

DEHUMANIZATION OF THE MENTALLY ILL COMPARED TO HEALTHY TARGETS

Miranda Svoli, Maria Sakalaki, & Clive Richardson
Panteion University of Social and Political Sciences, Greece

Abstract: Dehumanization has been a subject of study in interpersonal and intrapersonal, as well as intergroup, contexts. This article examined whether healthy and mentally ill targets are unequally dehumanized by lay people and whether group membership and self-determination of participants mediates the dehumanization of mentally ill targets. It also analysed whether the severity of mental illness affects self-dehumanization. A study conducted on a Greek sample of lay people ($N = 97$) revealed that the mentally ill are dehumanized more in comparison to the healthy ones, but this depends on the severity of their illness. Moreover, the study indicated that lay people dehumanize the neurotic targets somewhere in between psychotic and healthy targets depending on how much they identify with them. A psychosocial, situational variable such as group membership was stronger than a dispositional variable, that is, self-determination in determining dehumanization. A second study conducted on a Greek sample of mentally ill patients ($N = 77$) showed that psychotic patients humanize their own selves more than neurotic ones do, and in fact attribute more positive emotions to the self in comparison to neurotic patients. These findings suggest that psychotic patients display a less objective perception of reality than neurotic ones.

Key words: Dehumanization, Mental illness, Self-Determination Theory

Dehumanization is the tendency of individuals or groups to attribute less human characteristics to others, outgroups or the self. The denial of humanness as a discriminatory and prejudicial behavior towards outgroups has been mainly associated with intergroup processes (Bandura, 1990, 2002; Bar-Tal, 2000; Kelman, 1976; Opatow, 1990). In the intersexual and intrasexual context, it has been shown that women are dehumanized more by both sexes (Svoli & Sakalaki, 2015). In the field of cognitive disability, affected people have been compared to parasites that infect society (O'Brien, 1999). They have been viewed as unable to live in a civilized way, unable to experience pain and prone to immoral and criminal behavior (O'Brien, 2003).

The first empirical studies in the domain of dehumanization referred to infra-humanization, according to which people tend to attribute more uniquely human emotions (emotions which refer exclusively to the human being, e.g., guilt) to their ingroup than to outgroups (Demoulin et al., 2004; Leyens et al., 2003). In contrast, the attribution of non-uniquely human emotions (i.e., those we share with other animals, e.g., joy) does not differ in relation to the social status of the group (Leyens et al., 2001).

On a more systematic theoretical basis, Haslam and his colleagues showed that there are two senses of humanness that lead to two distinct forms of dehumanization, namely, animalistic dehumanization and mechanistic dehumanization (Haslam, 2006; Haslam & Bain, 2007; Haslam, Bain, Douge, Lee, & Bastian, 2005). Animalistic dehumanization, which has mainly been related to intergroup contexts, describes the reduced attribution of uniquely human characteristics (e.g., rationality, moral sensibility, civility) to others. In this case, others are represented as animal-like and their behavior is thought to be driven by motives, appetites and instincts. Mechanistic dehumanization refers to the reduced attribution of human nature characteristics (e.g., emotional responsiveness, interpersonal warmth, cognitive openness) to others, who are represented as machines or automata, lacking individual agency and being inert and passive.

According to this theoretical model, dehumanization may also apply to the intrapersonal context. Bastian and Haslam (2010) suggested that ostracized individuals attribute less human characteristics to the self. In addition, the perpetrator of social ostracism dehumanizes the self and regards his or her behavior as immoral (Bastian et al., 2013). In this respect, the dehumanization of minority groups could be assimilated to social ostracism. Sakalaki, Richardson, and Fousiani (2016) showed that enduring psychological variables that are poor in humanness, such as Machiavellianism and opportunism, also lead to self-dehumanization.

Furthermore, Sakalaki, Richardson, and Fousiani (2017) examined whether

distressing situations that inflict suffering can induce denial of humanness to the self and others. Confirming their hypotheses, the main results of five studies showed that: positive situations are judged to be more human than negative ones; self-dehumanization is positively correlated with ill-being variables such as negative affect, anxiety and somatization (which are dispositional variables that increase suffering), but negatively correlated with positive affect, vitality and self-actualization; the more a woman suffers from difficult familial and economic conditions, the more the observers tend to dehumanize her; and the dehumanization of victims of unemployment is greater than the dehumanization of those who have a job.

Finally, individuals with low socioeconomic status (e.g., an office cleaner working in the public sector) and moderate or severe mental disorder are more dehumanized than those who have no mental disorder or have a mental disorder but are of high socioeconomic status (e.g., a business executive in a company) (Sakalaki et al., 2017). All these studies underline the detrimental, deleterious effects of suffering and reduced well-being on how individuals perceive themselves and others in terms of humanness. There is evidence that, in lay thinking, humanization of the self and others requires the absence of high levels of suffering and deprivation which represent situations that seem to be regarded as less compatible with humanness.

Mental illness can be considered as a form of cognitive disability liable to increase suffering. According to Tzouvara and Papadopoulos (2014), “mental illness” is defined as “a syndrome characterized by clinically significant disturbance in an individual’s cognition, emotion regulation or behavior that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning” (American Psychiatric Association, 2013, p. 20). A neurotic illness can refer to a diagnosed disorder as well as to a normal condition. Therefore, lay people can identify with neurotics easier and feel closer to them in comparison to any other mental patients. However, patients who suffer from some form of psychosis may display illusions, delusions and unreasonable thought experiencing a much more intense suffering than neurotic ones.

Discrimination and stigma differ from ostracism in that discrimination usually refers to excessive negative attention or no attention at all (Wirth & Williams, 2009). However, since both are forms of interpersonal rejection, they are interrelated (Goffman, 1968). Previous studies have shown that beliefs about mental illness are negative (Link, 1982; Link, Cullen, Frank, & Wozniak, 1987) and connected with fear and sense of danger, especially in the case of schizophrenia (Economou, Richardson, Gramandani, Stalikas, & Stefanis, 2009) as opposed to depression (Angermeyer & Matschinger, 2003; Crisp, Gelder, Ritz, Meltzer, & Rowlands, 2000). The public appears more likely to identify symptoms of schizophrenia than symptoms of

depression as an indication of mental disorder, while biological factors are more frequently endorsed as a cause of schizophrenia. In contrast, psychosocial stress is more frequently considered responsible for the development of depression. In the case of schizophrenia, clearly labeled as a mental illness, a respondent's emotional reactions are negatively affected. As a result, people with schizophrenia are far more frequently considered as dangerous and unpredictable than other mental patients (Economou, Richardson, Gramandani, Stalikas, & Stefanis, 2009). However, in the case of major depression a positive affect prevails as sufferers from depression evoke more pro-social reactions (Angermeyer & Matschinger, 2003).

It is worth mentioning that, in contrast to other kind of illnesses, mental illness in lay thinking is conceived of as a chronic condition – a condition that can create fear, hostility, suspiciousness and aloofness in the general population (Rosenhan, 1973). It has been shown that targets who suffer from chronic mental illness are thought to be less human and more dangerous in comparison to those who suffer from chronic organic illness (Martinez, Piff, Mendoza-Denton, & Hinshaw, 2011). In contrast, when a target diagnosed with a mental illness (specifically, bipolar disorder) is perceived as being in remission and is engaged in rather normative behavior, he or she is thought to be more human and less dangerous than a patient diagnosed with a physical illness (specifically, melanoma). Furthermore, when the mentally ill target is humanized, he or she is less socially rejected (Martinez et al., 2011). Following the above, we hypothesized that psychotic patients are more dehumanized than neurotic ones and that both are more dehumanized than healthy people.

According to the literature, individuals with low socioeconomic status and mental disorder are dehumanized more than individuals who have no mental disorder or have a mental disorder but are of high socioeconomic status (Sakalaki et al., 2017). Moreover, targets who suffer from a chronic mental illness such as bipolar disorder are thought to be less human and more dangerous than those who suffer from a chronic physical illness such as melanoma (Martinez et al., 2011). Therefore, mental patients are thought to be less human. However, to our knowledge there is no study on the role that variables such as group membership and self-determination play in mediating dehumanization. Our research examined whether group membership – a psychosocial, situational variable – is stronger than self-determination – a dispositional variable – in determining dehumanization. The present study also tested whether the severity of mental illness affects self-dehumanization, another question that has not yet been examined.

Group membership is a process of social categorization which forms one's social identity. Being part of a group is an important source of pride and self-esteem (Tajfel & Turner, 1979). In the Minimal Group Paradigm (Tajfel, 1970, 1978; Tajfel, Billig, & Flament, 1971; Tajfel & Turner, 1986), it is suggested that social

categorization of participants as group members is sufficient to create the “generic” group attitude, that is, outgroup discrimination and ingroup favoritism. Therefore, the ingroup discriminates against the outgroup to enhance its self-image (Tajfel & Turner, 1979). In our study, perceived similarity of values between participant and target was manipulated to create group membership (Sakalaki, Richardson, & Sotiriou, 2014).

Causality Orientation theory is a sub-theory of Self-Determination Theory (Deci & Ryan, 1985) that distinguishes between three motivational orientations that determine human behavior: autonomy orientation, control orientation and impersonal orientation. Autonomy orientation is characterized by a high degree of experienced choice for the initiation of an activity and the regulation of the behavior. Control orientation refers to those who organize their behavior according to extrinsic motivation. Finally, impersonal orientation indicates lack of motivation and self-determination (Deci & Ryan, 1985). Moller and Deci (2010) conjectured that control is positively related to dehumanization, while autonomy is negatively related to dehumanization. That is, heteronomous people dehumanize mechanistically the self and others more in contrast to autonomy-oriented people. According to de Charms (1968), persons who feel controlled, coerced or manipulated by others, perceive themselves as objects. This theoretical framework was used to examine whether a variable such as self-determination could affect dehumanization. It was hypothesized that autonomy orientation will lead to less dehumanization of the self and others than control orientation.

Overview of the present studies

The aims of the studies presented here were, firstly, to examine whether healthy, neurotic and psychotic targets are unequally dehumanized by lay people, secondly, to examine whether perceived group membership and participants’ self-determination mediate the dehumanization of mentally ill targets, and thirdly, to explore whether the severity of mental illness affects self-dehumanization, that is, if psychotic patients have a greater tendency to self-dehumanize than neurotic ones. Specifically, the first study examined the dehumanization of neurotic, psychotic and healthy targets and the possible mediation of perceived group membership and self-determination. The second study examined the self-dehumanization of neurotic and psychotic patients. The hypotheses were the following:

H1: Participants are expected to dehumanize mentally ill targets more than healthy ones, and psychotic targets more than neurotic ones.

H2: Participants who are more autonomous are expected to dehumanize less the self and others.

H3: Participants will dehumanize more the target that they perceive as an outgroup, that is, psychotic patients.

H4: The neurotic patients will self-dehumanize less than psychotic patients do.

STUDY 1

The first study aimed to investigate whether lay people dehumanize more the mentally ill in comparison to healthy targets and to examine whether perceived group membership of the targets and participants' self-determination mediate the dehumanization of mentally ill targets.

Method

Participants

The study was conducted in a convenience sample from the general population of Athens, Greece. The sample consisted of a total of 97 individuals (34 men, 63 women), aged from 18 to 60 years old (32 % from 18 to 25 years old, 49.5% from 26 to 45 years old and 18.6 % from 46 to 60 years old). Thirty of them responded to a scenario-based questionnaire regarding a neurotic target, 34 to one regarding a psychotic target and 33 to one regarding a healthy target. The sample characteristics are shown in Table 1.

Table 1: Demographic characteristics of the participants in Study 1(N = 97)

Characteristic	N	%
Gender		
Male	34	35
Female	63	65
Age (years)		
18-25	31	32
26-45	48	49
46-60	18	19
Education		
High school graduate	26	27
University graduate	40	42
Technical School graduate	3	3
Post-graduate or doctoral degree	22	23
Other	5	5

Measures

Scenarios

The study comprised three groups, each of them responding to a different scenario. The scenarios described a target suffering from an anxiety disorder (neurotic condition), a schizophrenic target (psychotic condition) or a mentally healthy target (healthy condition), as follows:

Scenario 1: George is 50 years old and lives in Athens. He has a good relationship with his parents. He is married, has two children and he works as an employee in a company. He displays some fears when he is out of the house or when he is physically close to a lot of people. He prefers to go to work with his wife and in general he gets anxious easily. He cannot use public transport because he is afraid to come too close to others. He rarely stays home alone because he is afraid that something will happen to him and that no one will be there to help him. Apart from this, George is happy in his marriage, he cares about his job and his family.

Scenario 2: Myrto is 25 years old and lives in Thessaloniki. As a child she was very reserved and she did not play with other children. During her adolescence she stayed in her room for many hours and avoided human contact. She had many psychological problems and when she entered high school her condition got worse. She never washed herself or combed her hair and she said that she was hearing her mother's voice in her head. That made her crazy. During a three-month period of time she attempted to commit suicide several times. After her third attempt she was admitted with the help of her aunt to a psychiatric hospital.

Scenario 3: Manos is 45 years old and lives in Larisa. He is a farmer and works in the fields all day. He loves his job very much. He has been married for twenty years and he has three children. His wife is a nursery school teacher who loves children. His relationship with her is good although they argue sometimes. Their daughters live in Athens but the couple prefers to live in the country.

Questionnaires

Human Nature – Human Uniqueness scale (HN – HU scale)

For the assessment of dehumanization vs. humanization of the target, a Human Nature and a Human Uniqueness scale, inspired by Haslam's (2006) model of dehumanization and tested for their validity within Greek culture (Sakalaki et al., 2017), were used. Participants rated three pairs of *human uniqueness* and three pairs of *human nature* traits, including the related forms of humanness denial (Bastian &

Haslam, 2010; Haslam, 2006), on a nine-point scale ranging from 1 “very unlikely” to 9 “very likely”. The first item of each pair represented dehumanization and the second one humanization. Participants had to choose the degree to which the target described in the vignette possessed these characteristics. *Human uniqueness* traits were: instinctive – rational, childlike – mature, coarse – refined. *Human nature* traits were: cold – warm, without agency – with agency, lacking emotional responsiveness – emotionally responsive. The internal consistency of the whole scale in the present study was $\alpha = .77$. For the HN scale Cronbach’s α was .61 and for the HU scale Cronbach’s α was .55.

Animalistic Dehumanization scale

To assess the dehumanization of the different targets, we asked participants to attribute to them a set of 16 emotions each rated on a nine-point scale ranging from 1 (not at all) to 9 (a lot) (Sakalaki et al., 2017). Seven UH emotions (four positive – admiration, optimism, hope, nostalgia – and three negative – embarrassment, despair, guilt) and nine non-UH emotions (four positive: calmness, enjoyment, joy, pleasure, and five negative: sorrow, fear, worry, pain, panic) were included in the list. However, upon inspection of the correlations between responses (data not shown) it was found that respondents appeared to be responding based on emotions’ valence (positive emotions, $\alpha = .93$, and negative emotions, $\alpha = .92$) rather than their humanness. Therefore, no further analysis based on the Animalistic Dehumanization scale was performed.

Mechanistic Self-Dehumanization Scale (MSDS)

The MSDS was developed to measure attribution of human nature characteristics to the self (Sakalaki et al., 2017). Inspired both by Haslam’s (2006) model of dehumanization and Gray et al.’s (2007) model of mind perception, this 14-item scale includes both self-dehumanizing (e.g., “I try not to function in an emotional way”) and self-humanization items (e.g., “I am open to new experiences”). Each item is rated on a nine-point Likert scale ranging from 1 = “absolutely disagree” to 9 = “absolutely agree” (1 = “never” to 9 = “often” for the last item of the scale). The self-humanization items were reverse scored. The internal consistency of the scale in the present study was Cronbach’s $\alpha = .71$. Two previous pilot studies (Sakalaki et al., 2017) had shown, firstly, a strong test-retest correlation of the scale over an interval of one week ($r = .79, p < .001$) and, secondly, that the scale was negatively associated with a high human nature adjectives scale, inspired by Haslam’s model (2006) and measuring human nature ($r = -.221, p < .001$; Cronbach’s alpha for the HN

Adjectives scale was .75). The MSDS also correlated with a scale inspired by Gray's Mind Perception theory (Gray et al., 2007) and based on Gray's categories for measuring perception of agency, a central category of humanization in this theory, $r = -.380$, $p < .001$. Cronbach's alpha for the Agency scale was .63. Thus, the convergent/divergent validity of the scale was confirmed.

Group Membership scale

The operationalization of the ingroup versus outgroup variable was made using the similarity or dissimilarity between the target's values and one's own (Sakalaki et al., 2014). In the Group Membership scale participants were presented with four different statements: (a) I think I could belong to the same social milieu as X; (b) I believe I can easily identify with X; (c) I believe I could establish friendly relationships with X; and (d) I think I could feel quite close to X. Agreement with each item separately was indicated on a five-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). Higher scores (mean of the four items) indicate greater group identification. Cronbach's alpha for this questionnaire was .79.

The General Causality Orientation Scale

The strength of an individual's autonomy, control, and impersonal orientation was assessed with the General Causality Orientation Scale (GCOS), which has been translated into Greek (Sakalaki & Fousiani, 2012) and consists of 12 vignettes and 36 items (Deci & Ryan, 1985). Example items are: "You have been offered a new position in the company where you have been working for some time. The first question that is likely to come to mind is: a) What if I can't live up to the new responsibility? b) Will I earn more money in this position? c) I wonder if the new work will be interesting". The scale is well validated and has been shown to be reliable (Deci & Ryan, 1985), with Cronbach's alpha of .75 and a test-retest correlation of .74 over two months. In the present study, Cronbach's alpha for the autonomy orientation was $\alpha = .67$, for the impersonal orientation $\alpha = .76$ and for the control orientation $\alpha = .63$.

Demographics. All participants answered questions regarding gender, age, education and profession.

Procedure

The questionnaires were distributed in person by the researcher. Participants gave their consent to fill in an anonymous questionnaire as a contribution to a study

conducted by the university, without being informed about its purpose. Participants received instructions for the correct completion of the questionnaires and were encouraged to respond individually, honestly and anonymously to all the questions. Questionnaire completion time was approximately 15 minutes.

Results

The target person effect

A one-way ANOVA was conducted for the analysis of the dehumanization vs. humanization of the three targets (healthy, neurotic, psychotic), as measured by the HN – HU scale. The analysis on the HN characteristics showed a significant main effect of target, $F(2, 93) = 36.1, p < .001, \eta_p^2 = .437$. The participants attributed more human nature characteristics to the healthy target than to the other two targets (healthy target, $M = 5.87$, neurotic target, $M = 3.92$, psychotic target, $M = 2.97$). Post-hoc comparisons using the Bonferroni method confirmed that all the differences between pairs of means, including psychotic versus neurotic, were significant at $p = .01$.

A one-way ANOVA of the uniquely human characteristics showed a significant main effect of target, $F(2, 93) = 19.6, p < .001, \eta_p^2 = .296$. Participants attributed more uniquely human characteristics to the healthy target than to the other targets (healthy target, $M = 5.51$, neurotic target, $M = 4.38$, psychotic target, $M = 3.53$). Post hoc pairwise differences between means were significant at $p = .015$ (see Table 2). These findings confirm Hypothesis 1.

Table 2: Means, standard deviations and one-way analyses of variance (ANOVA) for effects of the target on the attribution of characteristics to others in Study 1

Variable	Target									ANOVA
	Neurotic			Psychotic			Healthy			
	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	
Human nature	3.92	1.49	30	2.97	1.37	34	5.87	1.37	32	$F(2, 93)$ 36.11*
Human uniqueness	4.38	1.40	30	3.53	1.25	33	5.51	1.22	32	$F(2, 92)$ 19.07*

* $p < .001$

A one-way ANOVA was conducted for the analysis of the degree in which participants identified themselves with the three targets (healthy, neurotic, psychotic) as measured by the group membership scale. The analysis showed a nonsignificant main effect of group identification, $F(2, 94) = 1.94, p = .15, \eta_p^2 = .040$. The

differences in group identification between the targets were small (healthy target, $M = 2.48$, psychotic target, $M = 2.12$, neurotic target, $M = 2.09$). Nevertheless, the mean difference between healthy targets and all mental patients (neurotic and psychotic targets taken together) was marginally significant ($p = .05$). Thus, participants appear to view the healthy targets as an ingroup more than they did the mentally ill.

Relations between causality orientations and self-dehumanization

Correlations were computed between causality orientations and self-dehumanization. There was a positive statistically significant correlation, $r = .31$, $p < .01$, between impersonal orientation and self-dehumanization. There was also a statistically significant negative correlation, $r = -.27$, $p < .01$, between autonomy orientation and self-dehumanization, a finding that confirms Hypothesis 2. Finally, there was no statistically significant correlation between control orientation and self-dehumanization, $r = -.07$, $p = .49$ (see Table 3). There were no statistically significant correlations between the dehumanization of others and the causality orientations.

Table 3: Correlations between the causality orientations, HN-HU characteristics and the MSDS in the total sample in Study 1

Measure	1	2	3	4	5
1. Impersonal orientation	--				
2. Autonomy orientation	.09**	-			
3. Control orientation	.27**	.15*	-		
4. HN-HU characteristics	.05	.02	-.19	-	
5. MSDS	.31**	-.27**	-.07	.05	-

** $p < .001$

Mediation and moderation analysis: Group membership and autonomy

Because of the absence of correlations between causality orientation and dehumanization, it was not possible to test any mediation/moderation effect for causality orientation between target groups and dehumanization. Similarly, the weak correlation between the target groups and group membership implies that the latter cannot function as a mediating variable in this relationship either.

The possible mediating role of group membership was tested by carrying out a series of multiple regression analyses with dehumanization as dependent variable. The initial model, equivalent to the ANOVA already described, included the three targets as predictors, represented by indicator variables denoting the neurotic (1 = yes, 0 = no) and psychotic (1 = yes, 0 = no) targets. Adding group membership as

a predictor produced a statistically significant increase, $\Delta F(1, 92) = 10.8, p = .001$, in the coefficient of determination R^2 from 42.7% to 48.7%. However, the increase was even greater, to 49.1%, when the group membership variable was included only for the participants who responded to the neurotic target. This represents an interaction between group membership and illness group, demonstrating that group membership acted as a moderator variable. Specifically, the regression equation predicting the dehumanization score was

$$5.69 - 3.17 N - 2.44 P + 0.78 (NxGM)$$

where the indicator variables N and P denote the neurotic and psychotic targets, respectively, and $NxGM$ denotes the above interaction. Thus, for a participant responding to the neurotic target, the predicted dehumanization score was $5.69 - 3.17 + 0.78 = 3.30$ if the group membership score was 1 (the minimum), or $5.69 - 3.17 + 0.78 \times 4 = 5.64$ if the group membership score was 5 (the maximum). The former score is very close to the mean of 3.25 for the psychotic target and the latter is very close to the mean of 5.69 for the healthy target. This finding indicates that participants dehumanized neurotic targets somewhere in between psychotic and healthy targets depending on how much they identified with them, that is, perceived them as an ingroup. An alternative way of expressing the role of group membership is to observe that it displayed a significant correlation with dehumanization only in the neurotic condition, $r = .54, p = .002$, but neither in the psychotic condition, $r = .15, p = .40$, nor in the healthy condition, $r = .23, p = .21$.

Discussion and Conclusions of Study 1

Summarizing, lay people attribute more human characteristics to the healthy target whom they identify more as an ingroup in comparison to the mentally ill. Moreover, they attribute more dehumanizing characteristics to the psychotic target in comparison with the neurotic target and they dehumanize more the neurotic target in relation to the healthy one. Where exactly they position the neurotic target depends on how much they identify with him or her. In addition, impersonally oriented participants dehumanize more the self, while autonomy oriented participants dehumanize less the self. Control orientation does not display a significant correlation with self-dehumanization. Finally, none of the three causality orientations had a statistically significant correlation with the dehumanization of others. To conclude, a psychosocial, situational variable such as group membership is stronger than a dispositional variable, that is, self-determination, in determining dehumanization.

STUDY 2

The second study explored whether neurotic patients self-dehumanize less than psychotic ones, focusing on the degree to which the mental patient thinks of himself or herself as less human, an issue never studied before.

Method

Participants

The study was conducted in Athens, Greece. Participants were 77 mental patients (28 men and 49 women; 2.6% from 18 to 25 years old, 33.8% from 26 to 45 years old, 50.6% from 46 to 60 years old and 13% more than 60 years old). Thirty members of the sample had been diagnosed by a psychiatrist with a neurotic disorder (e.g., anxiety disorder, obsessive-compulsive disorder, depressive disorder) and 47 with a psychotic disorder (e.g., schizophrenia, depression) (For an overview of sample demographics see Table 4.) Information regarding the diagnosis was confirmed by a psychiatrist or a nurse at the service from which the participant was recruited. In this study, we distinguished “neurotic” from “psychotic” disorders according to the severity of the mental illness. Therefore, we defined as “neurotic” a less severe disorder related to a more objective perception of reality and a less intense suffering.

Table 4: Demographic characteristics of the mentally ill in Study 2 (N = 77)

Characteristic	N	%
Gender		
Male	28	36
Female	49	64
Age (years)		
18-25	2	3
26-45	26	34
46-60	39	51
60+	10	13
Education		
Primary school graduate	15	19
Secondary school graduate	9	12
High school graduate	26	34
University graduate	15	19
Technical School graduate	7	9
Post-graduate/ doctoral degree	2	3
Other	2	3
Diagnosis		
Neurotic	30	39
Psychotic	47	61
Context of recruitment		
Health clinic in a hospital	50	65
Psychiatric hospital / Boarding houses	27	35

Materials

Animalistic Self-dehumanization scale

To assess self-dehumanization, participants were asked to indicate to what degree they experienced a set of 16 emotions rated on a nine-point scale ranging from 1 (not at all) to 9 (a lot) (Sakalaki et al., 2017). The emotions used were the same as in Study 1. However, as in Study 1, it was found upon inspection of the correlations between responses (data not shown) that respondents appeared to be responding based on the emotions' valence (positive emotions, $\alpha = .85$, and negative emotions, $\alpha = .91$) rather than their humanness. Therefore, no further analysis based on the humanness of these emotions was performed.

Human Nature –Human Uniqueness scale (HN–HU scale)

For the assessment of dehumanization vs. humanization of the self, we used the same instrument as in Study 1. The patients chose the degree to which they possessed these characteristics. Cronbach's alpha for the whole scale was $\alpha = .68$. For the HN scale Cronbach's α was $.60$ and for the HU scale Cronbach's α was $.55$.

Mechanistic Self-Dehumanization Scale (MSDS)

The MSDS was used as in Study 1. Its internal consistency (Cronbach's alpha) in the present study was $\alpha = .73$.

Demographics. All participants answered questions regarding gender, age, education and profession.

Procedure

The sample was recruited from three sources: a psychiatric health clinic located within a general hospital, where patients had been treated for a short period of time; a hospital with a psychiatric department to which they had been referred as outpatients; and boarding houses that were affiliated to a psychiatric hospital, where the patients lived permanently. Written permission to carry out the study was obtained from each institution. After the same briefing as used in Study 1, patients who gave their consent participated in the study. Participants were encouraged to respond individually, honestly and anonymously to all questions. Questionnaires were completed with the help of the researcher, if necessary, in the presence of a psychologist. The completion time was approximately 15 minutes.

Results

An independent samples *t*-test was conducted to compare the self-dehumanization of the neurotic and psychotic patients, measured by the HN HU scale. The analysis showed that neurotics and psychotics did not differ with regards to the attribution of human nature characteristics to the self, $t(75) = 1.77$, $p = .08$, $\eta_p^2 = .040$, but psychotic patients attributed more uniquely human characteristics to the self as compared to neurotic patients (psychotics, $M = 6.60$; neurotics, $M = 5.12$), $t(73) = 3.61$, $p = .001$, $\eta_p^2 = .152$.

A similar analysis to compare the MSDS score between the two groups of patients showed that neurotic patients dehumanized their self to a larger extent than psychotic patients did (neurotics, $M = 4.26$; psychotics, $M = 3.63$), $t(72) = 2.04$, $p = .045$, $\eta_p^2 = .055$.

Furthermore, psychotic patients attributed more positive emotions to the self than neurotic patients did (psychotics, $M = 6.18$; neurotics, $M = 4.52$), $t(75) = 4.22$, $p < .001$, $\eta_p^2 = .192$, whereas neurotic patients attributed more negative emotions to the self than psychotics did (neurotics, $M = 5.81$; psychotics, $M = 4.07$), $t(75) = 3.32$, $p = .001$, $\eta_p^2 = .128$.

Discussion and Conclusions of Study 2

The aim of the second study was to explore whether the mental patients self-dehumanize more according to the severity of their illness. Therefore, we expected that neurotic patients would self-dehumanize less than psychotic ones. On the contrary, the results showed that psychotic patients humanized the self more than neurotic ones did, and neurotic patients dehumanized the self more than psychotic patients did. Furthermore although this was not the subject of a hypothesis it was found that neurotic patients attributed more negative emotions to the self than psychotic ones did and that psychotic patients attributed more positive emotions to the self than neurotic ones did. It is likely that neurotic patients can recognize the difficulties caused by their illness (Pedinielli, Gimenez, Pirlot, & Bertagne, 2008). Therefore, they may formulate a less human perception of the self (Martinez et al., 2011) and experience more negative emotions than psychotic patients.

GENERAL DISCUSSION

Concerning lay people, the first study showed that the absence of a situation inducing suffering, such as mental illness, can shape a more human image of others. In addition, the presence of a severe mental illness such as psychosis can lead to a less human image of others in comparison to a mental illness such as neurosis. These findings confirmed the first hypothesis and show that a distressing situation such as psychotic illness, which inflicts severe suffering, leads to a denial of humanness to others (Sakalaki et al., 2017). Partially confirming our second hypothesis, impersonally oriented participants dehumanized the self more than autonomy-oriented participants did, while control orientation was not associated with self-dehumanization.

Regarding the dehumanization of others, both the suffering of the target and group membership –which are situational variables– appear to be stronger in determining the dehumanization of others than a dispositional or server-specific variable such as autonomy. This is consistent with previous studies (Sakalaki et al., 2014; Snyder & Ickes, 1985). Regarding our third hypothesis, participants identified with the healthy targets more than with the mentally ill ones. In addition, they dehumanized more the psychotic target than the healthy one, positioning the neurotic target at some intermediate point according to how much they identified with him or her.

Regarding self-dehumanization, our second study focused on the image that the mentally ill form in terms of humanness, a subject never investigated before. The results showed that even though psychotic patients suffer from a severe mental illness and therefore experience (from an observer's point of view) a much more intense suffering, they view the self as more human in comparison to neurotic patients. This may result from the fact that patients burdened by a severe mental illness hold a less objective perception of reality. In contrast, patients suffering from a neurotic disorder may realize that they display symptoms which are dysfunctional (Pedinielli et al., 2008) and therefore perceive themselves as less human (Martinez et al., 2011). It is possibly for this reason that neurotic patients reported that they experience more negative emotions than psychotic patients, who reported experiencing more positive emotions compared to neurotic patients.

Even though lay people dehumanize the psychotic targets more than the neurotic ones, patients who suffer from a severe mental illness such as psychosis, form a more human image of the self in comparison to neurotic patients. The image that lay people hold about the mentally ill could therefore be considered as contradictory to the one that patients hold about their selves. On the one hand, lay people clearly seem to think that the more severe the mental illness of the sufferer is, the less human the

target should be. On the other hand, psychotic patients' responses show that they do not suffer that much, but rather believe in their humanity and have positive emotions.

Consistent with studies showing that dehumanization of the self and others can be the consequence of a cognitive focus on painful experiences critical to a perception of humanness (Sakalaki et al., 2017), the present study showed that mental illness, a condition that increases suffering of the target, is associated with increased dehumanization of ill targets compared to healthy ones. Moreover, severe mental illness, such as psychosis, is more associated with dehumanization than less severe neurotic mental illness.

Limitations and future directions

The present studies take an important first step in the research on dehumanization of mental illness in Greece. Nevertheless, this work has several limitations which should be taken into consideration. In both studies an emotions scale was also included, but it appeared that participants distinguished the valence rather than the humanness of emotions, a finding that may be due to the cultural context. The scenarios included in the first study varied not only in terms of mental disorders but also in terms of sex, occupation, age and family status, something that may have affected the observed dehumanization and the degree to which participants experienced the three targets as an ingroup. In the second study mental patients completed the questionnaires with the help of the researcher; furthermore, the presence of a psychologist may have influenced the answers. Finally, we do not know if these results will apply in other cultural contexts. Future research should also focus on the self-dehumanization of other types of illness such as organic illnesses to test whether the results are replicated. Moreover, it would be interesting to explore whether health professionals such as doctors, nurses and psychologists dehumanize mental patients more than lay people do, which would confirm that dehumanization can be a mechanism of self-defense in situations of burnout (Vaes & Muratore, 2013).

REFERENCES

- American Psychiatric Association. (2013). *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.). Washington, DC: American Psychiatric Association.
- Angermeyer, M. C., & Matschinger, H. (2003). Public beliefs about schizophrenia and depression: Similarities and differences. *Social Psychiatry and Psychiatric Epidemiology*, *38*, 526-534.
- Bandura, A. (2002). Selective moral disengagement in the exercise of moral agency. *Journal of Moral Education*, *31*, 101-119.
- Bandura, A. (1990). Mechanisms of moral disengagement. In W. Reich (Ed.), *Origins of terrorism: Psychologies, ideologies, theologies, states of mind* (pp. 161-191). Cambridge, England: Cambridge University Press.
- Bar-Tal, D. (2000). *Shared beliefs in a society: Social psychological analysis*. Thousand Oaks, CA: Sage.
- Bastian, B., & Haslam, N. (2010). Excluded from humanity: The dehumanizing effect of social ostracism. *Journal of Experimental Social Psychology*, *46*, 107-113.
- Bastian, B., Jetten, J., Chen, H., Radke, R. M., Harding, J. F., & Fasoli, F. (2013). Losing our humanity: The self-dehumanizing consequences of social ostracism. *Personality and Social Psychology Bulletin*, *39*, 159-169.
- Crisp, A. C., Gelder, M. G., Rix, S., Meltzer, H. I., & Rowlands, O. J. (2000). Stigmatisation of people with a mental illness. *British Journal of Psychiatry*, *177*, 4-7.
- De Charms, R. (1968). *Personal causation*. New York, NY: Academic.
- Deci, E. L., & Ryan, R. M. (1985). The General Causality Orientations Scale: Self-determination in personality. *Journal of Research in Personality*, *19*, 109-134.
- Demoulin, S., Leyens, J. P., Paladino, M. P., Rodriguez, R. T., Rodriguez, A. P., & Dovidio, J. F. (2004). Dimensions of "uniquely" and "non-uniquely" human emotions. *Cognition and Emotion*, *18*, 71-96.
- Economou, M., Richardson, C., Gramandani, C., Stalikas, A., & Stefanis, C. (2009). Knowledge about schizophrenia and attitudes towards people with schizophrenia in Greece. *International Journal of Social Psychiatry*, *55*, 361-371.
- Goffman, E. (1968). *Stigma: Notes on the management of spoiled identity*. Harmondsworth, UK: Penguin.
- Gray, H. M., Gray, K., & Wegner, D. M. (2007). Dimensions of mind perception. *Science*, *315*, 619.
- Haslam, N. (2006). Dehumanization: An integrative review. *Personality and Social Psychology Review*, *10*(3), 252-264.
- Haslam, N., & Bain, P. (2007). Humanizing the self: Moderators of the attribution of lesser humanness to others. *Personality and Social Psychology Bulletin*, *33*, 57-68.
- Haslam, N., Bain, P., Douge, L., Lee, M., & Bastian, B. (2005). More human than you: Attributing humanness to self and others. *Journal of Personality and Social Psychology*, *89*, 937-950.

- Kelman, H. C. (1976). Violence without restraint: Reflections on the dehumanization of victims and victimizers. In G. M. Kren & L. H. Rappoport (Eds.), *Varieties of psychohistory* (pp. 282-314). New York, NY: Springer.
- Leyens, J. P., Cortes, B. P., Demoulin, S., Dovidio, J., Fiske, S. T., Gaunt, R., ... , Vaes, J. (2003). Emotional prejudice, essentialism, and nationalism. *European Journal of Social Psychology, 33*, 703-717.
- Leyens, J. P., Rodriguez, A. P., Rodriguez, R. T., Gaunt, R., Paladino, M. P., Vaes, J., & Demoulin, S. (2001). Psychological essentialism and the differential attribution of uniquely human emotions to ingroups and outgroups. *European Journal of Social Psychology, 31*, 395-411.
- Link, B. G. (1982). Mental patient status, work and income: An examination of the effects of a psychiatric label. *American Sociological Review, 47*, 202-215.
- Link, B. G., Gullen, F. T., Frank, J., & Wozniak, J. F. (1987). The social rejection of former mental patients: Understanding why labels matter. *American Journal of Sociology, 92*, 1461-1500.
- Martinez, A. G., Piff, P. K., Mendoza-Denton, R., & Hinshaw, S. P. (2011). The power of a label: Mental illness diagnoses, ascribed humanity, and social rejection. *Journal of Social and Clinical Psychology, 30*(1), 1-23.
- Moller, A.C., & Deci, E. L. (2010). Interpersonal control, dehumanization, and violence: A self-determination theory perspective. *Group Processes and Intergroup Relations, 13*, 41-53.
- O'Brien, G. V. (1999). Protecting the social body: Use of the organism metaphor in fighting the "menace of the feeble-minded". *Mental Retardation, 37*, 188-200.
- O'Brien, G. V. (2003). People with cognitive disabilities: The argument from marginal cases and social work ethics. *Social Work, 48*, 331-337.
- Opatow, S. (1990). Moral exclusion and injustice: An introduction. *Journal of Social Issues, 46*, 1-20.
- Pedinielli, J. L, Gimenez, G., Bertagne, P., & Pirlot, G. (2008. Επιμ. Έκδ., Ν. Παπαχριστόπουλος. Μεταφρ., Μ. Σπυροπούλου & Ν. Παπαχριστόπουλος). *Κλινικές δομές, νευρώσεις, ψυχώσεις, διαστροφές. Πάτρα: Opportuna.*
- Rosenhan, D. L. (1973). On being sane in insane places. *Science, 179*(4070), 250-258.
- Sakalaki, M., Richardson, C., & Fousiani, K. (2016). Self-dehumanizing as an effect of enduring dispositions poor in humanness. *Hellenic Journal of Psychology, 13*, 104-115.
- Sakalaki, M., Richardson, C., & Fousiani, K. (2017). Is suffering less human? Distressing situations' effects on dehumanizing the self and others. *Hellenic Journal of Psychology, 14*(1), 39-63.
- Sakalaki, M., Richardson, C., & Sotiriou, P. (2014). Group membership overrides dispositional variables in the determination of reciprocation of trust in a game situation. *Revue Internationale de Psychologie Sociale, 26*(4), 79-92.
- Sakalaki, M., & Fousiani, K. (2012). About some personality misfortunes of opportunists: The negative correlation of economic defection with autonomy, agreeableness and well-being. *Journal of Applied Social Psychology, 42*(2), 471-487.

- Snyder, M., & Ickes, W. (1985). Personality and social behavior. In G. Lindzey & E. Ronson (Eds.), *Handbook of social psychology* (Vol.2, pp. 883-947). New York, NY: Random House.
- Svoli, M., & Sakalaki, M. (2015). Intersexual and intrasexual forms of dehumanization. *Hellenic Journal of Psychology*, 12, 156-171.
- Tajfel, H.(1970).Experiments in intergroup discrimination. *Scientific American*, 223, 96-102.
- Tajfel, H. (1978). The achievement of group differentiation. In H. Tajfel (Ed.), *Differentiation between social groups: Studies in the social psychology of intergroup relations* (pp. 77-98). London: Academic.
- Tajfel, H., Billig, M., Bundy, R., & Flament, C. (1971). Social categorization in intergroup behavior. *European Journal of Social Psychology*, 1, 149-178.
- Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33-37). Monterey, CA: Brooks/Cole.
- Tajfel, H., & Turner, J. C. (1986). The social identity theory of intergroup behavior. In S. Worchel & W. G. Austin (Eds.), *Psychology of intergroup relations* (pp. 7-24). Chicago, OH: Nelson-Hall.
- Tzouvara, V., & Papadopoulos, C. (2014). Public stigma towards mental illness in the Greek culture. *Journal of Psychiatric and Mental Health Nursing*, 21(10), 931-938.
- Vaes, J., & Muratore, M. (2013). Defensive dehumanization in the medical practice: A cross-sectional study from a health care worker's perspective. *British Journal of Social Psychology*, 52, 180-189.
- Wirth, J. H., & Williams, K. D. (2009). 'They don't like our kind': Consequences of being ostracized while possessing a group membership. *Group Processes & Intergroup Relations*, 12, 111-127.