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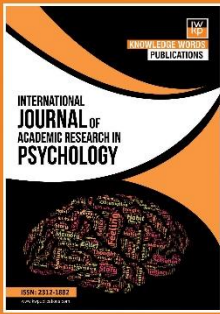
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Emotional Reactions towards Dementia: The Right to Life

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Abstract

Alzheimer Disease (AD) is an organic psycho-syndrome which affects mainly elderly people. AD patients have to confront problems in their social interactions daily. Therefore they become receivers of acceptance or rejection by the wider social group to which they belong. **Aim:** The study investigated how well informed is the Greek population regarding dementia, and how do they feel or react towards patients with dementia. **Method:** A specific questionnaire was constructed, which was administered to 70 participants, 31 male and 39 female, 20-60 years old, with 0-17 years of education. **Results:** AD is followed by highly positive emotional reactions in Greek society (98.2%). The participants' majority did not feel susceptible (77.1%) or stressed (71.4%) by the possible risk of the disease. There is a quite satisfactory level of awareness regarding dementia and AD (44%). People's previous experience with AD patients ($p=0.031$), as well as their locus of residence ($p=0.011$) affect their capability of identifying the disease. Women were more willing to show concern, compassion, desire to help and sympathy ($p=0.039$). Those more highly educated felt more susceptible to AD ($p=0.039$). Those who felt more susceptible to the disease and they had more aggressive emotions ($p=0.022$) and severe stress about the possible risk to get diseased by dementia, expressed rejection ($p=0.017$) and social emotions ($p=0.029$). **Conclusion:** Many of the Greek people who participated were aware about the issue of dementia, and the majority of them expressed positive emotions towards a patient with dementia.

Keywords: Emotional Reactions, Social Stigma, Dementia, Alzheimer Disease, Awareness.

Introduction

Social stigma constitutes a pre-constructed sociological concept, which was rendered by health professionals as an unwanted, disavowing attribute which deprives the human right of social acceptance, while at the same time it forces her/him to try and hide the reason of this rejection. It constitutes a social phenomenon whose existence is detected in the depths of time, from the middle Age until today.

Goffman (1963) defines stigma 'as a behaviour which does not necessitate deep esteem' and presupposes that the stigmatized person tends to be identified 'from an ordinary and integrated person as a person without any value'. Based on Goffman's theory, Jones et al (1984) use the term 'mark' in order to describe a deviating situation, where individuals are considered by society as scapegoats and defective. Crocker et al (1998) refer to stigma as 'devaluation of social identity'. Today this term is used to show that some diseases, and especially the psychological ones, cause emotions of disbelief, fear and prejudice towards the diseased (Lawrence et al., 2006).

A scrupulous inspection of stigma suggests that it is initiated by various stereotypes, prejudices and discriminations. According to Goffman (1963), stigma constitutes 'a specific relation between a person's behaviour and stereotypes'. The negative cognitive structures, which predefine our behaviour, are named stereotypes. When a person adopts these negative stereotypes, then the respective emotional reaction will follow, which is called prejudice. The behavioural reaction which is evoked by the combination of stereotypes and prejudices is called discrimination (Corrigan et al., 2002).

Stigma is directly related to neurological disorder. The term 'neurological disorder' is used to express a wide range of symptoms and experiences, which prompt problems with cognition, emotions, a person's behaviour, as well as the communication with other people (DSM IV, 1994). This disease could affect any individual of any age (Kessler et al., 2007). It is an enigmatic and unresolved disease, yielding scepticism and suspiciousness towards the diseased. Therefore, the patient is called to confront a double stigma: that which resulting from the disease and the other of the social rejection. There are social groups which are stigmatised due to their life style, such as people addicted to substances, the homeless and homosexuals (Ahern et al., 2007; Kidd, 2006; Kadushin, 1996); whilst diseases which are accompanied by stigma are cancer (Bloom & Kessler, 1994), various pestiferous diseases (Ifantopoulos, 1996; Papadatou, 1995; Zickmund et al., 2003), behavioural disorders and psychic diseases (World Psychiatric Association, 2001). Victim of social stigma is not only the patient, but also her/his family due to their interlinked relation. One's psychic imbalance disturbs the relation and the psychic balance of the rest of the family members (Freid, 1977).

The consequences which follow stigma cause additional problems, which always have as direct recipient the patient her/himself. Here are mentioned some of these selectively, such as the absence of funding resources towards the establishment of appropriate psychic health services, and the insufficient availability of accommodation spaces. Their confinement contributes to their marginalisation, social isolation and the wider rejective behaviour by their fellow citizens and the state (Rüsch et al., 2005). All these negative consequences compose the daily life of a patient with psychic disorders, which of course constitute an obstacle to the positive progress of their psychic health.

One of the neurological and behavioural disorders, according to the ICD-10 (1994) and the DSM IV (1994), is dementia. It is a degenerative brain disease which affects mainly people of the third age (Tsolaki, 1996). From the total of dementias, more than half of the cases are attributed to the Alzheimer Disease (AD) (American Psychiatric Association, 1994). The symptoms which characterise its beginning are the progressive deduction of episodic memory and attention. During the progression of the disease, additional mental functions are affected such as memory, cognition, perception, language and the learning and judgement ability. In few cases, change in behaviour or personality is also noticed (Almkvist, 1996; Mendenopoulos, 1997). This situation is burdened by the

withdrawal of the patient from her/his social activities, resulting in the social isolation of the individual and her/his family. In the case of dementia, stigma is also weighed down by the oncoming death. In general, the social perception which prevails is that an elderly person does not need immediate assistance and care in relation to a younger one. Under this prism appears the tendency to turn a blind eye to any neurological disease, such as AD, where the needs of the patient are overshadowed by her/his advanced age (Morris, 2005).

In order to practise the right and effective consultancy on the matter of social withdrawal and the subsequent isolation of the patient and her/his family, specialists need data that relate to the attitudes and conceptualisations of the social environment where those people live. It is this necessity that the present research attempts to cover, studying the beliefs and reactions of the Greek society towards the AD patient.

Aims

Amongst the aims of the research was the study of 1) the emotional reactions, 2) the cognitive perceptions of the Greek society towards a person suffering AD - that is, whether the wider community feels threatened by AD, 3) the education of the public on the issue of dementia, 4) which significant demographic factors relate to such emotional reactions, 5) if the cognitive perceptions about AD relate to the emotional reactions, 6) how the perception of AD as a threat to the interviewee affects her/his emotional reactions and 7) how any previous lived experience of/ acquaintance with a patient affects the reactions of the interviewee.

Method

Participants

The research addressed population from various districts of Greece, urban or other. 70 people participated (Table 1), 31 of which were men and 39 women, aged 20-60 years old, with education from 0-17 years of duration, from different occupations and monthly income ranging from 0 up to \geq 1000€. The familial situation of the participants was included in the framework of this research. Some of them had a lived experience/ knowledge of a person with AD and some did not. The sampling was randomised. A significant criterion, at least regarding the age group between 50-60 years old, was to have neither subjective complaints about memory deficiencies, nor clinically diagnosed dementia or Mild Cognitive Disorder.

(Table 1. about here)

Conditions of Questionnaire Distribution

The questionnaire was implemented by a trained psychologist and was effected during a personalised meeting with every participant individually under the 'face-to-face' condition, using structured interview. The distribution occurred in a specified space during morning hours and its duration did not exceed 15 minutes. Prior to filling the questionnaire, guidelines were provided, in order for the interviewee to understand the questioning procedure. The participants were informed that their participation in the research would be anonymous, voluntary and without payment.

Questionnaire Description

For the delivery of this research, a special questionnaire was used, which was based on the one applied to the population of Israel (Werner & Davidson, 2004), but was adjusted to the Greek circumstances. It should be noted that the only difference in the design between the two researches related to the profile of the patient which was portrayed. More specifically, in the Israeli research the description given was that of a patient with an advanced case of dementia, while the Greek one referred to a person of an early dementia stage. In the beginning, the description of the daily life of a female AD patient was given, where the interviewee – according to her/his judgement – was called to answer from what she suffered. The answer was open-ended and basically it was a chance to ‘characterise’ this person. For this reason, the process was named ‘labelling’. For testing the validity and reliability of the particular characteristics used in order to draw the profile of the portrayed female patient, the descriptive text was given individually for assessment to three health professionals, who diagnosed that, according to the described clinical picture, this particular person suffered from AD.

Continuing, there was a list with 16 emotional reactions which were scaled on a 5-graded scale, and the interviewees had to assess how each one of these better expressed them. The answers related to how they would react or feel if they were present together with a person such as the one in the example. Following, there were 3 questions which addressed the cognitive perceptions of the participants regarding whether they ever have felt being threatened or troubled by the thought of themselves suffering AD some time, and how much stress this thought caused them. Similarly, the answers here were also given with the form of a 5-graded scale. At this point of the questionnaire it was mentioned for the first time the term ‘Alzheimer disease’, and basically it was then that the interviewee was directed towards the fact that the research concerned the relevant disease. At the end there was a table where the interviewee completed her/his demographic data.

Results

Statistical Analysis

For the production of the results descriptive analysis was applied and the method of factor analysis of the principal components with varimax rotation on the emotional reactions. Additionally, descriptive analysis was used for the cognitive perceptions of the interviewee about dementia, in order to examine whether they were perceived as a threat; and for the ‘labelling’, in order to speculate how well they were informed so that they would be able to identify AD. The test of retrogressive hierarchical analysis was applied so as to examine the effect of the demographic elements, the ‘labelling’ and the previous experience on the emotional reactions and cognitive perceptions. This particular test was also used in order to investigate whether the cognitive perceptions of the interviewee had an effect on her/his emotional reactions; as well as whether ‘labelling’ was affected by the demographic characteristics and previous lived experience/acquaintance.

Factorial Analysis of Principal Components with Varimax Rotation on the Emotional Reactions

Applying the method of factorial analysis of the principal components with varimax rotation on the 16 emotional reactions, it was found that there were 5 factors charging some of these emotional reactions. The 5 factors had eigenvalues > 1 and represented 66.54% of the total variance. For the

needs of this research, the first factor is named 'social' and includes emotions such as concern, compassion, desire to help and sympathy. The second factor is named 'aggressive' and comprises of emotions such as irritation, ridicule, disgust, anger and rejection. The third factor is named 'anxious' and contains emotions of fear, uneasiness and insecurity. The fourth factor is named 'compromising' and depicts emotions of consternation and embarrassment, while the fifth factor is named 'rejective' and includes emotions of impatient and discouragement. From the recorded gradings of the emotional reactions of each factor, the Mean (M) and its Standard Deviation (SD) was produced (Table 2).

(Table 2. about here)

Emotional Reactions

Descriptive analysis was used in order to depict the 16 emotional reactions, from which the M and SD were originated. For practical reasons which relate to the production of the results, cumulative gradation was applied for the 5-graded scale of the emotional reactions. In particular, 3 new grades were calculated, of which the first included cumulatively the answers 'Not at all – Little', the second 'Fairly' and the third 'Much- Very Much'. According to these, 98.2% of the interviewees expressed a very high tendency towards help, compassion and concern for the AD patient. On the contrary, 95.7% expressed very few aggressive emotions, and 60% mentioned only very few or no emotions at all of fear, insecurity and uneasiness. 65.7% of the interviewees mentioned that did not feel consternated or distressed next to an AD patient, and 81.4% stated that they do not reject at all such patients (Table 3). Therefore, it was established that AD is a psychic disorder which – contrary to others – is not followed by negative emotional reactions within the Greek society.

Perceptions of Dementia as Threat

In order to examine the perceptions with regard to how threatening the interviewee considers dementia for her/himself, descriptive analysis was used, from which the M and SD were produced. From these results it was observed that 77.1% of the participants, according to the cumulative scale, mentioned that little or not at all did they feel susceptible towards the possibility of them taken ill by the disease at some point; 72.9% were never concerned by such thought; and 71.4% were not made to feel stressed by such a thought (Table 3). Therefore, the results suggest that the majority of the interviewees did not feel threat or stress towards a possible risk of the disease.

(Table 3. about here)

Information of the Public on the Issue of Dementia – Labelling

Regarding the public's education on the issue of dementia and the 'label' which the participants attributed to the female patient's profile, results showed that 65.8% of the interviewees were informed about dementia and AD and were able to identify it; whereas 22.9% could not give a clear definition, but answered ambiguously that it concerns AD or some other disease. Finally, 11.4% could not identify it (Table 4). According thus to the aforementioned, it appears that there is satisfactory information of the public about dementia and AD, but there needs to be further effort for education by the relevant agencies.

(Table 4. about here)

The Effect of Demographic Elements, Labelling and Previous Lived Experience/Acquaintance with an AD Patient on Emotional Reactions

Retrogressive hierarchical analysis was used for the effect of demographic elements and the previous experience of/acquaintance with an AD patient on the emotional reactions. According to the results (Table 5), gender appeared to have an effect on those emotions which constitute the 'social' factor. It seems that women (55.7%) are more sensitised $F(1,67) = 4.43$, $p = 0.039$ towards a patient with AD compared to men, regarding concern, compassion, desire to help and sympathy. Age, education, occupation, familial situation, location of residence, custody of children, labelling as knowledge or ignorance and lived experience/acquaintance did not show any effect on emotional reactions.

The Effect of Demographic Elements, Labelling and Experience on Perceptions

From the examination of the effect of the demographic elements on perceptions resulted that the participants' perceived susceptibility to AD appeared to be affected solemnly by education $F(1,67) = 4.45$, $p = 0.039$ (Table 5); while the perceived uneasiness and the perceived stress were not affected by demographic elements, labelling as knowledge or ignorance and experience of/acquaintance with an AD patient. More specifically, it emerged that the more years in education one was, the more susceptible they felt towards the possibility of taken ill some time by AD. (Table 5. about here)

The Effect of Perceptions on the Emotional Reactions towards a Person with AD

The effect of perceptions on the emotional reactions towards a person with AD was also examined with hierarchical retrogression. From the results it became obvious that the constant engagement of the interviewee with the idea of possibly taken ill by AD in the future seemed to affect the 'rejective' factor $F(1,68) = 6.01$, $p = 0.017$. Therefore, the more the participant was engaged with this thought, the more intense her/his emotions of impatient and discouragement towards someone already suffering by the disease. The perceived stress showed to have an effect on the 'social' factor $F(1,68) = 4.98$, $p = 0.029$; this means that the more the participants were stressed by the thought of possibly suffering themselves some day, the more they expressed sympathy, concern, compassion or desire to help. Moreover, at the single-factor analysis of variance it was observed that the perception of susceptibility had an effect on the emotions of 'aggressive' factor $F(1,68) = 5.47$, $p = 0.022$ (Table 6). Therefore, the more susceptible to AD the participants felt, the more emotions of disgust and repulsion they expressed towards the patient. Perceptions did not appear to affect the emotions of the 'anxious' and 'compromising' factors.

The Effect of Demographic Elements and Lived Experience/Acquaintance on Labelling

From the analysis of the effect of demographic elements and personal experience on labelling, it emerged that the previous experience $F(1,67) = 4.83$, $p = 0.031$ of the interviewee with AD patient, as well as her/his location of residence $F(2,66) = 4.81$, $p = 0.011$ affected the labelling of the patient (Table 7). More specifically, when the interviewee had previous experience of an AD patient or lived in an urban area, s/he identified the disease with higher accuracy. (Table 7. about here)

Discussion

According to the results of this research, of greatest interest proved to be 1) the emotional reactions and perceptions of the participants, as well as the effect between them, 2) the information of the public, 3) the effect of demographic factors, information and lived experience of/acquaintance with an AD person on the emotional reactions and perceptions, and finally 4) the effect of demographic factors and the lived experience/acquaintance on labelling.

The majority of the interviewees expressed positive emotions towards a person suffering AD, such as tendency to help, compassion, concern, resulting in them approximating more the profile of the social factor. In contrast to other psychic disorders, it seems that patients with AD become accepted by society at a higher percentage, without triggering aggressive and rejective emotions from their fellow citizens. All socio-psychological definitions advocate that stigma is a behaviour which defines people as different and diminishes them, however it depends on both the type of relation and the framework within which stigma is socially constructed (Major & O' Brien, 2005). Therefore, the existence of these emotional reactions could be attributed to the advanced age of the AD patient which, due to the learned social stereotypes and perceptions, inspires respect. Another possible explanation is that AD is often presented by mass media, and also most of the times as one funny, cute and quiet caricature. It does not reference to a type which is considered dangerous for the fellow citizens, as it usually happens with people who suffer from other psychic diseases.

A person's education seemed to play significant role on perceptions. The more years in education one had, the more susceptible they felt towards a possible risk of the disease. More particularly, advanced education can contribute in facilitating information about the issue of dementia. Therefore, the more informed one was in relation to the risk factors and etiopathogenesis of the disease, the higher susceptibility they felt. Moreover, the losses induced by the disease – either cognitive or functional – seem more threatening to people of a higher level of education. This happens because most of those who have advanced education usually practise professions of a higher responsibility and status, while interacting within a wider social network. They believe that such losses will be important and will affect their everyday life to a great extend, impairing their social and professional profile (Fioravanti & Carlone, 2001).

An important finding of the present research is that the bigger part of the public was informed about the issue of dementia and AD and they could identify it. Possibly, this indicates that the information the relative agencies provide, such as the Alzheimer associations, the mass media and primary care, is good, however it does not address the society's total. One of the initial hypotheses was that, for those who had come in contact with an AD patient, it would have been easier to recognise the disease. Indeed, the results of the research verified the aforementioned hypothesis. Previous experience or acquaintance with a patient contributed to the more accurate identification of the disease. Therefore the lived experience functions as knowledge, which is acquired through the familiarisation with the disease. Moreover, residents of the large urban centres also recognised the disease with higher accuracy. The rational explanation of this result agrees with the fact that more relevant agencies exist and function in large urban centres, and that the information provided is varied and multifaceted in comparison with smaller places.

Of great interest was the effect of gender on the emotional reactions. It appeared that women are more sensitised regarding care, desire to help and sympathy towards an AD patient compared to men. A possible explanation for this difference between the two genders would be the socially

constructed model of the female sex, where due to particular stereotypes and prejudices prevails the perception of their constant tendency to cater for the others. Besides, this particular behaviour, according to the explanation by the evolutionary psychology, is attributed to the already existing tendency of the woman to cater for and help the others, because of the particular characteristic feature of her gender (Dahlberg et al., 2007, Angermeyer, 1998), which is motherhood.

The interviewee's engagement with the thought that possibly will be taken ill by AD some time seemed to have an effect on her/his emotions. The more one was occupied with this thought, the more emotions of discouragement and impatient one expressed towards the AD patient. These emotions drew the 'rejective' factor. Moreover, the more one felt susceptible towards the disease, the more emotions of the 'aggressive' factor one expressed, such as irritation, anger, rejection and disgust. The manifestation of these emotional reactions could be one defence mechanism. In front of the threat of being taken ill by the disease, one creates rejective and aggressive emotions in order to protect oneself from a stress-generative stimulant, which in this case is AD. There are many defence mechanisms which work unconsciously in the psychism of one person in order to maintain her/his psychic balance. In this particular situation, the avoidance mechanism is activated, in order to avert from those ideas and thoughts which cause stress (Freud, 2007).

On the contrary, those interviewees that showed high levels of stress due to the risk of becoming ill by Alzheimer at some point expressed more emotions of the 'social' factor, such as sympathy, desire to help and compassion towards the AD patient. Such emotions were mainly expressed by women. Therefore, a first explanation could be attributed to the difference of the two genders. As it has been suggested by relevant research, women are considered to be more susceptible to stress (Galea et al., 1997. Bowman et al., 2006). In this research, it has been established that the more stressed they felt by the thought of been taken ill some time, the more emotions of the 'social' factor they developed.

This tendency could be explained according to the evolutionary tension and the cognitive-behavioural theory. More specifically, the stimulant, which is the disease itself, evokes some kind of reaction to these individuals. The reaction is mainly cognitive, where automatic thoughts penetrate, such as 'I may sometime be taken ill myself', and which trigger autonomous tensions like stress. At this point core convictions and social stereotypes emerge with which women have been nursed, and which affect their behaviour by breaking the vicious cycle (Hequembourg & Brallier, 2003). Instead of negative emotions being wakened by stress, positive ones are generated, which can be explained also according to the theory about the instinct of motherhood. These emotions – such as the desire to help, compassion and care – coexist, due to the particularity of the gender, and are evoked every time it is required by the circumstances (Tannenbaum & Mayo, 2003).

These results could also be explained by the psychoanalytical approach. According to it, when women develop stress to the thought that they might be taken ill, the defence mechanism of projection is triggered, in order to restore the psychic balance. The projection works compensatively for an endogenous stimulant – which in this case is the thought of being sickened by AD – which is misconstrued by the individual and becomes perceived as exogenous. Essentially, at its mild forms this projection is the basis for the development of empathy. They develop, thus, positive emotions towards the patient, such as those of the 'social factor', as they try to understand her/him and through this behaviour they assume that, if some time they become ill, they will have a similar treatment by others (McWilliams, 1994).

In comparison to the results of the equivalent research conducted in Israel, similarities and one difference are ascertained. To begin with, it is important to note that the results of both researches represent the opinion of a sample of the population, and should not be over-generalised. It appeared that in Greece a significant proportion (65.8%) was better informed and could more easily identify the signs of the disease; whereas in Israel this proportion was smaller (38%). Even though the presented cases in the two researches were of different stages, the emotions which prevailed at both researches were positive. The explanation of this tendency is attributed to the fact that patients with dementia are not considered themselves responsible for their disease, and are not assessed as dangerous in relation to others psychically ill. At both nations the gender effect became obvious, as women presented less emotions of rejection compared to men (Werner & Davidson, 2004).

In conclusion, a sufficient number of the Greek participants in this research were well informed on the matter of dementia, without this suggesting any termination of the production of further knowledge or the continuing effort to educate the public. Moreover, the positive emotions, which the participants expressed towards a patient with dementia, contribute to the better integration in and acceptance of such persons by society. However this research provides us the possibility of further exploration of the social stigma in the Greek society with a larger and more representative sample, while studying additional parameters of this multifaceted issue as perceived by careers and patients themselves.

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APPENDIX**Table 1.** Participants' Characteristics (N= 70)

Socio-demographic Characteristics	Percentage %
Gender	
Men	44.0%
Women	56.0%
Location of Residence	
Large urban centre	21.4%
Semi – urban centre	78.6%
Familial Situation	
Single	44.3%
Married	55.7%
Monthly Income	
≥ 400	15.7%
401 ≥ 999	44.3%
≥ 1000	40.0%
Lived experience/ acquaintance with a person with Alzheimer	44.3%
	M (SD)
Years of age	38.8 (12.1)
Number of children	.57 (.64)
Years in education	13.9 (2.9)

Table 2. Factor analysis of principal components with varimax rotation for emotional reactions

Emotional Reactions	Factor Social	Factor Aggressive	Factor Anxious	Factor Compromising	Factor Rejective
Concern	.78				
Compassion	.77				
Desire to help	.77				
Sympathy	.70				
Irritation		.74			
Ridicule		.70			
Disgust		.68			
Anger		.66			
Rejection		.57			
Fear			.81		
Uneasiness			.81		
Insecurity			.52		
Consternation				.81	
Embarrassment				.62	
Impatience					.86
Discouragement					.67
Eigenvalues	3.6	2.9	1.6	1.2	1
% of Variance	22.9	18.6	10.2	8.0	6.6
*M. (SD)	10.58 (2.45)	1.15 (1.77)	3.12 (2.21)	2.11 (1.46)	1.50 (1.13)

Note: Only the charge values > 500 were included.

***M. (SD):** Cumulative Means of the answers on emotional reactions which are included in the factor and square deviation in brackets.

Table 3. Emotional reactions towards a patient suffering from Alzheimer Disease, and the interviewee's perceptions regarding the disease (n = 70)

Factor	Not at all - Littleⁱ (%)	Fairlyⁱⁱ (%)	Much– Very Muchⁱⁱⁱ (%)	M	SD
Emotional Reactions					
Social					
Concern	5.7	37.1	57.1	2.58	.712
Compassion	8.5	22.9	68.5	2.70	.822
Desire to help	10.0	28.6	61.5	2.70	.890
Sympathy	8.6	31.4	60.0	2.60	.832
Total				10.58	2.45
Agressive					
Irritation	94.3	4.3	1.4	.571	.649
Ridicule	92.9	4.3	2.9	.214	.657
Disgust	98.6	1.4	-	.028	.239
Anger	100.0	-	-	.185	.391
Rejection	95.7	2.9	1.4	.157	.528
Total				1.15	1.77
Anxious					
Fear	87.1	10.0	2.9	.542	.792
Uneasiness	38.6	31.4	30.0	1.85	1.01
Insecurity	81.4	11.4	7.1	.728	.976
Total				3.12	2.21
Compromising					
Consternation	90.0	7.1	2.9	.442	.754
Embarrassment	45.7	34.3	20.0	1.67	.973
Total				2.11	1.46
Rejective					
Impatient	84.2	14.3	1.4	.700	.768
Discouragement	84.3	14.3	1.4	.714	.764
Total				1.50	1.13
Perceptions					
Susceptibility	77.2	18.6	4.3	1.07	.856
Uneasiness/ concern	72.8	17.1	10.0	1.02	1.04
Stress	71.4	17.1	11.4	1.05	1.19

ⁱ Grading of category Not at all - Little: 0 - 1

ⁱⁱ Grading of category Fairly: 2

ⁱⁱⁱ Grading of category Much – Very Much: 3 - 4

Table 4. Information of the public on the issue of dementia - Labelling

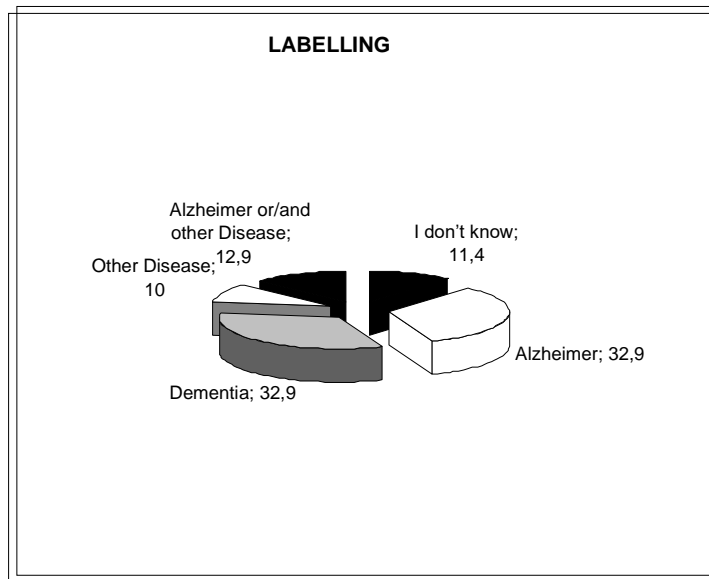


Table 5. Gender effect on the emotional reactions towards a person with AD and the effect of education on the perceived susceptibility

	M (SD)	F	df	Sig.	Beta.	t
Social Factor						
Men	9.90 (3.09)	4.436	(1, 67)	.039	.249	2.106
Women	11.12 (1.64)					
Susceptibility						
Years in Education (0-6)	0.50 (0.70)	4.450	(1, 67)	.039	.250	2.10
Years in Education (7-12)	.082 (0.71)					
Years in Education (13≤)	1.23 (0.93)					

Table 6. M and (S.D) of the emotional reactions towards a person with AD under the effect of cognitive perceptions

Emotions	Perceptions					F	df	Sig.	Beta	t
	Not at all	Little	Fairly	Much	Very Much					
	Engagement									
Rejective	1.26 (1.15)	1.20 (1.00)	1.33 (1.07)	2.80 (2.38)	3.00 (1.41)	6.015	(1, 68)	.017	.285	2.453
	Stress									
Social	10.13 (2.77)	10.4 7 (2.22)	10.75 (2.13)	11.33 (1.15)	12.80 (1.92)	4.988	(1, 68)	.029	.261	2.233
	Susceptibility									
Aggressive	0.56 (1.26)	1.21 (1.61)	1.15 (0.98)	10.00 (0.00)	0.50 (0.70)	5.47	(1, 68)	.022	.273	10.44

Table 7. M and (S.D.) of Labelling* under the effect of location of residence and lived experience/acquaintance

	M (SD)	F	Sig.	df	Beta	t
With experience	2.09 (1.24)	4.838	.031	(1, 67)	.260	2.199
Without experience	1.56 (1.07)					
Large urban centre	1.92 (1.19)	4.815	.011	(2, 66)	.248	2.130
Semi-urban centre	1.33 (0.97)					

*Labelling

0: I don't Know, 1: Alzheimer, 2: Other dementia, 3: Other disease, 4: AD or other disease