Stigmatization and severe mental disorders

Ivars Neiders (ivars.neiders@lu.lv)

Signe Mežinska (signe.mezinska@lu.lv)

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Stigmatization

Stigma: “a sign of a mark that designates the bearer as defective and therefore meriting less valued treatment than ‘normal’ people” (Biernat and Dovidio 2000, 88).

Goffman (1963) has argued that there are three types of stigmatising conditions:

(1) tribal (e.g., race or sex);

(2) blemishes of an individual’s character (e.g., mental disorders or addictions) or

(3) bodily abnormalities (such as physical disability or disease).

It has been suggested that individuals and their families affected by mental illness are the group of people most likely to be affected by disease-associated stigma. (Austin and Honer 2005; Goffman 1963).”

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Factors Associated With Stigmatization of Persons With Mental Illness

Caroline E. Mann
Melissa J. Himelein, Ph.D.

Stigmatization of individuals with mental illnesses is widespread and serves as a major barrier to treatment. In a survey of 116 undergraduates, the authors examined the impact of diagnosis, attitudes about treatment, and psychiatric terminology on stigma associated with mental illness. Stigmatization of schizophrenia was significantly higher than stigmatization of depression. More positive attitudes toward treatment were associated with significantly less stigma. However, psychiatric terminology had no impact on attitudes toward mental illness. Significantly less stigmatization of mental illness was found among females than among males. Reducing the stigmatization of mental illness continues to be an important goal for mental health professionals. (*Psychiatric Services* 55:185–187, 2004)

The stigmatization of persons with mental illnesses continues to be a primary deterrent to prevention and treatment efforts. A recent review of research on stigma documented discrimination against persons with mental illnesses in housing, jobs, and social interactions (1). Furthermore, empirical studies published [illegible] illness by surveying the public about attitudes toward "mental patients" or "persons with mental illness," terms that likely evoke images of chronic psychopathology. Consequently, it is unclear whether evidence of stigma is indicative of prejudice toward all mental illness or only its more severe forms. Although some studies have focused on the stigma associated with specific disorders (5,6), most researchers have chosen to blend subtypes into one catchall phrase.

Yet, with increased media coverage of precisely named psychological disorders such as "depression" and "bipolar disorder," it seems unlikely that the average adult construes men-

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Effects of Stigma (Kvaale et al 2013)

- **Stigma:**
- can be a barrier to help-seeking (Barney, Griffiths, Jorm, & Christensen, 2006; Christiana et al., 2000; Corrigan & Rüsch, 2002; Mojtabai, 2010);
- makes employment and accommodation harder to find (Alisky & Iczkowski, 1990; Bordieri & Drehmer, 1986; Brohan et al., 2012; Page, 1977, 1995; Thornicroft, Brohan, Rose, Sartorius, & Leese, 2009);
- is associated with loss of interpersonal contacts and roles (Cechnicki, Angermeyer, & Bielanska, 2011; Schulze & Angermeyer, 2003; Thornicroft et al., 2009);
- can lead to hopelessness about recovery and symptom exaggeration (Livingston & Boyd, 2010);
- represents a chronic challenge to emotional well-being and self-esteem (Livingston & Boyd, 2010; Richman & Leary, 2009; Wright, Gronfein, & Owens, 2000) that is perhaps as detrimental to the individual as the mental disorder itself (Corrigan & Penn, 1999).

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Stigmatisation & Discrimination

- **Stigmatisation can worsen the condition of a person at risk**
- *"There is evidence that individuals experiencing prodromal symptoms of psychosis are already stigmatized, and **the stress associated with mental health stigma, including self-stigma, during this prodromal stage can increase the rate of transition to schizophrenia** (Baba et al., 2017; Rusch et al., 2015). Self-stigma can also cause demoralization that results in lack of motivation to pursue employment or other life opportunities (Corrigan, 2004). Furthermore, people who are labeled as mentally ill often **seek to avoid stigma by concealing their disorder** (Corrigan & Matthews, 2003) or **denying mental health status altogether** (Corrigan, 2004), both of which significantly impede access to mental health care."* Brannan (2019)

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Stigmatisation & Discrimination

Duality in attitudes about predictive testing

- "*Moreover, the fact that psychiatric disorders such as depression and dementia are often accompanied by stigma and* ***discrimination can be used to support or oppose predictive testing.*** *On the one hand,* ***awareness of the genetic origins of some disorders reinforces the idea that abnormal behaviour is not something to be blamed for but the symptom of a disease.*** *On the other hand,* ***when confidentiality is not respected, knowledge that one is at high risk of developing a certain disorder can give rise to discrimination*** *(eg, by insurance companies or employers).*" Bortolotti (2011) - The right not to know: The case of psychiatric disorders

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Stigmatisation & Discrimination

- *"Almost all respondents thought that compared with somatic illnesses, there is greater stigma associated with psychiatric illnesses, asserting that psychiatric disorders are less understood and often more feared than other bodily illnesses.* ***The majority of participants believed that advances in genetic understanding of psychiatric disorders would lead to decreased discrimination toward these illnesses, while a minority believed it would lead to increased discrimination.***" Erickson (2011) - Ethical Considerations and Risks in Psychiatric Genetics: Preliminary Findings of a Study on Psychiatric Genetic Researchers

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Biomedical explanation of mental disorders and optimism

- A strong stigmatizing factor is the lack of public knowledge biological and genetic basis of schizophrenia.
- Therefore, if the public sees schizophrenia as a biological disease with a firm genetic basis, this will decrease the stigmatization (by removing the «fear of the unknown» that surrounds the disease and by making people less likely to attribute the symptoms to bad parenting or weak character) (Green 2001; Phelan 2002).
- However, there is a body of empirical evidence that this kind of optimism in unfounded.

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The 'side effects' of medicalization: A meta-analytic review of how biogenetic explanations affect stigma

Erlend P. Kvaale [a,*], Nick Haslam [a], William H. Gottdiener [b]

[a] Melbourne School of Psychological Sciences, University of Melbourne, Parkville, Australia
[b] Department of Psychology, John Jay College of Criminal Justice, City University of New York, NY, USA

HIGHLIGHTS

- Biomedical perspectives shape contemporary thinking about psychological problems.
- We quantitatively reviewed how biogenetic explanations affect stigma.
- Biogenetic explanations reduce blame, but induce pessimism about recovery.
- Biogenetic explanations do not affect desire for distance.
- Medicalization is no cure for stigma and may create barriers to recovery.

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ABSTRACT

Reducing stigma is crucial for facilitating recovery from psychological problems. Viewing these problems biomedically may reduce the tendency to blame affected persons, but critics have cautioned that it could also increase other facets of stigma. We report on the first meta-analytic review of the effects of biogenetic explanations on stigma. A comprehensive search yielded 28 eligible experimental studies. Four separate meta-analyses (*Ns* = 1207–3469) assessed the effects of biogenetic explanations on blame, perceived dangerousness, social distance, and prognostic pessimism. We found that biogenetic explanations reduce blame (Hedges $g = -0.324$) but induce pessimism (Hedges $g = 0.263$). We also found that biogenetic explanations increase endorsement of the stereotype that people with psychological problems are dangerous (Hedges $g = 0.198$), although this result could reflect publication bias. Finally, we found that biogenetic explanations do not typically affect social distance. Promoting biogenetic explanations to alleviate blame may induce pessimism and set the stage for self-fulfilling prophecies that could hamper recovery from psychological problems.

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Review

Biogenetic explanations and stigma: A meta-analytic review of associations among laypeople

Erlend P. Kvaale [a,*], William H. Gottdiener [b], Nick Haslam [a]

[a] Melbourne School of Psychological Sciences, University of Melbourne, Parkville, Australia
[b] Department of Psychology, John Jay College of Criminal Justice of the City University of New York, New York, USA

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ABSTRACT

The stigma and social rejection faced by people with a mental disorder constitute a major barrier to their well-being and recovery. Medicalization has been welcomed as a strategy to reduce blame and stigma, although critics have cautioned that attributing mental disorders to biogenetic causes may have unintended side effects that could exacerbate prejudice and rejection. The present study presents a quantitative synthesis of the literature on relationships between biogenetic explanations for mental disorders and three key elements of stigma, namely blame, perceptions of dangerousness, and social distance. A comprehensive search yielded 25 studies meeting the inclusion criteria. Separate meta-analyses (Ns = 4278–23,816) were conducted for the three stigma types, and assessed the consistency of effects across subgroups of studies involving different types of biogenetic explanations, mental disorders, and samples. We found that people who hold biogenetic explanations for mental disorders tend to blame affected persons less for their problems ($r = -0.19$), but perceive them as more dangerous ($r = 0.09$) and desire more distance from them ($r = 0.05$). The negative association with blame was significant for schizophrenia, belief in genetic causation, and in student samples. The positive association with dangerousness was significant for all disorders, belief in general biogenetic causation, and in community samples. The positive association with social distance was significant for schizophrenia, beliefs in neurochemical and general biogenetic causation, and in community samples. Nevertheless, across all analyses, biogenetic explanations were only weakly related to stigma. We conclude that biogenetic explanations for mental disorders confer mixed blessings for stigma.

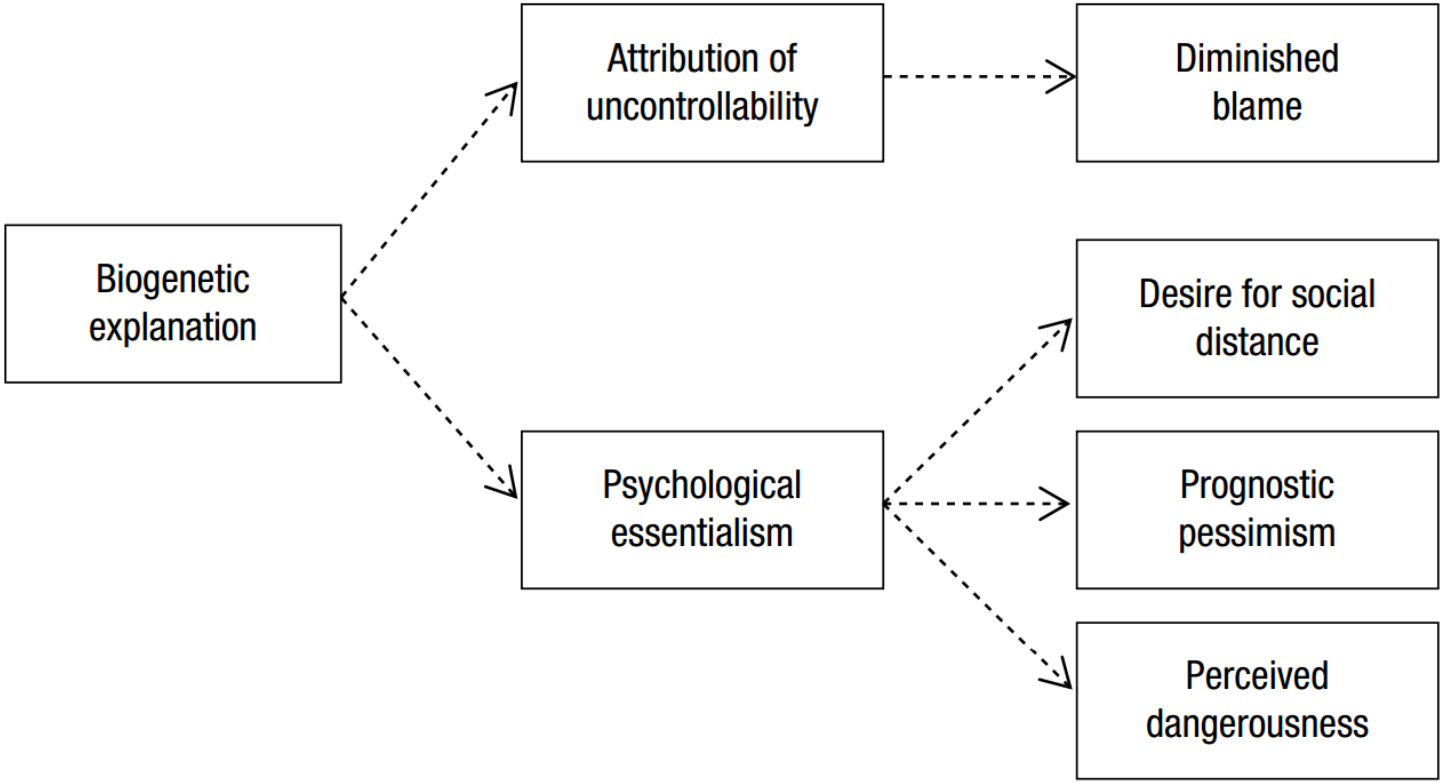

Fig. 1. The mixed-blessings model of biogenetic explanations and stigma. Because they engender two distinct ways of thinking about people with mental disorders (attribution of uncontrollability of symptoms and psychological essentialism), biogenetic explanations reduce one facet of stigma (blame) but increase three others (desire for social distance, prognostic pessimism, and perceived dangerousness).

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The «mixed-blessings model» (Haslam & Kvaale 2015)

- “Ideas of “genetic essentialism” and “neuro-essentialism” can help account for the dark side of our mixed-blessings model—namely, the links between biogenetic explanations and greater stigma. **First**, these explanations promote a desire for social distance from people with mental disorders because they portray them as categorically different: possessors of the pathological essence. **Second**, by triggering essentialist thinking, biogenetic explanations promote the view that mental disorders are not malleable, encouraging prognostic pessimism. **Third**, because essentialist thinking is associated with the endorsement of social stereotypes, biogenetic explanations are associated with acceptance of the widespread stereotype that people with mental disorders are unpredictable and dangerous.”

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The Influence of Using Novel Predictive Technologies on Judgments of Stigma, Empathy, and Compassion among Healthcare Professionals

Daniel Z. Buchman[a,b,c], Daphne Imahori[a], Christopher Lo[b,d,e], Katrina Hui[a,d], Caroline Walker[a], James Shaw[c,d], and Karen D. Davis[d,f]

[a]Centre for Addiction and Mental Health; [b]Dalla Lana School of Public Health, University of Toronto; [c]University of Toronto Joint Centre for Bioethics; [d]Temerty Faculty of Medicine, University of Toronto; [e]College of Healthcare Sciences, James Cook University, Singapore; [f]Krembil Brain Institute, University Health Network

ABSTRACT

Background: Our objective was to evaluate whether the description of a machine learning (ML) app or brain imaging technology to predict the onset of schizophrenia or alcohol use disorder (AUD) influences healthcare professionals' judgments of stigma, empathy, and compassion.

Methods: We randomized healthcare professionals ($N = 310$) to one vignette about a person whose clinician seeks to predict schizophrenia or an AUD, using a ML app, brain imaging, or a psychosocial assessment. Participants used scales to measure their judgments of stigma, empathy, and compassion.

Results: Participants randomized to the ML vignette endorsed less anger and more fear relative to the psychosocial vignette, and the brain imaging vignette elicited higher pity ratings. The brain imaging and ML vignettes evoked lower personal responsibility judgments compared to the psychosocial vignette. Physicians and nurses reported less empathy than clinical psychologists.

Conclusions: The use of predictive technologies may reinforce essentialist views about mental health and substance use that may increase specific aspects of stigma and reduce others.

KEYWORDS

Brain imaging; empirical bioethics; healthcare workers; machine learning; mental disorders; neuroethics; stigma; substance-related disorders

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	Machine Learning App	Brain Imaging	Psychosocial (Control)
Schizophrenia	Your colleague tells you about a patient, Jane, a 22-year-old woman who has a family history of mental illness. At a recent appointment, Jane reported that she is worried about developing schizophrenia in the future. Your colleague wants to accurately predict whether Jane will develop schizophrenia. **She asks Jane to download an approved passive mobile data collection app on her smartphone for two weeks. The app discreetly analyzes Jane's data including web browser history, emails, text messages, and social media posts, as well as geolocation and sleep patterns. Using machine learning, the app generates predictions about the user's future health.** Your colleague gets the results which indicate **atypical thinking, as well as cognitive and frequent mood changes. This suggests that Jane is likely to develop schizophrenia.**	Your colleague tells you about a patient, Jane, a 22-year-old woman who has a family history of mental illness. At a recent appointment, Jane reported that she is worried about developing schizophrenia in the future. Your colleague wants to accurately predict whether Jane will develop schizophrenia. **She orders a functional MRI (fMRI) scan of Jane's brain to identify biomarkers.** Your colleague gets the results which indicate **abnormal activity patterns in the fronto-limbic circuits, areas of the brain which mediate cognition and emotional states. This suggests that Jane is likely to develop schizophrenia.**	Your colleague tells you about a patient, Jane, a 22-year-old woman who has a family history of mental illness. At a recent appointment, Jane reported that she is worried about developing schizophrenia in the future. Your colleague wants to accurately predict whether Jane will develop schizophrenia. **She takes a medical history and conducts a psychosocial assessment and physical exam.** Your colleague gets the results which indicate **various psychosocial risk factors, including Jane having an older father and growing up downtown in a major city. This suggests that Jane is likely to develop schizophrenia.**

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Alcohol Use Disorder	Your colleague tells you about a patient, Jane, a 22-year-old woman who has a family history of addiction. At a recent appointment, Jane reported that she is worried about developing an addiction to alcohol in the future. Your colleague wants to accurately predict whether Jane will develop an alcohol use disorder. **She asks Jane to download an approved passive mobile data collection app on her smartphone for two weeks. The app discreetly analyzes Jane's data including web browser history, emails, text messages, and social media posts, as well as geolocation and sleep patterns. Using machine learning, the app generates predictions about the user's future health.** Your colleague gets the results back which indicate **atypical thinking, as well as cognitive and frequent mood changes. This suggests that Jane is likely to develop an alcohol use disorder.**	Your colleague tells you about a patient, Jane, a 22-year-old woman who has a family history of addiction. At a recent appointment, Jane reported that he is worried about developing addiction to alcohol in the future. Your colleague wants to accurately predict whether Jane will develop an alcohol use disorder. **She orders a functional MRI (fMRI) scan of Jane's brain to identify biomarkers.** Your colleague gets the results back which indicate **abnormal activity patterns in the fronto-limbic circuits, areas of the brain which mediate cognition and emotional states. This suggests that Jane is likely to develop an alcohol use disorder.**	Your colleague tells you about a patient, Jane, a 22-year-old woman who has a family history of addiction. At a recent appointment, Jane reported that she is worried about developing addiction to alcohol in the future. Your colleague wants to accurately predict whether Jane will develop an alcohol use disorder. **She takes a medical history and conducts a psychosocial assessment and physical exam.** Your colleague gets the results back which indicate **various psychosocial risk factors, including Jane having an older father and growing up downtown in a major city. This suggests that Jane is likely to develop an alcohol use disorder.**

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Results

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Results

and compassion. Our results suggest what Haslam and Kvaale (2015) have referred to as a "mixed blessing" model of stigma, meaning that perceptions of predictive technologies in MHSUD can help reduce some forms of stigma while simultaneously increasing other forms.

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Results

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We found that exposure to the ML vignette decreased participants' levels of anger toward Jane but had the detrimental effect of increasing fear, relative to the psychosocial vignette. Additionally, exposure to the brain imaging vignette was associated with higher reported feelings of pity relative to both ML and psychosocial vignettes, respectively. Our results also suggest that exposure to the psychosocial vignette increased healthcare professionals' perception that people are somewhat personally responsible for developing their condition. When compared to both brain imaging and ML vignettes, healthcare professionals reading the psychosocial language attributed greater personal responsibility to the character of Jane. This could be in part because such assessments draw heavily upon patient self-report and speculation on the relative weights of family history, circumstances, and environmental interactions.

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Questions?

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