STRENGTHS FOR OVERCOMING LIFE'S PITFALLS

JAVIER URRA

DIRECTOR JESUS SANCHEZ MARTOS

Thesis recorded in the Postgraduate Health Care degree of the Universidad Complutense de Madrid, directed by the Professor Dr. Juan V. Beneit Montesinos.

ACKNOWLEDGEMENTS

To all the people who suffer a traumatic event and fight to overcome it so as to look life in the face again.

To all those who carry the weight of their pain and are unable to overcome their victimisation.

To those who make everyday life a vital and beautiful event.

To those who accompany, help and donate their love and time.

To the researchers who have studied and dutifully transferred their knowledge and on whom this humble contribution rests.

To the experts who have generously read, re-read, corrected and improved the two tests drafted to carry out the empirical work of this Thesis.

To all those who have patiently responded to questionnaires, knowing that that would not reduce the suffering that the swipes of life have provoked, but that their contribution may serve to help others in the future.

To the professionals of different fields who have dedicated their time to responding to questionnaires and above all for their day to day attention, their knowledge and their kindness, for their commitment, for their positive assessment of inter and multi-professional work.

To all those who, knowing that you can only ask of life as much as you give, share the best of themselves.

To those who transmit hope and optimism as an ethical obligation.

To those who like to educate and be educated.

To my teachers and all those who educated me from the beginning.

To the colleagues of this beautiful science that is Psychology.

To the students, teachers, administrators and service personnel of this leading School of Nursing, Physiotherapy and Podology of the Universidad Complutense de Madrid, who have embraced me, making me feel that this emblematic centre is like my home.

To all those who believe in the vocation and strengthen it.

To those who steer themselves with moral deontology.

To those who consider care activities to be the responsibility of both men and women.

To those who have entrusted me with responsibilities so that I put my heart into them.

To those who melted my heart and caused it to overflow with gratitude.

To the friends and loved ones for being who they are and for always being there.

To the distinguished members of the Examining Board of this Doctoral Dissertation for showing interest and showing me how to improve this study.

To Sergio Escorial, psychologist, methodology professor of the Universidad Complutense de Madrid for guiding me and correcting my statistical analysis.

To Jesús Sánchez Martos, nurse, doctor. Professor of Health Education of the School of Nursing, Physiotherapy and Podology of the Universidad Complutense de Madrid for guiding me through this Thesis, for opening its doors of knowledge, for being my doctor, for providing me with friendship, for his openness to excite and to be excited by new projects.

PURPOSE OF THE INVESTIGATION

- ***Aims:***
  - *To find the basic elements that allow for successful coping strategies to be adopted in the face of traumatic phases in the process of life.*

- ***General Hypotheses:***
  - *There are people who anticipate events, who take advantage of these when they occur, others who on the other hand are besieged by these events, feeling completely lost by them. There are those who make life easier for others, and those who embitter it. This occurs in different cultures, geographic enclaves, ages, genders, social and economic levels, races, political and religious beliefs. There have to be substantive elements capable of being educated which qualify to a great extent the genetic capacity with which we are born or the situations which we objectively face.*

This Thesis is about cognitive vaccinations, behavioural antidotes, knowing that emotions derive from what we think.

We believe we can sail windward, facing the strong winds, but using that strength that seems to be against us to our advantage. We need to know who we are and where we want to go.

We assume that the patient is not responsible for anything, he is never accused at any moment of psychological weakness; we strongly reject those who convert illness or tragedy into an unjust and insidious metaphor against the morals of the person suffering it.

We try, in the humble knowledge that we won't cover the vast objective, to determine which factors promote mental health and prevent its vulnerability in the face of truly stressful circumstances.

I. THEORETICAL BASIS

POSITIVE PSYCHOLOGY

It all began in 1998 when the North American psychologist Martin Seligman was elected president of the American Psychological Association. Seligman, previously known for his theory on Learned Helplessness, slowly became the spokesperson and main representative of this new branch which proposes encouraging human strengths so they can act as a buffer in the face of adversity.

This links directly with the ambitious goal of promoting health, as stated by the main world health organisations.

The World Health Organisation defined health in 1948 as being a "*state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity*." Its definition meant a qualitative jump, as it transferred the focus on illness to a focus on positive health.

In more recent years it is important to highlight the contributions of Millon et al (2000) on human personality in terms of the psychological equivalence of the immune system in the human body.

Strength must be a feature in the sense that it has a certain level of generality in situations and stability over time.

According to Seligman (2003) strengths and virtues act as a barrier against misery and psychological disorders and may be the key to resilience.

It is necessary to consider human potentials as a deciding factor in periods of crisis, considering that crises are inevitable and necessary for the growth and development of the individual.

Furthermore, acknowledging that many of these qualities are learnt makes it possible to include them in school curricula.

In physics, resilience (from *resilio:* returning to its original state, resumes its original shape) refers to the capacity of materials to return to their original shape when they are forced to deform.

A possible definition of resilience is "*...the human capacity to confront, overcome and come out strengthened or transformed by adverse experiences".*

Resilience is a state of sensitivity by people in the face of painful or adverse stimuli, which act by weakening the person who at the same time responds with an active positive construction reaction.

Among the protective factors at an individual level are: good cognitive skills, including problem solving and attentional skills; good temperament in childhood, which eventually develops into an adaptable personality; positive self-perception and self-sufficiency; faith and a sense of life; a positive view of reality, a good capacity for emotional and impulse self-regulation; the ability to recognise own talents and in turn these are valued by society, and finally a good sense of humour.

Viktor Frankl (1979) maintains that humour was one of the weapons with which the subject fought for survival in Nazi concentration camps, and insists that in human existence, humour can provide the necessary distance to overcome any situation, even if it is for no more than a few seconds.

Every individual has a personal form of causal attribution known as “explanatory style”

Optimists consider problems to be temporal, specific and attributed to external causes.

One of the most consistent results in scientific literature shows that those people who are highly optimistic and have high levels of hope (both have to do with the expectation of positive results in the future and the belief in one’s own capacity to achieve goals) tend to come out strengthened and to find benefits in traumatic and stressful situations. In other words, where the pessimist sees problems, the optimist sees challenges.

Optimists are people who, without denying their problems, have hope and create action plans and ways to cope with the reality of the situation; they have a tendency to hope that the future will bring them favourable results, but always without departing from reality.

Seligman (2000) proposes a technique for increasing optimism, or at least to try to avoid catastrophic thoughts that automatically assail our consciousness. This technique consists in disputing those thoughts as though they had been voiced by a third person.

It seems that we are ever less able to accept that sometimes it is healthy to feel bad in response to the circumstances of life, and we tend to interpret bad feelings as pathological under any circumstances. As the pressure to feel good all the time increases, feeling bad is not only pathological, it is socially unacceptable.

The tyranny of the positive attitude can contribute paradoxically to reducing the subjective well-being you are precisely trying to develop.

We note a strong current trend: the pathologising of any vital problem.

Living is not an illness. Nor is suffering.

II. EMPIRICAL WORK

General aim of our work:

Build a scale to evaluate the psychological factors that prepare subjects for overcoming the adversities of life (or the new psychological qualities developed by the subjects to confront these life events) and analyse their psychometric properties.

We believe these scales could be used:

- As a screening tool to assess positive mental health levels, in the general population.
- As a tool for assessing the efficacy of mental health promotion programmes.
- As a basis for developing education programmes so that subjects in the population can develop these strengths and virtues that allow them to be happy and overcome difficult moments (which we all, sooner or later, to a greater or lesser extent, have to face).

We will study two samples from populations of great interest: 1) Those affected by adverse life eventsand 2) Professionals who work daily with such subjects.

First of all, it tries to identify the relevance of the basic elements in each collective that allow successful coping strategies to be adopted in the face of traumatic phases in the life process.

It tries to strengthen imbalance protectors. Since we cannot completely change external threats against personal harmony, we teach children, youngsters and the less

young to rebalance themselves for the ups and downs of living. To do this we must empirically determine which are the essential antidotes and vaccines that lead to some people sinking and others that are relatively happy (as much as you can ask of life) in the same circumstances.

In general, people need new resources to overcome life turbulences. Human strengths that defend mental health against the misfortunes of life should be taught and can be learnt. In general, this work is based on the hypothesis, susceptible to empirical contrasting, that 1) whatever the traumatic event suffered, the strengths needed to overcome it emotionally coincide, and 2) both the affected parties as well as the experts treating them will show the same essential qualities.

We can compare the concept of education to vaccination.

STUDY 1: CREATING AND VALIDATING THE CONTENT OF TWO NEW QUESTIONNAIRES

The objective pursued with this study is to obtain empirical evidence of the internal validity of two new tools: *Protective Factors for Overcoming Adversity Questionnaire (PFOA)* and *New Qualities for Overcoming Adversity Questionnaire (NQOA).* Specifically, this first study focuses on the validity of the content, in other words, the degree in which the items of these tools represent the domain of the content or conduct of the variables it is trying to measure. It does not try to be a statistical concept, but instead it depends on the opinions of the experts on the pertinence of the items for capturing the variable of interest.

It is useful to highlight that these are tools that have required a development and design process which can be very systematically summarised in the following points:

1. Study of the research by other authors published in impacting magazines, books and manuals.
2. Detailed reading of that written by the authors of the collection "*SOS Useful Psychology*", directed by Javier Urra and edited by Pirámide (Anaya group). Said collection is composed (to date) of 18 titles, among which those in which the survivors of traumatic situations explain their experiences, processes, needs, strengths, weaknesses and goals.
3. Supervision and study process of 2,250 cases of the Pequeño Deseo (Small Wish) Foundation of which Javier Urra is patron, in which parents have their children hospitalised with chronic or terminal diseases.
4. Study of the psychometric properties and main technical characteristics of the tests and questionnaires previously published.
5. Contributions by Irene Villa (psychologist and victim of a serious ETA terrorist attack); Luis Arbea (psychologist and multiple sclerosis sufferer) and Luis Montesinos (psychologist and cancer victim) after supervising a first draft of the questionnaire.
6. Expert assessments.

7. Supervision by the Deontological Committee of the Psychologists Association of Madrid, which Javier Urra presides over.

It is important to bear in mind that we are working with two different questionnaires in the sense that a) they are made up of a different number of items and b) each tool considers different points in time. This last difference is very important and merits some pause for reflexion. In the PFOA, subjects are asked to identify in order of importance the protective factors and relevant abilities a person has PRIOR to the traumatic event occurring, and which are considered positive in helping to overcome the adversities of life. The NQOA asks the subjects to identify in order of importance the new qualities that people develop in order to not allow themselves to be dragged down but instead to overcome the adversity AFTER the traumatic event has occurred.

Despite these important differences, the comparison of these two tools is viable as in principle they are based on the same common theory and attempt to assess the same constructs. In general, each of them is a new contribution as they incorporate, in a single scale, fourteen constructs which are relevant for the purposes of the present study. With a view to the objectives this study pursues in particular, for the time being it is sufficient to mention what these 14 constructs are that are covered by the PFOA and the NQOA:

1. **Values, principles, ethics:** Moral concepts and conducts that the human being develops in order to coexist jointly and voluntarily with others.
2. **Acceptance:** Being aware of and grateful for all the good things that happen to us and of those that, even if they aren't, still form part of the marvels of existence.
3. **Adaptability:** Capacity to be flexible and adapt ourselves daily to new circumstances.
4. **Internal control:** Being able to manage needs and contain desires and impulses when the situation so requires.

5. **Creativity:** Inventing new ways of doing and locating. Thinking differently, outside of the box. Lateral thinking.
6. **Hope:** Believing that goals will be achieved and receiving positive strength, working towards facilitating those goals.
7. **Spirituality:** Intimate belief (whether religious or otherwise), elusive, defining humans, the backbone of the raison d'être. It is felt rather than explained. It connects us to something higher and more permanent than worldly. It indicates universe and the divine.
8. **Social skills:** Achievements that allow our relationships with our surroundings, and congeners.
9. **Emotional intelligence:** One's knowledge of oneself and perception of the motivations and feelings of others to harmoniously combine the needs of both.
10. **Leisure:** Practice or be interested in sports, culture, leisure or contemplative activities, in the most part shared.
11. **Optimism:** Positive attitude in the present and hope for the future.
12. **Social relations:** Mutual interaction and support with family members, friends, work colleagues and people we know.
13. **Sense of humour:** Ability to make the importance of the events relative, to share smiles and joy and to laugh at oneself.
14. **Congruency:** Acting coherently with what we think and propose.

With regards to the population the tests are aimed at, these are questionnaires that can be used for the general public, although there are two groups in which their use could be particularly relevant:

- In the education field with the infant and adolescent population. The early identification of youngsters with a deficiency in the factors considered in the theoretical model as relevant for overcoming adversity allows for preventive intervention based on suitable education/training programmes aimed at counteracting such deficiencies. Equally, the association between these deficiencies and unhealthy habits (drug use, reckless behaviour, self-destructive tendencies, antisocial behaviour, etc.) support the use of these tools in the primary prevention of early behavioural problems.
- In the clinical field and as a support tool for different groups (victims of terrorism, sufferers of amyotrophic lateral sclerosis, cancer, spina bifida, etc...). The presence of low points on a number of the assessed variables may become an important support element at the decision making stage in the area of the daily tasks of these institutions or associations regarding possible interventions or specific training actions.

The items of a test are considered to be a sample of the domain we are interested in assessing, and what we will be checking is if all those that are there, should be (relevance of the items) and that all those that should be there, are (representativeness of the test).

The aim pursued with this study is to obtain empirical evidence focusing specifically on the validity of the content. To this end, information will be gathered through a panel of experts.

METHOD

Participants.

A sample of 7 subjects (5 men and 2 women), being a panel of experts of renown prestige in different areas (psychological assessment, personality, methodology, psychopathology and mental health centre professionals), all of them knowledgeable of the theoretical basis of the tools, subject of the study.

All of these persons are professionally linked to different institutions, and so they performed the task entrusted to them completely independently. Their participation in this study was voluntary and unpaid, and so being a panel of experts made up of subjects who are very busy it is important for the author of this work to acknowledge and be grateful for their contribution.

Procedure and measurement tool

They were sent an e-mail, cordially asking for their participation in this study. Three documents were attached to the mail: a letter with instructions, the tools (PFOA and NQOA) and some sheets to enable them to do the task they were asked to participate in.

RESULTS

All Kappa values are higher than .70 which, in accordance with Landis et al (1977), indicates a good level of agreement between the judges.

Such high Kappa values are understandable considering they are expert judges.

The empirical evidence gathered from the panel of prestigious experts serves to conclude that both the PFOA and the NQOA present a high level of content validity. In this way, the items making up the scales of both instruments are very relevant for capturing the constructs of interest on the one hand and the constructs that are to be assessed are very well represented by the collection of items making up the different scales, on the other hand. Therefore, for these tools we can talk about the relevance of the items (all those that are there should be) and the representativeness of the scales (all those that should be there, are).

STUDY 2: VALIDITY OF THE CONSTRUCTS OF THE PFOA AND NQOA SCALES AND ANALYSIS OF DIMENSIONALITY.

The objective pursued with this study is to obtain empirical evidence based on the internal structure of two new tools:

METHOD

It concerns tools which have undergone a design and development process characterised by its length and exhaustiveness.

RESULTS

Dimensionality

Items with a factorial weight of under 0.3 were eliminated. As the items have been eliminated and the original test structure has been modified slightly (using psychometric criteria), an R is added to the name of the tools to differentiate them from the original versions. Refined versions: PFOA-R and NQOA-R.

In view of the results obtained, we can conclude that, in general terms, the theoretical structure proposed is confirmed for both tools, although 1) it has been necessary to eliminate some items in some of the dimensions to satisfy the criteria previously defined and to ensure a suitable unidimensionality by factor and 2) some scales were initially conceived with their own factorial identity, and had to be collapsed into a single factor in order to once again attend to significant adjustment improvements. Perhaps one of the most interesting facts is that the model latent factors were reproduced analogically in both tests, including with the convergence of Emotional intelligence + Self control and Optimism + Hope into a single factor

In view of these results on the dimensionality study of the scales making up both the PFOA-R and the NQOA-R it was decided to use the refined scales for the remainder of the analysis involved in this doctorate thesis, after the elimination of the included items.

DISCUSSION

In general terms the unidimensional structure of the scales making up PFOA-R and NQOA-R is accepted, although in both tests the structure changes from one of 14 steps in each to a structure of 12 factors with the aforementioned fusions.

The PFOA-R scales all assess, as well as the specific component proper to it and which may derive in the empirical analysis of dimensionality and theoretically in the previously summarised review, the same phenomenon we have interpreted as "**Resilience"**, in the sense that the scales assess things which, although quantitatively and qualitatively different to each other, are all important for overcoming the adversities life has in store for us, and exactly the same interpretation of this general factor **Resilience** can be said of the NQOA-R.

STUDY 3: INTERNAL STRUCTURE AND WORKING OF PFOA-R AND NQOA-R IN TWO TARGET POPULATIONS. A COMPARATIVE STUDY.

We must acknowledge that the intention is to promote imbalance protectors based on the knowledge derived from this analysis. Since we cannot completely change external threats against personal harmony, we teach children, youngsters and the less young to rebalance themselves for the ups and downs of living. To do this we must empirically determine which are the essential antidotes and vaccines that lead to some people sinking and others being relatively happy (as much as you can ask of life) in the same circumstances.

The loss of loved ones and traumatic events often overcome a person's ability to respond, and they feel too overwhelmed to face the situations they have to live with. Frequently the coping strategies can become unhealthy or failures; and expectations, defeatist. The frequent appearance of negative emotions, such as hate, bitterness or a thirst for revenge (in the case of a traumatic event caused by other human beings), can complicate the outlook even further. As a consequence of all this, the person, unable to adapt to the new situation, can feel defenceless, lose hope for the future and find themselves paralysed from taking new initiatives and, definitively, from successfully running their own lives.

But it is true that a traumatic event can also be overcome. There are people who are able to overcome the terrible impact of the unexpected death of a loved one, a terrorist attack, a sexual assault or the violent loss of a child and rediscover, without forgetting what happened, the joy of living. What can be seen is that, both in the face of traumatic events as in times of mourning, people react differently, and likewise the coping strategies used to overcome these adverse circumstances are variable from one individual to another.

Common traumatic events (extracted from Echeburúa et al, 2005)

THE MOST COMMON TRAUMATIC EVENTS

INTENTIONAL

- Sexual assault in adult life
- Violent relationship with partner
- Terrorism, kidnap and torture
- Sexual abuse in childhood
- Child abuse

UNINTENTIONAL

- Accidents (traffic, train crashes, etc.)
- Natural disasters (earthquakes, floods, etc.)

Talking in numbers, trauma can be present in 15%-20% of those who suffer an accident or natural disaster, but this percentage can be considerably higher (up to 50%-70%) in those who have experienced a violent act, such as in the case of victims of terrorism, or family violence or sexual assault. Furthermore, the loss of a loved one can set in motion symptoms of pathological chronified mourning in 10%-20% of the total number of cases.

The two assessment tools (PFOA-R or the Protective Factors for Overcoming Adversity Questionnaire and the NQOA-R or the New Qualities for Overcoming Adversity Questionnaire).

Assess, precisely: Resilience, and what Health Sciences have for decades considered to be “Resistant Personality”, and they do this through 12 unidimensional scales.

For this reason, the main objective pursued with this study is the comparative analysis of the structure and working of the scales composing both tools in two target

populations, in other words, two populations with a great relevance to the theoretical framework of this thesis:

1. Subjects who are currently affected by a situation or traumatic event of any kind (victims of terrorism, victims of abuse, victims of sexual assault, victims of sexual assault during childhood, cancer sufferers, HIV sufferers, sufferers of a terminal illness in the process of dying, those affected by rare and/or neurodegenerative disease, those affected by the unexpected loss of a loved one, etc...)
2. The professionals of different disciplines who, in their daily practice, face the persons affected by a traumatic life event (Doctors, Psychiatrists, Psychologists, Nurses, Social Workers and Teachers, Physiotherapists, etc...).

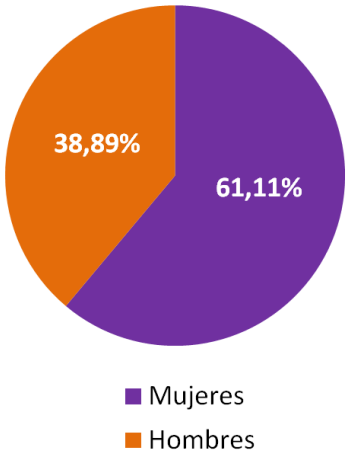
METHOD

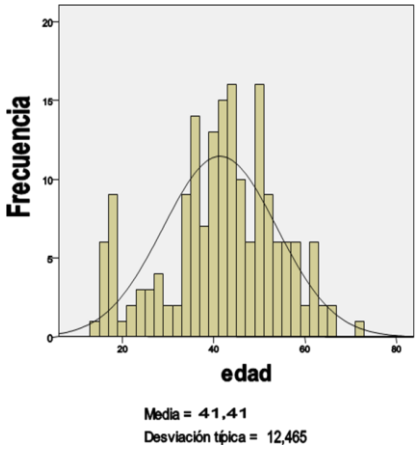
Participants.

GROUP 1: AFFECTED PERSONS

The group of affected persons is formed by 180 subjects: 70 men (38.9%) and 110 women (61.1%). The average age of the group is 41.41 years with a standard deviation of 12.47 and a range of ages between 14 and 71 years old.

Gender distribution and Age histogram of the group of affected persons.





[Traducción de los términos de los gráficos:
Women
Men

Frequency
Age
Average
Standard deviation]

The process followed for data collection allowed for a certain degree of dispersion of the geographic location of the subjects.

Origination of the group of affected persons by Autonomous Community.

COMMUNITY	%
MADRID	20.6
VALENCIA	12.2
BASQUE COUNTRY	11.1
CATALONIA	8.3
ANDALUSIA	7.2
CASTILLA LEON	6.1
GALICIA	5.0
ASTURIAS	4.4
ARAGON	3.3
BALEARICS	3.3
NAVARRA	3.3
CASTILLA LA MANCHA	2.8

CANARY ISLANDS	1.7
EXTREMADURA	1.7
FOREIGN COUNTRY	1.7
MURCIA	1.1
CANTABRIA	.6

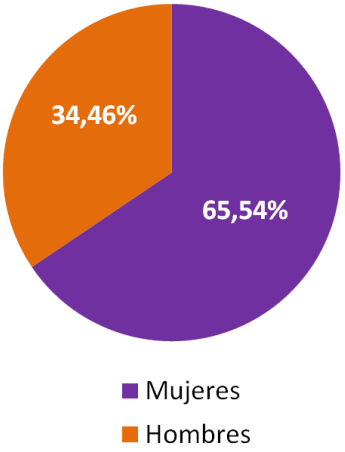
Categorisation of the traumatic event faced by the affected persons.

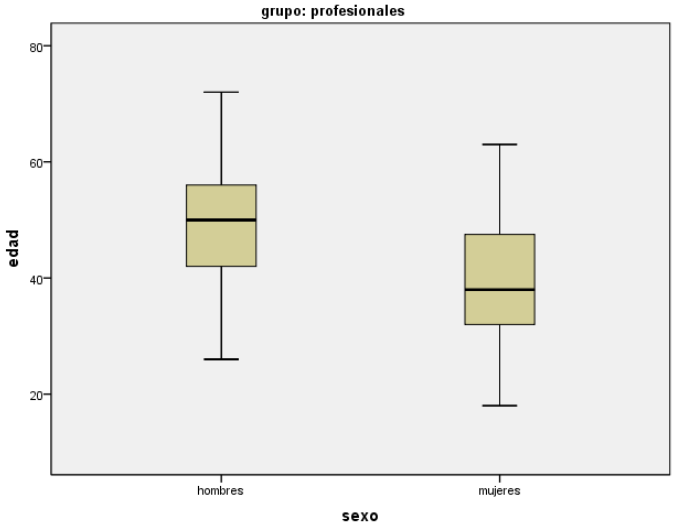
TRAUMATIC EVENT	**%**
RARE AND/OR NEURODEGENERATIVE DISEASE	24.4
UNEXPECTED LOSS OF A LOVED ONE	13.3
OTHER ILLNESSES (HEART ATTACK, TRANSPLANT, ETC.)	11.7
VICTIM OF ABUSE (DURING CHILDHOOD)	9.4
PHYSICAL AND/OR INTELLECTUAL DISABILITY	8.9
VICTIM OF ABUSE (ADULTS)	7.2
CANCER	6.7
ATTEMPTED SUICIDE	5.0
CONFLICTIVE DIVORCES	3.9
ADDICTION	3.3
IN THE PROCESS OF DYING	2.8
HIV	1.7
VICTIM OF TERRORISM	.6
OTHER	.6

GROUP 2: PROFESSIONALS

The group of professionals is formed by 179 subjects: 63 men (34.46%) and 116 women (65.54%). The average age of the men is 48.84 years with a standard deviation of 9.87, whilst the average age of the women is 39.42 with a standard deviation of 9.79.

Gender distribution and Box and whisker diagram for age according to gender of the group of professionals.





[Traducción de los términos de los gráficos:
Women
Men

Group: professionals
Age
Men
Women
Gender]

Origination of the group of professionals by Autonomous Community.

COMMUNITY	%
MADRID	37,4
VALENCIA	9,5
ANDALUSIA	5,0
NAVARRA	5,0
CATALONIA	4,5
BASQUE COUNTRY	4,5
ARAGON	4,5
CASTILLA LA MANCHA	3,9

CASTILLA LEON	3,4
BALEARICS	3,4
GALICIA	2,8
ASTURIAS	2,8
CANARY ISLANDS	1,7
MURCIA	1,7
EXTREMADURA	1,1
FOREIGN COUNTRY	1,1
CANTABRIA	,6

It was also important for the professionals forming part of the sample to be from different knowledge areas. This multi-disciplinarity allows the data to be more representative as they are not biased by the training received in a single discipline, especially taking into account that the work carried out with the affected subjects by each of them can be qualitatively and quantitatively different.

Categorisation of the disciplines each of the professionals belong to.

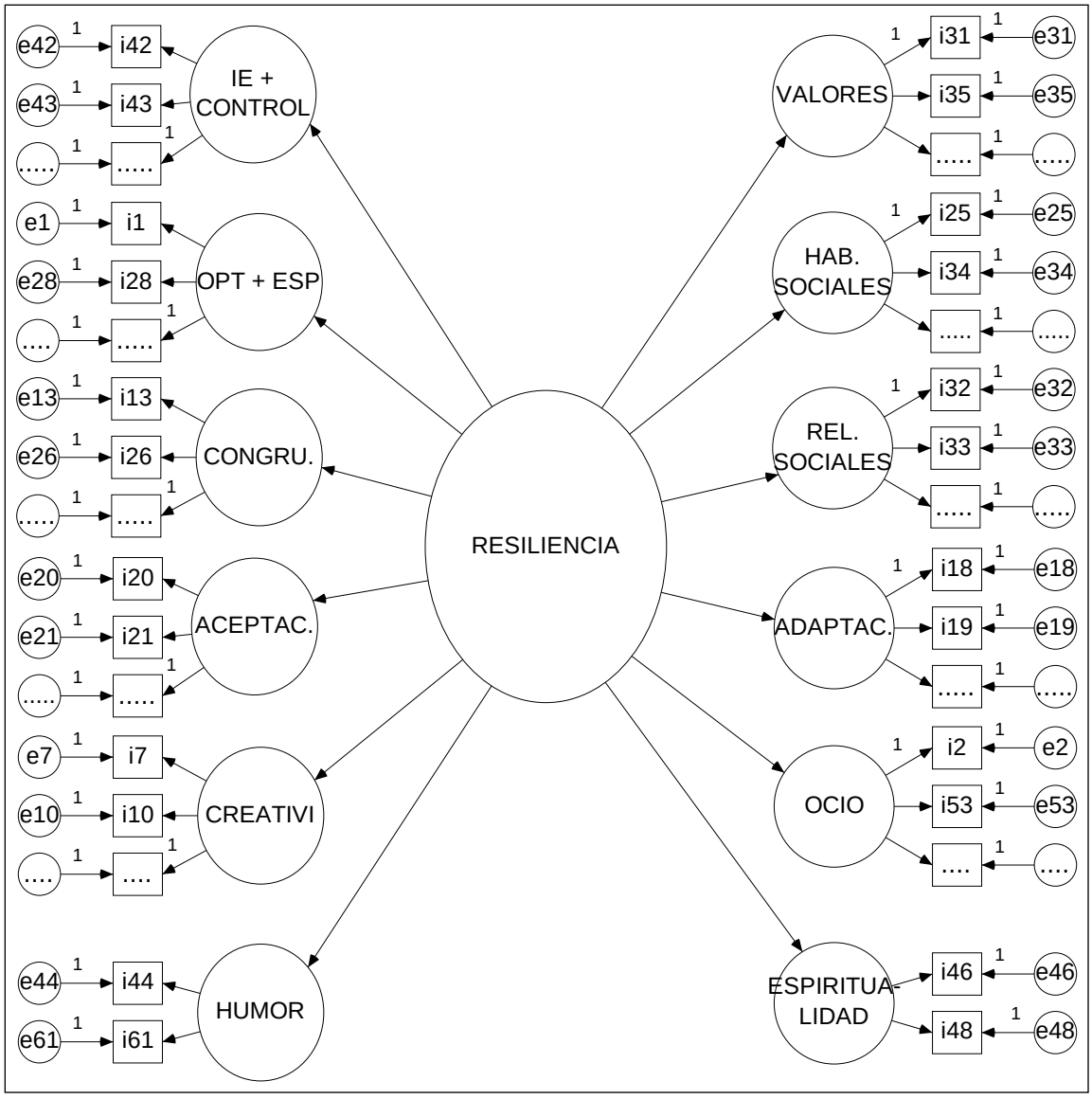
DISCIPLINE	**%**
PSYCHOLOGY	34.1
MEDICINE	30.2
NURSING	12.3
SOCIAL WORK	8.4
EDUCATION/TEACHING	7.8
PHYSIOTHERAPY	4.5
OTHER	2.8

RESULTS

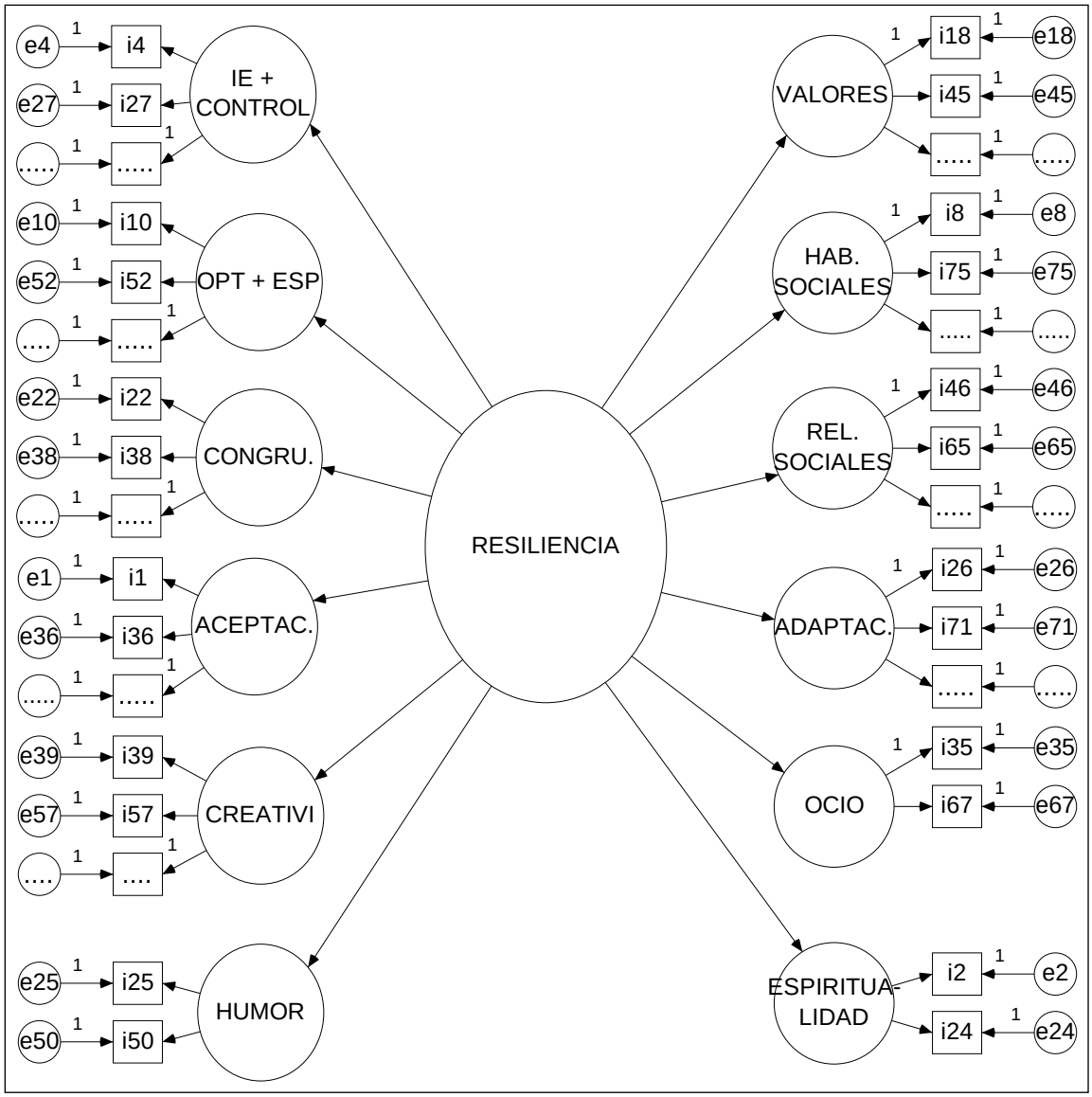
A multi-group Confirmatory Factor Analysis (CFA) was performed.

In both cases, and with the aim of simplifying the graphic representation of each CFA, two items were chosen to represent each of the 12 latent factors identified in each questionnaire. The criteria for choosing these items was to select those which had the highest factorial saturation in each of the latent factors. Afterwards, these first order factors were subjected to the second order structure found, this way, all first order factors are saturated into a single second order factor which we call “Resilience” in both questionnaires.

Factorial Structure of the PFOA-R (free model representation).



Factorial Structure of the NQOA-R (free model representation).



[Traducción de los términos de los gráficos:

EI + CONTROL	VALUES
OPT+HOPE	SOCIAL SKILLS
CONGRU.	SOCIAL RELATIONS
ACCEPT.	ADAPTAB.
CREATIV.	LEISURE
HUMOUR	SPIRITUALITY]

There are no significant differences in the PFOA-R scales between the group of professionals and the group of affected people, except in the “Values, principles and

ethics" if we work with a 0.5 confidence level. In this case the affected persons obtained higher points to the professionals, although the size of the effect is reduced.

With regards to the NQOA-R, there are no significant differences between the group of professionals and the group of affected people either, except in the "Values, principles and ethics" and "Leisure" scales if we work with a 0.5 confidence level. In both cases the affected persons obtained higher points to the professionals, although the size of the effect is reduced.

There are no significant differences between either of the scales, neither the PFOA-R nor the NQOA-R, based on the categories made for grouping the affected persons by traumatic event. We can conclude that the average of each of the scales in both tools is the same in all the groups of affected persons, independently of the type of traumatic event they are going through.

There are no significant differences between either of the scales, neither the PFOA-R nor the NQOA-R, based on the type of professional. We can conclude that the average of each of the scales in both tools is the same in all the groups of professionals, independently of the type of discipline (medicine, psychology, nursing, social work, etc...).

Relevance comparison of the scales of the PFOA-R.

	AFFECTED PERSONS			**PROFESSIONALS**		
	A	**S.D.**	**O***	**A**	**S.D.**	**O***
Emotional intelligence + Internal control	4.11	.59	3rd	4.21	.53	3rd
Values, principles, ethics	3.84	.65	9th	3.65	.74	11th
Optimism + Hope	4.21	.56	2nd	4.25	.54	2nd
Social skills	3.77	.66	10th	3.76	.62	9th
Congruency	4.29	.59	1st	4.31	.52	1st
Social relations	4.10	.65	4th	4.16	.55	4th
Acceptance	3.92	.63	7th	3.89	.64	7th
Adaptability	4.01	.65	6th	4.12	.57	5th
Creativity	3.87	.64	8th	3.78	.61	8th

Leisure	3.65	.72	11th	3.67	.96	10th
Sense of Humour	4.07	.85	5th	3.96	.70	6th
Spirituality	3.47	.87	12th	3.42	.78	12th

O*: Order, position

The order of relevance of the scales is very similar in the group of affected persons and the group of professionals. For example, the first seven scales assessed in order of importance are the same, the only exception being the change in 5th and 6th position between one group and the other.

Relevance comparison of the scales of the NQOA-R.

	AFFECTED PERSONS			**PROFESSIONALS**		
	A	**S.D.**	**O***	**A**	**S.D.**	**O***
Emotional intelligence + Internal control	3.97	.51	7th	3.93	.49	8th
Values, principles, ethics	3.93	.60	9th	3.81	.62	10th
Optimism + Hope	4.33	.50	1st	4.32	.43	1st
Social skills	3.95	.55	8th	3.97	.55	7th
Congruency	4.16	.56	2nd	4.16	.50	2nd
Social relations	4.08	.59	3rd	4.14	.57	3rd
Acceptance	4.06	.61	5th	4.11	.51	4th
Adaptability	3.89	.62	10th	3.92	.57	9th
Creativity	4.05	.61	6th	4.00	.54	6th
Leisure	3.82	.83	11th	3.65	.75	11th
Sense of Humour	4.07	.67	4th	4.05	.69	5th
Spirituality	3.41	1.01	12th	3.29	.85	12th

O*: Order, position

The order of relevance of the scales is very similar in the group of affected persons and the group of professionals. For example, the first six scales assessed in order of

importance are the same, the only exception being the change in 4th and 5th position between one group and the other.

DISCUSSION AND ANALYSIS

The main objective pursued with this study was the comparative analysis of the structure and working of the scales composing both tools in two target populations, in other words, two populations with a great relevance to the theoretical framework of this thesis:

1. Subjects who are currently affected by a traumatic event or action of any kind.

2. Professionals of different fields of discipline who, in their daily practice, face persons affected by a traumatic life event.

Specifically, this study sought to cover three basic objectives, intimately linked to the main objective.

1. To contrast the factorial structure of both tools in two samples of subjects from the two target areas considered relevant.
2. To analyse the behaviour of the PFOA-R and NQOA-R scales in both populations, this implied focusing on the appearance or otherwise of significant statistical differences in the scales analysed between both groups (affected persons and professionals).
3. To identify the relevance of the basic elements in each collective that allow successful coping strategies to be adopted in the face of traumatic phases in the life process. In other words, to empirically check which are the strengths considered most relevant for overcoming adversity.

As regards the first of these objectives, before being able to compare any factor between the groups (affected persons and professionals) we have to guarantee we are extracting the same factor (McArdle, 1996). The way to obtain this information is through the *congruence coefficient* (r_c) (Cattell, 1978; Jensen, 1998). The congruence coefficient is an inter-factorial index of similarity which, as with the Pearson correlation, presents values between -1 and +1. It is assumed that a value of +.90 is indicative of a high degree of similarity between the factors compared, whereas a value of +.95 or higher is interpreted as being identity (Jensen, 1998). All the congruence indexes calculated were higher than .97.

The factorial structure can be considered identical both for the affected persons as for the professionals. Here it is important to recall that the structure of both tools was for a general factor of the second order which originated from 12 factors of the first order. The general factor was interpreted as a Resilience factor. There are many authors who suggest that the concept of Resilience or Resistant Personality is a multi-dimensional concept.

In relation to the second objective, this study began with the following initial hypotheses:

a) Both the affected persons as well as the experts treating them will show the same essential qualities.
b) Whatever the traumatic event suffered, the strengths needed to emotionally overcome it will coincide.

The data obtained in the present study leads us to maintain the first hypothesis, as we have found that neither in PFOA-R nor in NQOA-R are there significant differences in the points obtained on the scales for professionals and those obtained for affected persons.

The data considered here also leads us to maintain the second hypothesis, as there are no significant differences either in the points based on the type of traumatic event, neither for PFOA-R nor for NQOA-R. In other words, independently of whether the subjects are affected by a neurodegenerative disease, by cancer, by HIV, or are victims of abuse, the importance they give the factors making up their strengths in the face of

such adversity is similar. This apparently surprising result is compatible with the arguments of Seligman, 2000; Echeburúa et al 1005; Vera et al, 2006.

Furthermore, and this result is new as far as we know, neither does the type of professional taking part in the study have an effect on the averages of the scales of the tools used in this study. In other words, independently of whether the professional subjects are doctors, psychologists, nurses or social workers, for example, the importance they give to the factors they consider strengths for overcoming adversity is the similar. The majority of the studies analysed use, in the best case, a single group of professionals, which prevents these kinds of comparisons. In our case the analysis is possible as it uses a heterogeneous sample both of affected persons as of professionals.

Finally, with the third objective we tried to identify the relevance of the basic elements in each collective that allow successful coping strategies to be adopted in the face of traumatic phases in the life process. In other words, to empirically check which are the strengths considered most relevant for overcoming adversity.

The higher or lower psychological repercussions of a traumatic event on a person depends on their *psychological vulnerability*, which refers to a precarious emotional balance, and on their *biological vulnerability*, which Both types of vulnerability can amplify, like a sounding board, the psychological damage of these negative experiences suffered.

In some people, low self-esteem and pre-existing emotional imbalance, especially if accompanied by alcohol or drug dependence and social isolation, worsen the psychological impact of the loss suffered.

In the face of similar traumatic events, some people show adaptive coping whereas others become deeply traumatised.

With state of mind, the same would occur as with weight: it is pretty stable throughout life. For that reason, in the case of optimistic and hopeful people who suffer a traumatic event or a loss, they tend to maintain a positive state of mind, beyond the intense pain, but transient, that an event of this kind could provoke in them. In other words, they maintain their personal capacity to *make sense* of their experiences in the context of a previous life project.

We assume that to a great extent emotions are derived from our thoughts, from how we replay the events. Consequently, we feel that there are cognitive vaccinations, behavioural antidotes.

By suggesting that each person has the ability to take over and control their own existence, we avoid blaming the patient for either psychological immaturity or affective lability.

Given that there are Health Education studies, we consider it stimulating and inalienable to look for those factors that promote mental health and prevent vulnerability in the face of stressful or distressing circumstances.

Perhaps it is true that “the feelings you have, predict your destiny”. We would do well to pay special attention to the affective development of people, as what is truly effective is focusing on prevention.

Through positive treatments, those that promote levels of well-being or increase people’s strengths, it is possible to overcome the illness by compensating for it, in other words, working on a dynamic balance that strengthens and/or makes those resilient aspects or (positive) protective factors grow in the subject’s personality, of the groups. Furthermore, acknowledging that many of these qualities are learnt makes it possible to include them in school, work, organisational, mental and physical health prevention curricula. They are firmly rooted in professionals such as doctors and nurses.

It is proposed that we learn to be aware of our emotions, understand others’ feelings, tolerate stress and frustration and adopt an empathetic and social attitude to achieve better personal development.

Early infancy is an excellent and necessary time to begin promoting resilience and prevention and to maintain mental health.

By observing resilient children we can recognise the following attributes: the ability to ask introspective questions and give honest answers. The ability to maintain optimal emotional distance from problems, without becoming isolated. The ability to balance intimacy with establishing affective connections with other people. To enjoy putting oneself to the test with progressively more demanding tasks. Using humour even in serious situations. The ability to organise chaos and to find a purpose to it. Commitment to values, the desire to extend well-being to all humanity. Consistent self-esteem.

Every person has an individual form of causal attribution, known as the explanatory style, which is formed during infancy without specific intervention and is generally maintained throughout life. Optimists consider problems to be temporal, specific and attributed to external causes. An explanatory optimistic style is associated with higher levels of motivation, achievement and physical well-being, as well as lower depressive symptoms.

It is clear that we can deeply influence our own thoughts pushing aside negative ruminations and allowing positive thoughts to enter.

We try to measure, understand and develop human potential and specifically develop educational programmes so that the subjects of the population can develop those strengths and virtues that allow them to be happier and to overcome hard times which they will surely have to face. Overcoming being understood as taking on the pain and sadness.

Is there a personality resistant to any degree to life's adversities? The answer is yes. They are characterised by emotional control, by having self-esteem at the same time as accepting their own limitations, having a sense of humour, relativising problems, positioning themselves positively in the face of life, having a sense of importance, enjoying a balanced lifestyle, controlling emotions, having solid moral criteria, being gratifyingly enthusiastic, sharing a stimulating social life, being formed daily by a rich internal world, giving oneself the coping abilities of daily difficulties. The good news is that we can vaccinate children so that they develop these characteristics so that when the time comes they have these resources.

It is true that, no matter what, there are people who maintain the personal ability to make sense of their experiences in the context of a previous life project.

To conclude we will list the three protective factors or relevant abilities that a person has before the traumatic event occurs. In order of importance in the PFOA-R, they are:

1. Congruency (acting coherently with what we think and propose).
2. Optimism + Hope (positive attitude in the present and hope for the future, working to achieve objectives).
3. Emotional intelligence + Internal control (knowledge of oneself and the perception of the motivations and feelings of others to harmoniously combine the needs of both. Containing desires and impulses when the situation so requires).

We must highlight the complete coincidence between affected persons and professionals.

With regards to the three factors considered positive for overcoming adversity, in order of importance and according to NQOA-R, they are:

1. Optimism + Hope.
2. Congruency.
3. Social relations (mutual interaction and support with family members, friends, work colleagues and people we know).

There is also a complete coincidence between affected persons and professionals.

It is evident that Congruency and Optimism and Hope are considered to be essential before and after the traumatic event.

Emotional intelligence and internal control are considered important prior to the painful event and Social support relations are fundamental for after the event.

Let’s now go to a more detailed analysis (although more vulnerable to scientific criticism), focusing on the previously described items which obviously make up the scale. Let’s first remember that both affected persons and professionals could assign

points from 1 to 5 for each item. In PFOA-R (protective factors and relevant abilities which a person has prior to the occurrence of the traumatic event and which are considered positive for helping to overcome life's adversities). "Having family support and dedicating time to the family" achieved 817 points. And the highest ranking with 822 points is "Having life projects".

In the NQOA-R questionnaire, that takes into account new qualities developed by people to avoid being dragged down by and to help cope with the adversity after the traumatic event has occurred. The highest ranking items were "Face problems" achieving 820 points and the highest is "Set out to live".

Notice how the highest points were awarded to "Having life projects" before the traumatic event and "Set out to live" after the event. This definitive concordance needs no interpretation, simply recognition and applause.

We can see great coherence and consistency in the replies to both questionnaires and a coincidence worthy of highlighting between the affected persons and the professionals, which indicates that they know themselves well and gave a true analysis of reality.

I believe that the concordance with the affected persons allows for recognition from this Thesis to be given to the magnificent and implicated professionals.

I believe that the purpose of science is to serve to help, on occasion as a palliative measure. This study touches lives.

"I am the master of my fate.

I am the captain of my soul".

(Quote that received great acclaim from the mouth of Nelson Mandela)

PFOA-R: AFFECTED PERSONS VERSION

INSTITUTION:
TRAUMATIC EVENT:

GENDER:
AGE:

INSTRUCTIONS

Hereafter you will find a questionnaire containing, as a result of scientific literature research, contributions from victims (of terrorism, multiple sclerosis, cancer...) and experts in methodology, objective tests and statistics, some of the protective factors and relevant abilities a person has BEFORE the traumatic event occurs and which are considered positive for helping to overcome life's adversities.

Your task, always based on your own experience, is to indicate the degree of importance these factors have for helping to face the traumatic events (In a Likert type scale of 5 points from 1: Not important at all to 5: Highly important).

Dr. Javier Urra Portillo

THANK YOU FOR YOUR COLLABORATION

		NOT IMPORTANT AT ALL	VERY NOT IMPORTANT	REASONABLY IMPORTANT	CONSIDERABLY IMPORTANT	HIGHLY IMPORTANT
1	Having a positive and hopeful outlook for the future.					
2	Having the ability to create new leisure activities.					
3	Having a true love for knowledge and continuously learning.					
4	Having a talent for creating new ways of working.					
5	Having life projects.					
6	Believing that the future is in your own hands. Active attitude to what lies ahead.					
7	Being interested in what is going on in the world. Being a person with intellectual curiosity.					
8	Having an open mentality for giving different meanings to situations and appreciating different nuances.					
9	Being creative.					
10	Being able to give knowledgeable and suitable advice to others.					
11	Understanding that a negative always has a positive side.					
12	Taking on events without becoming paralysed looking back.					
13	Externalising positive feelings.					
14	Bringing negative experiences out in the open. Talking about problems.					
15	Having the ability to forgive people and grant them a second chance.					
16	Being modest and humble.					
17	Feeling that you control your own life.					
18	Being prudent and cautious when taking decisions, not taking unnecessary risks.					
19	The ability to accept your own limitations.					
20	Knowing how to live with your own faults.					
21	The ability to face up to daily problems.					
22	Enjoying what life gives. The ability to persist at an activity despite the obstacles.					
23	Loving yourself.					
24	Trusting people.					
25	Being genuine, sincere.					
26	Facing life with enthusiasm and energy.					
27	Establishing good relationships with work colleagues.					
28	Being true to the group (or society) you belong to and feeling part of it.					
29	Being fair and impartial with others.					

30	Having family support and dedicating time to the family					
31	Enjoying a united group of friends.					
32	The ability to lead and motivate the group you are a member of.					
33	Doing favours and good deeds for others, helping and caring for other people.					
34	Self-confidence.					
35	Feeling close and attached to other people.					
36	The ability to recognise your own feelings and those of others.					
37	Knowing what is important for others. Empathy.					
38	Being responsible for your own actions.					
39	Having discipline and control over emotions and impulses.					
40	The ability to face your own fears.					
41	Laughing a lot and joking frequently.					
42	Knowing that you have someone to call, especially when sad.					
43	The ability to be alone, to accept and enjoy moments of solitude.					
44	Being aware of and grateful for the good things that happen to you.					
45	Religious beliefs. Believing that there is something bigger than us that gives shape to and determines our behaviour and protects us.					
46	Finding advantages in limitations (real or otherwise).					
47	Internalising that it is not always possible to respond to the fears we have.					
48	Understanding that there are situations outside of our control (natural disasters, attack, death, ...).					
49	Practicing sport.					
50	Enjoying cultural and leisure activities.					
51	Being passionate about everything on the journey.					
52	Showing feelings and states of mind to people important to me; sharing emotions.					
53	Enjoying oneself.					
54	Harvesting and multiplying positive feelings.					
55	Spending time with the family.					
56	Having a sense of humour, enabling you to relativise problems.					

57	Accepting uncertainty.					
58	Awareness of how small "I" am.					
59	Deep awareness of my social being "I am you".					
60	OTHER (specify which):					

NQOA-R: AFFECTED PERSONS VERSION

INSTITUTION:
TRAUMATIC EVENT:

GENDER:
AGE:

INSTRUCTIONS

Hereafter you will find a questionnaire containing, as a result of scientific literature research, contributions from victims (of terrorism, multiple sclerosis, cancer...) and experts in methodology, objective tests and statistics, some of the new qualities a person develops in order to cope with and overcome the adversity AFTER the traumatic event occurs.

Your task, always based on your own experience, is to indicate the degree of importance you give these factors for helping to face the traumatic events (In a Likert type scale of 5 points from 1: Not important at all to 5: Highly important).

Dr. Javier Urra Portillo

THANK YOU FOR YOUR COLLABORATION

		NOT IMPORTANT AT ALL	NOT VERY IMPORTANT	REASONABLY IMPORTANT	CONSIDERABLY IMPORTANT	HIGHLY IMPORTANT
1	Tolerance in the face of the situation.					
2	Profound spiritual life.					
3	Doing good deeds.					
4	Belief in oneself.					

5	Looking to the future.					
6	Commitment to others.					
7	Achieving objectives (despite difficulties).					
8	Actively participating in group/s.					
9	Managing emotions.					
10	Set out to live.					
11	Enjoying what life gives.					
12	Putting yourself in a position to learn.					
13	Perceiving what others are feeling.					
14	Living in the present.					
15	Sharing happiness.					
16	Clearly visualising what you want.					
17	Preparing for action.					
18	Transmitting trust.					
19	Forgiving.					
20	Assessing the long term consequences of your own behaviour.					
21	Contemplating; meditating.					
22	Adding humour.					
23	Forgetting.					
24	Rationalising thoughts.					
25	Letting emotions come to the surface.					
26	Developing new ideas.					
27	Not throwing in the towel (not flagging).					
28	Humbleness.					
29	Facing your own fears.					
30	Appreciating art.					
31	Accepting your own limitations.					
32	Higher self-awareness.					
33	Maturity.					
34	Grasping the interesting point of each situation.					
35	Being interested in others.					
36	Commitment to the principles of justice and equality.					
37	Looking to write destiny.					
38	Having your feet on the ground.					
39	Sharing feelings.					
40	Courage.					
41	Accepting love from others.					
42	Having hope in life.					
43	Taking pleasure from making others smile.					
44	Accepting that everyone has something to say.					
45	Thinking about the good things in life.					
46	Facing problems.					
47	Finding the positive side.					
48	Enjoying learning new things.					
49	The ability to surround yourself with people who look after and make you feel good.					
50	Hope for other people's happiness.					
51	The ability to lead a disciplined and ordered life.					
52	Accessing self-help groups.					
53	Becoming stronger, appreciating what you are capable of.					
54	Feeling love, solidarity understanding for those who surround us.					

55	Loving knowledge.					
56	Enjoying the present.					
57	Taking the best of a situation.					
58	Being prudent.					
59	Showing yourself as being whole.					
60	Not feeling guilty, but responsible.					
61	Promoting a spirit of effort and sacrifice.					
62	Directing yourself towards the positive.					
63	Personal acceptance.					
64	Development of self-esteem.					
65	Being grateful for everything, because everything happens for a reason.					
66	Developing sociability.					
67	OTHER (specify which):					