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# Stigma towards Psychosis: Cross-Cultural Differences in Prejudice, Stereotypes, and Discrimination in White British and South Asians

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#### Abstract

Public stigma towards people with mental health problems has been demonstrated in Western societies. Little is known about non-Western cultures and whether cultures differ in their perceptions of people with mental health problems. Aim of this study was to examine cultural differences in prejudice, stereotypes and discrimination towards people with psychosis. Participants were young people from White British and South Asian backgrounds (*N* = 128, aged 16-20 years) recruited from two schools and colleges in the UK. They completed a cross-sectional survey on affective, cognitive and behavioral dimensions of stigma. Results revealed significant cultural differences on all three stigma dimensions. South Asians attributed higher anger (prejudice) and dangerousness (stereotypes) to people with psychosis than White British. They also reported lower willingness to help, greater avoidance and higher endorsement of segregation (discrimination). The effects of ethnic group on helping intentions, avoidance and segregation endorsement were mediated by anger and by dangerousness. Understanding cultural differences in stigma towards psychosis will be important for designing stigma interventions as well as treatments for people with different cultural backgrounds.

Keywords: mental health, psychosis, stigma, cultural differences, South Asians

Public stigma towards people with mental health problems is widespread in Western countries, with psychosis being one of the most stigmatized mental health problems (Barry, McGinty, Pescosolido, & Goldman, 2014; Crisp, Gelder, Rix, Meltzer, & Rowlands, 2000; Huggett et al., 2018; Phelan, Link, Stueve, & Pescosolido, 2000; Wood, Birtel, Alsawy, Pyle, & Morrison, 2014). Mental health problems are universal, however, culture can influence the severity of stigma experienced, for example, stigma can be more severe in non-Western cultures with a higher emphasis on family and relationships such as Asian cultures (Lauber & Rössler, 2009; Ng, 1997). Additionally, migration status is associated with psychosis (Cantor-Graae & Selten, 2005) and stigma (Major & O'Brien, 2005). With the world becoming more and more socially diverse, ethnic minority group members living in a dominant White society face challenges not only in terms of adapting to the host culture (Berry, 1997), but also utilize mental health services less (Kapadia et al., 2016), experience discrimination and generally report poorer health (Major et al., 2013) than ethnic majority group members.

While there is a wealth of research on the negative consequences of stigma on people's quality of life (Corrigan, Markowitz, Watson, Rowan, & Kubiak, 2003; Major, Mendes, Berry, & Dovidio, 2013; Major & O'Brien, 2005), little is known about cultural differences in the type of stigma towards psychosis. Previous research has mainly focused on examining mental health stigma in Western cultures, however, these findings cannot be generalized to individuals from non-Western cultures living in a Western culture, such as South Asians living in the United Kingdom. The present study aimed at addressing this empirical gap in cross-cultural differences, by comparing White British and South Asian young people living in the United Kingdom in their prejudice, stereotypes, and discrimination towards people with psychosis.

#### **Psychosis**

Psychosis (also labelled 'psychotic experiences' or 'psychotic episode') is a mental health problem with symptoms of auditory hallucinations, delusional beliefs and disorganized thinking and speech. These experiences can severely distress individuals and change their behavior (NHS Choices, 2018). The Adult Psychiatric Morbidity Survey in England in 2014 (McManus et al., 2016) estimated the lifetime prevalence of a psychotic disorder at 0.7%. In our study we focused on young people (16-20 years old) and ethnic minorities (South Asians) as they are particularly vulnerable. First, it is often during adolescence when the first episode of psychosis occurs (NHS, 2016; Kessler et al., 2008). Among the 16-24 year-olds, the prevalence is estimated at 0.4%, then increasing among the 25-34 year-olds (0.5%) and 35-44 year-olds (1%) (McManus et al., 2016). Not only treatment is most effective when accessed at early stages, also stigma interventions that are incorporated in schools' curriculum (such as increasing knowledge or intergroup contact; Rüsch, Todd, Bodenhausen, & Corrigan, 2005) can challenge prejudice and discrimination from an early age on. Second, ethnic minorities are at greater risk for mental health problems such as psychosis (Major et al., 2013). In the United Kingdom, South Asians are the largest ethnic minority group with over three million people (Office for National Statistics, 2011). South Asians have a greater risk for psychotic disorders in England (0.9% prevalence) compared to Whites (0.5%). In particular, cities in the North West of England where our data collection took place have one of the highest number of people with psychosis (McManus et al., 2016; Public Health England, 2016). In addition to the severe consequences of psychosis for people's quality of life, it is also one of the most stigmatized mental health problems (Crisp et al., 2000; Wood et al., 2014).

#### **Stigma towards Psychosis**

Based on the multicomponent model of attitudes (Zanna & Rempel, 1988), public stigma has been conceptualized as having three components, it is the combination of negative

affect (feelings such as anger), derogatory cognitive beliefs (stereotypes and inaccurate knowledge), and hostile behavior (discrimination) (Brown, 2011; Corrigan & Watson, 2002; Thornicroft et al., 2007). Belonging to a stigmatized group can result in a devaluation of one's social identity (Crocker et al., 1998; Steele et al., 2002) and social identity threat (Major & O'Brien, 2005) as well as internalized stigma and label avoidance (Corrigan & Watson, 2002; Link et al., 2001). Processes of negative affect, stereotypes, discrimination and social identity threat can have a wider impact on health and general quality of life of people with mental health problems (Corrigan & Watson, 2002; Link, Struening, Neese-Todd, Asmussen, & Phelan, 2001; Link, Struening, Rahav, Phelan, & Nuttbrock, 1997; Perlick et al., 2001; Rosenfield, 1997; for a review see Major et al., 2013).

People with psychosis experience severe public stigma in terms of negative affective reactions, false stereotypical beliefs and discriminatory behavior (Barry et al., 2014; Corrigan et al., 2003; Crisp et al. 2000; Phelan et al., 2000; Wood et al., 2014). In fact, psychosis is associated with the most negative stereotypes than other mental health problems such as depression or anxiety disorder. For example, people with psychosis are seen as a danger to others and as unpredictable (Angermeyer, Breier, Dietrich, Kenzine, & Matschinger, 2005; Crisp et al., 2000; Wood et al., 2014).

Corrigan and colleagues' attribution model of public stigma towards people with mental health problems (Corrigan, 2000; Corrigan, 2012; Corrigan et al., 2003), in line with the multicomponent model of attitudes, distinguishes between affective prejudice (anger, pity, fear), stereotypes (blame, beliefs about dangerousness) and discrimination (unwillingness to help, social avoidance, recommendations for mandatory treatment and the segregation of people with mental health problems from the community). Attributions about the cause and controllability of mental health problems such as beliefs that people are responsible for and have control over their condition (blame) as well as perceptions that they are dangerous can lead to negative affective reactions of anger, fear and lack of pity, which in turn can lead to discriminatory behavior such as withholding help and rejection (avoidance, recommendations for segregation and coercion) (Corrigan et al., 2003).

Research on mental health problems including psychosis has largely focused on Western cultures, while less is known about how the type of stigma differs in non-Western cultures, in particular in those with migration status in a majority host society. Importantly, cultural differences in perceptions of mental health problems have implications for designing interventions to reduce stigma. If there are cultural differences in the endorsement of stereotypes, which can lead to discriminatory behavior, then interventions may need to be tailored to specific cultures in order to be effective.

### **Culture and Mental Health Stigma**

Previous research suggests that mental health cannot be understood in isolation from its socio-cultural context, and that Western concepts cannot be directly applied to non-Western cultures, but that culture influences stigma towards mental health (for a review see Abdullah & Brown, 2011; Lauber & Rössler, 2009). Mental health problems and the stigma associated with them exist universally. However, explanations for mental disorders and the severity of stigma varies between cultures. For example, in Asian cultures the distinction between physical and mental health problems, between the body and the mind, does not exist as it does in Western cultures. This means that in Asian cultures, mental health is somaticized and medicalized, i.e., there is a tendency to experience psychological symptoms as somatic symptoms, and to focus on medical instead of psychological help. Additionally, explanations for mental health problems are reported to be different (Lauber & Rössler, 2007; Mirza, Birtel, Pyle, & Morrison, 2019). While Western cultures rather seem to emphasize biological or psychosocial approaches to treatment, in Asian countries larger emphasis is placed on religious, supernatural and magical approaches. Furthermore, Mirza et al. (2019) found that South Asian adolescents living in the United Kingdom tend to report greater supernatural causes as explanations for mental health problems such as psychosis, in particular when they experience low to moderate psychotic experiences. As a consequence, when health care is sought, it focusses on somatic symptoms (Lauber & Rössler, 2007). In the United Kingdom, statistics show that South Asians are less likely to engage with mental health services, and less likely to complete treatment than Whites (Baker, 2018). Research has suggested several reasons for the barriers to mental health help-seeking in ethnic minorities. First, causal explanations of mental health can impact help-seeking. South Asians have a greater tendency to attribute psychosis to supernatural causes and seek help from faith institutions first, which can delay help-seeking from services providing medication and therapy (Burns, Jhazbhay, & Emsley, 2011; Islam, Rabiee, & Singh, 2015). Second, stigma from the public generally prevents people from disclosing or seeking help for their mental health problem (Schulze & Angermeyer, 2003). Such stigma can be greater in non-Western cultures which tend to place greater importance on family and relationships than Western cultures. Therefore, stigma can affect the relations of an individual to a greater extent (Lauber & Rössler, 2009).

Although the majority of the literature examined mental health stigma in the Western world (e.g., Crisp et al., 2000; Barry et al., 2014), stigmatizing attitudes and discriminatory behavior towards people with mental health problems is not limited to Western countries. There is evidence that stigma can be found across a range of different cultures and countries, including South Asian populations originating from Pakistan, India and Sri Lanka (Lauber & Rössler, 2007). Lauber and Rössler's (2007) review suggests that the tendency to view people with mental health problems in a negative light is shared with Western societies. However, stigma from close others such as family members is reported to be larger and to have more devastating social consequences in terms of social distance, devaluation and marriage in Asian cultures. Pawar, Peters and Rathod (2014) conducted a study in India in which 90% of patients had experienced mental health stigma and 86% had perceived discrimination from their colleagues, friends and superiors. Tabassum, Macaskill and Ahmad (2000) also reported that some of the most commonly endorsed attitudes by South Asians about mental health revolved around social avoidance and not having close relationships and contact with those with mental health difficulties. Research also suggests that messages about the dangers of people with mental health difficulties are being conveyed to children by their parents, resulting in them distancing themselves further (Salve, Goswami, Sagar, Nongkynrih, & Sreenivas, 2013). Additionally, stigma from health professionals is also shared between both Western and non-Western cultures, for example in Western countries such as USA, UK and Australia (Nordt, Rössler, & Lauber, 2006; Van Boekel et al., 2013), Pakistan (Naeem, Ayub, Javed, Irfan, Haral, & Kingdon, 2006), and Sri Lanka (Fernando, Deane, & McLeod, 2010).

There is currently little insight into cross-cultural differences in the type of stigma towards psychosis, in particular considering ethnic minorities living in a dominant Western culture. The United Kingdom's largest ethnic minority group, South Asians, have to cope with different issues than those living in their home countries. For example, they can experience discrimination and poor wellbeing due to their stigmatized minority group status (Major et al., 2013; Major & O'Brien, 2005), and visible ethnic differences in migrants can increase the risk for psychosis (for a meta-analysis see Cantor-Graae & Selten, 2005). South Asians abroad also have to deal with acculturation processes, i.e., negotiating conflicts between their original cultural identity and the new identity and social norms of their host culture. These processes can result in acculturative stress and, depending on the outcome of this conflict between original and new identity, to a reduced wellbeing (Berry, 1997). Additionally, experiencing psychosis would mean that South Asians living in the UK would not only belong to a minority group based on ethnicity but also to an additional minority group based on mental health.

#### The Present Research

Psychosis typically emerges during the developmental period of adolescence (Garralda & Raynaud, 2012; Vos & Begg, 2003). Understanding cultural differences in the perception and stigmatization of psychosis is important in order to design effective interventions to reduce negative attitudes and discrimination towards people with psychosis from an early age on. The present study was conducted in a large ethnically diverse city in Northern England. The city has an overall population of 2.7 million, with the largest ethnic groups being White British (79.8%) and Asian British (10.2%; comprised of 4.8% Pakistani; 2% Indian; and 1.3% Bangladeshi) (Office for National Statistics, 2011).

While there is evidence for stigma towards mental health problems in both Western and non-Western cultures, little research has been carried out examining the type of stigma towards psychosis, in particular in non-Western cultures living in a dominant White culture. We compared White British and South Asian British young people living in the United Kingdom in their type of stigma towards people with psychosis, distinguishing between negative affective reactions (prejudice), negative cognitive biases (stereotypes) as well as discriminatory behavior. While Mirza et al. (2019) found that South Asians living in the UK tend to report lower intentions to have contact with people with psychosis, an indication of stigma, we focused on disentangling the different dimensions of stigma associated with negative affect, cognition and behavior, using Corrigan et al.'s attribution model of stigma (2003; 2012). We predicted that affective prejudice (anger, pity, fear) and stereotypes (perceived blame and dangerousness) towards people with psychosis would be associated with discriminatory behavior (withholding help and rejection responses). Furthermore, evidence suggests that stigma towards people with mental health problems may be greater in Asian cultures (Lauber & Rössler, 2007). We tested the following hypotheses:

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- H1: South Asians will report greater affective prejudice (anger, fear, lack of pity) towards people with psychosis than White British.
- H2: South Asians will report more negative stereotypes (blame, dangerousness) towards people with psychosis than White British.
- H3: South Asians will report more discriminatory behavior (withholding help, avoidance, endorsement of segregation, coercion) towards people with psychosis than White British.
- H4: The relationship between ethnic group and discriminatory behavior will be mediated by affective prejudice and by stereotypes.

Additionally, intergroup contact theory (Allport, 1954) suggests that contact with stigmatized groups, such as people with psychosis, is associated with lower stigma towards those groups (Pettigrew & Tropp, 2006; Reinke, Corrigan, Leonhard, Lundin, & Kubiak, 2004). For example, contact with people with schizophrenia is associated with less social avoidance, due to more positive attitudes (West, Hewstone, & Lolliot, 2014). Due to the stigma of mental health in the South Asian community, those with mental health problems may isolate themselves from others (Rathod, Kingdon, Phiri, & Gobbi, 2010) and therefore have less contact with people with psychosis. For this reason, intergroup contact was included as a covariate to control and adjust for these participant characteristics. We measured contact towards people with mental health problems more generally, instead of contact specifically towards people with psychosis, as intergroup contact research suggests that contact not only reduces prejudice towards the group one has interacted with, but also towards other stigmatized groups (for an overview see Vezzali & Stathi, 2017). Identification with being British was used as a proxy measure to test whether our South Asian sample had adapted to the British culture, or in other words, whether the cultural identity of South Asians living in the United Kingdom was significantly different from a British identity.

#### Method

### **Participants**

One-hundred-seventy-three young people took part in the study, 109 White British and 64 South Asians. In line with the definition by the Office for National Statistics, South Asian refers to those individuals originating from the South Asian subcontinent, including those from India, Pakistan, Bangladesh and Sri Lanka, but who live in the United Kingdom. The ethnic identity of participants was determined by them self-reporting their ethnicity.<sup>1</sup> The exclusion criteria were: not speaking or understanding English due to all measures being in English. Thirty-two completions of the 205 participants had to be excluded from the analysis as they did not meet our inclusion criteria of identifying themselves as either White British or South Asian. The analysis plan for this project included an a priori decision on comparing equal sample sizes. This decision was based on recommendations on power in unequal cell sample sizes (StataCorp, 2013). This planned strategy was then followed once data were collected. Due to the inequality of cell sample sizes, an equivalent sample size for both groups was used via random subsampling in SPSS, and 64 cases were randomly selected from the 109 White British group, resulting in a final sample size of 128 participants (64 White British, 64 South Asians) included in the analysis (64 women and 64 men). In order to detect a medium effect for both  $\alpha$  and  $\beta$  paths using the bias-corrected bootstrap test of mediation with a power of .8, the required sample size is N = 71 (Fritz & MacKinnon, 2007). Those included in the analysis were between the age of 16 and 20 years ( $M_{\text{White}} = 16.95$ ,  $SD_{White} = 0.88, M_{Asian} = 16.53, SD_{Asian} = 0.80$  (for more demographics see Table 1).

#### Procedure

Head teachers of one secondary school and one college in a city on Northern England were contacted via email and telephone. Then they were given a copy of the participant information sheet and consent forms for the participants and for the parents of participants younger than 18 years. These were collected from the head teachers a week later by the researcher, and participants were given an envelope containing a set of questionnaires through the head teacher. Upon completion, participants were asked to put the questionnaires in the envelopes, seal them and return to the head teacher who passed them on to the researcher. Ethical approval was received by the local institutional research and ethics committee (Ref: 15173). As young people may not be familiar with the term psychosis, and as its cultural meanings may vary, a brief definition of psychosis from the NHS were given to participants.

#### **Measures**<sup>1</sup>

**Prior contact with people with mental health problems.** Prior contact was measured by asking participants to indicate whether they had any previous contact with a person with a mental health problem (0 = no, 1 = yes).

**Identification with being British.** The five items of the Group Identification Scale (Hornsey & Hogg, 2000) were used on a 7-point Likert scale ranging from 1 = strongly *disagree* to 7 = strongly agree, for example "I feel British". A composite score was created by the mean of these items (Cronbach's  $\alpha_{White} = .90$ ; Cronbach's  $\alpha_{Asian} = .90$ ).

Stigma towards psychosis was measured adapting the Attribution Questionnaire (Corrigan et al., 2003). All three dimensions towards people with psychosis were measured: prejudice (anger, pity, fear), stereotypes (blame, dangerousness), and discrimination (helping, avoidance, segregation, coercion). Participants were presented with a vignette about a person named Harry who was described as having psychosis, and were asked to rate statements about Harry on a 9-point Likert scale ranging from 1 = not at all to 9 = very much. A composite score was created by the mean of the items for each subscale, with most subscales having three items apart from anger and pity (two items). Cronbach's  $\alpha$  was calculated for the three-item scales (criterion:  $\alpha \ge .60$ ), and a correlation coefficient for the two-item scales

(criterion:  $r \ge .50$ ): anger e.g., "I would feel aggravated by Harry" ( $r_{white} = .58$ ;  $r_{Asian} = .59$ ), fear e.g., "How scared of Harry would you feel" ( $\alpha_{white} = .89$ ;  $\alpha_{Asian} = .85$ ), pity e.g., "How much sympathy would you feel for Harry?" ( $r_{White} = .58$ ;  $r_{Asian} = .62$ ), dangerousness e.g., "I would feel unsafe around Harry" ( $\alpha_{White} = .85$ ;  $\alpha_{Asian} = .62$ ), blame e.g., "I would think that it was Harry's own fault that he is in the present condition" ( $\alpha_{White} = .45$ ;  $\alpha_{Asian} = .53$ ), helping e.g., "I would be willing to talk to Harry about his problems" ( $\alpha_{White} = .74$ ;  $\alpha_{Asian} = .88$ ), segregation e.g., "I think Harry poses a risk to his neighbours unless he is hospitalised" ( $\alpha_{White} = .79$ ;  $\alpha_{Asian} = .70$ ), avoidance e.g., "If I were an employer, I would interview Harry for a job" ( $\alpha_{White} = .67$ ;  $\alpha_{Asian} = .60$ , reverse coded), coercion e.g., "How much do you agree that Harry should be forced into treatment with his doctor even if he does not want to" ( $\alpha_{White} = .59$ ;  $\alpha_{Asian} = .43$ ). The scales for blame and coercion lacked internal consistency, and thus no further analyses were conducted considering these constructs.

#### Results

#### **Preliminary Analyses**

White British (n = 45) reported significantly more previous contact with a person with a mental health problem than South Asians (n = 25),  $\chi^2(1) = 13.44$ , p < .001. White British reported stronger identification with being British (M = 5.35, SD = 1.53) than South Asians (M = 4.64, SD = 1.51), t(126) = 2.64, p = .009, indicating that South Asians perceived themselves as culturally different from White British people.

#### **Stigma Dimensions**

Descriptive statistics for all dependent measures are reported in Table 2. In order to test whether White British and South Asians differed in stigma towards psychosis (while controlling for contact), one-way ANCOVAs were carried out with the six stigma subscales. Ethnicity was coded as White British = 0 and South Asians = 1. Prior contact with people with mental health problems was entered as a covariate. Results demonstrated a significant

effect on all three dimensions. South Asians reported higher levels of *anger* (*F*(1, 124) = 7.60, p = .007, partial  $\eta^2 = .06$ ; H1), *dangerousness* (*F*(1, 124) = 4.95, p = .028, partial  $\eta^2 = .04$ ; H2), *segregation* (*F*(1, 124) = 4.19, p = .043, partial  $\eta^2 = .03$ ; H3) and avoidance (*F*(1, 124) = 6.76, p = .010,  $\eta^2 = .05$ ; H3) as well as lower *helping intentions* (*F*(1, 124) = 8.24, p = .005, partial  $\eta^2 = .06$ ; H3) than White British. The covariate was significant only for helping intentions (*F*(1, 124) = 6.36, p = .013, partial  $\eta^2 = .05$ ). There were no significant differences between White British and South Asians for *fear* and *pity*, ps > .05.<sup>2.4</sup>

#### **Mediation Models**

Anger. We computed mediation analyses to assess whether the effects of ethnicity on discriminatory behavior (reduced helping intentions, avoidance, endorsement of segregation) were mediated by variation in perceived *anger*. Ethnicity was coded as White British = 0 and South Asians = 1. Bootstrapping analyses (1000 subsamples, 95% bias-corrected and accelerated confidence interval) were conducted using the PROCESS macro provided by Hayes (2016, Model 4). Contact was entered as a covariate. Results can be found in Table 3. As hypothesized, ethnicity significantly predicted helping, avoidance and segregation, *p* < .05 for all total effects. Being of South Asian ethnic background was associated with lower helping intentions, and greater avoidance and segregation recommendation. There were significant indirect effects of ethnicity on helping, avoidance and segregation, through anger. As hypothesized (H4), the relationships between ethnicity (predictor) and helping, avoidance and segregation (outcome variables) were mediated by anger. Being of South Asian ethnic background was associated with higher attributed anger, and in return with lower helping intentions, greater avoidance and higher segregation recommendation.

**Dangerousness.** We then computed similar mediation analyses to assess whether the effect of ethnicity on discriminatory behavior (reduced helping, avoidance, segregation) was mediated by variation in perceived *dangerousness*. Contact was entered as a covariate.

Results can be found in Table 4. As hypothesized, ethnicity significantly predicted helping, avoidance and segregation, p < .05 for all total effects. Being of South Asian ethnic background was associated with lower helping intentions, and greater avoidance and segregation recommendation. There were significant indirect effects of ethnicity on helping, avoidance and segregation, through dangerousness. As hypothesized (H4), the relationships between ethnicity (predictor) and helping, avoidance and segregation (outcome variables) were mediated by dangerousness. Being of South Asian ethnic background was associated with higher attributed dangerousness, and in return with lower helping intentions, greater avoidance and higher segregation recommendation.<sup>3, 4</sup>

#### Discussion

Previous research has focused on examining mental health stigma in Western cultures, little research has compared Western with non-Western cultures living in a dominant White culture in their type of stigma. The current study compared White British and South Asians young people in the United Kingdom in their affective prejudice, stereotypes and discriminatory behavior towards people with psychosis.

Firstly, following Corrigan et al.'s attribution model of stigma (2003; 2012), we found support for our hypotheses that South Asians endorse greater affective prejudice and more negative stereotypes towards people with psychosis than White British. Specifically, they attributed higher anger and dangerousness to people with psychosis for their condition. Secondly, we found support for our hypothesis that South Asians report greater willingness to engage in discriminatory behavior towards people with psychosis than White British. Specifically, they reported greater intentions to withhold help, avoidance and endorsement of segregation between people with psychosis and the community. We also found support for our hypothesis that these cultural differences in self-reported discriminatory behavior are mediated by prejudice (anger) and stereotypes (dangerousness). Our findings are in line with evidence on cultural differences which suggest that stigma towards people with mental health problems can be greater in Asian cultures (Lauber & Rössler, 2007). While evidence indicates that social distance is one of the most common endorsed consequences of having a mental health problem among South Asians (Tabassum, et al., 2000), our findings indicate that this also specifically applies to psychosis and extends to other consequences such as withholding help, avoidance and recommending segregation between people with psychosis and the community. Intergroup contact theory (Allport, 1954) suggests that White British may also be less stigmatizing towards people with psychosis due to greater prior contact with people with mental health problems (Pettigrew & Tropp, 2006). Furthermore, due to the stigma of mental health in the South Asian community, contact with people with mental health problems (Rathod et al., 2010). Future research should examine the role of prior intergroup contact in cross-cultural studies on mental health stigma further, using more refined measures of contact quantity and quality.

While we found support for cultural differences in the endorsement of prejudice, stereotypes and discriminatory behavior, we did not find support for cultural differences on all measures of affective prejudice (fear, pity). One reason may be that stereotypes and discriminatory behavior are associated with cultural norms and expectations, for example South Asians may not be able to help or socially engage with people with psychosis due to the stigma and consequences attached to it. However, they may still experience similar emotions as White British, for example they may not differ in their (internally experienced) fear or pity for people with psychosis. There may also be a complex relationship between cultural origin and migrant status in South Asians. Future research will need to investigate whether stigma is generally more severe in non-Western compared to Western cultures, or whether only specific aspects of stigma (cognitive and behavioral components) are more severe, by using more refined measures of affective prejudice such as intergroup anxiety or empathy.

In addition to explanations focusing on how culture can affect stigma, another explanation for our findings could be that since South Asians living in the UK are an ethnic minority group in a majority host society, they may tend to avoid further associations with other minority groups, such as people with mental health problems. Another reason may be limitations in our design. The vignette was based on a person named Harry, which indicated that the person with psychosis is from a White British ethnic background, so an outgroup member for South Asians and an ingroup member for White British. A fruitful avenue for future research may be to vary the main character of the vignette, using a White British and a South Asian name, or removing the name from the vignette, to test whether naming the target of the stigmatized group influences affective reactions. In general, using scales developed for research in Western countries may not be easily applicable to cross-cultural studies. They may lead to lower reliability (as some scales in our study) as well as an inability to capture potential cultural differences. An important avenue for future research is to develop scales that make it possible to capture the culture-specific experiences of mental health, and which are developed with researchers and service-users from non-Western cultures.

Due to the challenge of obtaining the same number of South Asian participants as White British participants, the cell sample sizes were unequal and the overall sample size lower than planned. This is a limitation of the current study, in terms of power and the type of analyses that are possible (such as more complex models). Future studies should consider strategies reaching out to minority participants in order to obtain larger sample sizes to test more complex models. Another limitation of the current study is that we did not collect more information about the South Asian sample. While we had included a measure of identification with being British as a proxy measure of adaption, future research should consider important variables such as British citizenship or length of stay in the UK.

#### Implications

Stigma greatly impacts the health of people with mental health conditions further. It is associated with poorer well-being such as lower self-esteem, depression and poor sleep (Birtel et al., 2017; Corrigan & Watson, 2002; Link et al., 2001). Additionally, stigma has implications for the diagnosis, treatment and management of psychosis. Help-seeking is frequently delayed due to fear of social exclusion from close others and society (Schulze & Angermeyer, 2003; Wright et al., 2000). Stigma is a major barrier to help-seeking (Schomerus & Angermeyer, 2008). Subsequently, this impedes timely diagnosis and treatment, hinders recovery and rehabilitation, and ultimately compromises the quality of life of those with mental health difficulties. Mental health services are reported to be underutilized by ethnic minorities, particularly South Asians (Kapadia et al., 2016). However, cross-cultural differences exist when it comes to mental health causal beliefs, which can influence the willingness to seek help. Spiritual and supernatural explanations are commonly held by South Asians regarding the causes of psychosis, including the will of god, karmic retribution and evil eve (Kulhara et al., 2000; Mirza et al., 2019). South Asians are more likely to seek help from informal services, including religious leaders, prayer and god as first ports of call (Conrad & Pacquiao, 2005). This help-seeking pattern has also been extended to South Asians living in the United Kingdom, where there is also a reluctance to visit health practitioners for mental health problems (Fenton & Sadiq-Sangster, 1996). Appropriate and timely help-seeking from formal mental health services such as Early Intervention Services can mean better outcomes, including symptom reduction and fewer relapses (McGorry et al., 2008).

Therefore, there is a need to understand cultural differences in stigma towards people with psychosis in order to tackle the negative consequences of stigma on help-seeking and well-being, and to make service accessible and effective for those from ethnic minority backgrounds, in particular adolescents.

#### Conclusion

The present study contributes to understanding the processes of prejudice, stereotypes and discrimination towards people with psychosis in its socio-cultural context. Developing a deeper understanding of cross-cultural differences in psychosis specifically, and of mental health in general, may provide valuable insights for practitioners. Increased sensitivity to associations between culture and mental health will enable educators and policy makers to tailor stigma interventions, and clinicians to develop treatment approaches to South Asian communities.

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#### Footnotes

<sup>1</sup> This study, a student project, was part of a larger research project that involved two students with different research questions and different dependent measures. Therefore, other measures were administered which were not part of the present investigation (see Mirza et al., 2019).

<sup>2</sup> When including the full sample, analyses yielded similar results: In the ANCOVAs, South Asians (vs White British) reported significantly higher levels of anger (F(1, 168) =8.89, p = .003,  $\eta 2 = .05$ ; H1) and avoidance (F(1, 168) = 7.61, p = .006,  $\eta 2 = .04$ ; H3), and significantly lower helping intentions (F(1, 168) = 13.70, p < .001,  $\eta 2 = .08$ ; H3); danger (F(1, 168) = 2.84, p = .094,  $\eta 2 = .02$ ; H2) and segregation (F(1, 168) = 2.43, p = .121,  $\eta 2 =$ .01; H3) showed a trend to be higher for South Asians. In the mediation analyses, there were significant indirect effects between ethnicity and helping intentions (b = -.31, SE = 0.13, 95% CI [-0.60, -0.09]), avoidance (b = .31, SE = 0.12, 95% CI [0.08, 0.57]), and segregation (b =.37, SE = 0.14, 95% CI [0.10, 0.67]) via anger.

<sup>3</sup> Entering both mediators (anger, dangerousness) simultaneously in the same mediation models yielded similar results. Specifically, for segregation both anger (b = .22, SE = 0.12, 95% CI [0.01, 0.50]) and dangerousness (b = .23, SE = 0.12, 95% CI [0.03, 0.52]) were significant mediators, for helping intentions anger was a significant mediator (b = ..32, SE = 0.15, 95% CI [-0.66, -0.05]) but not dangerousness (b = ..03, SE = 0.08, 95% CI [-0.24, 0.11]), for avoidance dangerousness (b = .28, SE = 0.15, 95% CI [0.03, 0.62]) but not anger (b = ..11, SE = 0.10, 95% CI [-0.05, 0.33]) was a significant mediator.

<sup>4</sup> When intergroup contact was excluded as a covariate, the ANOVAs yielded similar results: South Asians reported significantly higher levels of anger (F(1, 126) = 7.73, p = .006, partial  $\eta 2 = .06$ ; H1) and avoidance (F(1, 126) = 9.14, p = .003,  $\eta 2 = .07$ ; H3), marginally significantly higher levels of dangerousness (F(1, 126) = 3.72, p = .056, partial  $\eta 2 = .03$ ; H2)

and segregation (F(1, 126) = 3.45, p = .066, partial  $\eta 2 = .03$ ; H3) as well as significantly lower helping intentions (F(1, 126) = 14.93, p < .001,  $\eta 2 = .11$ ; H3) than White British. In the mediation analyses, anger (but not dangerousness) mediated the effects of ethnicity on discriminatory behavior, i.e., helping intentions (b = ..32, SE = 0.14, 95% CI [-0.62, -0.08]), segregation (b = .39, SE = 0.15, 95% CI [0.12, 0.70]), and avoidance (b = ..35, SE = 0.14, 95% CI [0.10, 0.64]).

# Participant Demographics (frequencies)

	White British	South Asian
Gender M:F	14:50	50:14
Ethnicity		
White British	64	
Asian Pakistani		39
Asian Indian		19
Asian Bangladeshi		5
Asian Sri Lankan		1
Religion		
No religion	33	18
Christian	28	2
Muslim	0	33
Sikh	0	2
Hindu	1	6
Other	1	1
First Language		
English	64	49
Urdu		9
Punjabi		3
Arabic		1
Malayam		1

	White British	South Asian
Anger	2.41 (1.52)	3.16 (1.54)
Fear	2.70 (1.61)	3.14 (1.59)
Pity	7.22 (1.63)	6.88 (1.57)
Dangerousness	3.12 (1.67)	3.67 (1.57)
Helping	7.43 (1.41)	6.26 (1.97)
Segregation	2.51 (1.50)	2.98 (1.42)
Avoidance	4.00 (1.79)	4.93 (1.70)

Means (and Standard Deviations) for the Stigma Dimensions

# Total, Direct, and Indirect Effects of Ethnic Group on Discriminatory Behavior, Mediator:

Anger
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				95% BCa CI	
Dependent Variable	В	SE (B)	р	LL	UL
Helping					
Total effect	-0.91	0.32	.005	_	_
Direct effect	-0.57	0.30	.062	-	_
Indirect effect	-0.34	0.15	_	-0.66	-0.08
Segregation					
Total effect	0.56	0.27	.043	_	_
Direct effect	0.16	0.24	.516	_	_
Indirect effect	0.41	0.16	-	0.09	0.74
Avoidance					
Total effect	.82	0.32	.011	_	_
Direct effect	.49	0.30	.110	_	_
Indirect effect	.34	0.15	_	0.07	0.67

*Note*. Contact was entered as a covariate. B = unstandardized coefficient, SE = standard error, p reported two-tailed, 95% BCa CI = 95% bias-corrected confidence interval, LL = lower limit, UL = upper limit.

## Total, Direct, and Indirect Effects of Ethnic Group on Discriminatory Behavior, Mediator:

				95% BCa CI	
Dependent Variable	В	SE (B)	р	LL	UL
Helping					
Total effect	-0.91	0.32	.005	_	—
Direct effect	-0.71	0.31	.024	-	—
Indirect effect	-0.20	0.11	_	-0.45	-0.02
Segregation					
Total effect	0.56	0.27	.043	_	_
Direct effect	0.21	0.23	.355	_	_
Indirect effect	0.35	0.15	-	0.06	0.63
Avoidance					
Total effect	.82	0.32	.011	_	_
Direct effect	.49	0.28	.090	_	_
Indirect effect	.34	0.16	_	0.07	0.66

Dangerousness

*Note*. Contact was entered as a covariate. B = unstandardized coefficient, SE = standard error, p reported two-tailed, 95% BCa CI = 95% bias-corrected confidence interval, LL = lower limit, UL = upper limit.