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Semantic differential in the study on the stereotype of mentally ill people – comparative study 10 years later

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Summary

Objectives. This article examines how mentally ill people are perceived by psychology students. It was inspired by a study on stereotypical perception of mentally ill people carried out 10 years ago, which was published in Polish Psychiatry (2000).

Methods. A modified version of the semantic differential, which was used 10 years ago, was applied. The version consisted of: subject selection of 30 pairs of adjectives which describe mentally ill people, marking on a scale the extent a given object possesses a feature, describing what percentage of the mentally ill possess a feature as well as describing the level of certainty (%) of the respondent on the feature intensity.

Results. Compared to a similar group of subjects studied ten years ago, the examined 152 students (F 138, M 14), on average aged 21.8, received results showing higher maturity and lesser weight of stereotypical thinking regarding the mentally ill. The subjects currently studied stated lower certainty (71%) then the previously studied group (79%), in most mentally ill people having problems in contact with others as well as with themselves. They perceive mentally ill people in a wider perspective (11 differential categories in 2000 compared to 19 differential categories in 2010).

Conclusions. The studies on stereotyping of mentally ill show beneficial changes in awareness among psychology students. New psychology teaching programmes sensitizing to mental problems, the complexity of illness processes, likely impact of social advertising, and fostering social support for mentally ill, contributed to the positive changes in results.

Key words: semantic differential, mentally ill people, stereotyped behavior

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Introduction

Studying stereotypes is an interesting occupation not only for theoretical reasons; practice also shows that we take part in a dynamic phenomenon that is subject to many determinants. This is why it is so important to study stereotypes at different time intervals. Stereotype (from the greek language: *stereos* – "firm, solid", *typos* – "template, imprint") is a construct consisting of three components: cognitive (usually simplified), emotional and behavioural one. It includes some false beliefs regarding different phenomena, including social, professional and clinical group phenomena. Therefore, it seems justifiable to observe the mode in which a stereotype may develop, change and diminish.

In psychology, the meaning and credibility of longitudinal studies as well as those in which a phenomenon is studied at regular time intervals are stressed more and more often. This method is particularly important in the case of stereotypes and their patterns. Guided by the premises mentioned above and inspired by the previous study on the stereotyping of the mentally ill carried out by Olga Bąk [1], the author decided to deal with the issue again and apply the modified semantic differential for a similar group as it was done previously.

The distinguished american researcher Elliot Aronson claims that a stereotype can be accepted by a person through their own observations or by acquiring the views of other people (most often important ones, such as parents, teachers, and other influential individuals, etc.). Sometimes it results from emotional processes experienced by the person [2, 3]. If strong emotions, such as aggression, rejection, excitement or euphoria accompany important events, they are strengthened in this way, contributing to the formation of certain thoughts, evaluations, patterns or superstitions. Stereotypes can be negative, neutral or positive, although negative ideas are encountered most often, and these are most often researched. An essential characteristic of stereotyping is their social context, a collective conviction of a specific group. Therefore, its role in psychological research is fundamental.

Generalization or strictly speaking – overgeneralization coming from one's beliefs, is the next characteristic feature of the phenomenon discussed. Stereotyping is a false and insufficiently justified collective conviction, related to a certain group of people, usually insensitive to argumentation. In Bak's research on stereotypical ideas concerning mentally ill people it occurred that a certain collective perception carries signs of common opinions. The psychology students researched accentuated mainly two aspects of an ill person's portrait: characteristics conditioning one's own difficulty in possible contact with an ill person as well as characteristics connected to physical expansion of ill people [1].

S. Sontag writes that tuberculosis was frequently given a sentimental dimension, i.e. it was reputed to lead to identity reinforcement. Can we draw a parallel between myths about tuberculosis and the stereotypical perception of mental disturbances? The circle of 19th-century researchers with C. Lombroso in the lead seems to be one of the first sources of such stereotypes. Sontag wrote that judgement hidden in the assessment of a mental illness may have considerable social consequences. It is indeed

so and therefore we should make more effort to monitor social views, including views on mental illnesses and on attempts made to change them [4].

Humans have a spontaneous inclination to create stereotypes and all human ideas about the surrounding world are subject to such communication simplification. Stereotypes are often based on incomplete knowledge and false convictions, strengthened by tradition, are seldom subject to change, and even more seldom subject to rejection [3, 5]. Numerous researchers still searched for a "grain of truth" in stereotypes; the term "stereotype accuracy" was even formulated. When facts contradicting a stereotype appear, people tend to treat it as an exception ("the exception proves the rule") or tend to create subcategories without altering the basic category [6-8].

Interesting studies regarding stereotypical perception of mentally ill people, which were carried out in the same year as this study, included 796 subjects in seven countries: Croatia, Israel, Lithuania, Malta, Romania and Sweden. It turned out that ill people's self-stigmatization can be comparable and correlates with the degree of stereotypical perception of psychiatric patients by the social environment. In a given country, the stronger the belief of patients regarding helplessness with respect to their illness and the lower their self-assessment, the higher the percentage of society that perceived the mental illness in a more stereotypical way. Research of social environment yielded similar results irrespective of the country of origin: the higher the biological age of the subjects and at the same time the lower their educational and social and professional status, the higher the tendency to stereotypical thinking with regard to the mentally ill. Christin Krajewski, Genz Burazeri, and Helmut Brand emphasize that mentally ill people struggle against their own attitude towards the illness as well as with stereotypical perceptions of them by the surrounding environment, which constitutes an additional burden in the struggle against disorders [8].

Material

Research using the modified version of the semantic differential was conducted, like in the study from 10 years ago, on a group of psychology students. At that time, 149 subjects participated, including 102 females and 36 males. Their average age was 21.5. In 2010, the same study comprised 152 subjects, of which 138 were females and 14 males. Their average age was 21.8. All the individuals studied agreed to participate in the study.

Method

Semantic differential and its modification were described in detail by Bąk [1] in her first study in 2000. It is worthwhile to remember that above all it serves the cognitive and evaluative aspect of stereotyping. Subjects had at their disposal 30 pairs of adjectives with the use of which they described the researched phenomenon. Differential modification consisted in selecting pairs – out of all the pairs provided – that qualified as descriptors of mentally ill people (the subjects were free to select any number of scales); following the selection of pairs of adjectives, the subject had the task

of marking a '+' next to the adjective in a pair that according to the subject is positive, and a '-' next to a negatively associated adjective; marking on a scale to what degree a given object has a given feature; describing what percentage of mentally ill people possess this feature as well as describing the level of certainty (%) of one's own opinion on the intensity of the feature. In this way, modified semantic differential studies the social and evaluative character of stereotyping as well as simplification of view, overgeneralization and rigidity of perception.

Results

In order to present differences clearly in the results obtained in year 2000 and 2010, the results of the studies are presented below in an orderly way: first, the results obtained in 2000 are shown in tables, and then the results of the study conducted in 2010.

A social character of stereotypical perception of the mentally ill was proved in Bąk's paper 10 years ago [1]. Some attributes of an image of a mentally ill person were confirmed by most subjects. Almost 80% of them acknowledged that mentally ill people were unpredictable, lost, difficult to understand, sensitive, withdrawn, unaware, uncontrollable, excitable, threatening, aggressive and violent. Both previous and current results are presented in Table 1 below.

three groups in [70]), comparative seasons of 2000 and 2010.					
	Percentage	Results in 2000	Results in 2010		
	of subjects	Number of characteristics indicated	Number of characteristics indicated		
1	60–77%	7	12		
2	59–20%	15	18		
3	do 10%	8	0		

Table 1. Number of pairs of adjectives selected by subjects (respondents were divided into three groups in [%]). Comparative studies of 2000 and 2010.

Source: Bak, 2000 and the author's own research

Just on the basis of percentage of characteristic indicators it can be seen that changes occurred for all categories. It was also checked which pairs of characteristics are selected by most subjects during an analysis of the content scope of mentally ill person's stereotyping. It turned out that in 2000 the subjects most often chose the following terms out of 30 pairs of adjectives: unpredictable—predictable (77%), threatening—safe (69%), excitable—well-balanced (66%); withdrawn—open (64%); lost—organized (64%); aggressive—gentle (63%); unaware—aware (61%).

On the other hand, in 2010, at least 60% of subjects chose far more pairs of the following adjectives (percentage of their certainty was also higher): unpredictable–predictable (77%), threatening–safe (70%), excitable–well-balanced (63%); withdrawn–open (73%); lost–organized (77%); aggressive–gentle (74%); unaware–aware (63%).

The following additional pairs of adjectives also appeared, which were indicated by at least 50 % of the subjects: tense–relaxed (67%), easily understood–hardly understood (63%), gullible–suspicious (63%), violent–calm (60%), self-possessed–uncontrollable

(53%), sensitive—insensitive (53%), active—passive (53%), helpless—resourceful (53%), uncritical—critical (53%), irresponsible—responsible (50%), carefree—anxious (50%).

During an analysis of a mentally ill person's portrait, the author decided to compare the same pairs of adjectives as the ones 10 years ago. The results of the average values of evaluations on a five-degree scale are presented in Table 2 below.

Table 2. What is a mentally ill person like? (based on the mean value of evaluations on a scale) The last column of Table 2 includes the characteristic indicated.

Comparative studies of 2000 and 2010

No.	Pair of characteristics	Mean value on a scale of evaluations 2000*	Mean value on a scale of evaluations 2010*	What is a mentally ill person like?
1	violent-calm	2.4	2.5	violent
2	excitable-well-balanced	1.9	2.4	excitable
3	withdrawn-open	1.8	2.4	withdrawn
4	aggressive-gentle	2.7	2.8	aggressive
5	self-possessed-uncon- trollable	4.1	2.9	self-possessed
6	unpredictable-predictable	1.8	2.5	unpredictable
7	lost-organized	1.7	2.2	lost
8	unaware-aware	2.1	3.2	aware
9	easily understood-hardly understood	4.2	3.8	hardly understood
10	threatening-safe	2.4	2.6	threatening
11	sensitive-insensitive	1.7	2.8	sensitive
12	gullible-suspicious		4.2	suspicious
13	trustful-distrustful		4.0	distrustful
14	helpless-resourceful		2.8	helpless
15	uncritical-critical		2.9	uncritical
16	carefree-anxious		3.9	anxious
17	active-passive		3.3	passive
18	tense-relaxed		2.3	tense
19	irresponsible-responsible		2.6	irresponsible
20	independent-dependent		3.2	dependent

^{*} Mean values less than 3 indicate an adjective on the left whereas mean values exceeding 3 indicate an adjective on the right end.

Source: Bak [1] and the author's own research

Changes in the image that people have nowadays of the mentally ill are currently connected to deeper perception of behaviour that is beyond standard functioning.

The following terms were most noticeable: suspicious, distrustful and anxious. Indeed, knowledge and awareness of the mentally ill's problems seem to be greater than 10 years ago. Also the remaining terms which contribute to an image of a person that requires professional help are richer (passive, dependent, uncritical, irresponsible or tense).

Evaluativeness of stereotyping of a mentally ill person is a proportion of the number of positive evaluations granted by subjects to a given adjectival term to the number of negative evaluations. As in Bąk's study [1], the only pairs taken into account were those indicated by at least 50% of subjects. The results are presented in Table 3.

Table 3. How respondents evaluate the characteristics selected Comparative studies of 2000 and 2010

Characteristic	2000			2010			Positive
indicated most often	Characteristic +	Characteristic	Lack of evaluation	Characteristic +	Characteristic	Lack of evaluation	vs negative characteristic
violent	4	76	1	8	70	1	negative
excitable	8	91	0	6	65	3	negative
withdrawn	8	86	2	5	90	2	negative
aggressive	8	81	4	9	71	0	negative
uncontrollable	3	77	0	5	60	2	negative
unpredictable	24	91	0	4	76	4	negative
lost	8	85	2	5	85	3	negative
unaware	8	80	3	4	80	4	negative
hardly understood	12	62	2	6	60	2	negative
threatening	6	94	3	2	84	3	negative
sensitive	67	4	3	45	4	4	positive
irresponsible				5	55	3	negative
dependent				6	65	3	negative
tense				4	74	3	negative
passive				3	70	2	negative
suspicious				9	36	7	negative
distrustful				7	51	4	negative
helpless				4	65	3	negative
useless				8	55	6	negative
anxious				8	45	6	negative

Source: Bak, [1] and the author's own research

These results also yielded interesting results, so much different from those conducted 10 years ago. Apart from the confirmation of the importance of 11 characteristics

indicated most often (100% conformity regarding the type of evaluation: positive vs negative characteristic), there are as many as nine characteristics (all negative) which correspond with an image of a person that is dependent, passive, helpless, tense, distrustful, anxious, and irresponsible. Like in the previous study, one characteristic (i.e. sensitivity) proved to be considered a positive one.

It is worth to emphasize that quite a simplified stereotypical image of a mentally ill person was obtained in the study conducted a decade ago. Thus, it is now possible to determine a degree of complexity of a mentally ill person's image by calculating, like 10 years ago, an average number of the adjectives selected (for the whole group as well as separately for women and men). The results are presented in Table 4.

*				
Subjects in 2000		Subjects in 2010		
	Average number of characteristics selected		Average number of characteristics selected	
whole group N = 149	11.0	whole group N = 152	12.8	
women N = 102	10.8	women N = 138	9.7	
men N = 36	11.8	men N = 14	9.5	

Table 4. Average number of the characteristics selected. Comparative studies of 2000 and 2010

Source: Bak [1] and author's own research

Subjects selected from 3 to 30 characteristics. Within the scope of an average number of adjectives indicated in 2000, the difference between women and men was statistically insignificant [1], similar to the study conducted after 10 years.

A tendency to assign some attributes to most or all members of a given group is one of typical features of stereotyping [5, 9]. In the study carried out a decade ago, an average percentage of the mentally ill who, according to subjects had a given characteristic, was calculated. After the selection of adjectives by at least 50% of subjects, the results received indicated those attributes of mentally ill people that may pose difficulty or cause helplessness in contact with an ill person. What was surprising in the previous findings was a result of the lack of the respondents' providing characteristics related to physical expansion of the mentally ill. The results of both studies are shown in table 5 below.

Table 5. Average percentage of mentally ill people who, according to respondents,

Study in 2000 Study in 2010 Characteristic selected Percentage of the Characteristic selected Percentage of the (based on average mentally ill who have this (based on average mentally ill who have this evaluation) characteristic evaluation) characteristic unpredictable 80 unpredictable 64 lost 78 lost 59

have a given characteristic. Comparative studies of 2000 and 2010

table continued on the next page

hardly understood	78	hardly understood	62
sensitive	78	sensitive	58
withdrawn	77	withdrawn	70
unaware	76	unaware	65
uncontrollable	73	uncontrollable	57
excitable	73	excitable	68
threatening	66	threatening	57
aggressive	64	aggressive	52
violent	64	violent	60
		tense	62
		passive	63
		irresponsible	59
		dependent	69
		suspicious	63
		distrustful	68
		helpless	62
		uncritical	69
		anxious	71

Source: Bak [1] and author's own research

Similar to the previous categories, the result here is different too. Apart from eleven characteristics included by the subjects in the previous study, which were also chosen by the current group, nine new characteristics were added to the previous ones by the present subjects.

While analyzing the last category ,stereotype rigidity, it should be pointed out that it relates to a degree of certainty of the opinions voiced. The higher the subject's certainty about his/her opinion, the greater the stereotype rigidity and thus greater resistance to change [1]. Grounding in one's own opinions constitutes another important characteristic of stereotyping. A decade ago, average certainty calculated for all pairs of characteristics selected by subjects amounted to 80% [1] and in a recent study reported a declining trend up to 71,6%. An average percentage of opinions about the characteristics selected by most respondents was also counted then. The previous and current results are presented in table 6.

Table 6. Average percentage of certainty of opinions about characteristics selected by most subjects (51% minimum). Comparative studies of 2000 and 2010.

Study in 2000		Study in 2010		
Pair of characteristics	How much are you certain about your opinion? (%)	Pair of characteristics	How much are you certain about your opinion? (%)	
violent-calm	79.0	violent-calm	73.3	
excitable-well-balanced	79.0	excitable-well-balanced	63.9	
withdrawn - open	81.0	withdrawn -open	77.9	
aggressive-gentle	79.0	aggressive-gentle	73.8	
self-possessed-uncon- trollable	78.5	self-possessed-uncon- trollable	59.0	
unpredictable – predictable	83.0	unpredictable – predictable	72.3	
lost-organized	80.0	lost-organized	73.1	
unaware-aware	77.0	unaware-aware	66.3	
easily understood – hardly understood	82.5	easily understood – hardly understood	74.1	
threatening – safe	76.0	threatening – safe	76.9	
sensitive –insensitive	85.0	sensitive –insensitive	71.2	
		independent – dependent	77.5	
		uncritical-critical	74.9	
		carefree –anxious	74.7	
		trustful-distrustful	73.5	
		helpless-resourceful	73.4	
		active-passive	73.1	
		irresponsible – responsible	71.3	
		gullible – suspicious	69.2	
		tense – relaxed	64.5	

Discussion

The research carried out with the use of the modified semantic differential after 10 years brought new results. Social awareness of psychology students regarding a mental illness broadened as well as an image of a person suffering from mental disorders. Remains to be determined whether the image is sufficiently changed for the benefit

of the patient. On this question the answer is negative. Still dominate the determination of the negative, emphasizing the difficulty in contact with patients.

It is worth stressing that changes in the image of the mentally ill perceived by subjects are connected to their deeper perception of behaviour beyond standard functioning. It manifests itself in the subjects' indicating such terms as: suspicion, distrust or an anxious person. Knowledge and awareness regarding problems of mentally ill people seems to be better after 10 years. Also the remaining but different terms that contribute to the image of a person who need help are richer (passive, dependent, uncritical, irresponsible, tense). There are no pejorative or derogatory determine.

Out of 30 pairs of the adjectives suggested, similar values were obtained in the second study in the case of the most rarely selected adjectives (less than 15%). Also here the subjects avoided evaluative adjectives such as: good–bad, friendly–unfriendly, honest–dishonest, pretty–ugly, hard-working–lazy or consistent–inconsistent.

Within the evaluativeness, the image obtained of a mentally ill person was quite consistent with respect to both an emotional tinge of the terms and their contents. The results indicate that an image of a mentally ill person has not improved, however the perception of it has deepened in respect of its complexity. Some coherence typical of people who wish to get to know a new world have been noticeable in the new terms. As it was mentioned in the paper 10 years ago, such a form of perception of the mentally ill may translate into a certain attitude towards them. This kind of conclusion is also suggested in the results obtained by Jennifer Boyd Ritsher's [9] and Nicolas Rüsch's [11] research team. The results obtained are supported by Polish social surveys conducted regularly by CBOS (the last one was conducted in 2012): "a favorable attitude to the mentally ill exists also among people living in the biggest cities with more than five hundred thousand inhabitants as well as respondents most involved in religious practices. Women have a friendlier attitude towards the mentally ill than men – they declare kindliness more often while indifference – less frequently. The attitude to the mentally ill depends also, to a certain extent, on one's mental condition and experiences with the mentally ill. Those respondents who personally know a mentally ill person as well as those worried about their own mental health tend to declare kindliness more often while indifference – less frequently" [12, 13].

It seems that regarding psychology students' awareness of mentally ill people one can be a cautious optimist and predict its expansion in the future. One can also hope that a certain tendency has been measured that will show growth in the future. It is worth mentioning that with the lapse of time there has been an improvement in the image of a mentally ill person with regard to their social perception and a certain improvement of knowledge.

According to the current CBOS report, over the years we could observe some improvement in knowledge and in the image of a mentally ill person, in the way such a person is perceived not only by students of psychology, but also by the public. "This year's measurement is another one that shows a significant improvement in the attitude towards the mentally ill – expressed in greater consent to the mentally ill performing various functions. Present social distance indicators are ones of the lowest in the entire period being analyzed" [12].

This phenomenon also concerns other disorders [3]. It is hard to decide what the direct cause is. Apart from factors quoted by CBOS such as a big city, higher education or acquaintance with an ill person – greater attention and interest in the mentally ill could be caused by changes introduced to the university education. At the university where the research was conducted there were introduced the so-called curriculum paths in large measure connected with clinical psychology and secondly – more students from the university work as volunteers, among others, in mental hospitals. There are also various social educational campaigns that concern, for example, depression. However, to make those findings scientifically binding, we need to prove them in separate analyses.

Despite the fact that the majority of expressions used to describe the mentally ill are still negative, we should bear in mind conclusions made by Krajewski and his coworkers [6] concerning the relations between the biological age of the respondents, their education and a slighter tendency to think stereotypically about the mentally ill. The survey conducted at present among the psychology students supported those conclusions. Analogical findings have been reported by other researchers dealing with similar issues [9-11].

In the scope of adjective selection by at least 50% of the subjects researched, the result of the previous study are statistically different than the current one. It turns out that the number of the characteristics selected based on the average evaluation in 2010 is definitely higher. Therefore, if we applied a similar interpretation as before, it should be indicated that the degree of difficulty in relationships with mentally ill people has increased. Not only are they perceived as threatening, violent and unpredictable, but also as suspicious, uncritical and anxious. Like in previous categories, here the result is also different. It turns out that the number of characteristics selected based on the average evaluation after ten years is considerably higher. Apart from eleven characteristics included by the subjects in the previous report, the current group has additionally selected nine new characteristics. Therefore, if we applied a similar interpretation as before, it should be indicated that the degree of difficulty in relationships with mentally ill people has increased. Not only are they perceived as threatening, violent and unpredictable, but also as suspicious, uncritical and anxious. Does this change in the profile mean leaving the old stereotype behind? The answer is yes. Will this change have an ending similar to that of the TB patient stereotype described by Sontag? The answer is not yet [4].

The results of studies conducted ten years ago regarding the stereotype rigidity indicated that the degree of certainty in the selection of particular characteristics oscillated within an average calculated for all pairs and amounted to 80%. There were three pairs placed above this value: sensitive—insensitive (85%), unpredictable—predictable (83%) as well as easily understood—hardly understood (82.5%). Will the subjects have similar preferences after a decade? It seems that the results are quite surprising. If we take into consideration the same pairs of adjectives that were previously selected by the subjects, it will turn out that the average is significantly lower and amounts to 71,6%. The distribution of results is also flatter, and above the average value the same number of pairs have been placed: violent—calm (73.3%), withdrawn—open (77.9%),

aggressive—gentle (73.8%), unpredictable—predictable (72.3%), easily understood—hardly understood (76.9%), threatening—safe (71.2%). These results indicate a slight decrease in the stereotype of the mentally ill.

It is worth mentioning that the studies undertaken as well as those presented in the subject-matter literature contribute to the recognition of stereotype scales regarding the mentally ill and can also be the starting point for prophylaxis and formulation of social policy that prevents stereotyping of life [3, 8].

Conclusions

- Osgood's modified semantic differential method applied in this study achieved the desired results in 2000 and ten years later. It should undertake such studies, since they are a kind of barometer of attitudes towards the mentally ill.
- The direct method presented through group labelling (mentally ill people) used in research of a social group (students) has turned out to be relevant and brought forth many new results. The analysis of socially stereotypical perception of phenomena or problems provides knowledge about the social, evaluative aspects and examines deeply the possibility of simplification or generalization of opinions. A group of psychology students study at present have broader awareness about the mentally ill and show more balanced opinions than their colleagues of ten years before. The reasons for the changes have not been subject to this diagnosis, although a thesis should be stated that the reasons for such results can be found both in ever more effective psychological education of students as well as in the changes of the social message (social advertisements).
- The same study conducted on a group of psychology students after ten years showed more complicated social perception of an ill person. The subjects stated with a lower certainty (71%) compared to the previous subjects (80%) that most mentally ill people have difficulties in both contact with others and with themselves. A broader perspective of perception of the mentally ill (twice as many additional categories) should be highlited, which confirmed by the decrease in stereotyping of this group.
- Analysis of evaluation of characteristics assigned to the mentally ill was an essential
 but an unchangeable aspect of the modified version of the semantic differential.
 This situation has not changed and the evaluation is still one-sidedly negative.
 Sensitivity, the only positive characteristic assigned to the ill, was similarly evaluated in the study a decade ago.
- The thesis postulated by Bak that research performed by means direct methods may lead to results that are in accordance with current social norms (due to the fear of researcher's disapproval), seems to prove correct. The role of social advertisements mentioned before constituting some social support for mentally ill people, which has been noticeable in recent years, is a manifestation of this thesis.
- This study, despite some limitations, also gives suggestions for the future. It would
 be worth complementing similar analyses with quality methods allowing verifying more precisely the dependency between psychology students' perception
 of the mentally ill and the mentally ill people's real perception of themselves as well.

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