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The Efficacy of Three Interventions Modifying Stereotypes and Prejudice Towards People with Schizophrenia

Little is known about the efficacy of various interventions aimed at fighting stereotypes and prejudice towards people with schizophrenia. This study evaluated the efficacy of three interventions: film, meeting a person with schizophrenia, and educational presentation, in reducing stereotypes and prejudice towards people with schizophrenia. Three groups of students were assessed by the Stereotypes and Prejudice Questionnaire before, directly after, and one month after the intervention. A reduction in both stereotypes and prejudice was observed following the educational presentation, and a further decrease in the unfavorable attitudes was observed a month later. Watching the film was found effective in reducing prejudice, however it did not lower stereotypes. Meeting a person suffering from schizophrenia was found to minimize stereotypes but its effects on prejudice were relatively insignificant and temporary. The findings from this study showed that various types of intervention had diverse effects in reducing stereotypes and prejudice.

Key words: stereotypes, prejudice, schizophrenia

Introduction

Schizophrenia is a psychiatric disease considered as the severest mental disorder occurring between the 15th to 30th year of life, and affecting approximately 1% of people. It is partially hereditary: the closer the relationship with the ill person, the higher the likelihood of becoming ill. Problems during pregnancy, complications with delivery, viral or bacterial infections all increase the risk of incidence as they can trigger irreversible changes in the brain. And stress caused by adolescence-related problems or familial dysfunctions may also be factors in the development of schizophrenia.

Categorising people according to false stereotypes and being prejudiced has been a source of considerable suffering for nations, groups and individuals. Aronson (2008) defines a stereotype as an excessive generalization, assigning identical characteristics to each of diverse members of the same group, without taking into consideration existing

differences between them. It is also a way to simplify our view of the world—schema in our heads (Lippman, 1922). Stereotypes allow an immediate reaction in contacts with others and are helpful in dealing with fear related to the surrounding world. According to Aronson (2008), prejudice is a negative or hostile attitude towards an alien group, based on simplifications derived from false, often incomplete, information. They also serve as an excuse for ignoring an alien group and its troubles (Snyder & Meine, 1994; Lysaker et al., 2008).

The groups against which negative stereotypes and prejudice are still common often include the disabled and ill. One of such groups are people with psychiatric disorders, such as schizophrenia. Copying and following stereotypes has an impact on people with schizophrenia. Stereotyping leads to discrimination, therefore those who would like to overcome the illness are prevented from becoming regular members of society again. Stereotypes create a specific image of people with the disease. This impression, often

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spread by the media, prevents them from recovering, and affects their families and friends. Prejudice and artificial stereotypes frequently discourage people with symptoms from seeking medical help. The earlier that schizophrenia is diagnosed, the better the chance for complete convalescence.

Such negative attitudes can be reduced thanks to programs aimed at fighting them. Accordingly, various anti-stigma programs have been undertaken to fight stereotypes and prejudice towards people with schizophrenia. One of them was carried out in Saxony, Germany (Schulze et al., 2003) and aimed at reducing stigma towards schizophrenics. During a five-day long enterprise of social exercises, secondary school students were countering their stereotypes and prejudice towards the ill. The program was based on discussions, as well as sharing the students' personal experiences, however, meeting a young person with schizophrenia was a crucial part of the program. The questionnaires conducted before, during and a month after the project revealed that pupils dispelled many of their negative stereotypes and prejudice.

Another program took the form of educational interventions and was carried out in UK secondary schools (Pinfold, Toulmin et al., 2003). Firstly, students participated in workshops with a short anti-stigma video and an educational session discouraging pupils to label the ill. Information leaflets were also distributed. Secondly, meeting a person who had personal experience with mental illness with a follow-up question-and-answer session was carried out. The students demonstrated a positive change in their attitude in a follow-up survey both one week and six months after the intervention.

Another intervention reported in the literature was a one-hour long educational program carried out in a group of first-year medical students (Mino, Yasuda et al., 2001). Its aim was to improve the students' attitudes towards the mentally ill. Pre- and post-measurements revealed a positive change in their outlook.

Although various efforts are made to reduce unfavorable social attitudes towards people with schizophrenia, still little is known about their outcomes. Therefore, the objective of this study was to prepare, carry out and evaluate the efficacy of three interventions aimed at modifying stereotypes and prejudice towards people with schizophrenia. The basic research question of the study was: What is the efficacy of interventions aimed at reducing stereotypes and prejudice towards people with schizophrenia?

Participants and methods

Participants

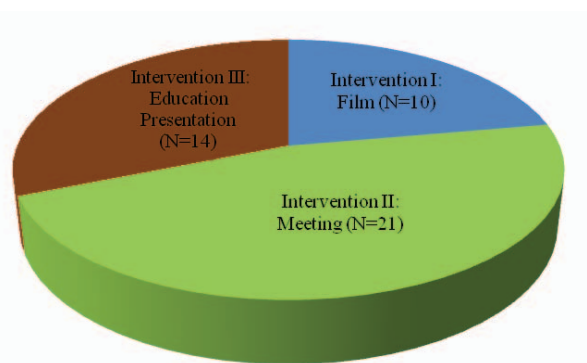
Forty-five students of the Technical University of Lublin at the average age of 20.86 took part in the study. They were assigned to three groups. For each group a dif-

ferent intervention was prepared and carried out. Table 1 and Figure 1 present the number of students in each group, including the frequency of men and women. The first surveys measuring the students' stereotypes and prejudices concerning people with schizophrenia were conducted in February 2006.

Table 1. The participants of the study

Group	Women	Men	Sum
Intervention I: Film	6	4	10
Intervention II: Meeting	5	16	21
Intervention III: Education Presentation	5	9	14

Figure 1. The participants of the study – graph



Stereotypes and Prejudice Measurement

Stereotypes and prejudice towards people with schizophrenia were measured by means of questionnaire methods adapted from the survey by B. Schulze, M. Richter-Werling et al. (2003). The Stereotypes Questionnaire and the Prejudice Questionnaire were used to measure the students' attitudes towards people with schizophrenia. Students had four options to respond to the statements from the questionnaires: 'Yes,' 'Rather yes,' 'Rather no,' and 'No.' The score in the Stereotypes Questionnaire can theoretically range from 13 (lack of stereotypes) to 52 (the strongest stereotypes). The scores in the Prejudice Questionnaire have a theoretical range from 7 to 28. The questionnaires were completed by the students at three time points: two weeks before, immediately after, and a month after, the intervention.

Interventions

Three interventions aiming at countering false stereotypes and unsubstantiated prejudice were carried out in the study.

Intervention I: Film

A film “Schizophrenia” recorded from Discovery channel was presented to the first group of students. It presented life situations of five people with schizophrenia. The characters talked about their feelings, fears and attitudes towards both life and other people. The students could observe different variants of the disease: one lasting the whole life as well as one which occurred only once in a lifetime. A psychiatrist in the film explained how schizophrenia works, from a medical point of view, and psychologists expounded how the illness affects not only social life but also families’ and friends’ situations. The film lasted 45 minutes.

Intervention II: Meeting a Person with Schizophrenia

The second intervention consisted in meeting a person suffering from schizophrenia. An ex-student of pharmacy and regional champion of tennis, Aleksander agreed to talk about his experience of living with schizophrenia to the students taking part in the project. During the meeting, the students from the second group listened to Aleksander’s story and could ask him questions.

Intervention III: Educational Presentation

A colourful and vivid multimedia presentation outlining the main characteristics of schizophrenia was carried out to the third group of students by the author of this work. It explained what schizophrenia is, why a person comes down with schizophrenia, and what its symptoms are. A special emphasis was put on labelling the ill. Next, the students were encouraged to ask questions and they did so (“Is schizophrenia curable?” or “Do people suffering from schizophrenia have to be confined to hospitals for the mentally ill?”). The students had the opportunity to confront their beliefs with scientifically established facts about schizophrenia.

Research questions

The following research questions were formulated:

- 1) Do the interventions really lower the level of stereotypes and prejudice in the examined students?
- 2) If they do, is the change long-lasting? (i.e. is it still observed a month after the intervention?)
- 3) Are there any differences in the efficacy of the applied interventions?
- 4) Is the efficacy of particular interventions equal with reference to both stereotypes and prejudice?

Results

Efficacy of Intervention I: Film

Intervention I: A film was paradoxically found to increase stereotypes in the studied group from 12.9 at the baseline to 14.4 directly after the intervention. Follow-up measurement after 1 month showed, however, a return of the scores on the Stereotypes Questionnaire to the baseline level of 12.8.

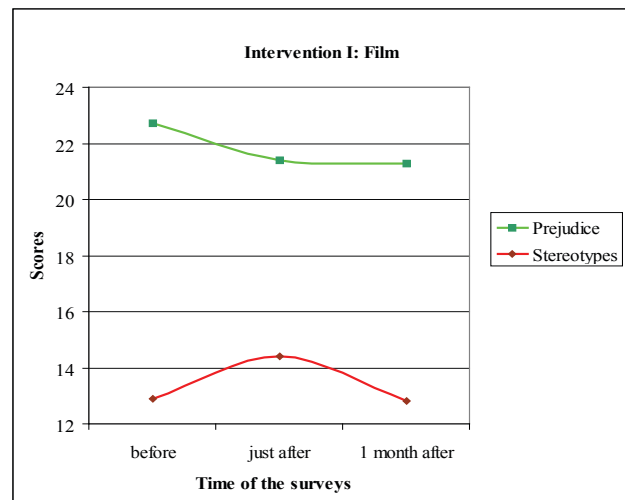
Intervention I: The film was observed to reduce prejudice in the investigated students. The initial level of prejudice as measured on the Prejudice Questionnaire was 22.7 and directly after the intervention dropped to 21.4. This change was found to be stable over time since the follow-up testing after 1 month yielded the prejudice level (21.3) almost equal to that from the second measurement.

The data from the Stereotype Questionnaire and Prejudice Questionnaire obtained in the Intervention I group are presented in Table 2 and Figure 2.

Table 2. Changes in the mean scores on stereotype and prejudice measures in the group with Intervention I: Film (N=10)

	Before intervention I	Directly after intervention I	One month after intervention I
Stereotypes	12.9	14.4	12.8
Prejudice	22.7	21.4	21.3

Figure 2. Changes in the mean scores on stereotype and prejudice measures in the group with Intervention I: Film.



Efficacy of Intervention II: Meeting

Intervention II: Meeting was observed to lower stereotypes in the examined group of students from the baseline of 14.62 to 13.29 in the second survey. After one month the score even fell to 12.86.

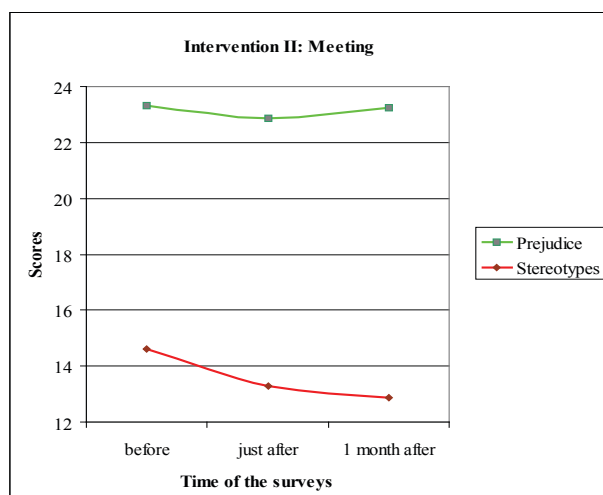
Intervention II: Meeting was observed to decrease the students' prejudice. At the first measurement it was found at the level of 23.33, whereas directly after the intervention the score was 22.86. However, the survey conducted after one month from the intervention revealed that the effect was short-term. The level of the social distance in the examined group returned almost to its initial level and was 23.24.

The data from the Stereotype Questionnaire and Prejudice Questionnaire obtained in the Intervention II group are presented in Table 3 and Figure 3.

Table 3. Changes in the mean scores on stereotype and prejudice measures in the group with Intervention II: Meeting (N=21)

	Before intervention II	Directly after intervention II	One month after intervention II
Stereotypes	14.62	13.29	12.86
Prejudice	23.33	22.86	23.24

Figure 3. Changes in the mean scores on stereotype and prejudice measures in the group with Intervention II: Meeting



Efficacy of Intervention III: Educational Presentation

Intervention III: Educational Presentation was shown to be effective in reducing stereotypes. Directly after the intervention they fell by 2 points from 16.14 to 14.14. In a follow-up measurement they dropped even further to the score of 13.86.

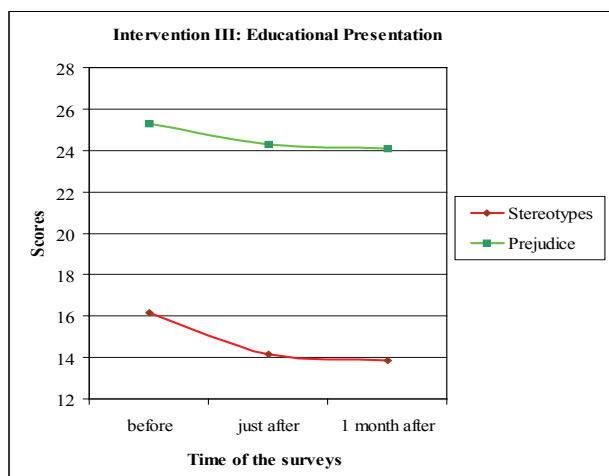
Intervention III: Educational Presentation was found to decrease prejudice in the investigated group from the baseline of 25.29 to 24.29. The survey carried out one month after the intervention displayed a further reduction of prejudice to the level of 24.07.

The data from the Stereotype Questionnaire and Prejudice Questionnaire obtained in the Intervention III group are presented in Table 4. and Figure 4.

Table 4. Changes in the mean scores on stereotype and prejudice measures in the group with Intervention III: Educational Presentation (N=14)

	Before intervention III	Directly after intervention III	One month after intervention III
Stereotypes	16.14	14.14	13.86
Prejudice	25.29	24.29	24.07

Figure 4. Changes in the mean scores on stereotype and prejudice measures in the group with Intervention II: Educational Presentation



Efficacy of the Interventions: Comparison

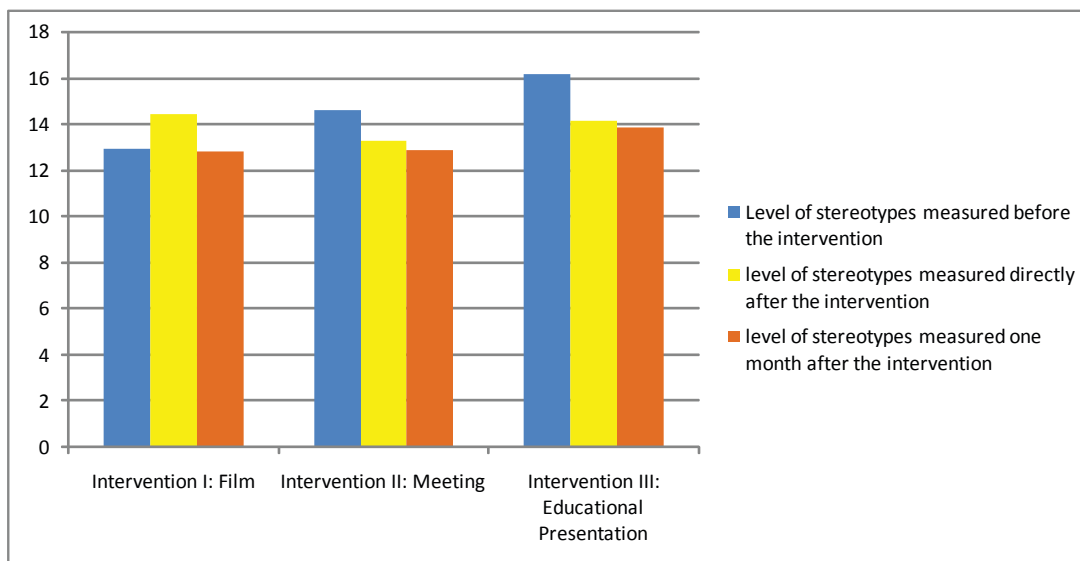
Stereotypes

Both Table 5 and the Figure 5 show how efficient the three interventions in modifying stereotypes were. Educational Presentation was observed to be most successful. Students taking part in it reduced their stereotypes from the index of 16.14 to 13.86 in their last survey. The second most fruitful intervention was Meeting a person with schizophrenia. The initial respondents' score was 14.62, whereas a month after the intervention it lowered to 12.86. The intervention I: Film was paradoxically found to increase stereotypes from a relatively low value of 12.9 to 14.4 directly after the intervention. Fortunately, one month later, the scores came back to their baseline level of 12.8.

Table 5. Comparison of the efficacy of the three interventions in reducing stereotypes

	Film		Meeting		Educational presentation	
	Mean	N	Mean	N	Mean	N
Before intervention	12.9	10	14.62	21	16.14	14
Directly after	14.4	10	13.29	21	14.14	14
One month after intervention	12.8	10	12.86	21	13.86	14

Figure 5. Comparison of the efficacy of the three interventions in reducing stereotypes



Prejudice

Intervention I: Film was shown to be unproductive in minimizing stereotypes, but it was the most successful in reducing prejudice, as it is illustrated in Figure 6. Having the lowest level of prejudice among the three groups, the students watching the movie even dropped it from the score of 22.7 to 21.3 (Table 6).

Intervention III: Educational Presentation also was observed to decrease prejudice. As measured by the Prejudice Questionnaire, it fell from the initial 25.29 to 24.29 directly after, and 24.07 one month after the Intervention (Table 6).

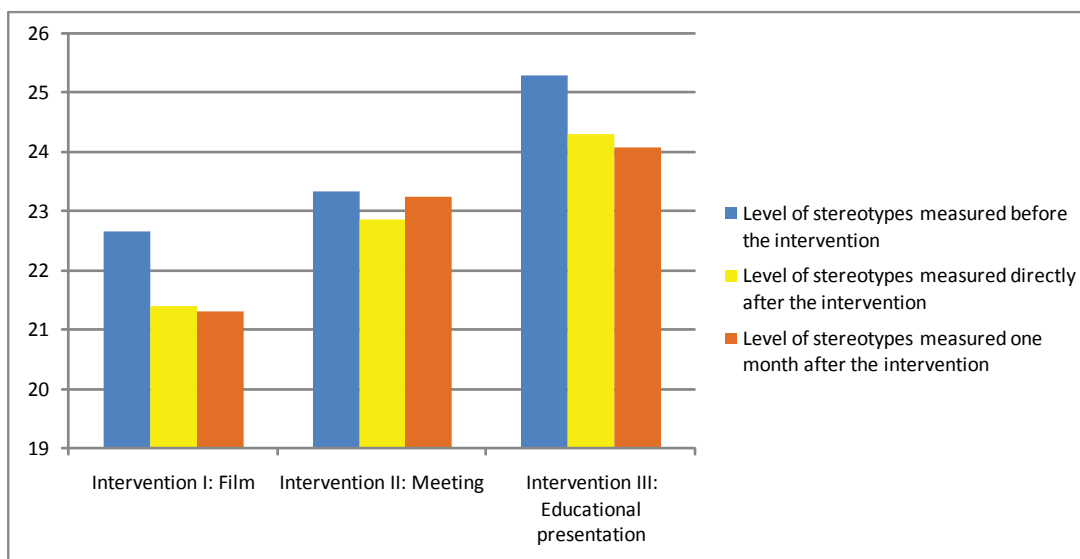
Intervention II: Meeting a person with schizophrenia was found effective but only on a short-term scale. Students from

this group decreased their prejudice from the baseline 23.33 to 22.86 directly after the Intervention. After a month, however, the index regressed to its primary value of 23.24 (Table 6).

Table 6. Comparison of the efficacy of the three interventions in reducing prejudice

	Film		Meeting		Educational presentation	
	Mean	N	Mean	N	Mean	N
Before intervention	22.7	10	23.33	21	25.29	14
Directly after	21.4	10	22.86	21	24.29	14
One month after intervention	21.3	10	23.24	21	24.07	14

Figure 6. Comparison of the efficacy of the three interventions in reducing prejudice



Discussion

Stereotypical thinking (as well as being biased) can be modified in various ways. However, a personal interaction was suggested to be the most efficient method. The 'contact hypothesis' claims that getting into an interaction with representatives of a stereotyped group can weaken stereotypes and prejudice. According to Allport (1954), however, four fundamental conditions have to be fulfilled for the interaction to work: equal status of the participants of the interaction, common aims, inter-group cooperation, and the authorities' support. Amir (1969) adds also a positive atmosphere and personal character of the interaction. Pettigrew (1998) supplements this list with "potential of friendship".

Diverse experiments were conducted to verify this hypothesis. The "Robber's Cave" Study¹ as well as the "Jigsaw classroom" study² provided support for this hypothesis. It was shown that reducing prejudice was most successful when people cooperated in order to achieve a common goal. Having favourable circumstances, they created friendly relationships with members of the previously alien groups. Normative influence is another method suggested to alter the social attitudes. If the community disagreed with stereotypes and prejudice, an biased individual would have to change his behaviour regarding an discriminated group (Dovidio & Gaertner, 1991). When people confront principles which were to govern their life with their actual, ie. prejudiced, attitude, then they stop stereotyping. Rokeach (1973) called that the confrontation technique.

Among the three kinds of interventions tested in our study, the educational presentation was found to be the most successful in modifying negative, untrue stereotypes. Not only did students from that group minimize their stereotypes directly after the presentation but they also revealed permanent changes in their prejudice towards people with schizophrenia. The difference between the first and the third survey was observed to be the biggest: 2.28. However, explanation of this finding still requires further research.

Meeting a person with schizophrenia was found to be the second most efficient intervention in reducing stereotypes. Direct contact with a person suffering from schizophrenia caused debunking of common beliefs. The contact hypothesis was confirmed in decreasing stereotypes, however, a permanent fall in prejudice was not achieved. The likely reason for this was that not all the necessary

¹ Robber's Cave study – Sherif's (Sherif, Harvey 1961) research demonstrating that work on a common goal decreases stereotypes and prejudice among stranger groups.

² Aronson's experiment countering prejudice when small independent groups cooperate in attaining the same aim. The teams are mixed so that members of initially strange groups can confront their beliefs about the other group (Aronson et al., 1978).

requirements of effective interaction were met as both the students and Aleksander did not cooperate in groups getting to the same superordinate goal³. Perhaps a more interactive approach should have been applied to make this intervention a more productive method of weakening prejudice. One month after the meeting, the students' prejudice was estimated at a level almost the same as the initial one. Perhaps the students facing up to the real illness had also the possibility of noticing the negative aspects of the disease. Perhaps the contact was too short to reduce fears associated with meeting a person with schizophrenia.

Intervention I: Film "Schizophrenia" did not prove effective in modifying unfounded beliefs concerning people with that mental disease. A striking phenomenon was observed with this intervention: students watching the film did not decrease their previous stereotypes, as expected, on the contrary, the index of their stereotypes even increased. In the first survey this group had the lowest level of stereotypical thinking: 12.9. By contrast, the score of the group with Intervention III: Educational Presentation, after one month the speech was 13.86. After the exposition to the film, the movie group's stereotypes rose significantly. However, the positive finding was that they did not consolidate in the students' memory. A month after watching the film their stereotypes came back to the 12.8 level.

The efficacy of Intervention I turned out to be much better with respect to lowering prejudice. Among the three interventions, the film was found to be the most fruitful in decreasing the students' prejudice. The difference between the first and the third survey was the largest of all the interventions: 1.4 points.

Conclusion

The overall findings from this study seem to be able to shed some light on the problem of efficacy of interventions aimed at modifying negative attitudes towards people with schizophrenia. Two of the interventions tested - Meeting and Educational Presentation - were successful in minimizing stereotypes. Also Educational Presentation and Film were proved effective in reducing prejudice. The results of this study showed that various interventions used to modify negative attitudes towards people with schizophrenia had diverse effects. Some of them were only temporary, others more durable. Some interventions were more successful in reducing stereotypes and others in minimizing prejudice. Further research should focus on the diverse mechanisms involved in these types of interventions and their impact on long-term efficacy. The results of this study could also be helpful in designing further programmes aimed at changing negative attitudes towards mentally ill people.

³ Superordinate goal task which can only be completed by cooperation of a larger number of people (Sherif et al., 1961).

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