

Imagined Disclosure of a Close Other's Mental Health Status: A Strategy for Reducing Stigma
by Association

by

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Abstract

The present research applied imagined contact theory (Crisp & Turner, 2009) to the context of stigma by association, or stigma of mental illness as it relates to individuals associated with persons accessing mental health services. Mental imagery was used to address stigma in a sample of university students ($N = 127$). Participants, who had close relationships with someone with a mental health condition, were randomly assigned to one of two conditions, imagined contact group or control group. The former group imagined positively disclosing to a stranger the closer other's mental health status and the latter group imagined nature. In addition to assessing the effects of imagined contact on stigma by association, the research assessed if this depends on the quantity of prior disclosures, and quality of prior disclosures of the close other's mental health condition. The criterion variables were stigma by association, affiliate stigma, and self-efficacy expectancy. Contrary to expectations, imagined contact did not have significant effects on stigma by association, self-efficacy expectancy, or affiliate stigma. Importantly, however, quality of prior disclosure predicted stigma by association, self-efficacy expectancy, and affiliate stigma. In addition, participants' quantity of prior disclosure was a significant predictor for stigma by association, self-efficacy expectancy, and marginally predicted affiliate stigma. These findings carry practical implications and lend to the discussion of future directions regarding disclosures regarding mental health conditions.

Keywords: stigma by association, imagined contact, quality and quantity of prior contact

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Imagined Disclosure of a Close Other's Mental Health Status: A Strategy for Reducing Stigma by Association

The experience of stigma is upsetting for the person accessing mental health services, and it can also involve family members, loved ones, and close friends. In Canada, 38.5% of individuals treated for mental illness indicated unfair treatment due to current or past mental health or emotional problems (Stuart, Patten, Koller, Modgill & Liinama, 2014). Personal and romantic relationships were recognised as life domains most affected by stigma, with 32% and 30% attributed to each, respectively (Stuart et al., 2014). With the experience of mental health-related symptoms, individuals accessing mental health services also face stressors that stem from their surrounding social environment reaching beyond the individual level to include experiences in the context of social relationships (Schulze & Angermeyer, 2003). Hence, mental illness stigma includes those who are close to the person accessing mental health services.

It has been suggested that stigma occurs on three levels; societal, interpersonal, and individual (Bos, Pryor, Reeder, & Stutterheim, 2013). Along all levels, the stigma process includes stereotypes; blanket statements about groups of people, which gain meaning when individual people are judged on the basis of group membership (Larson & Corrigan, 2008). Once individuals endorse and agree with stereotypes, it is then referred to as prejudice (Larson & Corrigan, 2008). Prejudice generates emotional evaluation that leads to discrimination, the behavioural outcome of stigma (Larson & Corrigan, 2008).

Stigmatisation carries real consequences for the person accessing mental health services and the associated individual. The experience of stigma complicates the associated individual's ability to serve as a caregiver, financial supporter, treatment seeker, and advocator to the individual with the mental health condition (Hinshaw, 2007). Individuals who are close to the

person accessing mental health services are particularly vulnerable to devaluation by the general public because of their pre-existing interpersonal relationship. The potential for persons associated with a stigmatised individual to be devalued exemplifies courtesy stigma (Goffman, 1963) and is comparable to associative stigma (Mehta & Farina, 1988), which is more commonly referred to as stigma by association (Ostman & Kjellin, 2002). Family stigma has also been proposed as an efficient way of referring to the prejudice and discrimination experienced by individuals related to someone experiencing mental health issues (Gela & Corrigan, 2015). For the present study, stigma by association will be the term used throughout. Furthermore, the process of internalising the devalued views will be referred to as affiliate stigma (Mak & Cheung, 2008).

As stigma surrounding mental illness remains a prominent concern, further research into stigma reduction is needed. Few researchers have examined techniques for reducing the stigma associated with mental illness that is specifically targeted towards individuals who are close to the person accessing mental health services. The indirect approach of imagined contact (Crisp & Turner, 2009), based on intergroup contact theory (Allport, 1954), has shown to be effective in reducing intergroup prejudice across a broad range of contexts. In particular, imagined contact has been applied within the context of mental illness stigma (Crisp & Turner, 2009). Hence, the present study extends the application of mental imagery to address stigma related measures. Also, it assessed whether imagined contact could help members of a stigmatised group feel more efficacious regarding their contact with the majority. By imagining a successful disclosure of a close other's mental health status, this study proposes that individuals who are in relationships with people accessing mental health services may be better equipped to deal with stigma related feelings.

Conceptualizations of Stigma

Stigma is a phenomenon that has been explored differently depending on the circumstance in which it has been applied and the interdisciplinary nature of its research. Still, the conceptualisation proposed by Goffman (1963) remains relevant to this day. Goffman defined stigma as an “attribute that is deeply discrediting” (p. 3) reducing the individual “from a whole and usual person to a tainted, discounted one” (p. 3). Mental illness and addiction are categorised as blemishes of individual character. Differences are either classified as discredited or discreditable: The former reflects overt signs of deviance, such as birth defect, whereas the latter denotes differences that are not obvious, such as certain mental health conditions, but if discovered would greatly impact personal reputation. Visible sources of stigma discredit a person immediately whereas concealed stigmatisation results in complicated social and personal consequences.

Labelling and Mental Illness

Given the personal and social consequences for the stigmatised individual, researchers have examined the impact of labelling on mental illness through the labelling theory (Scheff, 1966), the medical model (Gove & Fain, 1973), and the modified labelling theory (Link, Cullen, Struening, Shrout, & Dohrenwend, 1989). Scheff (1966) stated that the label ‘mentally ill’ causes society to treat the stigmatised as deviants. As such, feelings of fear toward people with mental health conditions are what lead to social distancing and minimal interaction. Hence, people with mental health conditions continue to exhibit deviant behaviour congruent with the label because they are socialised into the role. The medical model of Gove and Fain (1973) criticised the view that labels create negative social consequences. In their view, negative reactions emanate from the aberrant behaviour exhibited by individuals with mental illness.

Furthermore, relapse in illness is the recurrence of the mental disorder and is in no way influenced by the label.

Addressing this critique, Rosenhan (1973) further examined whether disabilities associated with mental illness originates from medical conditions or whether it is the label attached to mental illness that worsens matters. A field experiment was conducted to examine the difficulties surrounding the ability of psychiatrists to discern normality and abnormality. The primary study involved eight pseudo patients presenting with simulated symptoms and reporting facts surrounding personal struggles. Without knowledge of the experiment, each pseudo patient was admitted and treated by the hospital staff. Normal behaviour was misinterpreted as stemming from the patient's mental health condition rather than the environment. The second study involved informing staff members of a potential pseudo patient attempting to be admitted. Staff members were to rate each patient on the likelihood of being pseudo patient. This false information resulted in false positive. Rosenhan concluded that it is difficult to distinguish a person with a mental health condition from a person without a mental health condition. Importantly, labelling can lead to consequences such as depersonalisation, powerlessness, and segregation.

Considering the opposing views surrounding psychiatric labels, the modified labelling theory (Link et al., 1989) concluded that the general public stigmatised a person labelled with mental illness regardless of the presence of bizarre behaviour. Thus, psychiatric labels along with negative societal reactions aggravate the trajectory of a person's illness.

Stigma by Association

The concepts and theories mentioned above highlight the process of stigmatisation within the context of the stigmatised individual. Still, the social and personal consequences confronted

by the stigmatised can extend to accompanying individuals. Mere association with a stigmatised person can lead to courtesy stigma (Goffman, 1963). Goffman proposed that association occurs through social structures, such as family ties, or through choice, such as sympathising with the stigmatised. Such relationships and interactions result in the treatment of both individuals as one by the general public (Goffman, 1963). As Goffman (1963) illustrates, the loyal spouse of a person accessing mental health services and the daughter of an ex-convict are obliged to share some of the discredit because they are bound by their relations. Goffman concluded that choosing not to accept this status can result in terminating or avoiding.

Expanding on the original definition, Bos, Reeder, and Stutterheim (2013) defined stigma by association as the social and psychological reactions to people associated with a stigmatised individual, as well the other's reaction to being associated with a stigmatised individual. Stigma by association along with public stigma, structural stigma, and self-stigma are the four manifestations of stigma. Public stigma exists at the group level (Livingston & Boyd, 2010) and represents the society's social and psychological reactions to someone with a stigmatised condition (Bos et al.). Structural stigma exists at the system level (Livingston & Boyd) and consists of society's institutions legitimising the stigmatised status (Bos et al.). Self-stigma is at the individual level (Livingston & Boyd) and reflects the social and psychological impact of possessing the stigma (Bos et al.).

Affiliate Stigma

Family members tend to internalise the devalued views of others, which are known as affiliate stigma. Internalizing stigma involves adopting an identity that reflects the views held by members of society (Hasson-Ohayon et al., 2014). As such, the person could adopt a self that is seen as dangerous or incompetent. Internalization is reflected in feelings of guilt or self-blame in

relations to the relative's illness and is associated with low self-esteem, secrecy, psychological distress, subjective burden, and social withdrawal in response to anticipated rejection (Perlick et al., 2011). Also, Mak and Cheung (2008) demonstrated a positive association between caregivers' feelings of stress and subjective burden and affiliate stigma among caregivers of children with mental disorders.

Consequences of Mental Health Stigma

Individuals associated with people with mental health conditions can find themselves in sensitive and straining situations since that they are both the 'marker' and the 'marked' (Mehta & Farina, 1988 as cited in Ostman & Kjellin, 2002). For example, the individual close to the person accessing mental health services can endorse the devalued views held by the general public. As such, the individual affiliated with the person accessing mental health services serves the role of a 'marker' because they reflect their views onto the individual with the mental health condition. Simultaneously, the individual close to the person accessing mental health services is stigmatised because of their affiliation; therefore, they are marked by the perception of the general public.

The impact of mental illness stigma on close others varies depending on the relationship with the person with mental illness (Corrigan & Miller, 2004). For example, family members are frequently harmed by public stigma (Corrigan, Watson, & Miller, 2006). The authors assessed how members of the general public view family members through a national-based survey (N = 968) to examine how the family role and mental health conditions influence stigma. The respondents were randomly assigned to read a vignette that varied across four dimensions: Diagnosis of the person with the condition (schizophrenia, drug dependency, or emphysema), role of the corresponding family member (parent, child, sibling, and spouse), gender of the

person with the condition, and gender of the family member. After reading the vignette, participants responded to 14 items via a 7-point Likert scale. Seven items were about the person with the health condition (primary stigma), and seven items were about the family member (family stigma). These seven items addressed content such as onset responsibility, offset responsibility, pity, contamination, shame, incompetence, and avoidance. In regards to stigma varying by health condition, family members of people with drug dependence and schizophrenia were viewed as more pitiable. In regards to stigma varying with the family role, results revealed that parents and spouses were viewed as more responsible for the onset of an illness than other roles. Corrigan and colleagues concluded that children were more likely to be contaminated by the illness and parents were held responsible for the reoccurrence and relapse of drug dependence and schizophrenia. These findings coincide with the results of a review of stigma impacting families conducted by Corrigan & Miller (2004): Parents are responsible for triggering their child's mental illness. Siblings and spouses are accused of not making sure that relatives with mental illness follow treatment plans. Lastly, children are afraid of being infected by the mental illness of their parents.

Moreover, a number of researchers sought to estimate the degree to which relatives perceive the experience and impact of stigma for example reporting avoidance, shame, concealment, or embarrassment (Ahmedani et al., 2013; Phelan, Bromet & Link, 1998; Shibre et al., 2001; Struening et al., 2001; Wahl & Harman, 1989 as cited in Gela & Corrigan, 2015). To avoid bringing shame upon the family, approximately 25% to 50% of family members reported the need to conceal information regarding their relative accessing mental health services; exact rates depend on the study. Wahl and Harman (1989) surveyed the views of stigma held by relatives of people with mental health conditions. Domains perceived as most damaged by

stigma were relationships with other family members (22%), relationship with the close other with mental health issues (20%), and self-esteem (21%). In regards to the perspective of caregivers, Struening et al. (2001) investigated perceptions of devaluation with two samples: Caregivers of relatives with schizophrenia, and caregivers of relatives with bipolar and schizoaffective disorders. When rating the following statement, “Most people believe that parents of children with a mental illness are just as responsible and caring as other parents” (Struening et al., 2001, p. 1636), 79% of family caregivers in the first sample disagreed or strongly disagreed. Likewise, 77% of family caregivers in the second sample disagreed or strongly disagreed. Along with perceptions, Phelan et al. (1998) examined reactions to stigma among parents and spouses of persons admitted to hospitalisation for the first time. Their research revealed that 50% of family members reported concealing the recent hospitalization of their close other to some degree, although only 16% reported the experience of avoidance. This suggests that in anticipation of experiencing avoidance, family members concealed the status of their close other. Examining the phenomenon outside of the Western context, Shibre et al. (2001) surveyed the extent of family stigma in rural Ethiopia: Seventy-five percent of relatives of the person with the mental health condition perceived or experienced stigma due to the presence of mental illness in the family and 42% worried about a change in treatment. Also, a greater occurrence of family embarrassment is felt by relatives of individuals with alcohol, drug, or mental health conditions in comparison to subgroups with relatives affected by general medical conditions, even when adjusting for age and sex (Ahmedani et al., 2013).

Accordingly, the stigma process can lead to negative treatment, avoidance of social interaction, social exclusion, and a depletion of energy and resources to conceal relations to the stigmatised individual (Larson & Corrigan, 2008). In addition to psychological complaints,

stigma by association affects the physical well being of family members of persons with a stigmatised identity (Angermeyer, Schulze, & Dietrich, 2003; Östman & Kjellin, 2002; Van der Sanden, Bos, Stutterheim, Pryor, & Kok, 2013).

Stigma Reduction

Protest, educate, and promote contact are three strategies proposed for reducing the negative views of mental illness (Rüsch, Angermeyer, & Corrigan, 2005). Protesting consists of directly instructing individuals to suppress stigmatising attitudes and behaviour so that individuals do not consider or think about negative stereotypes (Couture & Penn, 2003). The findings towards the significant effect of protest on stigmatisation attitudes have been inconsistent (Corrigan & Penn, 1999; Penn & Corrigan, 2002). Educating consists of providing factual information to the general public about persons with mental illness in the form of information sheets or brief courses (Couture & Penn, 2003). Although shown to be successful, promoting contact is the most promising of the three strategies. This method reduces stigma through education and direct interpersonal contact with someone who has a stigma (Couture & Penn, 2003). The current study applies intergroup contact theory to test the impact of imagined disclosure of a close other's mental health status on the self-perception of stigma by association

Intergroup Contact Theory

Intergroup contact theory provides a possible approach to stigma reduction. Allport (1954) hypothesised that contact, or social interaction, between groups, reduces prejudice. This is particularly the case when the interaction provides four optimal conditions: Equal status between the groups, common goals, intergroup cooperation, and institutional support (Allport, 1954). His theory has inspired numerous investigations across a variety of populations and situations addressing psychological processes that produce positive impact from intergroup

contact (Brown & Hewstone, 2005; Pettigrew, 1998). Effects are even observed in the absence of Allport's facilitating conditions, as indicated by a meta-analytic test of intergroup contact theory (Pettigrew & Tropp, 2006). After conducting analyses on 713 independent samples from 515 studies, Pettigrew and Tropp (2006) concluded that the contact effect on prejudice reduction generalises across a broad range of groups and contact settings. In a subsequent meta-analysis, Pettigrew and Tropp (2008) addressed how contact diminishes prejudice by testing the three most studied mediators and revealed mediational effects for all three. The mediational value of anxiety reduction along with empathy and perspective taking was much stronger than increased knowledge.

Quality and Quantity of Contact.

The nature of contact, more specifically quality and quantity of intergroup contact, are important in the reduction of prejudice and the modification of attitudes. Aberson and Haag (2007) demonstrated that better quality contact and increased quantity contact with African Americans predicted improved perspective taking for White undergraduates. They suggested that contact improves one's ability to understand perspectives. They also found that increased perspective taking is associated with lessened intergroup anxiety regarding interactions with African Americans. Perspective taking partially mediated the relationships between both contact quality and quantity on anxiety. Overall, perspective taking impacts attitudes and stereotypes through reduced anxiety.

In a study by Keith, Bennetto, and Rogge (2015), 550 participants completed a survey and short task that measured levels of contact with individuals who have intellectual and developmental disorders. Their findings suggest that contact relates to attitudes towards individuals with intellectual developmental disorder. Specifically, it is the nature of contact that

related to participants' attitudes: Quality of contact was associated with lower levels of prejudice towards individuals with intellectual and developmental disorders. Similarly, McManus, Feyes, and Saucier (2010) demonstrated that quality of contact significantly predicted attitudes toward individuals with intellectual disabilities. They suggested that more positive attitudes toward individuals with intellectual disabilities are related to greater quality of contact with individuals with intellectual disabilities.

In a study by Voci and Hewstone (2003), 310 Italian university students completed a questionnaire concerning the relations between Italians (in-group) and immigrants from Africa who have come to work and live in Italy (out-group). A path analysis with latent variables was run where quantity and quality of contact were treated as separate predictors of anxiety, perceived out-group variability, attitudes toward the out-group, and subtle prejudice. The findings of the model revealed that anxiety was reduced by quality of intergroup contact and not by quantity of intergroup contact. Perceived variability was enhanced by both quantitative and qualitative contact. Also, attitudes towards immigrants were only affected by quality of intergroup contact but not quantity of intergroup contact. Finally, subtle prejudice was reduced by quantitative contact and not qualitative contact.

Islam and Hewstone (1993) assessed how quantitative, qualitative, and intergroup contact related to three criterion measures: intergroup anxiety, perceived outgroup variability and outgroup attitudes. This study was to provide background information on the Hindu-Muslim context in Bangladesh. The findings revealed that both quantitative and qualitative aspects of contact were negatively related to intergroup anxiety. Quantity of contact was the only type of contact that had a significant direct effect on perceived outgroup variability. Lastly, attitude toward the outgroup revealed direct effects of both quantitative and qualitative contact.

Further evidence of the importance of contact quality and quantity came from a longitudinal field survey in Germany, Belgium, and England with school students (Binder et al., 2009). The sample consisted of ethnic minority and majority groups in the various contexts. The main findings of this study can be briefly summarised. Quality and quantity of friendship contact had beneficial influence over time on two different measures of prejudice, the desire for social distance and negative intergroup emotions. These effects were found using the full sample, the attitudes of minorities toward majorities as well as attitudes of majorities toward minorities.

Within the context of mental illness, Alexander and Link (2003) found that total contact was a significant predictor of general dangerousness, a measure of the perceived dangerousness of people with mental illnesses as a group. The same was true for the vignette measures of stigma. The vignette task involved participants reading a vignette describing a character with a history of mental illness and then responding with reactions and opinions about the character's dangerousness and the desire for social distance from the character. As total contact increased, the perceived dangerousness and desired social distance from the vignette character decreased. Alexander and Link concluded that individuals with greater overall contact perceived people with mental illness in general as less dangerous. They also viewed the vignette character as less dangerous and reported less desired social distance from the vignette character.

Across two studies, West, Hewstone, and Lolliot (2014) found that contact was associated with less fear, less intergroup anxiety, more favourable attitudes and less avoidance. These studies did not distinguish contact quality and quantity, and the relationships observed were presumably a function of both.

Despite the reported benefits of intergroup contact, one challenge remains prominent: Providing the opportunity for social and group members to engage in contact particularly when there are problematic intergroup relations due to extreme segregation (Crisp & Turner, 2009). Due to the limitations presented by lack of opportunity and impracticalities, indirect approaches to establishing contact has emerged (Crisp & Turner, 2009). The present study will use the term quality and quantity of prior disclosure about the quality and quantity of prior contact.

Imagined Contact

Extending intergroup contact theory, imagined contact involves social interaction with an out-group member(s) via mental simulations (Crisp & Turner, 2009). Imagined contact helps to address reservations associated with prejudice that may interfere with pursuing contact and instead provides individuals with an opportunity to practice outgroup social interactions free of narrow-mindedness.

Imagined contact reduced explicit prejudice towards minority groups such as the elderly and homosexuals (Turner, Crisp & Lambert, 2007). Experiment 1 instructed 28 participants, young adults, either to imagine an interaction with an elderly person or imagine an outdoor scene. Participants were then instructed to circle a preference, on a 9-point scale, for working with another young person and with an elderly person. Authors revealed significant intergroup bias in the control condition but not in the imagined contact condition. The difference in ingroup and outgroup preference determined intergroup bias. These findings prompted a second experiment to address the possibility that is simply thinking about the elderly, rather than imagining an interaction, could reduce prejudice. For the second experiment, 24 participants were instructed either to imagine interacting with an elderly stranger or to simply think about the elderly. The experimenters compared the effect of social category priming and imagined

contact. A planned t-test confirmed that priming the social category (thinking about the elderly) does not reduce intergroup bias; whereas, imagined intergroup contact with the elderly reduces intergroup bias. Hence, imagining intergroup contact is more than just priming an outgroup category. In Experiment 3, the investigators extended and replicated the effect of imagined contact on the attitudes of heterosexual men towards homosexual men as measured across perceived outgroup variability, outgroup attitude, and intergroup anxiety. The 27 participants were instructed either to imagine interacting with a homosexual man or imagine a hiking trip. When compared to the control condition, planned t-tests revealed significantly greater perceived outgroup variability, significantly more positive outgroup evaluation, and significantly less intergroup anxiety among the imagined contact condition. Furthermore, a mediational analysis revealed intergroup anxiety explains the positive effects of imagining intergroup contact on outgroup attitudes.

Turner and Crisp (2010) found that imagined contact reduces implicit prejudice levels as investigated across two studies. The first investigation involved imagined interaction with the elderly among university students while the second consisted of imagined interaction with Muslims among non-Muslim university students. Before starting the experiment, researchers informed participants that the purpose of the study is to run a pre-test study to gather information that will help create material for a possible later experiment. Turner et al. (2007) used the same explanation when relaying the rationale to participants to avoid demand characteristic as an explanation. Following the manipulation and journaling of what was imagined, participants were asked to indicate how they felt toward the elderly to measure explicit out-group attitudes. Also, participants completed a measure of implicit intergroup bias, the Implicit Association Test. One-tailed t-tests were conducted for explicit and implicit attitudes. The explicit results revealed a

significantly greater positive attitude for participants of the imagined contact group in comparison to the control group. The implicit results revealed a significantly lower bias than participants in the control condition. The second part of the investigation made minor alterations to the initial procedures for two reasons. First, insure that it is the mental imagery of positive encounter that resulted in positive effects rather than the task of imagining an unexpected out-group member. Second, confirm that the impact of manipulation on implicit attitudes is not due to out-group priming. The instructions consisted of imagining meeting a Muslim and having a positive interaction with the experimental group. The control group consisted of thinking about Muslims. The findings of the one-tailed t-test showed statistical significance revealing that those who imagined contact with Muslims were less biased than those who simply thought about Muslims.

More recently, a meta-analysis on imagined contact was conducted (Miles & Crisp, 2014). Along with the four key measures of intergroup bias—attitudes, emotions, intentions, and behaviour—this meta-analysis tested for moderators from both group design and study design characteristics. The analysis reported a significant reduction of intergroup bias for all four measures where the effect was significant for published and unpublished studies across a broad range of target outgroups and contexts. The effects were equally strong for explicit and implicit attitude measures. However, in terms of outcome variables, the effect on intention was stronger than on attitudes. For the design characteristics, most had no significant impact such as the valence of the imagined interaction, type of control condition, and time spent imagining contact meanwhile the greater the elaborate the stronger the effect. As for the group characteristics, imagined contact effect was stronger for children than adults. These reliable findings support the use of imagined contact as a tool for improving intergroup relations.

Of particular relevance to the present research, imagined interaction has been explored to assess its effectiveness towards reducing the stigma associated with mental illness. Research participants who imagined a positive encounter with individuals with schizophrenia reported a decline in stereotype (Stathi, Tsantila & Crisp, 2012). Specifically, 57 participants were either instructed to imagine a positive and comfortable interaction with a person with schizophrenia or an outdoor scene. Mentally simulating a positive and comfortable interaction with a person with schizophrenia resulted in greater intentions to engage in future contacts and reduced endorsement of stereotypes. Further analysis showed that a mental rehearsal of a contact experience with a person with schizophrenia led to greater intention for real contact through the reduction of intergroup anxiety. Moreover, participants without mental health conditions who were asked to imagine a positive encounter with an adult with schizophrenia after having imagined a negative encounter reported less intergroup anxiety compared to participants who imagined two positive encounters (Birtel & Crisp, 2012). Furthermore, research that compared imagined and actual contact demonstrated that both groups improved in their attitudes towards persons with schizophrenia (Giacobbe, Stukas, & Farhall, 2013). Ultimately, the simplicity, flexibility and efficacy of imagined contact as a tool have been demonstrated in improving intergroup relations.

Current Study

Rationale

Reducing stigma by association is important, considering the significance of the informal social network of family and friends in the recovery process of the person accessing mental health services (Schön, Denhov & Topor, 2009). Stigma and lack of understanding from the family has been reported as a barrier to recovery (Aldersey & Whitley, 2014). This reality is fuelled by the shame that family members harbour, resulting in a denial of the illness, and the attempt to hide the illness from relatives or the community because the family reputation is at risk of being tarnished. Considering the prominence of stigma related feelings, disclosure instead of secrecy may reduce self-perception of stigma by association. Smart and Wegner (1999) suggest that concealing stigma results in more suppression and intrusion thoughts of the mental illness as well as more projection of the mental illness thoughts. As such, individuals who conceal their mental illness may be struggling more than what appears.

Arranging an interaction between intergroup members can be difficult and may induce adversarial emotional response (Crisp & Turner, 2009). The imagined contact approach capitalizes on the benefits of face-to-face contact with fewer risks (Crisp & Turner, 2009; Crisp et al., 2009). Accordingly, the current study will further explore the use of this technique in regards to stigma by association.

So far, the research supporting imagined interaction considers the attitude of the majority towards the minority. Little research has looked at the effect of imagined contact in improving minority group members' attitude towards the majority. Uncertainty lies in the unanswered question of whether stigmatised groups can feel more efficacious regarding their contact with the majority. This study investigated the effects of imagined contact on the reduction of stigma by

association and other related measures, which is an area that has been understudied. Furthermore, the proposed research has implications for interventions aimed at reducing self-perception of stigma by association and in doing so perhaps empower individuals associated with persons accessing mental health services. Empowerment is defined as a sense of personal mastery as a result of building confidence and self-esteem, developing coping mechanisms and skills, and taking control of the decisions that influences one's life (Wallerstein 2006).

Research Questions

Based on the body of literature discussed and the rationale, the current study aims to answer the following research questions: (1) can imagining a successful disclosure of a close other's mental health status decrease self-perceptions of stigma by association and increase self-efficacy expectancy? If so, (2) does the above effect depend on the following individual difference measures?

- a. Quantity of prior disclosures
- b. Quality of prior disclosures

Hypotheses

The first hypothesis is that imagined contact will reduce stigma by association, and affiliate stigma, and it will increase self-efficacy expectancy. The second hypothesis is that the effect of imagined contact on stigma by association, affiliate stigma, and self-efficacy expectancy will be enhanced for individuals who have lower quality and quantity of contact.

Method

Participants

Characteristics. The population of interest for the present study was individuals, 18 years or older, who have an existing interpersonal relationship with a person accessing mental health services¹. The study sample consisted of 127 participants (18 male, 99 female, 10 undisclosed) with a mean of 24.75 and a standard deviation of 9.30.

Recruitment. Participants were recruited from a post-secondary setting in Ontario, Canada. The study was advertised using the University online-based subject pool software (i.e. SONA), inter-campus communication systems (i.e. Desire2Learn), University social media platforms, as well as recruitment flyers.

Participants who met the criterion of having a relationship with a person accessing mental health services were invited to partake in a brief online study that was entirely dependent on voluntary and anonymous responses. The research incentive for participation was either the receipt of a bonus percent to a course or an entry to a draw for a gift card. Participants who did not have the option of receiving a bonus percentage were entitled to enter a draw for a 25.00 Amazon.ca gift card. Participants were responsible for emailing the investigator. Participants could only receive one of the two incentive options.

Recruitment began in March 2016 and remained active until August 2016. During that time frame, 190 surveys were started. However, only 127 survey responses were utilized for the data analyses. Sixty-three survey responses were excluded from the analyses because participants either failed to reach the imagined contact manipulation (49 respondents), did not

¹ For example a family member, friend, partner or resident of the same household who is accessing mental health services for emotional, behavioural, developmental conditions, or addictions.

complete responses for the first dependent variable (4 respondents), or did not journal their imagined task (10 respondents).

Sample Size. The number of participant retained in the present study satisfied the estimated sample size of 84 participants as determined by a priori power analysis. This power analysis was conducted prior to the research study and was based on the desired probability level, the number of predictors, the anticipated effect size and the desired statistical power level for the model.

Design

A between-groups experimental design was employed for this study. Participants were randomly assigned to one of the two conditions: Imagined contact group or control group. The imagined contact group was asked to imagine a successful disclosure of a close other's mental health status to a stranger who in turn shows a positive and supportive reaction. The control group was asked to imagine an outdoor scene.

The research model consisted of a focal categorical predictor with two levels: Imagined contact condition vs. control condition. The design also included two continuous predictors: quality of prior disclosure, and quantity of prior disclosure. The continuous criterions were stigma by association, self-efficacy expectancy, and affiliate stigma.

Measures

Demographic variables. The demographic questionnaire was brief and it involved answering questions concerning the participant and the close other accessing mental health services. Information regarding the participant included variables such as age, sex, educational attainment, living situation, and history of prior access to mental health services. The demographic variables of the close other, as reported by the participant, included variables such

as age, sex, type of relationship, the length of relationship, and the reason for accessing mental health services.

Quantity of prior disclosure. The number of an individual's past disclosures was measured using four items adapted from Voci and Hewstone (2003). These modified items examined the quantity of intergroup contact: Disclosing the mental health status of a close other and discussing its impact to people from the community, including family and friends. For example: "How many people from the community, including family and friends, have you told about the mental health status of your close other?" Similarly, "How frequently do you talk to members of the community, including family and friends about how the mental health status of your close other affects you?" The reliability for the quantity of contact of the original study was Cronbach's alpha of 0.72.

Quality of prior disclosure. The quality for the prior disclosure was assessed using an adaptation of the two items with four rated responses from Voci and Hewstone (2003). The modified questions explored the experiences of an individual's past disclosures. The first item assessed how (pleasant, comfortable, superficial, or unhelpful) was the experience of telling others of the mental health status to members of the community including family and friends? The second item examined how (pleasant, comfortable, superficial, or unhelpful) was the experience of talking about the *impact* that the close other's mental health status has had on the individual to members of the community including family and friends. Responses ranged from 1 (Not at all) to 5 (Very). The reliability for the quality of contact of the original study was Cronbach's alpha of 0.67. Unlike previous research, the values of the two were not multiplied to create a single index (Voci & Hewstone, 2003). McManus and colleagues (2010) proposed that making a distinction between quality contact and quality of contact is importance because there

is not always a positive outcome when having contact with another social group. With inconsistent findings in the research on the importance of quantity of prior contact, this study aimed to determine if both aspects are important predictors. Nonetheless, a high score represents high quality and as well as high frequency of intergroup contact disclosure.

Stigma by Association. The participants' cognitive, emotional, and behavioural reaction to being related to someone who has a mental health condition was measured using the stigma by association scale (SBA; Pryor & Bos, 2009). Individuals were asked to indicate on a five-point scale ranging from 1 (strongly disagree) to 5 (strongly agree) how strongly they agreed with 27 statements. For example, "What are your behavioural reactions to being related to someone with mental illness? I try to keep it a secret." Participants' scores were computed by averaging the response rates. A high score reported a higher level of perceived experiences of stigma by association. The Cronbach's alpha was 0.90 (van der Sanden et al., 2013).

Self-Efficacy Expectancy. An individual's expected positive interaction in future situations concerning the discussion of a close other's mental health status was measured using the self-efficacy expectancy adaptation of Mazziotta, Mummendey, & Wright (2011). The measure consisted of three items rated on a seven-point scale from 1 (*strongly disagree*) to 7 (*strongly agree*). For example, "Even under difficult circumstances, I can trust my abilities to have a positive interaction discussing the mental health status of my close other to community members including family and friends." As such, each item probed for the subjective judgment regarding one's ability to discuss a close other's mental health status with out-group members. Calculating the average across the three items created a composite measure. Higher scores reflected greater self-efficacy expectancy. The Cronbach's alpha was 0.78 (Mazziotta et al., 2011).

Affiliate Stigma. Participants' internalization of stigma was measured across three levels: Cognitive, emotional and behavioural. A modified wording of Mak and Cheung's (2008) affiliate stigma scale was used. The wording was modified to incorporate close others and not just family members associated with mental health consumers. This measure consists of 22 items. Individuals were asked to indicate the extent to which they endorsed each item on a 4-point Likert scale from 1 (*strongly disagree*) to 4 (*strongly agree*). For example, "I feel sad because I am close to a mental health consumer", or "Having a relationship with a mental health consumer makes me think that I am incompetent compared to other people." The mean score was used and higher scores indicated higher levels of affiliate stigma. The Cronbach's alpha was 0.94 (Mak & Cheung, 2008).

Manipulation Check. To ensure the participants were attending to the imagined contact task, they were asked to complete two manipulation check measures. The first consisted of the positivity of the imagined experience, which was assessed using three items from Parks, Birtel and Crisp (2014). These items assessed how participants felt during the imagined task on a semantic differential scale. The participants ranked, from 1 to 7, how tense-relaxed, negative-positive, and uneasy-comfortable their imagined experience was. Each item was examined separately rather than computing a mean composite score for the measure of positivity. The Cronbach's alpha for this measure was 0.94.

The second manipulation check consisted of the fluency of the imagined experience, which was assessed using three items from Parks et al. (2014). The first item measured "how easy was it for you to imagine the experience." The second item measured "how quickly were you able to imagine the experience." The third item measured "how pleasant did you find the task." The participants ranked their experience on a 7-point Likert scale with a range of 1 (not

at all) to 7 (Very). Once again, each item was examined separately instead of computing the mean of the three items for the measure of fluency. The Cronbach's alpha for this measure was 0.72

Procedure

The study gained ethical approval from the University research ethics board. All participants provided informed consent. The experiment was conducted online using Qualtrics, an insight and research platform. Similar to other experiments, this study made efforts to minimize demand characteristics, which is defined as the change in response due to suspicion regarding the true nature of an experiment. As such, the study was advertised as a preliminary test for a possible later experiment needed to gain information for the construction of materials (Turner et al., 2007; Turner & Crisp, 2010). Although explicit deception was not used, a full explanation of the purpose and hypotheses of the study were withheld until the debriefing. Given the nature of the research, complete transparency at the outset could have biased participants' responses.

Each participant began by completing two continuous predictor variable measures. Degree of closeness to the person with the mental health issue as well as shame-proneness were assessed but given that they were not significantly related to any criterion variables, they have not been included in this report. Participants were then randomly assigned to one of two groups via the randomization function of the research platform (imagined contact group versus control group). Depending on the conditions participants were assigned to, the two groups were given different sets of instructions for performing the mental imagery task.

Imagined Contact Manipulation. Participants assigned to the control group were told to imagine a view of nature. More specifically, 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)". The same wording has been used in previous research on a standard no-contact control scene (Stathi & Crisp, 2008; Turner et al., 2007; Stathi, et al., 2012). The instructions have been designed to evoke an imagination of something completely unrelated to a contact encounter.

Participants assigned to the imagined contact group were told to imagine a successful disclosure of a close other's mental health status with another person who in return shows a positive and supportive reaction. More specifically, participants were instructed: "*I would like you to take a minute to imagine yourself meeting a stranger within your community for the first time. Imagine talking about the mental health status of your close other. Imagine that the interaction is relaxed, positive and comfortable*". This set of instructions is a modified version of what has been previously used by Stathi et al. (2012). The instructions include minor yet necessary modifications to evoke participants' imagination of a detailed interaction of successfully disclosing a close other's mental health status with an out-group member.

All participants were encouraged to imagine their scenarios as vividly as possible. Participants in both conditions were given one minute to imagine the scene, which is recommended by the researchers (Crisp, Stathi, Turner, & Husnu, 2009). They were also instructed to write down their mental imagery in as much detail as possible. This task reinforces the impact of manipulation, which is common practice with imagined contact (Crisp et al.). More specifically, participants were instructed the following: "*Describe as many aspects of the scenario you just imagined as possible.*" The time and instructions are equivalent to previous research (Husnu & Crisp, 2010). Along with the brief journaling, participants completed two

additional measures of manipulation check: Positivity of the imagined interaction and fluency of the imagined interaction.

Following the manipulation of imagined stigma disclosure, participants were asked to complete the continuous criterion variables of stigma by association and self-efficacy expectancy. Participants then completed a continuous predictor variable of quality and quantity of intergroup contact disclosure as well as the continuous criterion variable of affiliate stigma.

With each page completed, participants were unable to return to previous pages to make any changes in an effort to avoid suspicion of the true nature of the study. After completing the measures, participants completed demographic questions. They were also given an opportunity to guess the nature of the study (to determine if responses were influenced by demand characteristics) and share comments towards their experience in the study. Finally, they were thanked and shown the debriefing form. Anytime during the study, participants were able to ‘exit’ the survey at which point they were directed to the debriefing form.

Statistical Analyses

The data were analyzed using the IBM SPSS Statistics 21.0 Software package. An alpha level of 0.05 was employed for all tests. Furthermore, data were screened for accuracy, missing values, outliers, and statistical assumption violations.

Results

Data screening

The data set had missing cases for the following variables: Self-efficacy (two cases), quantity of past contact disclosure (four cases), quality of past contact disclosure (six cases), and affiliate stigma (six cases). The pattern of missing data is classified as monotone; those who dropped out of the study at the midpoint do not have points further on in the study. Depending on the analysis and its options, the missing values were dealt with by excluding cases pairwise.

Univariate outliers were detected with the interquartile range (IQR) and boxplot. Data points farther than ± 1.50 IQR but less than ± 3.00 IQR were classified as outliers. Based on this method, there were three cases of outliers for stigma by association, six cases for self-expectancy, and five cases of outliers for affiliate stigma. Multivariate outliers were screened through case wise diagnostics by examining Mahalanobis Distance. Despite the presence of univariate outliers, there were no multivariate outliers. Stigma by association had three cases of outliers. Self-efficacy expectancy had six cases of outliers and affiliate stigma had 6 cases of outliers. Given the sample size ($N = 127$) and lack of extreme outliers, the univariate outliers were not excluded from the analyses.

The normality of the distribution of scores was examined by the Shapiro-Wilk test. The data for quality of prior disclosure was deemed normal ($p > .05$). The data for stigma by association, affiliate stigma, self-efficacy, and quantity of prior disclosure significantly deviated from normal distribution ($p < .05$). Normality was further examined by interpreting skewness and kurtosis. Standardized values were obtained by dividing each statistic by its standard error. Despite three variables (stigma by association, self-efficacy, and affiliate stigma) with values greater than 3.30 for skewness, transformation was not an option for fixing non-normality.

Transformation complicates the interpretation of the final results. Also, given the size of the sample, the regression is deemed as robust to violation of the assumption of normal distribution (Keith, 2015).

The assumption of linearity among variables was checked by the visual examination of bivariate scatterplots as well as scatterplots of residuals. Bivariate scatterplots did not show a curvilinear relationship. For the scatterplots of residuals, a regression analysis was conducted (plots of the standardized residuals as a function of standardized predicted values). The scatterplots did not show a non-linear relationship.

To assess homoscedasticity of the dependent variables, scatterplots of the residuals were examined. The shapes of the plotted points were deemed satisfactory. Lastly, intercorrelations of the predictor variables were low. An examination of tolerance and Variance Inflation Factor (VIF) indicated no presence of multicollinearity (Tolerance > 0.1 ; VIF < 10).

An alpha level of 0.05 was employed for all tests.

Descriptive Statistics and Correlations

Table 1

Means, Standard Deviation, and Intercorrelations for Moderator and Criterion Variables

	<i>Mean</i>	<i>S</i>	1	2	3	4	5
Variables							
1. Quality of Prior Disclosure ^{aaa}	- 0.25	0.63	1				
2. Quantity of Prior Disclosure ^{aa}	2.03	0.87	.39*	1			
3. Stigma by Association	1.74	0.63	-.33*	-.33*	1		
4. Self-Efficacy ^a	5.57	1.16	.43*	.38*	-.43*	1	
5. Affiliate Stigma ^{aaa}	1.41	0.51	-.33*	-.25*	.68*	-.53*	1

Note. $N = 127$

^a $N = 125$

^{aa} $N = 123$

^{aaa} $N = 121$

*. Correlation is significant at $p < .05$ (2-tailed).

Correlations

Quality of prior disclosure and quantity of prior disclosure were positively and moderately correlated (Table 1). Quality of prior disclosure and stigma by association were negatively and moderately correlated. The correlation between quality of prior disclosure and self-efficacy expectancy was positive and moderate. The correlation between quality of prior disclosure and affiliate stigma was negative and moderate. Similarly, the correlation between quantity of prior disclosure and stigma by association was negative, although moderate. The relationship between quantity of prior disclosure and self-efficacy expectancy was positive and moderate. Both quantity of prior disclosure and affiliate stigma were negatively and moderately correlated. Similarly, stigma by association and self-efficacy expectancy were negatively and moderately correlated. Both stigma by association and affiliate stigma were positively and highly correlated. Lastly, the relationship between self-efficacy expectancy and affiliate stigma is negative and moderate.

In summary, the higher the quality and quantity of prior disclosure, the lower levels of stigma by association and affiliate stigma. Greater levels of quality and quantity of prior disclosure were associated with higher levels of self-efficacy expectancy. Lower levels of self-efficacy expectancy levels were associated with higher levels of affiliate stigma and stigma by association. Lastly, as stigma by association increased so did affiliate stigma.

Imagined Task Characteristics

To test whether the imagined stranger task was more difficult and more negative than the imagined nature task, independent-sample *t*-tests were conducted to follow up the manipulation task. Homogeneity of variances was violated, as assessed by Levene's test for equality of

variances ($p < .05$) for all of the tests (Table 2). As such, the Welsh t-test was used because it is more robust for skewed distributions and large sample sizes.

Positivity of imagined experience. The imagined disclosure task was perceived as less relaxing than imagined nature, $t''(98.12) = 5.75, p = .001, d = 1.03$. Also, the imagine disclosure group found the task as less positive than the imagined nature $t''(113.38) = 4.18, p = .0001, d = .75$. Lastly, the imagined disclosure was less comfortable and more uneasy than the imagined nature $t''(100.42) = 4.84, p = .0001, d = .81$.

Fluency of imagined experience. Imagining the disclosure task was more difficult than imagining the outdoors task, $t''(105.77) = 5.17, p = .0001, d = .93$. In addition, those in the imagined disclosure condition were slower at imaging the experience $t''(110.21) = 3.59, p = .0001, d = .64$. Moreover, the imagined disclosure group found the task less pleasant than the imagined nature, $t''(113.75) = 6.98, p = .0001, d = 1.25$.

The Effects of Imagined Contact Manipulation

Independent sample *t*-tests were conducted to compare the effects of imagined disclosure on stigma by association, self-efficacy, and affiliate stigma. Homogeneity of variance was tested and not violated for all three tests. Results revealed no significant differences between groups. The difference in scores for imagined stranger and imagined nature was not significant for stigma by association: $t(125) = 0.11, p = .91, d = .02$. There was no difference in groups for self-efficacy: $t(123) = 0.43, p = .67, d = .08$. Lastly, affiliate stigma had no difference in scores: $t(119) = 0.21, p = .84, d = .04$. For the means and standard deviations, refer to Table 2.

Table 2.

Effect of imagined task on outcome measures

Variable	Condition			
	Imagined Task Nature <i>n</i> = 68		Imagined Task Disclosure <i>n</i> = 59	
	<i>M</i>	<i>S</i>	<i>M</i>	<i>S</i>
Positivity				
How did you feel during the imagined task? - Tense: Relaxed	6.13	1.35	4.34	2.04
How did you feel during the imagined task? - Negative: Positive	6.00	1.49	4.76	1.79
How did you feel during the imagined task? - Uneasy: Comfortable	6.15	1.35	4.78	1.98
Fluency				
How easy was it for you to imagine the experience?	6.06	1.36	4.56	1.83
How quickly were you able to imagine the experience?	5.66	1.48	4.58	1.87
How pleasant did you find the task?	5.93	1.55	3.80	1.85
Stigma by association	1.75	0.69	1.74	0.56
Self-efficacy ^a	5.61	1.14	5.52	1.18
Affiliate stigma ^{aa}	1.42	0.49	1.40	0.54

Note. *N* = 127 for each outcome variable.

^a *N* = 125

^{aa} *N* = 121

Moderation Analyses

Moderated multiple regressions were conducted to examine the effects of the continuous moderator, categorical predictor, and the interaction for each of the criterion variables. The moderation models were tested using IBM SPSS and the PROCESS macro, model 1 released by Andrew Hayes version 2.15 (2015). Before running the analysis, the categorical predictor was dummy-coded so that imagined nature was given a value of zero and imagined disclosure was given a value of one. In addition, the continuous moderator values were mean-centered.

There were no significant interactions between any of the continuous moderators (quality of prior disclosure, quantity of prior disclosure) and the categorical predictor (imagined contact). Additionally, there were no significant effects of imagined contact on any of the criterion variables. Importantly, however, quality and quantity consistently predicted the criterion variables, and therefore the remaining results focus on these individual difference variables. Shame proneness was not a significant predictor of stigma by association, self-efficacy and affiliate stigma. Such was also the case for degree of closeness to individuals with the mental health stigma. Regressions were re-run in PROCESS model 1 with quality and quantity and their interaction as the predictors of each of the criterion variables.

Stigma by association. Quantity of prior disclosure was a significant predictor for stigma by association ($p = .020$), as was quality of prior disclosure ($p = .016$). The regression coefficients are presented in Tables 3. Those who reported low quality of disclosure reported higher in stigma by association ($PV = 1.89$), whereas those who reported high quality of disclosure reported lower levels of stigma by association ($PV = 1.61$). For participants who reported low quantity of prior disclosure, levels of stigma by association was higher ($PV = 1.90$) than those who reported high quantity of prior disclosure ($PV = 1.61$).

Table 3.

Regression Model Coefficients for quality of prior disclosure by quantity of prior disclosure on stigma by association.

Predictor	Coefficient (se)	<i>t</i>	<i>p</i>
Intercept	1.75 (0.06)	31.61	.00
Quality of Prior Disclosure	-.23 (.10)	-2.44	.02*
Quantity of Prior Disclosure	-.17 (.07)	-2.36	.02*
Quality x Quantity of Prior Disclosure	.02 (.11)	.17	.87
Model R ²	0.15	<i>F</i> = 6.86	.00*
Interaction ΔR ²	0.00	<i>F</i> = 0.03	.87

Note. All coefficients are unstandardized and based on models with all primary variables entered
**p* < .05

Self-efficacy expectancy. Both quantity of prior disclosure (*p* = .0015) and quality of prior disclosure (*p* = .0002) were significant predictors of self-efficacy expectancy. The regression coefficients are presented in Tables 4. Those who reported low quality of disclosure for self-efficacy expectancy had a score of (*PV* = 5.14) and those who reported high quality of disclosure scored (*PV* = 5.94). Those who reported low quantity of disclosure scored (*PV* = 5.24) and those who reported high quantity of disclosure scored (*PV* = 5.83).

Table 4.

Regression Model Coefficients for quality of prior disclosure by quantity of prior disclosure on self-efficacy expectancy.

Predictor	Coefficient (se)	<i>t</i>	<i>p</i>
Intercept	5.54 (.10)	56.52	.00
Quality of Prior Disclosure	.63 (.17)	3.78	.00*
Quantity of Prior Disclosure	.34 (.11)	3.26	.00*
Quality x Quantity of Prior Disclosure	.14 (.16)	.88	.38
Model R ²	0.25	<i>F</i> = 14.30	.00*
Interaction ΔR ²	0.00	<i>F</i> = 0.78	.38

Note. All coefficients are unstandardized and based on models with all primary variables entered

* $p < .05$

Affiliate stigma. Quality is a significant predictor for affiliate stigma ($p = .0002$). Still, the predictor of quantity of prior disclosure was marginally significant ($p = .167$) for affiliate stigma. The regression coefficients are presented in Tables 5. Those in lower levels of quality of disclosure scored with higher levels of affiliate stigma ($PV = 1.55$) and those with higher level of quality of disclosure scored with lower levels of affiliate stigma ($PV = 1.27$). Those with lower levels of quantity of disclosure scored with higher levels of affiliate stigma ($PV = 1.48$) and those with higher levels of quantity of disclosure score with lower levels of affiliate stigma ($PV = 1.34$).

Table 5.

Regression Model Coefficients for quality of prior disclosure by quantity of prior disclosure on affiliate stigma.

Predictor	Coefficient (se)	<i>t</i>	<i>p</i>
Intercept	1.41 (.05)	31.29	.00
Quality of Prior Disclosure	-.23 (.07)	-3.11	.00*
Quantity of Prior Disclosure	-.08 (.06)	-1.39	.17
Quality x Quantity of Prior Disclosure	-.04 (.09)	-.50	.62
Model R ²	0.13	<i>F</i> = 6.64	.00*
Interaction ΔR ²	0.00	<i>F</i> = 0.25	.62

Note. All coefficients are unstandardized and based on models with all primary variables entered

* *p* < .05

Discussion

The current study examined the influence of an imagined positive disclosure (imagined contact) as well as quality and quantity of prior mental health stigma disclosure on stigma by association, self-efficacy expectancy, and affiliate stigma. Overall, findings from this study confirmed that quality of prior disclosure of a close other's mental health condition is a significant predictor of key outcomes related to stigma by association. Specifically, quality of prior disclosure predicted stigma by association, self-efficacy expectancy, and affiliate stigma. Also, participants' quantity of prior disclosure was a significant predictor of stigma by association, self-efficacy expectancy, and marginally predicted affiliate stigma. An imagined positive disclosure failed to have any significant effects on the key outcome variables. In general, the findings from this study support the notion that quality and quantity of prior disclosure are linked to outcomes related to stigma by association.

The original hypotheses concerned an imagined positive disclosure of mental health stigma resulting in a reduction of stigma by association and affiliate stigma as well as an increase in self-efficacy expectancy. They also focused on interactional effects where individual differences influenced the impact of imagined contact effectiveness. Contrary to these hypotheses, an imagined positive experience of disclosure neither had a significant impact on the criterion variables nor were there any significant interactions between the imagined disclosure manipulation and any of the continuous predictors. As such, the analysis and discussion focused on the examination of the relationship between the two significant predictors, quality and quantity of prior disclosure, and the outcome variables of interest.

Quality and Quantity of Prior Disclosure

The results of this study are broadly consistent with research on direct intergroup contact that examined attitudes of majority group members towards minority group members. For example, Keith and colleagues (2015) demonstrated that higher levels of quality of contact predicted stronger positive implicit attitudes toward individuals with intellectual and developmental disabilities. Also, McManus, and colleagues (2010) demonstrated that greater quality of contact predicted more positive attitudes towards individuals with intellectual disabilities. In a different context, Tam, Hewstone, Harwood, Voci, and Kenworthy (2006) found that quantity rather than the quality of contact with older people was associated with more favourable implicit associations.

These findings are also comparable with research that examined the composite score of quantity multiplied by the quality of contact in regards to negative attitudes, prejudice, as well as mental illness stigma. For example, Pettigrew and Tropp's (2006) meta-analysis of 515 studies demonstrated that intergroup contact is associated with prejudice reduction. In fact, having the opportunity to meet the out-group was associated with more positive implicit out-group attitudes (Turner, Hewstone, & Voci, 2007). In regards to mental health stigma specifically, West and colleagues (2014) found that prior contact predicted more positive attitudes and less avoidance against people with schizophrenia. Also, Alexander and Link (2003) demonstrated that direct intergroup contact was a significant predictor of a mental illness stigma, as total contact increased perceived mental illness stigma decreased.

The mere exposure effect provides a potential explanation for why quantity and quality of prior disclosure are predictors of mental health related stigma and attitudes, and this has been suggested by researchers as a mechanism for the effects of intergroup contact (Pettigrew, Tropp, Wagner, & Christ, 2011). This basic process highlights that the exposure of self-disclosing

could influence the target outcomes: Stigma by association, self-efficacy expectancy, and affiliate stigma.

According to Turner, Hewstone, and Voci (2007), self-disclosure improves explicit out-group attitudes. This supports recent advances in intergroup contact theory that have suggested self-disclosure as an important aspect in explaining the impact of personalized intergroup encounters (Turner et al., 2007). For example, Miller (2002) found cooperative contact to result in more positive out-group evaluation when an out-group member disclosed personal information. As discussed by Turner et al., (2007), the relation between self-disclosure and positive explicit out-group attitudes is generated by empathy and trust. Firstly, the greater experiences of self-discloser with out-group members by participants, the greater they empathized with out-groups and as a result greater positive explicit out-group attitude. Secondly, trusting and feeling trusted by the out-group shows dependability and trustworthiness. Similarly, Vezzali and Capozza (2011) found that frequent and cooperative contact positively influenced the relations with disabled colleagues as a result of increased empathy towards them as well as enhancing their evaluation. Self-disclosure has been viewed as a means of enhancing authenticity. Newheiser and Barreto (2014) confirmed that hiding a concealable stigmatised identity lends to decreased feelings of belonging, and as they conclude, hiding a socially stigmatised identity is a problematic identity management strategy because it does not provide the social acceptance piece that individuals living with stigmatised identities are seeking.

Imagined Contact

Contrary to expectations, imagined contact did not have significant effects on stigma by association, self-efficacy expectancy, or affiliate stigma. Moreover, none of the hypothesized interactions was significant. The effects of imagined contact on stigma by association, self-

efficacy expectancy, and affiliate stigma were not dependent on the individual differences measures: Quality of prior disclosure, and quantity of prior disclosure. The results of this study contradict the numerous studies that have demonstrated the effectiveness of imagined contact as an intervention in changing attitudes and efficacy. For example, Stathi, Tsantila, and Crisp (2012) found that imagined contact resulted in weakened stereotypes and stronger intentions to engage in future interactions with persons with schizophrenia because of reduced feelings of anxiety. Giacobbe, Stukas, and Farhall (2013) demonstrated a change in attitude on stigma related measures such as dangerousness, affect, and distancing towards persons with schizophrenia. Miles and Crisp's meta-analytic test (2014) tested the effectiveness of the imagined contact hypothesis and confirmed a significant reduction in intergroup bias for attitudes, emotions, intentions, and behaviour.

Despite the extensive evidence supporting imagined contact hypothesis, different stereotypes can alter the nature of the imagined task, thus, rendering the intervention ineffective. This may explain the ineffectiveness of imagined contact for this study. West, Holmes, and Hewstone (2011) demonstrated in two of their studies that imagining contact with people with schizophrenia resulted in an increase in intergroup anxiety and no change in attitudes. According to West et al. (2011), there is the possibility of increasing rather than decreasing prejudice against them. Even when positive information about people with schizophrenia was followed by imagined contact task, there was no improvement in attitudes.

When addressing minority groups versus majority groups, research has demonstrated that contact is less effective for changing minorities' attitudes toward majority group members. The meta-analytic test of Tropp and Pettigrew (2005) reveal a difference in the relationships between direct intergroup contact and prejudice for members of minority and majority groups. The

contact-prejudice relationship is weaker for members of minority groups than for members of majority groups. Tropp and Pettigrew proposed that the constant acknowledgement of the group's devaluation prevents the potential for positive contact outcomes for members of a minority group. This effect is not the case for members of a majority group. In regards to imagined contact, similar findings were shown. In one of their experiments, Stathi and Crisp (2008) demonstrated that minority group members were more resistant to the attitude-changing effects of imagined contact than majority group members. Only the majority group who imagined a positive contact were able to project a more positive self-trait to the outgroup.

Limitations and Future Direction

This research is not without certain limitations. The first limitation to be acknowledged is that the study may not be widely generalizable. The majority of participants were young adult women. This is similar to an observation made by Giacobbe and colleagues (2013). They stated that care should still be taken when generalizing even though gender was not a significant moderator as found by Pettigrew and Tropp (2006) as well as West et al. (2011). Also, the study relied on members of a convenient sample of university students whereby participants expressed a very restricted range of scores for stigma by association and affiliate stigma. As such, it is possible that because participants did not endorse high level of stigma by association and affiliate stigma, the effects of imagined contact manipulation was not observed. Had this study relied on a more representative sample of the general public or a different population, such as parents, then an effect of the manipulation may have been concluded.

An additional limitation is the correlational nature of the results. Since the imagined contact manipulation was ineffective, the findings of this study could only test correlational predictions. As such, statements of causality could not be made despite the additional analyses

that were conducted to increase confidence in the findings. Moreover, the design of the study lends to a specific limitation: As is the case with many survey-based questioning, there is the concern for social desirability. It is possible that participants responded in a manner that they thought would be viewed favourably by others.

Considering the findings of this study were inconsistent with prior research, further research is needed to establish the effectiveness of imagined contact in reducing the various forms of stigma. For example, a more guided and elaborate approach to imagined contact could be used. Also, it could be worth testing to see whether the type of mental health diagnosis influences the effectiveness of the manipulation task. Lastly, future research might explore the differences between disclosing to a stranger, versus disclosing to a familiar individual versus imagining a neutral scene. These suggestions may help in discerning whether imagined contact is a viable intervention for reducing self-perceptions of stigma and related outcomes.

Implications

The present study has important and practical implications given its novelty. As groundwork research, the current study highlights the need to further explore the role of quality and quantity of self-disclosure in reducing mental health related stigma by association and in increasing self-efficacy expectancy. In regards to clinical implications, the findings of this study suggest that coming out proud of a close other's mental health concerns is related to stigma by association, self-efficacy expectancy, and affiliate stigma. Hence, increasing the quality and quantity of self-disclosure could serve as an exposure therapeutic approach. The current study suggests that with practice, family and friends can be systematically desensitized to the fear and shame of being exposed to the mental health condition of the close other. Relieved of the stigma

that is attached to mental health conditions, individuals could feel empowered rather than embarrassed and ashamed.

Based on the findings of the current study, creating opportunities for positive and greater disclosure is important. Incorporating self-disclosure exercises in support groups, therapy sessions, and meetings with health professionals can help in creating a safe space for practising a positive dialogue about mental illness. Moreover, the current findings can be translated and communicated to the general public through campaigns that address the stigma of mental health conditions. Such campaigns can promote strategies on how to talk about the close other's mental health condition with family, friends, and members of the community. Starting such dialogues will aid in normalizing mental health conditions and create conversations that could further dispel myths that are perpetuating stereotypes and prejudice towards the stigmatised and the close other.

Conclusions

To conclude, the findings of the current study adds to the limited research regarding mental health related stigma, more specifically, stigma by association. Overall, the results of the current study demonstrate the importance of quantity and quality prior disclosures of mental health stigma in predicting stigma related measures. Although the imagined contact manipulation was ineffective for this study, the findings do not deter from the overall need to evaluate similar interventions related to mental health stigma. The findings also highlight the important role of prior disclosure of stigma along with direct contact with supportive others. Future research should, therefore, evaluate contexts and characteristics of stigma-related disclosures to inform interventions to alleviate mental health stigma that is currently maintained by societal norms.

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