

## Research article Ερευνητική εργασία

### Attitudes of psychology students to depression and its treatment: Implications for clinical practice

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**S**tigma and mental health literacy affect access to and quality of treatment of major depression. Though mental health professionals seem better able to recognize major depression than the general public, they often hold similarly stigmatizing attitudes towards people suffering from the disorder. These attitudes are shaped jointly by the public stigma attached to mental illnesses as well as by the content and delivery of mental health professionals' undergraduate training. In line with this, the present study aimed to explore psychology students' ability to recognize major depression, their attitudes towards the disorder, and their views surrounding helpfulness of various interventions. A random sample of 167 undergraduate students was recruited from the psychology department of one public university in Athens. During one university hour, students were administered a vignette describing a woman fulfilling the DSM-IV criteria for major depression. A self-report questionnaire exploring students' recognition abilities, attitudes to depression and views on the helpfulness of various treatment modes was also administered. In total, 80.2% of students correctly recognized major depression from the vignette. Concerning their attitudes, students were unsure about the illness and ambivalent towards the person who suffers from it. With regard to available treatments for depression, students considered discussion with a friend to be the most helpful intervention. Counseling, cognitive behavioural therapy and psychoanalysis were also viewed in a positive light. On the contrary, antidepressants were not deemed helpful by most students. Finally, recognition of as well as attitudes towards depression and its treatments seemed to improve during the second year of undergraduate study; however they remained unchanged thereafter. Consistent with these, psychology students seem to have only a rudimentary knowledge on depression, that cannot not be qualified as mental health literacy. The core misconception espoused pertains to the view that major depression is not a medical illness; a finding which can also be interpreted in light of the lingering controversy on the medicalization of normal sadness and human predicament. The clinical implications of these findings are substantial. Mental health professionals-educators should reflect on their own beliefs and attitudes towards depression, as they may convey stigmatizing messages to their students and thus perpetuate the stigmatization of the illness. Concomitantly, psychology students' attitudes to depression and its treatment might render them incapable of understanding their patients, responding to their needs and providing them with appropriate help, while they may hinder their effective collaboration with psychiatrists.

**Key words:** Stigma, discrimination, stereotypes, mental health professionals, beliefs, affective disorders.

## Introduction

Depression is a pressing public health concern worldwide.<sup>1</sup> In spite of its substantial burden, the disorder remains largely under-treated with less than half of those suffering from an episode seeking professional help for it<sup>2</sup> and a similar proportion among those contacting health services being neither explicitly recognized as depressed nor offered appropriate treatment.<sup>3,4</sup> Help seeking, recognition and adequate management of depression is influenced by a broad array of factors; however stigma and discrimination emerge as preponderant barriers to these processes.<sup>5,6</sup>

The stigma surrounding mental illness has been largely explored in relation to schizophrenia, the most stigmatized psychiatric disorder.<sup>7</sup> Nonetheless, a growing body of research has demonstrated that stigma and discrimination are a primary concern for people with depression as well.<sup>8,9</sup> Laziness, character weakness, personal responsibility for the illness and unpredictability are the main characteristics attributed to them.<sup>10,11</sup> These in turn may influence lay beliefs about the effectiveness of different treatment strategies: confiding to close friends, taking vitamins or minerals or following a special diet are all regarded as helpful interventions for coping with depression.<sup>12</sup> Limited "mental health literacy" –i.e. knowledge and beliefs about mental disorders which aid their recognition, management and prevention<sup>13</sup>– has been suggested to underlie stigma.<sup>14,15</sup>

Studies seeking to address the role of mental health literacy argue for a continuum running from lay beliefs to professional knowledge.<sup>13,14,16,17</sup> Nonetheless, a recent review on the topic calls attention to mental health professionals' stereotypical views about mental disorders and their ambivalent attitudes towards people who suffer from them.<sup>18</sup> Concerning major depression, mental health professionals seem better able to recognize depression, as compared to the general population; however, their "mental health literacy" seems imperfect as a substantial number of them classified a major depression event as a crisis situation.<sup>17</sup> In the same study, mental health staff demonstrated an equal degree of desired social distance from people with major depression as the general population. In this rationale,

anti-stigma interventions should prioritize targeting mental health providers' stigma, as these professionals often serve as role models and opinion leaders on mental health issues.

In Greece, depression is largely treated in the private sector and in community mental health centers, as there is no well-established Primary Care in the country.<sup>19</sup> In this context, mental health providers –rather than general practitioners– are responsible for treating the disorder and hence their beliefs and attitudes are of utmost importance. Furthermore, mental health staff's duty is also to foster attitudes of acceptance towards people with depression in the community. To this end, mental health practitioners need to reflect on their own attitudes, which are largely shaped by their experiences and professional training.<sup>18</sup>

Consistent with this, the present study endeavored to investigate the impact of undergraduate professional training on psychologists' attitudes to depression and its available treatments. The selection of psychologists was done so on the grounds of being the professional group most frequently interacting with people with depression in community mental health settings in Greece. This study is particularly important, as psychology students can attain a license to practice upon graduation, without further training.

Therefore, the study objectives were:

- To explore psychology students' ability to recognize major depression and their attitudes towards it.
- To explore students' beliefs about the helpfulness of various interventions for treating major depression
- To investigate the impact of education (year of study) on students' recognition abilities, attitudes and views.

## Method

### Sample

A total of 167 undergraduate psychology students, recruited from the psychology department of one university, took part in the present study. Participants were approached, after randomly selecting a mandatory class from each year of study. Students who had taken part in student-exchange programs (e.g. ERASMUS) were excluded, as their experience in other universities might have jeopardized the inter-

nal validity of the findings. The characteristics of the sample can be found in table 1.

Statistical analysis revealed no differences in the sample composition as a function of the year of study, with the exception of age ( $p < 0.05$ ); lending support to the comparability of the sub-samples.

Among the 4-year students, all of them had completed their clinical placement: 23 (53%) in community mental health centers, 10 (23.2%) in psychiatric departments of general hospitals, 7 (16.3%) in psychiatric hospitals and 3 (7%) in rehabilitation services. Roughly 93% of them reported interacting with people with depression during their placement.

### Measures

Students completed the questionnaire after reading a vignette describing a woman, who fulfilled DSM-IV criteria for a major depressive episode.<sup>20</sup> Prior to the beginning of the study, the vignette was distributed to 5 mental health professionals (2 psychiatrists, 2 psychologists and 1 social worker), who unanimously confirmed the diagnosis.

Students' abilities to recognize major depression was assessed with the question: "Based on the text you have read, do you think Mary has a mental illness? If yes, please define the illness and its severity".

For assessing attitudes towards the person in the vignette, the Depression Stigma Scale–Personal

(DSS–Personal) developed by Griffiths and colleagues<sup>21</sup> was incorporated in the questionnaire. The scale consists of 9 items rated on a five-point Likert Scale ranging from strong agreement ("1") to strong disagreement ("5"). The composite scale score ranged from 9 to 45, with higher values indicating higher levels of stigma. The internal consistency of the scale was considered good (Cronbach  $\alpha = 0.72$ ).

Participants were also asked to rate the helpfulness of various interventions for the person in the vignette: psychoanalysis, CBT, counseling, Art Therapy, anti-depressants, vitamins, antibiotics, anti-psychotic medications, lifestyle changes (eating properly and exercising), yoga, self-help books and discussing her problems with a friend. Students had to assign a rating on a scale from 0 (not helpful at all) to 100 (absolutely helpful).

Students' gender, age, place of origin, familiarity with mental illness, year of study and information about their clinical placement were also obtained. Data were collected in the form of a self-completed questionnaire during April 2012.

### Curriculum

The undergraduate program in Psychology had a 4-year duration. In particular, it required students to undertake 42 mandatory modules covering various disciplines within the realm of Psychology: Clinical, Developmental, Social, Experimental and Cognitive

**Table 1.** Sample characteristics.

Variable	Total n=167	1st year n=41	2nd year n=42	3rd year n=41	4th year n=43
<i>Gender</i>					
Male	50 (29.9%)	11 (26.8%)	13 (31%)	12 (29.3%)	14 (32.6%)
Female	117 (70.1%)	30 (73.2%)	29 (69%)	29 (70.7%)	29 (67.4%)
<i>Family status</i>					
Single	162 (97%)	40 (97.6%)	42 (100%)	39 (95.1%)	41 (95.3%)
Married	5 (3%)	1 (2.4%)	0 (0%)	2 (4.9%)	2 (4.7%)
<i>Place of origin</i>					
Athens	96 (57.5%)	22 (53.7%)	24 (57.1%)	24 (58.5%)	26 (60.5%)
Districta	71 (42.5%)	19 (46.3%)	18 (42.9%)	17 (41.5%)	17 (39.5%)
<i>Personal experience with mental illness</i>					
Yes	92 (55.1%)	23 (56.1%)	23 (54.8%)	21 (51.2%)	25 (58.1%)
No	75 (44.9%)	18 (43.9%)	19 (45.2%)	20 (48.8%)	18 (41.9%)
Age	21.05 (2.76)	19.44 (2.1)	20.2 (0.89)	21.49 (3.92)	23.08 (4.1)

Psychology. Furthermore, students also had to select 24 optional modules from the same disciplines. Regarding Clinical Psychology training, students have to attend 6 mandatory classes (1 during the 1st year, 4 during the 2nd year, 1 during the 3rd year and 1 during the 4th) and 6 electives. Moreover, during their final year of study, they attained some clinical experience on the field by spending 3 months in a mental health service.

In a nutshell, psychology undergraduates had completed 13 modules on Clinical Psychology and 3 months of clinical placement upon graduation.

### Procedure

One mandatory class was randomly selected from each year for distributing questionnaires. Two professionals from the research team visited the class, introduced themselves and administered the questionnaires. Data collection occurred the same day for all years in order to avoid contamination of results.

The research protocol was approved by the EPIPSI Ethics Committee, in accordance to the provisions of Helsinki in 1995.

### Analysis

In terms of descriptive statistics, frequencies were used for categorical variables and means with standard deviations for continuous variables.

For investigating differences among the helpfulness ratings for the various interventions for depression, a Repeated Measures ANOVA was performed.

Concerning the recognition of major depression, a categorical variable with 3 levels was created: erroneous labeling (including participants who responded that the person in the vignette does not suffer from a mental illness as well as those who stated the wrong diagnosis), almost correct labeling (entailing participants who recognized depression but underestimated its severity) and correct labeling (including participants who could identify both the disorder and its severity). For exploring the association between recognition and year of study, chi-square analysis was performed. For investigating differences in attitudes to depression and in helpfulness of various interventions as a function of the year of study, one-way ANOVA was performed. Post hoc exploration using the Bonferroni test was conducted for the significant results.

### Results

The vast majority of the sample could identify that the person has a mental illness (98.2%). Nonetheless, 11 students (6.6%) misclassified the person in the vignette as suffering from anxiety or eating disorder. Moreover, 19 students (11.4%) identified the episode as a major depressive one; however, they underestimated its severity. Congruent with these, the correct diagnosis was assigned by 134 students (80.24%). Regarding their attitudes, students appeared unsure about depression and ambivalent towards the person in the vignette (table 2).

**Table 2.** Students' beliefs and attitudes towards major depression.

	<b>Disagree</b>	<b>Unsure</b>	<b>Agree</b>
People with a problem like Mary's could snap out of it, if they wanted	31.5%	13.3%	55.2%
A problem like Mary's is a sign of personal weakness	31.5%	24.5%	44.1%
Mary's problem is not a real medical illness	35.0%	19.6%	45.5%
People with a problem like Mary's are dangerous	90.2%	3.5%	6.3%
It is best to avoid people with a problem like Mary's, so that you don't develop this problem	96.5%	2.8%	0.7%
People with a problem like Mary's are unpredictable	51.7%	32.2%	16.1%
If I had a problem like Mary's I would not tell anyone	79.7%	12.6%	7.7%
I would not employ someone if I knew they had a problem like Mary's	81.8%	6.3%	11.9%
I would not vote for a politician if I knew they suffered by a problem like Mary's	76.9%	13.3%	9.8%

Concerning available interventions for depression, participants considered discussing with a friend to be the most helpful intervention for depression. As indicated in table 3, counseling, CBT and psychoanalysis were also viewed in positive light by students. A Repeated Measures ANOVA with Greenhouse-Geisser corrections demonstrated that differences reached statistically significant levels:  $F(6.88, 962.95)=114.31, p<0.01$ .

Concerning the impact of training, recognition abilities displayed a statistically significant association with year of study:  $\chi^2(6)=18.14, p<0.01$ . In particular, the most knowledgeable group about depression were students going through their 2nd year of study, with 93.5% of them recognizing both the presence of major depression as well as its severity. The corresponding rates for the other groups were: 57.7% for the 1st-year of study group, 87.9% for the 3rd year of study group and 80% for the 4th year of study group. Similarly, concerning the association between year of study and attitudes to depression, one-way ANOVA revealed a statistically significant effect:  $F(3,163)=8.78, p<0.01$ . In particular, the mean value for the 1st-year of study group was 22.74 ( $SD=4.91$ ), for the 2nd year of study group was 19.26 ( $SD=2.7$ ), for the 3rd year of study group was 19.94 ( $SD=4.52$ ) and for the 4th year of study group was 18.9 ( $SD=3.31$ ). Post hoc exploration utilizing the Bonferroni test pinpointed a statistically significant difference between the 1st year of study group and the remaining three. In line with this, attitudes towards depression seem

to improve after the first year of study only to reach a plateau henceforth.

Regarding helpfulness ratings for interventions, the four groups displayed statistically significant differences with respect to "vitamins", "yoga" and "self-help books" interventions, with the 1st year of study group displaying the highest ratings in all three categories:  $F(3,163)=4.98, p<0.01$  for vitamins,  $F(3,163)=4.27$  for yoga and  $F(3,163)=4.07$ , for self-help books. Post hoc exploration with the Bonferroni test showed that the statistically significant difference occurred between the 1st year students and the remaining three groups.

### Discussion

Study findings indicate that students were capable of identifying major depression; however, the overall pattern of results shows that their knowledge is rather crude. This finding draws a clear distinction between recognizing a clinical case and acquiring mental health literacy, while raising important questions regarding the valid assessment of the latter.

With respect to students' attitudes, the majority of them endorsed the view that people with depression are weak and can readily snap out of the illness; while depression was not acknowledged as being a real medical illness. In the case of character weakness students' attitudes resemble those of community samples.<sup>10,11</sup> Not conceptualizing major depression as a medical illness can possibly be accounted for by the social orientation of the university, from which

**Table 3.** Students' beliefs regarding the helpfulness of various interventions for depression.

<i>To what extent from 0 to 100 do you think the following interventions are helpful for treating Mary's problems?</i>	<b>Mean</b>	<b>SD</b>
Discussing with a friend	67.6	6.1
Counseling	64.1	4.1
Cognitive-Behavioral Therapy	59.6	7.5
Psychoanalysis	58.6	6.6
Lifestyle changes (exercising and eating properly)	53.8	7.5
Art Therapy	51.0	7.7
Yoga and/or alternative relaxation activities	48.0	6.6
Self-help books	37.2	4.8
Antidepressant medication	33.1	6.9
Vitamins	31.8	8.1
Antipsychotic medication	8.7	4.1
Antibiotics	3.3	6.4

participants were recruited. Alternatively, students' conflicting responses echoes the lingering controversy regarding the medicalization of normal sadness and human predicament.<sup>22,23</sup> The particular divide in opinion is also conspicuous in the narratives of people with depression, where misunderstanding about depression as an illness has emerged as a preponderant theme in a qualitative study.<sup>8</sup> While some people with depression were fearful that others might see them as dangerous due to their mental illness, a roughly equal proportion expressed the opposite view, preferring depression to be perceived as a mental illness. Perhaps in this way, people with depression believe that others will see them as less responsible for their condition and therefore will not blame them.

Students' ratings concerning the helpfulness of the various interventions are along similar lines. Their confidence on non-medical interventions indicates either ignorance about treatment guidelines for the disorder or their objection to the biomedical perspective. The popularity of certain non professional interventions (e.g. discussing with a friend, lifestyle changes, yoga, etc.) among them is consistent with lay responses in other surveys.<sup>12,16</sup> It is noteworthy that the present study could not disentangle between students' overall objection to medication or to psychiatric medication in particular.

The impact of education on influencing students' recognition abilities, their attitudes towards depression and their treatment preferences for it was found to be constricted to the first two years of undergraduate training. It seems that after these two years, any further improvement is hindered. This finding runs in parallel with the content of the curriculum, where the vast majority of clinical modules are delivered during the second year. Students seem to enter undergraduate training with lay beliefs and attitudes towards depression and its treatment, while during the first two years of study they seem to acquire some basic clinical knowledge. Nonetheless, this knowledge does not appear to become sophisticated in the ensuing years and students graduate without having acquired an in-depth understanding of the illness.

Surprisingly, the clinical placement they undertake during the 4th year does not seem to influence their mental health literacy levels. This clinical placement is relatively diverse with some students spending 3 months in inpatient units and others in community settings. The majority of 4th year students reported

interacting with people with depression during their clinical placement; however, the context and characteristics of this interaction are unknown. In this reasoning, the effect of contact on stigma endorsement<sup>24</sup> may be different in patients with depression as compared to those with schizophrenia. For example, interacting for one hour with a person with schizophrenia might be enough time for realizing that he/she does not suffer from split personality. On the other hand, interacting one hour with a person suffering from depression might not be enough to reverse the character weakness stereotype.

### ***Clinical implications***

The clinical implications of the present study are substantial. Based on findings, it seems that the mental health professionals who teach psychology students should reflect on their own beliefs and attitudes towards depression and the available treatments for it, as they might convey stereotypical views to their pupils and in this way enhance stigma. As psychology undergraduates acquire a license to practice upon graduation, their attitudes towards depression might render them incapable of understanding their patients in depth, responding to their needs and providing them with appropriate treatment. Their negative views on the helpfulness of antidepressants, as well as disagreement with the biomedical model might introduce drawbacks in their collaboration with psychiatrists in the context of community multi-disciplinary teams. As mental health professionals often serve as role models for mental health issues, their stigma endorsement might contribute to the perpetuation of public stigma with adverse repercussions on people's help seeking behaviors and the broadening of the treatment gap.

### ***Limitations***

The study was not without its shortcomings. The sample was drawn from one psychology department in the country and therefore present findings should not be extrapolated to all psychology undergraduates in the country. Furthermore, due to the cross-sectional design of the study, one cannot rule out the presence of unmeasured confounders. In other words, students belonging to different years of study might display dissimilarities in their characteristics, which were not measured and controlled for in the present analysis. Following-up students from year 1 to year 4 would have allowed to draw clearer conclusions.

# Στάσεις των φοιτητών ψυχολογίας απέναντι στην κατάθλιψη και τη θεραπεία της: Επιπτώσεις στην κλινική πρακτική

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Το στίγμα και οι γνώσεις σε ζητήματα ψυχικής υγείας (“mental health literacy”) έχει βρεθεί να επηρεάζουν την αναζήτηση βοήθειας και την ποιότητα φροντίδας στη μείζονα κατάθλιψη. Αν και οι επαγγελματίες ψυχικής υγείας μπορούν εξ ορισμού να αναγνωρίσουν την ύπαρξη κατάθλιψης πιο εύκολα από τον γενικό πληθυσμό, συχνά διατηρούν εξίσου στιγματιστικές στάσεις. Αυτές οι στάσεις διαμορφώνονται υπό την επιρροή του στίγματος, αλλά και από την αντίστοιχη εκπαίδευση που λαμβάνουν. Έτσι, ο στόχος της παρούσας μελέτης είναι να διερευνήσει την ικανότητα προπτυχιακών φοιτητών Ψυχολογίας στην ανίχνευση της μείζονος κατάθλιψης, τις στάσεις απέναντι στη νόσο και τις αντιλήψεις τους αναφορικά με τη χρησιμότητα ειδικών παρεμβάσεων. Τυχαίο δείγμα 167 προπτυχιακών φοιτητών Ψυχολογίας στρατολογήθηκαν από δημόσιο πανεπιστήμιο της Αθήνας. Κατά τη διάρκεια μιας πανεπιστημιακής ώρας διδασκαλίας, οι φοιτητές διάβασαν τη βινιέτα που τους χορηγήθηκε, η οποία περιέγραφε μια γυναίκα που πληρούσε τα διαγνωστικά κριτήρια μείζονος κατάθλιψης, ενώ συμπλήρωσαν το ερωτηματολόγιο της μελέτης. Συνολικά το 80,2% των φοιτητών αναγνώρισε την παρουσία κατάθλιψης στη βινιέτα. Αναφορικά με τις στάσεις τους απέναντι στη νόσο, οι φοιτητές βρέθηκε να είναι αναποφάσιστοι σε σχέση με την ασθένεια, ενώ χαρακτηρίζονταν από αμφιθυμία προς τους ανθρώπους που πάσχουν από αυτήν. Αναφορικά με τις διαθέσιμες παρεμβάσεις για τη νόσο, οι φοιτητές βρέθηκε να θεωρούν τη συζήτηση με κάποιον φίλο ως την πιο αποτελεσματική παρέμβαση. Η συμβουλευτική, η γνωσιακή-συμπεριφορική θεραπεία και η ψυχανάλυση θεωρήθηκαν επίσης βοηθητικές θεραπείες. Αντίθετα, η αγωγή με αντικαταθλιπτικά δεν θεωρήθηκε ιδιαίτερα βοηθητική. Τέλος, οι ικανότητες αναγνώρισης της νόσου και οι στάσεις απέναντι στην κατάθλιψη και τη θεραπεία της φαίνεται να βελτιώνονται κατά το δεύτερο έτος φοίτησης στο Πανεπιστήμιο και να παραμένουν οι ίδιες έκτοτε. Επομένως, από τα αποτελέσματα προκύπτει πως οι φοιτητές Ψυχολογίας έχουν υποτυπώδεις γνώσεις για την κατάθλιψη, μακριά από την έννοια του “mental health literacy”. Η βασική εσφαλμένη αντίληψη για την κατάθλιψη αφορά στην πεποίθηση ότι η νόσος δεν αποτελεί ιατρική ασθένεια, εύρημα το οποίο μπορεί να εξηγηθεί και από την αντιπαράθεση σχετικά με την ιατρικοποίηση της φυσιολογικής θλίψης. Οι προβληματισμοί που εγείρονται από τα εν λόγω ευρήματα σε σχέση με την κλινική πρακτική είναι σημαντικοί. Οι επαγγελματίες ψυχικής υγείας που έχουν εκπαιδευτικό ρόλο οφείλουν να αναλογισθούν τις δικές τους στάσεις απέναντι στην κατάθλιψη, καθώς μπορεί να μεταδίδουν στερεοτυπικά μηνύματα στους φοιτητές. Παράλληλα, οι προκατειλημμένες στάσεις των φοιτητών παίζουν αποτρεπτικό ρόλο στην ενδελεχή κατανόηση των ασθενών με κατάθλιψη, στην παροχή κατάλληλης φροντίδας και στην ουσιαστική συνεργασία με τον ψυχίατρο σε κλινικά πλαίσια.

**Λέξεις ευρητηρίου:** Στίγμα, διακρίσεις, στερεότυπα, επαγγελματίες ψυχικής υγείας, πεποιθήσεις, συναισθηματικές διαταραχές.

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