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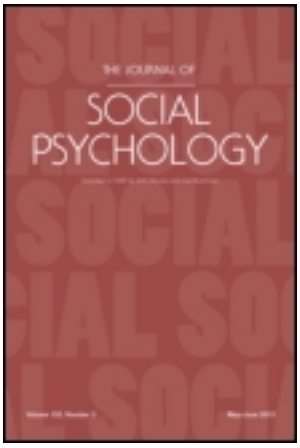

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Imagining Intergroup Contact Can Combat Mental Health Stigma by Reducing Anxiety, Avoidance and Negative Stereotyping

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ABSTRACT. Research has demonstrated widespread negative attitudes held toward people with mental health problems. Our study investigated whether a new prejudice reduction technique, imagined intergroup contact (Crisp & Turner, 2009), could combat stigma against people with mental illness, and the mediating processes through which it may exert this beneficial effect. We found that compared to a control condition, participants who imagined a positive encounter with a schizophrenic person reported weakened stereotypes and formed stronger intentions to engage in future social interactions with schizophrenic people in general. Importantly, these intentions were formed due to reduced feelings of anxiety about future interactions. We discuss the implications of these findings for improving the social inclusion of people with mental health problems.

Keywords: imagined contact, intergroup anxiety, mental health, stereotyping, stigma

ONE OF THE BIGGEST SOCIAL PROBLEMS worldwide is the prevalence of prejudices, stigma, and social exclusion. A group that suffers significantly from stigmatization is people with chronic mental health problems. In this article we report our research into a new approach to reducing prejudice called *imagined intergroup contact* (Crisp & Turner, 2009; Crisp, Stathi, Turner, & Husnu, 2008; Crisp, Husnu, Meleady, Stathi, & Turner, 2010), as well as our attempts to extend the benefits of the technique to people with mental health problems. In particular, we tested the hypothesis that imagined contact could

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reduce stereotyping and enhance intentions to engage positively with people with mental illness via reducing negative feelings (anxiety) about these future interactions.

The Stigma of Mental Illness

Discrimination against people with mental illness can take different forms. People who face mental health problems are considered a distinct group of individuals, an outgroup different from the "normal" population, with particular behaviors and characteristics (Kendell, 2004); or as Goffman (1963/1990) puts it, perhaps considered less human. In Goffman's (1963/1990) definition, stigma is a social phenomenon, a consequence of social labeling and rejection, linked with reduced life opportunities. Recently, research showed that stigmatizing attitudes toward people with mental disorders can be not only explicit but also implicit (Monteith & Pettit, 2011). All in all, rejection from friends, family, and employers leads to isolation, feelings of depression, anger, and low self-respect (Dinos, Stevens, Serfaty, Weich & King, 2004; Link, Struening, Neese-Todd, Asmussen & Phelan, 2001). As a consequence, people with mental health illnesses have lower quality of life and limited opportunities for self-development (Byrne, 2000).

The need to tackle prejudice against people with mental health problems is evident. Researchers have been measuring stereotypes of people with psychiatric disorders since the 1950s (for review see Hayward & Bright, 1997). This research has revealed three key characteristics of stigma against people with mental illness: *negative cognitions (stereotyping), negative feelings about contact (anxiety)*, and *avoidance*. With respect to negative stereotyping, Nunnally (1961, as cited in Rabkin, 1974) found that the lay public regarded people with mental disorders as *unintelligent, dirty, dangerous* and *unpredictable*. In a more recent review of population studies published between 1990 and 2004, Angermeyer and Dietrich (2006) conclude that people facing mental health problems are viewed as *needy and dependent, unpredictable* and, less frequently, *dangerous and prone to violence*. Affective responses toward mentally ill people include *uneasiness, fear* and *uncertainty* (Angermeyer & Dietrich, 2006). Finally, people appear to *avoid social interaction* with people with mental disorders (Angermeyer & Dietrich, 2006; see also Corrigan, Green, Lundin, Kubiak & Penn, 2001).

Corrigan and Penn (1999) stress the importance of using social psychological theory and research in the effort to diminish the stigma of mental illness and promote social inclusion. Research on intergroup relations has highlighted ways to address prejudice and offers tools to test theory in practice. Based on recent evidence, a new intergroup contact strategy based on mental imagery, imagined contact, may be an effective way to improve attitudes toward people with mental illnesses and reduce the negative stereotypes associated with them. Furthermore, we propose that imagined contact may work particularly well to combat the three

elements of stigma against people with mental health problems identified in earlier work—stereotyping, anxiety, and avoidance.

Imagined Intergroup Contact

In 1954, Gordon Allport published *The Nature of Prejudice*, in which he argued that contact, under certain optimal conditions, can reduce discrimination and prejudice between different groups. Since then, this idea has received sustained attention, and in their extensive meta-analysis of over 500 studies, Pettigrew and Tropp (2006) have demonstrated that contact is fundamentally associated with significantly reduced prejudice. However, the opportunity for intergroup contact is not always prevalent. Some communities are highly segregated and others face intractable intergroup conflict that restricts the desire or opportunity for positive intergroup interactions. The situation is similar in the case of stigmatized groups, like people who face mental health problems, with whom the public has limited desire or opportunity for social contact (e.g., Angermeyer & Dietrich, 2006). Importantly, these are the settings where contact is mostly needed, yet is also very hard to be established (Pettigrew, 2008).

To address this dilemma we have argued that *imagining* positive intergroup interactions could act as a proxy for actual interactions (Crisp & Turner, 2009; Crisp et al., 2008). Mental simulation has been found to be a useful tool in many areas, including the enhancement of sporting performance, promotion of healthy behaviors, and psychotherapy to combat phobias and anxiety disorders (Wolpe, 1958; Yates, 1975; for a recent review see Crisp, Birtel, & Meleady, 2011). We recently proposed that the benefits of imagery could be extended to efforts to *reduce prejudice* against minority groups in society.

Imagined intergroup contact is defined as "the mental simulation of a social interaction with a member or members of an outgroup category" (Crisp & Turner, 2009, p. 234). The technique has been found to improve intergroup attitudes at both explicit (Turner, Crisp, & Lambert, 2007) and implicit (Turner & Crisp, 2010) levels, it promotes positive trait projection (Stathi & Crisp, 2008) and contact self-efficacy (Stathi, Crisp, & Hogg, 2011), encourages intentions to engage in actual contact (Husnu & Crisp, 2010a) and it even reduces susceptibility to stereotype threat (Abrams et al., 2008). Our aim was to explore the effectiveness of imagined contact in combating stigma against mental illness and to identify potential underlying processes.

The Present Study

Previous research has found that imagined contact reduces prejudice against a range of different target groups (Harwood, Paolini, Joyce, Rubin, & Arroyo, 2011), including prejudice on the basis of age (Turner et al., 2007), nationality

(Stathi & Crisp, 2008), sexuality (Turner et al., 2007; see also Hodson, Choma, & Costello, 2009), ethnicity (Husnu & Crisp, 2010b; Stathi & Crisp, 2008), weight (Turner & West, 2012), religion (Husnu & Crisp, 2010a; Turner & Crisp, 2010), and, most pertinently here, schizophrenic people (West, Holmes, & Hewstone, 2011). This latter study established a basic positive effect of imagined contact on attitudes towards schizophrenic people. Here, we build on this work to examine the benefits of imagined contact as they relate to the three key characteristics of stigma against people with mental illness identified above: *negative feelings about contact (anxiety)*, *negative cognitions (stereotyping),* and *avoidance* (Angermeyer, Beck, & Matschinger, 2003; Angermeyer & Matschinger, 2005; Angermeyer et al., 2003; Angeremeyer & Matschinger, 2005; Stuart & Arboleda-Florez, 2001). We aimed to examine whether imagined contact could have positive impact on all these specific components of stigma against schizophrenic people.

We hypothesized that in the condition of mental imagery (i.e., imagining a positive interaction with a member of the outgroup, in this case a person with schizophrenia) there will be significantly less stereotyping and greater intentions to engage in contact in the future, compared to the control condition, and that this effect will be statistically explained by less intergroup anxiety.

Method

Participants and Design

The sample consisted of 57 students from the University of Kent in the south east of England (36 women and 21 men), aged between 18 and 48 years old ($M = 22.49$, $SD = 4.87$). The participants were randomly assigned to one of the two conditions (control versus imagined contact). Participants either received course credit for their participation in this study or took part as volunteers.

Procedure

Upon entrance to the laboratory the participants were asked to take a seat in one of the cubicles and were subsequently given different sets of instructions, depending on the condition they were assigned in. Specifically, in the imagined contact condition, participants were instructed the following: "I would like you to take a minute to imagine yourself meeting a person with schizophrenia for the first time. Imagine that the interaction is relaxed, positive and comfortable." In previous imagined contact research, an extensive variety of control conditions have been tested, including informational load (Turner et al., 2007, Experiment 1) non-relevant positive interaction (Stathi & Crisp, 2008, Experiment 2), outgroup priming (Turner et al., Experiment 2), neutral contact (Stathi & Crisp, Experiment 1; Turner et al., Experiment 1) and no-contact control scenes (Stathi & Crisp, Experiment 3; Stathi et al., 2011; Turner et al., Experiment 1). The significant

benefits of imagined positive contact have been demonstrated against all of these controls. Thus, to equate this study with previous research, in this experiment we used the standard no-contact control scene used in previous research (Stathi & Crisp, 2008; Turner et al., 2007). Specifically, in the control condition participants were instructed, "I would like you to take a minute to imagine you are walking in the outdoors. Try to imagine aspects of the scene about you (e.g., is it a beach, a forest, are there trees, hills, what's on the horizon)."

After timing the participants for one minute, and in order to reinforce the impact of the manipulation (as is typical with the standard imagined contact task, Crisp et al., 2008), the participants were asked to write down what they previously imagined in as much detail as possible.

Dependent Measures

Intergroup anxiety. Participants were asked to determine the extent to which they would feel *awkward*, *happy*, *self-conscious*, *competent,* and *relaxed*, if they were to meet a person with schizophrenia in the future (based on Stephan & Stephan, 1985). A Likert scale was used ranging from 1 (*not at all*) to 7 (*very*). The positive items (*happy*, *competent* and *relaxed*) were reverse-coded so that a high score on this scale indicated higher intergroup anxiety ($\alpha = .78$).

Stereotyping of people with schizophrenia. A 13-item scale measuring the degree of stereotyping of people with schizophrenia was used (based on Angermeyer & Matschinger, 2004). Respondents were asked to indicate on a Likert scale from 1 (*not at all*) to 7 (*very much*) how much they believed each item was typical of people with schizophrenia in general, for example *unpredictable, frightening, hard to talk to*, etc ($\alpha = .80$).

Intentions for future contact. Participants were asked to answer using a 9-point Likert scale, from 1 (*not at all*) to 9 (*very*) to the following questions: "How important do you think it is to learn more about people with schizophrenia and mental health problems?"; "How willing would you be to participate in a discussion group that includes students and people with schizophrenia that will focus on issues of stigmatization and mental health problems in the UK?"; "Thinking about the next time you find yourself in a situation where you could interact with a person with schizophrenia (e.g., queuing for a bus, with friends in a cafe, etc.), how likely do you think it is that you would strike up a conversation?"; "How interested would you be in striking up a conversation?"; "How much do you think you would like to strike up a conversation?" ($\alpha = .78$).

After reporting their demographic information, participants were debriefed and thanked for their participation.

Results

Independent-sample *t*-tests were conducted in order to test the effects of imagined contact on stereotyping of people with schizophrenia, intergroup anxiety, and intentions to engage in future contact. The results revealed that following imagined contact there was reduced anxiety ($M = 3.47$) compared to the control condition ($M = 4.04$), $t\ (55) = 1.97$, $p = .05$, $d = 0.53$. A significant difference between the control and the experimental conditions on the index of stereotyping was also revealed, $t\ (55) = 2.97$, $p = .004$, $d = 0.80$. In the imagined contact condition participants reported less stereotyping of people with schizophrenia ($M = 3.40$) compared to the control condition ($M = 3.98$). Finally, intentions to engage in future contact were higher after imagining contact ($M = 6.95$) compared to the control condition $M = (6.23)$, $t\ (51.53) = -2.48$, $p = .017$, $d = -0.69$[1]. Means, standard deviations and correlations between the variables can be found in table 1.

Mediational Analyses

Regression analyses were used to test the mediational path from condition (coded 0 for the control condition and 1 for imagined contact) to stereotyping and intentions to engage in contact with people with schizophrenia via reduced anxiety.

Stereotyping. The pathway between the predictor (condition) and stereotyping was significant, $\beta = -.372$, $t = -2.97$, $p = .004$. Condition also predicted the mediator, anxiety, $\beta = -.257$, $t = -1.97$, $p = .05$. The path between anxiety and stereotyping controlling for the condition was also significant $\beta = .468$, $t = 4.098$, $p < .0005$. Controlling for the mediator the significant relationship between

TABLE 1. Means, Standard Deviations and Correlations Between All Variables

Variable	*M* (*SD*)	1	2	3	4
Condition (coded 0 for the control and 1 for imagined contact)	–	–	−.257†	−.372**	.306*
Intergroup anxiety	3.78 (1.11)	–	–	.533***	−.415***
Stereotyping	3.71 (.77)	–	–	–	−.434***
Future contact intentions	6.56 (1.20)	–	–	–	–

†$p = .053$
*Correlation is significant at the .05 level (2-tailed)
**Correlation is significant at the .01 level (2-tailed)
***Correlation is significant at the .001 level (2-tailed)

condition and stereotyping became less reliable, $\beta = -.252$, $t = -2.20$, $p = .032$. Following Preacher and Hayes's (2008) recommendations, we estimated the significance of the indirect effect of imagined contact on stereotyping through anxiety using a bootstrapping approach with 5000 samples. This analysis yielded a 95% CI [–.43, −.01]. Since the CI did not include zero, the indirect effect is estimated to be significant (MacKinnon, Lockwood, & Williams, 2004). Therefore, as predicted, the impact on stereotyping of imagined contact was mediated by reduce intergroup anxiety.

Intentions for future contact. The pathway between the predictor (condition) and intentions was significant, $\beta = .309$, $t = 2.41$, $p = .019$. Condition also predicted the mediator, anxiety, $\beta = -.257$, $t = -1.97$, $p = .05$. The path between anxiety and intentions controlling for the condition was also significant $\beta = -.357$, $t = -2.856$, $p = .006$. Controlling for the mediator the significant relationship between condition and intentions became marginally significant, $\beta = .217$, $t = 1.739$, $p = .088$. Again using the Preacher and Hayes's (2008) bootstrapping approach with 5000 samples we computed a 95% CI [.04, .57]. Since the CI did not include zero, the indirect effect is estimated to be significant. Therefore, as predicted, the impact on intentions to engage in future contact of the imagined contact task was mediated by reducing intergroup anxiety.

Discussion

Aiming to provide further experimental support to the imagined contact hypothesis and to help improve attitudes toward stigmatized groups, we conducted a study testing this recently developed approach in the context of mental health. Participants were either instructed to imagine a positive and comfortable encounter with a person with schizophrenia or an outdoor scene. The results confirmed the hypotheses. Mentally simulating a positive interaction with a person with schizophrenia resulted in greater intentions to engage in contact with people with schizophrenia and reduced endorsement of stereotypes. Further analysis showed that imagined contact led to greater intentions for real contact via reducing intergroup anxiety. In other words, after a mental rehearsal of a contact experience with a person with schizophrenia, people were more affectively favorable toward people with schizophrenia. After imagined contact, participants felt less anxious about interacting with them, a process that led to less stereotyping and increased intentions to seek out real, direct contact. This is in line with research in Tropp and Pettigrew's meta-analysis (2005), which showed that stereotypes correlate negatively with negative emotions. Furthermore, our study replicates research regarding the role of anxiety as a key underlying factor of the imagined contact effects (for a detailed discussion see Stathi, Crisp, Turner, West, & Birtel, 2012), here extended to the domain of stereotyping.

Implications for Combating the Stigma of Mental Illness

The current study yielded some positive results and showed that imagined contact is beneficial in reducing the stigma of mental illness. Prejudice and prejudice-reduction research has suggested that in intergroup contexts people must be sufficiently motivated to focus on information about outgroups in order to decrease strong reliance on stereotypes (Moreno & Bodenhausen, 1999; Operario & Fiske, 2001). The fact that imagined contact can help combat negative stereotyping and facilitate future real contact encounters (Crisp & Turner, 2009; Stathi et al., 2011), via reducing anxiety about interacting with schizophrenic people, is of key importance. We suggest that mental imagery of intergroup contact could be an important first step of an integrated intervention package to help combat mental health stigma. The mental rehearsal of contact experiences with people who have mental illnesses can enable a lay person to pursue direct contact with a more open mind and significantly reduced biases toward this population. Resting upon the vast evidence with regard to the benefits of contact on attitudes (for a review, see Pettigrew & Tropp, 2006) we can be hopeful that bringing together the lay public with people who suffer from schizophrenia can help combat the stigma and prejudice.

A school intervention among German students used by Schulze, Richter-Werling, Matschinger, and Angermeyer (2003) is of relevance here. This project was carried out in the course of a school-week. Through the use of artwork and games, students first discussed their experiences of stressful events, thinking about life facts that can lead to mental health problems. Subsequent to a general discussion on mental illness and sharing of personal experiences and aims, students met with young people with schizophrenia, who talked about their mental health problems and their experiences of stigmatization. This interactive project, titled "Crazy? So what!" produced significant change in attitudes toward people with schizophrenia, when compared with attitudes prior to the intervention, and more positive views among students who took part in the program in comparison with the control groups. Positive effects were still evident after one month (see Schulze et al., 2003). Even though this project did not involve mental simulations of contact, it did involve thinking about life crises, emotional well-being and being different. Hence, it did involve some kind of mental simulation, at least of the context of mental illness. It could be further argued that a similar project, involving simulated contact and subsequent actual interactions with the outgroup, would produce even more positive results.

One might ask whether our design was susceptible to demand characteristics. There are a number of reasons why we do not believe experimental demand played any role in the observed results. Extensive research on imagined contact has ruled out this possibility. Turner et al. (2007) show that in post experimental debriefing that participants were not able to guess the imagined contact experimental hypothesis. Turner and Crisp (2010) have subsequently shown that imagined contact reduces implicit prejudice measured using response times. It is highly unlikely that

participants would have been able to modify their responses on such a task. These studies have also ruled out informational load (Turner et al., Study 1), stereotype priming (Turner et al., Study 2), positive affective priming and non-relevant social interaction (Stathi & Crisp, Study 2) as alternative explanations for the imagined contact effect. It is, uniquely, the mental simulation of positively toned intergroup contact that improves intergroup attitudes in these studies. Furthermore, the use of a between-subjects design, and in two of the studies a comparison between imagined contact and elaborated imagined contact (which would be indistinguishable from perceivers' point of view) makes a demand explanation unlikely here. However, future research should continue to use a wide range of possible control conditions to further confirm the unique effects of positive contact simulations on intergroup perceptions.

Previous research on imagined contact has also ruled out a number of alternative explanations by utilizing various control conditions. These have included informational load (Turner et al., 2007, Experiment 1), non-relevant positive interaction (Stathi & Crisp, 2008, Experiment 2), outgroup priming (Turner et al., Experiment 2), neutral contact (Stathi & Crisp, Experiment 1; Turner et al., Experiment 1), and no-contact mental imagery (Stathi & Crisp, Experiment 3; Turner et al., Experiment 1). Overall, the mental simulation of positive intergroup contact reduces bias against all of these control conditions.

Future research should delve deeper into the underlying processes of the effects of imagined contact in the context of people with mental health problems. Anxiety about interacting with these people can be further explored with more elaborate measures. Also, an alternative positively focused affective factor that could play a critical role in the effectiveness of imagined contact is empathy. To our knowledge no research has yet explored the potential mediating role of empathy in imagined contact effects, and this may well be a fruitful direction for future research.

Ultimately, the flexibility and power of imagined contact as a tool in the arena of improving intergroup relations has been demonstrated, which allows us be optimistic about its benefits in promoting actual contact. The simplicity and effectiveness of this novel approach may prove valuable to educators and policy makers in efforts to reduce prejudices, and promote greater tolerance and social inclusion.

NOTE

1. Levene's test for homogeneity of variance was significant for intentions to engage in future contact so the reported results for the *t*-test does not assume equal variance.

AUTHOR NOTES

Sofia Stathi is affiliated with the University of Greenwich. **Katerina Tsantila** is affiliated with the University of Kent. **Richard J. Crisp** is affiliated with the University of Kent.

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