,53$ $p=.02$) and complicated ($t_{(35)}= -2,81$ $p=.008$) (Tab.I). No differences for control group were found.

Tab. I – Comparison between before and after activities

Adjective	Means-before	Trend	Means-after	Adjective
<i>Insignificant</i>	5,94	→	6,17	<i>Important</i>
<i>Disgusting</i>	4,50	→	5,22	<i>Tasty</i>
<i>Apathetic</i>	4,17	→	4,78	<i>Vivacious</i>
<i>Incapable</i>	4,28	→	5,11	<i>Capable</i>
<i>Inefficient</i>	4,22	→	4,94	<i>Efficient</i>
<i>Unsatisfied</i>	3,50	→	4,22	<i>Satisfied</i>
<i>Impulsive</i>	3,67	←	3,00	<i>Reflective</i>
<i>Excited</i>	4,11	←	3,72	<i>Quiet</i>
<i>Immature</i>	4,22	←	3,78	<i>Mature</i>
<i>Untidy</i>	4,22	←	3,89	<i>Tidy</i>

<i>Superficial</i>	5,72	←	5,44	<i>Deep</i>
<i>Complicated</i>	3,17	→	3,89	<i>Simple</i>
Scale from 1 to 7 intervals				

**Fig. 1: Pairs of bipolar adjectives – Comparison between before and after activities
Experimental group**



4. Discussion and conclusion

Results seemed to confirm initial hypothesis, in the sense that experimental group showed significant changes in social attitudes toward disability, while control group showed no significant differences. In reference to explored areas, it was possible to observe a greater willingness to consider disabled person as a resource, a precious asset that must be protected, a sociable person who elicit tenderness, a person who can achieve the objective to get out of the condition of disability and generate feelings of professional realization for the improvements achieved. Furthermore, results highlighted the increase of evaluation of scholastic integration as strategy useful to encourage a positive contact with other students.

After congress activities students of experimental group increased the evaluation, in terms of most common prejudices, of the perception of disabled person as a subject who doesn't lead a normal life, unintelligible, a person with many elements of diversity, a limitation for the family and a burden to society. In addition, students increased degree of agreement with ideas that disabled person are children who puts a strain on the skills of parents. These last results could be explained in relation to the typology of the Residential Rehabilitation Centre which permanently plays host to disabled people and this evidence could have influenced the perception of disabled person as subjects difficult to handle by their families.

After contact with disabled people, social attitudes linked to rehabilitation centres have improved because they were evaluated less hard to find, more satisfactory for therapies and specialized in the activities.

It is interesting to note that the experience of contact modified the representation of disabled people who were assessed more important, tasty, vivacious, capable, efficient and satisfied, but also, more impulsive, excited, immature, and untidy. With reference to the cross-cultural model of *Quality of Life* (QOL) by Schalock (1996), Schalock and Verdugo (2006), and Schalock *et al.* (2007), these results will be topic of interest in order to identify strategies and activities useful to improve quality of life in people with intellectual disability. Quality of Life Model analyzed eight areas: (a) emotional well-being, (b) interpersonal relationship, (c) material well-being, (d) personal development, (e) physical well-being, (f) self-determination, (g) social inclusion, and (h) rights. Positive and negative representations of disabled people, expressed by individuals who undertake training courses planned to work with them, can influence social attitudes towards disabled people and the best practices direct to them.

This research noticed that participation to activities focused on the improvement of knowledge about intellectual disabilities and methods of approach to them (see, Tait and Purdie, 2000), supported by direct contact with people with disability (as were already showed in students by Hastings *et al.*, 1996 and in teachers by Parasuram, 2006), seems to improve representation of disabled people and change social attitudes toward them and rehabilitation services.

It is useful to structure training periods with direct, qualified, and intensive contact within university courses designed to train specialized person to support subjects with special needs in order to ensure positive and long-term effects (Allport, 1954; Lewin, 1951). In this way students will be anchor the beliefs about disabled people to real everyday life experiences and break away from prejudicial representation of disabled people (see Corrigan *et al.*, 2001).

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