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An online intervention using information on the mental health-mental illness continuum to reduce stigma

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ABSTRACT

Background: A core component of stigma is being set apart as a distinct, dichotomously different kind of person. We examine whether information on a continuum from mental health to mental illness reduces stigma.
Method: Online survey experiment in a quota sample matching the German population for age, gender and region (n = 1679). Participants randomly received information on either (1) a continuum, (2) a strict dichotomy of mental health and mental illness, or (3) no information. We elicited continuity beliefs and stigma toward a person with schizophrenia or depression.
Results: The continuum intervention decreased perceived difference by 0.19 standard deviations (SD, $P < 0.001$) and increased social acceptance by 0.18 SD ($P = 0.003$) compared to the no-text condition. These effects were partially mediated by continuity beliefs (proportion mediated, 25% and 26%), which increased by 0.19 SD ($P < 0.001$). The dichotomy intervention, in turn, decreased continuity beliefs and increased notions of difference, but did not affect social acceptance.
Conclusion: Attitudes towards a person with mental illness can be improved by providing information on a mental health-mental illness continuum.

1. Introduction

Changing the stigma of mental illness has proven a difficult task [1]. Recent time trend studies on the stigma of mental illness have shown that public attitudes towards persons with depression or alcohol dependence have barely changed over the last twenty-five years, while attitudes towards persons with schizophrenia have worsened [2–6]. Hence, established anti-stigma strategies have to be reconsidered, and there is a pressing need for novel approaches.

Such a novel approach could involve promulgating the idea of a mental health-mental illness continuum. A continuum model corresponds to findings of epidemiological studies on the prevalence and severity of symptoms of mental illness among the general population. Continua from a few mild symptoms to many severe symptoms have been found for psychiatric disorders, like schizophrenia [7], depression [8], or alcohol dependence [9]. Stressing the continuous nature of mental distress has already been discussed as a potentially useful anti-stigma strategy [10]. The idea of replacing a perceived fundamental, qualitative difference between those with and those without mental disorder with a more quantitative difference on a symptom continuum is in line with current models of the stigma process: The widely used model proposed by Link and Phelan [11,12] posits the separation between 'us' and 'them' as central to the stigma process. Stressing the normality of mental illness symptoms could reduce separation: "if we are all affected – who are 'the mentally ill'?" ([9], p. 442). In fact, observational studies suggest that continuity beliefs are

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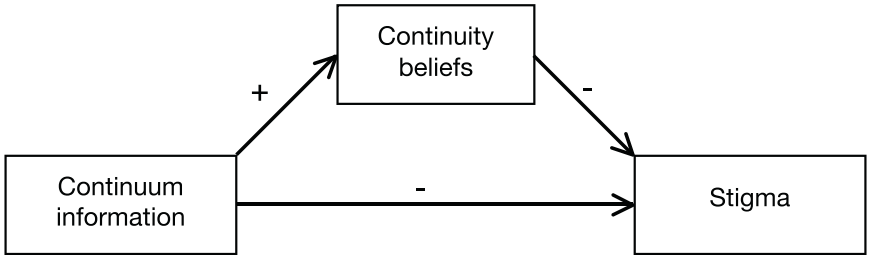

Fig. 1. Hypothesized effect of continuum information on continuity beliefs and stigma.

associated with less stigma. Surveys among large samples of the general population in Germany [13] and France [14] showed that endorsement of a mental health-mental illness continuum was associated with less fear, more empathy and less desire for social distance from a person with schizophrenia, depression, or alcohol dependence as described in a case vignette with no diagnostic label. An online-study of a convenience sample of 120 adults found continuum beliefs regarding schizophrenia associated with less negative stereotypes [15]. However, there have also been warnings of possible side effects of a continuity approach. Potentially, 'likeness-based' messages could increase notions of blame and foster the false belief that persons with mental illness only 'have to pull themselves together', thereby worsening stigma instead of reducing it [16,17]. So far, it has not been tested whether the provision of continuum information does change the stigma of mental disorder, and whether it carries any unwanted side effects.

In this study, we conduct an online survey experiment in a population sample in Germany to examine how information on the mental health-mental illness continuum affects attitudes towards a person with mental illness. The hypotheses tested in this study are conceptualized in Fig. 1. We assume that a continuum intervention reduces stigma, and that this effect is mediated by increasing continuity beliefs. Hence, we will first test the effect of a continuum intervention on continuity beliefs and stigma, and then examine whether the effect of the continuum intervention on stigma is mediated by continuity beliefs.

2. Methods

2.1. Sample

We conducted an online survey among persons > 15 years old from an established market research panel in Germany. Participants were contacted by email in November 2014 and asked to complete an online questionnaire. Sampling was stratified for age, gender and place of residence of the respondents, resulting in a sample matching the general population for these characteristics. A total of 12,321 email invitations were sent out, and respondents were included until the predefined quota for age, gender and place of residence were accomplished in the final sample of those completing the interview. Two thousand four hundred and eighty-five persons started the interview, 350 respondents were rejected because of full quota. Of 2135 respondents randomized, 456 dropped out before finishing the interview, resulting in a final sample of 1679 persons completing the entire interview. This final sample consisted of 51% women, 21% of the sample being 15–24 years, 14% 25 34 years, 19% 35–44 years, 16% 45–55 years, and 29% > 55 years of age, which corresponds exactly to the general population in Germany. Participants were, however, on average better educated than the general population: 44% had completed 12 or 13 years of schooling (general population: 27%), 34% 10 years of schooling (general population: 29%), and 22% had completed 9 years of schooling or less (general population: 43%). The study was approved by the Greifswald University institutional review board.

2.2. Interview

2.2.1. Intervention

Respondents were randomly assigned one of three different conditions: They either received a text explaining the mental health-mental illness continuum (n = 554), a text of similar length and topic, but different message, describing a strict dichotomy of mental health and mental illness (n = 530), or no-text (n = 595). We were thus able to compare attitudes elicited after a continuum message to attitudes elicited absent of any message, and to attitudes elicited after an oppositely framed message. Both intervention texts were drafted to resemble a short newspaper article on mental illness. They contained reference to a fictitious study and a researcher "Dr. Harald Buch" endorsing the text's message, and were similar in length and language. Apart from the fictitious researcher and study, we were careful not to include false information in both texts. The continuum intervention text was headed by "Is there a sharp line between mental illness and mental health? No, it's a matter of degree", the dichotomy text was headed "How can we distinguish mental illness from mental health? There are clear differences."While the continuum text provided information on the high prevalence and different degree of severity of psychiatric symptoms, the dichotomy text focused on the unique experience of severe mental illness. So, for example, both interventions referred to "anhedonia, or 'loss of interest', a core symptom of depression", followed by different explanations from Dr. Buch. In the continuum intervention, he was cited "One in four persons in our study stated that they had experienced this at some point during the last two weeks. Some told us they experienced it strongly all the time, whereas others said they experienced it much less strongly and for shorter periods of time". In the dichotomy intervention, Dr. Buch stated "In mental illness, this means a complete inability to feel any pleasure. Such experiences are truly beyond the imagination of healthy people". For the full text of both interventions, see Appendix A. Participants were instructed to read the information carefully and answer the subsequent questions.

2.2.2. Mental illness case vignettes

After reading the intervention texts, or at the beginning of the interview in the no-text-condition, respondents were randomly assigned to read different versions of a case vignette of a woman, Anne, who experienced either symptoms of severe depression or acute schizophrenia. The case vignettes were adopted from vignettes used in representative population studies conducted in Germany that had been validated by trained experts in psychopathology [2]. They did not contain a diagnostic label. After reading the case vignettes, respondents answered questions regarding their attitudes and beliefs about Anne.