

# Volunteer Work and Disability: Impact on Social Representations and Health

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## Abstract

Even if it is linked to the idea of giving, volunteer work constitutes an important productive resource but it also has a number of interests which are rarely examined in their concomitant actions. The aim of this study is to investigate social representation of disability and brain lesion and to check the impact of commitment to voluntary work on this representation. Firstly a group of 30 retired people interested in voluntary work who had no experience of brain damaged people, filled out a characterization questionnaire. Secondly after a period of voluntary work, a sample of 8 of these retired people redid the questionnaire. The results show an evolution with experience alongside this population. A few months later the volunteers filled out another questionnaire on the impact of volunteer work. The findings show they think that experience of volunteer work can change the way people see disability and that it has beneficial effects on their well-being.

**Keywords:** volunteer work, social representation and practices, brain lesions, retired people, promotion of health

## 1. Introduction

Even if volunteer work is difficult to enumerate since: "...it forms the subject of no regular official investigation, except in Canada because it does not contribute to the gross domestic product" (our translation) (Archambault, 2005, p. 11), nevertheless some data is available on this activity. From a study carried out in 1997, it has thus been established that the hard core of volunteer work is on the side of associations for social actions. Besides the characteristics of work defined as "regular, trusty and exclusive", an increase in volunteer work was noted between 1990 and 1996. The evolution of volunteer work's economic clout since 1993 (for the author it represented 1100000 full-time jobs) is thought to constitute: "...a mutation of behavior whatever the methodological biases" (our translation) (Archambault, 2005, p. 20).

We also learn that it is more often men than women, that the highest age brackets go from 35 to 54 (the author also notes that volunteer work of young people is on the rise) and that commitment increases with the level of education.

When extended to Europe, this study also reveals four "typical-ideal models": -a corporatist model (or Rhine model) with Germany, Austria, Belgium and the Netherlands; -an Anglo-Saxon model; -a Scandinavian model (Sweden, Norway and Finland); and a Mediterranean or emerging model with Spain and Italy. Despite these differences: "...volunteer work in Europe represents a powerful group force, bearing common values and European citizenship" (our translation) (Archambault, 2005, p. 30).

### 1.1 Social Representations (SRs) and Practices

The study of SRs initiated by Moscovici (1961/76) has given rise to several streams of thought that rely on various methodological approaches. The research started by the school of higher studies in social sciences (EHESS) maintains an ethnographical anchoring with a more qualitative methodology (Jodelet, 1989; Moscovici, 1961/76). The Geneva approach, known to stress the generating principles of taking a stand, has illustrated these contributions through factor analysis (Doise, Clémence, & Lorenzi-Cioldi, 1992). The Aix-en-Provence school is the instigator of the theory of the central core of SRs. According to this approach the representation is organized around a central core which is the consensual part of the representation and a periphery which is linked to

individual practices (Abric, 1976; Flament, 1987). This school developed qualitative and quantitative tools such as ranked free associations or characterization questionnaire (Abric, 2003).

From the beginning, the link between practices and representation was formulated: "...the representation contributes exclusively to the *processes of behaviour formation and social communication orientation*" (Moscovici, 1976, p. 75). Whether in social or professional practices, research is abundant. For example Campos (1998) was concerned with the social representation of children on the street among social workers in Brazil. Gaymard and Joly (2013) studied the social representation of soccer among young adult amateurs practising soccer "at the foot of apartment buildings". Trévisan-Virol and Lecigne (2000) showed that the social representation of old age was linked to the practices of the team of carers and their voluntary participation in organizing activities (trips, games, painting, etc.). Gaymard (2006) studied the social representation of the elderly among professional carers and students who only had experience in the family with healthy grandparents. These few examples of work testify to the necessity of taking into account experience or practices when working on an object of social representation.

The disability issue present in the field of the sociology of deviance with the works of the Chicago school (Becker, 1963; Goffman, 1975) has been studied less in social psychology; a fact which Paicheler, Beaufiles and Ravaud already brought up in 1987. Here we will not touch on the works dealing with the theoretical questioning around the object disability (Miami, 1994) but we will refer to certain research in the field of SRs and Implicit Theories of Personality (I.T.P.).

### *1.2 SRs, I.T.P. and Disabilities*

Jodelet (1989) worked on the relationship to madness and the representations of mental illness. She performed a study in a rural community accommodating the mentally ill. She shows the existence of protective practices based on beliefs of contagion. For example the host family washes the linen or the place settings of the mentally ill separately. Gaymard (2014) studied the social representation of work among women working in a sheltered environment and adolescent girls with intellectual disabilities. In this study the value of inclusion of work and the positive feelings are revealed even if the work (for the women) is done in a sheltered environment. The link between social representations and practices can also be observed as well as the importance of employers' social representations. Paicheler, Beaufiles and Ravaud (1987) analysed the Implicit Theories of Personality (ITP) in relation to physical and sensorial disabilities. Via correspondence analysis, they thus show that an anxious and introverted type of personality is attributed to disabled persons. For the rehabilitation professionals who were interviewed, a disabled person who has not overcome his or her disability is to be found effectively at the far end of the introverted/anxious pole. This study shows that physical deficiency is associated with a pathological personality. To study the stereotypes with regard to the elderly, Gaymard (2006) started from the semantic differentiator used by Paicheler et al. (1987) adding certain modifications. The comparison between students and health professionals shows a more discriminating representation for the latter, which implies that practices accentuate stereotypes. These results should be put in relation with the concept of ageism proposed by North American researchers, which refers to a set of prejudices toward the elderly (Grant, 1996). Working from two central dimensions, abilities (independent, hard working, productive...) and human warmth (pleasant, sensitive...), the works show that elderly people are classified in the group incompetent/warm, which is close to incapacity and intellectual backwardness (Fiske, Cuddy, Glick, & Xu, 2001; quoted by Cuddy & Fiske, 2002).

The works to which we have just referred studied the representations generated by an able-bodied public namely with the question of attitudes toward disabled persons (Miami, 1986). But another approach was proposed by Gaymard (2014) who studied the representation of work among persons with disabilities and showed that in this representation of work elements already observed among an able-bodied public could be found. Bamford (2007) was concerned with personal real-life experience of cranial trauma but brain lesions have never yet been studied as an object of representation although they constitute a real problem of public health.

### *1.3 People with Brain Lesions and Cranial Trauma: A Real Problem of Public Health*

A person with brain lesions is a person whose brain has received an attack or a lesion that can be due to a cranial trauma (80% of cases) or a result of an infection (<http://www.c2rp.fr/upload/publication/TRAUMA.pdf>). The origins of acquired brain lesions are therefore diverse (road accident, sporting activity, stroke, cerebral anoxia, brain tumor, etc.). Cranial trauma is a real problem of public health... "...because, from the trauma itself to socio-professional rehabilitation of the person who has been a victim, it will call into play a multitude of factors (medical, psychological, social) and actors (from the initial care to the rehabilitation), interrogating the institutional, technical and human means at the person's disposal and their family to enable them to continue their life in the best possible conditions" (our translation) (Forgeau, 2004, p. 3).

Brain lesion can cause a certain number of complications that can impede daily activities. These after-effects vary from one person to another, affecting cognitive, communicational, emotional and behavioral capacities of the person. The victim thus suffers from a number of disorders such as problems of the memory and attentiveness, slowness, trouble anticipating and orientating in space and time and personality problems (Truelle, Fayada, & Montreuil, 2005; Vallat-Azouvi & Chardin-Lafont, 2012). This disability therefore takes several forms and the expression invisible disability is often used to define it since it is not initially perceived by the person nor by others (<http://www.ebissociety.org/automn/Handicap-invisible.09.2007.pdf>). The consequences of brain damage disturb the relations with the environment, family, emotional and professional life (Bamford, 2007; Brooks, 1991). Brain damage is a psychic disability that of necessity implies care. This type of disability should be distinguished from a mental disability resulting from intellectual deficiency (UNAFAM <http://www.unafam.org/Specificite-de-l-handicap.html>). The Act of 11 February 2005 (“Equality of rights and opportunities, participation and citizenship”) makes official recognition of the psychic disability possible. According to the Lebeau report (1995) medical and social care of brain damaged people really began about 30 years ago with the creation of C.A.T. (Center of assistance through work), C.A.J (Day reception Center) and F.O (Occupational home). Thanks to two decrees it was possible to structure care of brain damaged people better: decrees DAS/DE/DSS n° 96-428 of 5 July 1996 and DAS n° 98-13 of 12 January 1998. But the question of inclusion of brain damaged people and their integration in a life plan means that the role of institutions in opening up to the outside world should be considered and equally the role of volunteer work which has a double impact: on the level of residents and on that of volunteer workers themselves.

#### *1.4 Opening Institutions to the Outside World*

“The National Agency of assessment and quality of social services and institutions” (ANESM) published the procedure for elaborating recommendations of professional benchmarks entitled “Opening the institution ‘to’ and ‘on’ its environment” ([http://www.anesm.sante.gouv.fr/IMG/pdf/reco\\_ouverture.pdf](http://www.anesm.sante.gouv.fr/IMG/pdf/reco_ouverture.pdf)). This document deals with the importance of doubly opening institutions. Firstly, by making it easier for people (family, volunteer workers ...) to come into the institution, which thus becomes a resource for the outside world. In this document the importance of volunteer workers is stressed since they contribute to the social link and have a role of “... communication relay toward the outside world by contributing to the recognition of the institution”. Then, by going toward the outside world to include residents in the town in which case the institution rests on the outside world and territory. This double action should allow institutions to be opened up and the residents to be assured of maintaining links with others and exercising their citizenship. But if the Act of 11 February 2005 enabled official recognition of psychic disability, what is the situation a few years later? In a report by the general inspection of social affairs bearing on the assessment of the care of psychic disability (Amara, Jourdain-Menninger, Mesclon-Ravaud, & Lecocq, 2011), an evolution can be observed in the implementation of certain plans but also advances when faced with problems of enforcement. Concerning social and civic life: “These difficulties are related to negative representations in public opinion which mental illness still suffers from, by maintaining an unfavorable context for the inclusion of the person in society and for recognition of their citizenship” (our translation) (p. 8). Thus this opening must be accompanied by quality communication with the outside world in order to modify the representations of the residents. It should be possible for institutions for health care and social welfare to be in direct contact with the local partners and they should look out for new projects that could favour the opening up of the institutions.

##### *1.4.1 Volunteer Work and Health*

A study on the social representation of volunteer work (Vincent, 2006) shows that it is structured around strong values such as solidarity, usefulness, self-sacrifice but also contributes to well-being and personal fulfillment.

Moreover, several studies establish a link between volunteer work and health. Barron, Tan, Song, McGill and Fried (2009) show that volunteer work can help to promote good health in elderly people. Other works testify to its effects on well-being and satisfaction in life (Morrow-Howell, Hinterlong, Rozario, & Tang, 2003; Van Willigen, 2000). In a study among elderly Japanese, Shono, Takamura, Nakano and Honda (2007) made a comparison between volunteer workers and non-volunteers. They highlighted significant differences concerning self-evaluation of health, frequency of medical visits and frequency of contacts with friends. They also noted a significantly higher total score in the group of volunteer workers for the categories “origin of the meaning of life and satisfaction ‘and’ emotional support network”. A Canadian report on volunteer work and its beneficial effects on the elderly (Cook & Speevak Sladowski, 2013) mentions the following beneficial effects: improving physical functions, increasing emotional health, securing specific social benefits and is good for the brain. Concerning the beneficial effects on psychological health the authors write (our translation):

“The expression ‘Helper’s high’ was made popular by Dr Allan Luks who has studied the beneficial effects of volunteer work on health for more than 30 years. One of the first studies on the subject carried out by Cornell University after following up around 500 volunteer workers over 30 years related that only 36% had had a serious illness during this period compared with 52% of those who had not been volunteers. This has been explained by the production of endorphins which are usually found when a person feels useful to others and this chemical change in the body has a calming effect thus contributing to a positive outlook” (p. 28).

Thus, whether from the point of view of representations or of epidemiological studies, volunteer work appears to have positive effects on well-being and health.

The study presented here follows an observation inside a medico-social institution. After 3 years in operation, it was noted that there was difficulty in working in partnership with local authorities and meeting the needs of users by implementing teams of volunteer workers. The remote location of the institution in an area that is badly served by public transports encourages local development of volunteer work. Despite different attempts, volunteer work is not well represented while there exists a high demand from the residents. Several observations lead us to think that the image of the institution recently set up in the area and the opinion on disability and brain lesion would be runways to work. People with little knowledge of this disability are believed to have fears and apprehensions that hold them back from undertaking volunteer activities. On the other hand knowledge of the disability would seem to have a positive impact on representations. This leads us to put forward the following hypotheses:

Hypothesis 1: The representation of disability and brain lesion reflects a perception of a generalized disability, both physical and mental.

Hypothesis 2: Experience with brain damaged persons would make this representation evolve favorably.

Hypothesis 3: In relation to the second hypothesis this time concerned with the impact of volunteer work on retired people, we put forward the hypothesis that they will express a positive opinion of the virtues of volunteer work.

## **2. Method and Procedure**

### *2.1 The Area of Study*

This study was performed in a locality of around 6000 inhabitants. The population is relatively old and the socio-professional groups represented most are retired people and management staff. In this locality a medico-social institution for disabled adults from 20 to 60 years with acquired brain damaged, opened 3 years ago. It is a complex of 3 institutions composed of a residence, a nursing home and a specialized nursing home. Before being affected by this pathology the people suffered from no illness and lead a life that could be called “normal”. A large number of them are parents, spouses, wage-earners or students ... Particular and multiple situations that the staff must take into account in order to accompany these users individually. The institution has constraints that are above all linked to the remote geographical location, which does not make the residents’ autonomy easy nor their openness to the outside world.

### *2.2 The Population Interviewed*

The inhabitants of the locality concerned by volunteer work were invited to share a moment of conviviality inside the institution. Through this first contact it was possible to register the future participants in the study. There were 30 retired people averaging 57.73 years (SD=4.29) 26 women and 4 men. Only one woman had professional experience in the medico-social field as a former nurse. The others had no professional nor personal experience of disability in the broad sense of the term.

For the pre-post phases of the study, 8 people having filled in the characterization questionnaire beforehand filled it in again after 2 months of volunteer work.

For the questionnaire of opinions on the impact of volunteer work, 13 volunteers working since the spring 2013 filled it in 8 months later (average age, 63.18).

### 2.3 Tool

#### 2.3.1 The Characterization Questionnaire

A characterization questionnaire was compiled following an exploratory phase. The latter took place over 2 months during which we met the inhabitants of the zone (shops, town hall, schools, enterprises, associations, bars, busy streets...). The idea was to meet inhabitants and key protagonists such as presidents of associations, local councillors...

Ten people answered the inductor: "When you hear disability and brain lesion what comes to mind?" and twelve people answered the inductor "When you hear brain injury what comes to mind?" As the associations produced from the first inductor were twice as many, we opted for this object which had visibly aroused more interest. The characterization questionnaire is a tool developed in the framework of the structural approach of social representations (Abric, 2003; Gaymard & Joly, 2013; Gaymard, Tiplica, Koh, & Wong, 2015). Composed of 20 items (Table 1), it rests on the principle of block choices. Those questioned have to select the items more or less characteristic of the object "disability and brain lesion" while strictly following 4 stages. In stage 1, they choose the 4 items the most characteristic of the object which they score +2. In a second stage, they choose the 4 items the least characteristic of the object which they score -2. In a third stage, they select the 4 items slightly more characteristic (+1) then the 4 items slightly less characteristic (-1). The remaining items are scored 0.

The items were rescored from 1 (-2), 2 (-1), 3 (0), 4 (+1) to 5 (+2) (Gaymard & Joly, 2013). Working from ordinal distributions we carried out a quartile analysis (Gaymard, 2007). For the pre-post phase (N=8) we used the Wilcoxon Signed-Rank Test.

Table 1. Items constituting the characterization questionnaire: "disability and brain lesion"

Psychiatry	Behavioral disorders
Difficult to define	Mental disability
Violent behavior	People like everybody else
People having to be put into an institution	Vulnerability
Suffering/pain	Need for support
Low level of understanding	Low level of disability
Abnormality	Inclusion is feasible
Physical disability	Pity
Courage	Incapacity
Accident	Madness

#### 2.3.2 The Opinion Questionnaire on the Impact of Volunteer Work

We compiled a questionnaire composed of 8 items measured by 5-point scales (1. Absolutely disagree to 5. Absolutely agree). Concerning volunteer work, the respondents had to give their views on the following themes: -Helps to meet people and create links (item 1); -Helps to spend pleasant moments (item 2); -Helps to change the view on disability (item 3); -Helps to share values (item 4); -Helps to be happy (item 5); -Helps to feel useful to others and society (item 6); -Helps toward personal fulfilment (item 7); -Has positive effects on health (item 8). At the end of the opinion questionnaire, the volunteer workers could make comments.

## 3. Results

### 3.1 Characterization of the Object "Disability and Brain Lesion"

The quartile analysis (Table 2) provides data on the distribution of items more or less characteristic of the object "disability and brain lesion". Through this analysis it is possible to rank individuals and distribute the ranked population in 4 equal parts. The first quartile (Q1) separates the bottom 25% of data, the second quartile corresponds to the median and the third quartile separates the bottom 75% of data. The higher the quartile, the nearer the answers are to what characterizes most "disability and brain lesion". Ranking by increasing quartile q75 (Figure 1) shows that the most characteristic items are: need for support, mental disability, behavioral disorders, accident, physical disability, violent behavior and psychiatry.

Table 2. Analysis by quartiles of the items of the questionnaire of characterization

Items	Q1 q0,25	Q2 Median	Q3 q0,75
Psychiatry	2,0	4,0	5,0
Difficult to define	2,0	2,5	3,0
Violent behavior	2,0	4,0	5,0
People having to be put into an institution	2,0	4,0	4,0
Suffering/pain	2,0	3,5	4,0
Low level of understanding	2,0	3,0	3,0
Abnormality	2,0	2,0	4,0
Physical disability	4,0	4,0	5,0
Courage	1,25	3,0	3,0
Accident	2,0	4,0	5,0
Behavioral disorders	4,0	5,0	5,0
Mental disability	4,0	4,0	5,0
People like everybody else	1,0	1,0	2,0
Vulnerability	2,25	3,0	3,0
Need for support	2,25	3,0	5,0
Low level of disability	1,0	1,0	2,0
Inclusion is feasible	1,0	3,0	3,0
Pity	1,25	3,0	4,0
Incapacity	2,0	3,0	4,0
Madness	1,0	3,0	4,0

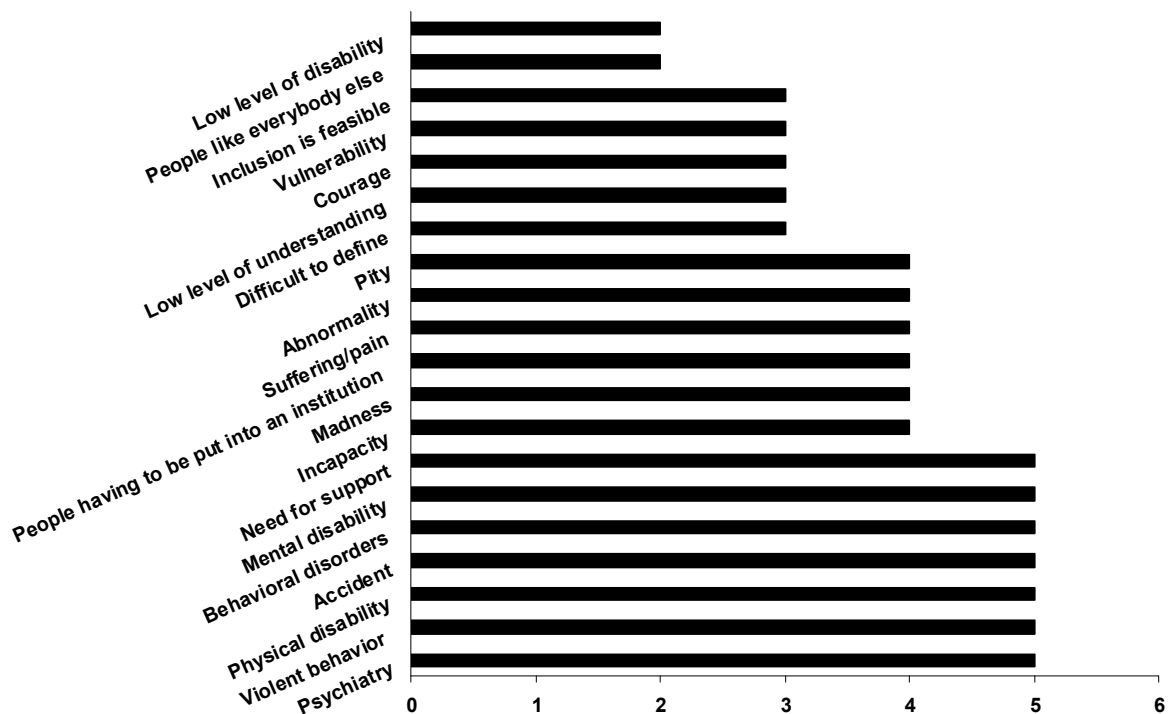


Figure 1. Items ordered by increasing quartile q75 (from the least characteristic to the most characteristic)

### 3.2 The Pre-Post Measures

The results of the Wilcoxon Signed-Rank Test (Table 3) are significantly different (on the threshold of .05) before and after experience of volunteer work. These items are: psychiatry, difficult to define, physical disability, courage, accident, people like everybody else, vulnerability, need for support, low level of disability and madness. No differences are observed between the pre and post phases in the items: violent behavior, people having to be put into an institution, suffering/pain, low level of understanding, abnormality, behavioral disorders, mental disability, inclusion is feasible, pity and incapacity.

Table 3. Pre-post analysis: results of the Wilcoxon Signed-Rank Test

Items	V	Expectation	Variance	p-value (bilateral) (Note 1)
<b>Psychiatry</b>	<b>15,000</b>	<b>7,500</b>	<b>13,500</b>	<b>.028</b>
<b>Difficult to define</b>	<b>5,000</b>	<b>14,000</b>	<b>33,625</b>	<b>&lt;.0001</b>
Violent behavior	27,000	18,000	49,625	.196
People having to be put into an institution	5,000	14,000	33,625	.058
Suffering/pain	16,500	14,000	34,625	.916
Low level of understanding	12,000	10,500	20,250	.087
Abnormality	15,000	10,500	20,250	.274
<b>Physical disability</b>	<b>0,000</b>	<b>5,000</b>	<b>6,250</b>	<b>&lt;.0001</b>
<b>Courage</b>	<b>3,500</b>	<b>14,000</b>	<b>30,625</b>	<b>.007</b>
<b>Accident</b>	<b>4,500</b>	<b>5,000</b>	<b>7,375</b>	<b>&lt;.0001</b>
Behavioral disorders	28,000	14,000	33,625	.335
Mental disability	21,000	10,500	21,500	.442
<b>People like everybody else</b>	<b>0,000</b>	<b>14,000</b>	<b>34,625</b>	<b>&lt;.0001</b>
<b>Vulnerability</b>	<b>2,500</b>	<b>10,500</b>	<b>21,375</b>	<b>&lt;.0001</b>
<b>Need for support</b>	<b>1,500</b>	<b>10,500</b>	<b>21,375</b>	<b>&lt;.0001</b>
<b>Low level of disability</b>	<b>4,00</b>	<b>10,500</b>	<b>21,750</b>	<b>&lt;.0001</b>
Inclusion is feasible	4,00	18,000	50,000	.060
Pity	24,00	14,000	34,000	.731
Incapacity	8,00	18,00	44,000	.232
<b>Madness</b>	<b>6,000</b>	<b>3,000</b>	<b>3,000</b>	<b>&lt;.0001</b>

It can thus be seen that the items “psychiatry”, “accident” and “madness” are less characteristic of disability and brain lesion after experience of volunteer work. On the other hand the items “difficult to define”, “physical disability”, “courage”, “people like everybody else”, “vulnerability”, “need for support” and “low level of disability” are more characteristic of disability and brain lesion after experience of volunteer work (see Appendix).

### 3.3 Measurement of Opinions on the Impact of Volunteer Work

The results concerning measurement of opinions on the impact of volunteer work appear in Table 4. On reading this table it can first of all be seen that in the 8 propositions, there are 7 that receive a high percentage of answers “absolutely agree” on the positive impact of volunteer work. In particular 11 in 13 retired people (84,62%) consider that volunteer work helps to spend pleasant moments (item 2), to change the view of disability (item 3) and enables personal fulfilment (item 7) ; and 10 in 13 retired people (76,92%) think that it helps to meet people and create links (item 1), to share values (item 4), to be happy and to feel useful to others and society (items 5 and 6). Item 8, which concerns the positive effects on health, is more mixed since 5 retired people have no opinion (38,46%), 3 agree (23,08%) and 5 absolutely agree (38,46%). One might think that these answers are linked more to the physical health of the retired people, who, with age, are more exposed to problems such as arthritis or muscular disorders (Boult, Kane, Louis, Boult, & McCaffrey, 1994; Fujiwara et al., 2000).

Table 4. Answers in percentage to the opinion questionnaire on the impact of volunteer work

	Absolutely disagree	Disagree	No opinion	Agree	Absolutely agree	Total
1. Helps to meet people and create links				23,08	76,92	100%
2. Helps to spend pleasant moments				15,38	84,62	100%
3. Helps to change the view of disability			7,69	7,69	84,62	100%
4. Helps to share values				23,08	76,92	100%
5. Helps to be happy				23,08	76,92	100%
6. Helps to feel useful to others and society				23,08	76,92	100%
7. Enables personal fulfilment				15,38	84,62	100%
8. Has positive effects on health			38,46	23,08	38,46	100%

#### 4. Discussion

The aim of this study was to show that the social representation of disability and brain lesion could evolve among retired people after experience of volunteer work with this public. It was also to illustrate the positive impact of volunteer work on the well-being of retired people.

The first hypothesis according to which the initial representation conveys a disability both physical and mental is confirmed. Through quartile analysis it can effectively be seen that the items physical disability, mental disability and psychiatry belong to the most characteristic items with other items concerning behavioral problems: behavioral disorders and violent behavior. It can thus be understood why the representation of disability and brain lesion gives rise to certain fears that do not further commitment to volunteer work among the public. But this representation does not necessarily point to a total misconception of disability and brain lesion since psychical but also behavioral disorders constitute an important factor in disability (Fayada & Truelle, 2004; Truelle, Fayada, & Montreuil, 2005).

This perception of difference is increased by the results of items “low level of disability” and “people like everybody else” which obtain the lowest scores at q0.75, meaning they are not chosen as being characteristic of disability and brain lesion. It can therefore be said that transmitted social representations disqualify disabled persons with brain damage who are first perceived by their shortcomings, their differences, and the fear they create through mental illness and violent behavior.

Hypothesis 2 according to which experience with brain damaged persons causes this representation to evolve favorably is equally confirmed but this representation remains ambivalent. According to Abric (2003) it can be considered that the property of a central element is to be more characteristic of the object; yet it can be seen that there is a change in the most characteristic item following volunteer work. The terms psychiatry and madness are much less characteristic after experience in volunteer work. In the first case the first quartile goes from 5 (pre phase) to 2 (post phase); in the second case it goes from 5 to 1, which is even more significant. But it can also be seen that items “mental disability”, “behavioral disorders” and “violent behaviour” do not present significant differences between the pre and post phases. It can therefore be said that this representation is less pathological and less stigmatizing without calling into question the perception of a mental disability. Concerning the perception of physical disability, a significant difference can be noted since this item appears more characteristic after volunteer work. In contact with accommodated people, volunteer workers were faced with motor problems resulting from brain damage.



The evolution in the representation of volunteer workers testifies to a more valuable and inclusive representation. The items courage, low level of disability and people like everybody else are thus more characteristic after experience in volunteer work. After this experience brain damaged people are also seen as being more vulnerable and the need for support appears heightened. Among items for which no significant difference is observed on the threshold of .05, there can be noted three items with a significant tendency that remains to be confirmed with time. These items are “people having to be put into an institution” (.058), “low level of understanding” (.087), and “inclusion is feasible” (.06). Our results reveal the benefits of volunteer commitment with people suffering from acquired brain damage. Experiences as varied as those of Mr. M. who participates on Wednesday mornings every two weeks by supervising a two-hour IT activity with 7 adults, likewise of Ms A. who participates every Monday morning in a press review activity (2 hours) with a dozen adults, or of Mr. P who accompanies a group of 6 adults with a professional on outings every two weeks. All these experiences provide the volunteer workers with practical knowledge of brain damage and make them aware that the people in the institution can have multiple, varied and sometimes invisible disabilities. This is attested by the item “difficult to define” which appears more characteristic in the representation after experience of volunteer work thus confirming the difficulty in perceiving the specificity of this disability in relation to other types of disabilities, which had led Lebeau (1995) to talk of brain trauma as “an unknown epidemic”. The particularity of social representations rests on their stability with a core that resists change and a periphery that serves as a “fender” (according to Flament’s expression, 1987) by absorbing potential contradictions. Nevertheless, over a relatively short period this representation can be seen to evolve and it can be thought that it will be transformed with time. The major role of practices is well known and the part that new practices have in the transformation of social representations (Mamontoff, 1995).

The third hypothesis bears on the impact of volunteer work on the well-being of retired people and this is equally verified for the most part. On viewing the answers given by the retired people, it can be said that volunteer work plays an important part in maintaining social links (“helps to meet people and create links”), by contributing to well-being, happiness (“helps to spend pleasant moments”, “helps to be happy”, “enables personal fulfilment”), sharing values and the feeling of being useful (“helps to share values”, “helps to feel useful to others and society”); all these elements contribute to “volunteer work euphoria” (“Helper’s high”, according to the expression of Dr Allan Luks quoted by Cook and Speevak Sladowski, 2013). The answers also confirm the impact of volunteer work to change the way disability is regarded, at the same time reinforcing results obtained to validate hypothesis 2. Only the item dealing with positive effects on health appears to be more divided but we do not directly observe disagreements but rather answers “no opinion” (5/13). A possible interpretation would be that these answers concern physical problems linked to age such as problems of arthritis (Boult, Kane, Louis, Boult, & McCaffrey, 1994).

Thus volunteer work has multiple effects. Firstly volunteer workers’ commitment can significantly improve the daily life of people within the institution, on one hand thanks to the plus value of the activities offered and on the other by providing a benevolent and non stigmatizing view of these people. The knowledge and experience that volunteer workers acquire on contact with brain damaged people are conveyed in the exchanges and can constitute a lever for a change in mentalities. Finally volunteer work can improve well-being for volunteer workers. At a time when we talk a lot about psychosocial risks at work, this study draws the attention to an important activity that is significant from both a quantitative and a qualitative point of view thus providing a contrast with the problems of paid work.

### **Compliance with Ethical Standards**

Conflict of interest: “The authors declare that they have no conflict of interest”.

Consent: “We obtained authorization and consent for interviews”.

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## Note

Note 1. Monte Carlo Method, alpha=.05. Treatment of equals, Hollander & Wolfe. In bold, significant differences.

## Appendix

### Analysis by quartiles

(1=before the volunteer work; 2=after the volunteer work)

Items	First quartile	Median	Third quartile
Psychiatry1	3	4	5
Psychiatry2	1	1	2
Difficult to define1	1	2,5	3,25
Difficult to define 2	3	3	3,5
Physical disability1	4	4	5
Physical disability2	5	5	5
Courage1	3	3	3
Courage2	4	4	4

Accident1	2	4	5
Accident2	3,5	4	4,25

### Analysis by quartiles

Items	First quartile	Median	Third quartile
People like everybody else1	1	1,5	2
People like everybody else 2	3,75	4	4,25
Vulnerability1	3	3	3
Vulnerability2	3	4	4
Need for support1	3	3,5	5
Need for support2	5	5	5
Low level of disability1	1	1	2
Low level of disability2	1	2	3
Madness1	1	1	5
Madness2	1	1	1

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