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Social identity and psychosis: Explaining elevated rates of psychosis in migrant populations

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Abstract

A substantial body of literature suggests that migrants are at greater risk of developing psychotic symptoms, such as paranoia, compared to native populations. To date, researchers have been unable to identify the primary cause of this effect, finding scarce support for biological, diagnostic and economic explanations. Social determinants have received little empirical attention in this domain, which we assert is a critical gap in the literature. Here, we propose that the Social Identity Approach (SIA) offers a framework to help explain the elevated rates of psychosis among migrants, and in turn inform policies and interventions to address this important mental health issue. We propose that cultural identities play a central role in mitigating the psychological precursors of psychosis, and that de-identification and social disconnection subsequent to migration could initiate or exacerbate psychosis for multiple generations. We draw together research from social and clinical psychology to detail a social identity approach to psychosis in migrant populations, and make recommendations for future research.

Keywords: social identity, psychosis, paranoia, self-categorization, migration, ethnic density

Social identity and psychosis: Explaining elevated rates of psychosis in migrant populations

Over the last decade there has been exponentially increasing research on the impact of social identity - those aspects of a person's identity that derive from the social groups and categories to which he or she belongs (Hornsey, 2008; Tajfel, 1972) - on physical and mental health (S. A. Haslam, Jetten, Postmes, & Haslam, 2009; Jetten, Haslam, & Alexander, 2012). With respect to mental health, this research has largely focused on the common psychiatric disorders such as anxiety and depression, as well as the more general construct of wellbeing (see review by Haslam et al., 2009). We propose that the Social Identity Approach (SIA) may have important implications for other mental health outcomes, in particular, psychosis: the spectrum of mental illnesses associated with a loss of contact with reality, which typically presents as positive (e.g., delusional beliefs and hallucinations) and/or negative (e.g., absence of emotions and motivation) symptoms. It is clear that this approach has the potential to inform research on many of the pathways to psychosis at the population level. However, in the present instance we focus on the issue of psychosis incidence rates in migrant populations, which are consistently higher than those found among non-migrants (Cantor-Graae & Selten, 2014).

The psychotic disorders

It should be pointed out at the outset that the concept of psychosis is a broad one, and that the taxonomy of psychotic disorders has been the subject of continuous debate since the middle years of the nineteenth century. Although patients with psychotic symptoms are most often diagnosed as suffering from schizophrenia, schizoaffective disorder or bipolar disorder according to conventional diagnostic criteria (for example, those in the American Psychiatric Association's Diagnostic and Statistical Manual for Psychiatric Disorders and the World Health Organization's International Classification of Disease), there is little evidence that these categories reflect 'natural kinds' (Bentall, 2004), and thus, many patients have symptoms that stride these categories (Tamminga et al., 2014). It has recently become recognized that sub-clinical psychotic experiences are relatively common in epidemiological samples (Van Os, Hanssen, Bijl, & Ravelli, 2000) and that these kinds of experiences lie on a continuum with healthy functioning (Bebbington et al., 2013; Claridge, 1990; Freeman et al., 2005). One approach to capturing this kind of variation involves defining psychosis in terms of five independent dimensions of positive symptoms, negative symptoms, cognitive disorganization, depression and excitement/mania (Van Os & Kapur, 2009), but an alternative approach favored by psychological researchers has been to identify mechanisms involved in specific symptoms such as hallucinations or delusions (Bentall, 2004). In this paper, our focus is on the positive symptoms and, in particular, the most common of the positive symptoms: paranoid delusions (irrational beliefs about persecution), which have been extensively investigated by psychological researchers (Bentall, Corcoran, Howard, Blackwood, & Kinderman, 2001; Freeman et al., 2006).

In recent years, research on epidemiological, patient and prospective samples has identified substantial social risk factors for the positive symptoms of psychosis, including exposure to poverty, social inequality and urban environments in childhood, childhood trauma such as sexual and physical abuse or bullying, separation from parents at an early age, and victimization in adulthood (Beards et al., 2013; Bentall et al., 2014; Varese et al., 2012). However, as already noted, although these factors may have implications for social identity more broadly, our focus of concern in this paper is the elevated rates of psychosis in migrant and ethnic minority populations (Bhugra et al., 1997; Cantor-Graae & Selten, 2014; Fearon et al., 2006; King, Coker, Leavey, Hoare, & Johnson-Sabine, 1994; Van Os, Castle, Takei, Der, & Murray, 1996), which according to past research, cannot be explained by diagnostic biases, selective migration,

socioeconomic status, or genetic differences (Kirkbride et al., 2008; Morgan, Charalambides, Hutchinson, & Murray, 2010; Sharpley, Hutchinson, Murray, & McKenzie, 2001). Thus, there is a need to consider new approaches to this problem that focus on social rather than biological determinants.

Here, we argue that the SIA may hold the key to understanding these elevated rates. Specifically, we propose that first- and second-generation migrants who struggle to maintain adaptive social identities may be at higher risk of developing psychosis. Indeed, as proposed by Berry and Kim (1998), migrants who do not identify with their culture of birth, nor their newly discovered culture, may be at risk of social marginalization and its associated stressors. These stressors may be exacerbated among second-generation migrants who feel disconnected from their family's culture and the culture within which they live, leaving them vulnerable to feelings of uncertainty and low self-esteem, both of which have been shown to predict psychosis onset (Kramer & Wei, 1999; Thewissen, Bentall, Lecomte, van Os, & Myin-Germeys, 2008).

In the present article we first demonstrate how social identity theorizing can be applied to the psychotic illness spectrum. Second, we discuss how our model might explain the high incidence of psychosis among migrant populations. Third, we provide a blueprint for future research on social identity and psychosis, and outline potential psychological and social mechanisms. Finally, and more broadly, we encourage greater integration of social psychology, clinical psychology, and psychiatry to better understand the social determinant of mental health.

The Social Identity Approach

The SIA comprises two influential theories: Social Identity Theory (SIT; Tajfel & Turner, 1979) and Self-Categorization Theory (SCT; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). These two theoretical frameworks are highly related and emerge from the

SOCIAL IDENTITY AND PSYCHOSIS

same philosophical perspective. Self-Categorization Theory, however, focusses on individual processes and how people develop self-concepts by virtue of the different groups and categories to which they belong (e.g., athlete, woman, human). Social Identity Theory, conversely, emphasizes intergroup processes and how identification contributes to differences in attitudes and behaviors towards ingroups ("us") and outgroups ("them").

Fundamental to SCT is the idea that self-categorization can occur at several different levels. For example, at the superordinate level people may develop a *human identity*, whereby individuals see themselves as part of humanity. People may also categorize themselves at the intermediate level (social identity) as a member of social group ("we") that is distinct from other social groups ("they"). Finally, at the subordinate level (*personal identity*) self-categorizations can occur based on interpersonal comparisons that highlight personal idiosyncrasies. It should be noted that the intermediate level of self-categorization can be broken down into finer gradients (Hornsey & Hogg, 2000), and that categorizations are dynamic insofar as they change over both time and contexts (Turner, Oakes, Haslam, & McGarty, 1994). For example, when a person switches career their tendency to categorize themselves in terms of their previous profession might wane. Similarly, one's human identity may become less salient when interacting with animals that display human-like behaviors, and more salient when watching the moon landing. Changes in identity are also argued to be functionally dependent ("functional antagonism"): as the salience of one self-category increases, the salience of other categories consequently decreases (Turner et al., 1987).

The categories that define self-concepts give rise to social identities that are equally dynamic. Social Identity Theory argues that as different social identities become salient, they affect how people behave towards ingroup and outgroup members. As demonstrated in seminal

6

work by Tajfel, Billig, Bundy, and Flament (1971), people tend to show ingroup preferences even when groups are arbitrarily defined. In their study, Tajfel and colleagues asked participants to estimate the number of dots in a series of images projected onto a screen. Participants were then ostensibly assigned to groups based on their tendency to overestimate or underestimate the number of dots in the image; however, in reality, participants were simply randomly allocated to over- or under-estimator groups. In a subsequent task where participants could allocate varying rewards to each group, they consistently favored the group to which they were allocated. These ingroup biases occurred despite the fact that participants were all unknown to each other, the groups were based on arbitrary criteria, there was no interaction with ingroup or outgroup members, and participants could not gain personal advantage by favoring their own group. By viewing ingroups positively and outgroups negatively, and by exaggerating the differences between ingroups and outgroups, SIT argues that people can enhance their personal self-image through these social comparisons. Thus, in order to maintain a positive sense of self, ingroups must be viewed favorably compared to outgroups.

The ease with which people categorize themselves and others, and show preferences for their own category, highlights how strong social identities can form. These identities may be bound to social groups, cultures, nationalities, sporting teams, and religions, to name but a few. The tendency for individuals to favor the groups with which the identify has been interpreted as a way of maintaining self-esteem and, indeed, in most circumstances, identifying with multiple positively valued groups will promote a positive view of the self (Jetten et al., 2014). However, identifying with a negatively valued group may result in self-stigma, which is damaging to selfesteem and self-efficacy, a problem faced by many patients suffering from severe mental illness (Corrigan, Watson, & Barr, 2006), impeding long-term recovery (Vass et al., 2015). In unequal and diverse societies there are many opportunities for groups to become devalued through stigma and prejudice, leading to deteriorating identities and poor mental health. Issues of identity denial, racism, and religious intolerance are problems faced by migrants across the world (Wrench & Solomos, 1993). However, we have limited understanding of the mental health consequences of devaluing one's cultural identity, or having it devalued by others.

Migration and identity

Bhugra (2004) defines migration as "a process of social change where an individual, alone or accompanied by others, because of one or more reasons of economic betterment, political upheaval, education or other purposes, leaves one geographical area for settlement in another geographical area". Although it has occurred throughout human history, there has been evidence of increasing rates of international migration during the late twentieth and early twentyfirst centuries (Koser, 2007). Migration may be temporary or permanent, may be to a similar or vastly different culture and may be motivated by a need to improve one's education or career prospects, or to escape political persecution and violent conflicts. Migrants may also have a strong support network to rely upon during their transition or they may have to navigate the process alone. Thus, migration is a social process that involves varying levels of stress and volition depending on the circumstances surrounding the decision to migrate.

Even when someone migrates under less stressful circumstances, the process is still characterized to some extent by uncertainty, anxiety, and loss. One issue faced by all migrants is the potential loss of their cultural identity, which is a social identity that is bound to a specific culture. Sam and Berry (2010) note that moving between cultures leads to both psychological and cultural changes (*acculturation*), which will then culminate in one of four possible outcomes (Berry & Kim, 1998). The first is *integration*, sometimes referred to as *biculturalism*, which

SOCIAL IDENTITY AND PSYCHOSIS

occurs when a person assumes their new culture while maintaining their original cultural identity. The second, *assimilation*, refers to the process of embracing the new culture whilst deidentifying with one's original culture. *Separation* describes the process of rejecting the new culture while retaining one's original cultural identity. The final potential outcome is referred to as *marginalization*, which occurs when a person rejects both their original culture and their new culture.

According to Berry and Kim, marginalization is the most stressful of these four possible outcomes. Indeed, marginalization is associated with higher levels of stress and depression among first and second-generation Greek-Canadians (Sands & Berry, 1993), and with increased stress among Korean-Canadians (Berry, Kim, Minde, & Mok, 1987). Yeh (2003) found that the stress associated with being trapped between two cultures, and alienated from both, was associated with more general mental health issues in a sample of Asian-American student migrants. Thus, feeling disconnected from multiple cultural groups is particularly stressful and psychologically harmful.

Integration is suggested to be the most beneficial form of acculturation in terms of social adjustment and mental health (Berry, 1999; Berry et al., 1987). According to curvilinear models of acculturation, people need a balance of cultural elements from both their new and previous culture to maintain good mental health. Moving too far in the direction of one cultural identity may distance oneself from important social connections that help to maintain a positive sense of self. This idea is supported by research indicating that better mental health is predicted by belonging to more social groups (Cruwys et al., 2013; Thoits, 1983), which in turn suggests that maintaining previous identities while also forming new identities may protect people from developing psychological symptoms. Similarly, it may be important to maintain identification at

different categorization levels (e.g., national identity, friendship group identity, family identity) to increase psychological resilience.

Psychosis and the ethnic density effect

As noted earlier, psychotic symptoms are consistently higher among ethnic minority populations. In Great Britain, for example, African-Caribbeans experience a psychosis incidence rate 6.7 times higher than White Britons, while Black African and Asian psychosis incidence rates sit at 4.1 and 1.5 times higher than White Britons, respectively (Fearon et al., 2006). Although studies have generally focused on broad diagnoses, especially schizophrenia, it has been noted that paranoid (Eitinger, 1959; Hitch & Rack, 1980; Westermeyer, 1989) and manic symptoms (Bebbington, Hurry, & Tennant, 1981; Hunt et al., 1993; Leff, Fischer, & Bertelsen, 1976; Lloyd et al., 2005) are especially evident in migrant groups.

In the Netherlands, rates of psychosis among migrants seem to be related to the degree of cultural divergence between a person's culture of origin and the host culture. Indeed, migrants from Western nations have a 1.2 times higher risk of psychosis than native Dutch people, but rates are much higher in non-Western migrants from Morocco (5.9), Surinam (2.6), and Netherlands Antilles (2.2; Veling et al., 2007). A meta-analysis of 18 studies conducted in Western nations (Australia, The United Kingdom, Denmark, Sweden, and the Netherlands) reported schizophrenia incidence rates of 2.7 among first-generation migrants and 4.5 among second-generation migrants (people born to migrant parents) relative to non-migrants (Cantor-Graae & Selten, 2014). These findings are consistent with the possibility that second-generation migrants are at greater risk compared to first-generation migrants because they lack strong cultural ties to their homeland, whilst not completely identifying with their culture of birth. Thus, it may be that second-generation migrants are trapped in a type of identity limbo that prevents

them from reaping the mental health benefits that multiple social identities provide (S. A. Haslam et al., 2009; Iyer, Jetten, Tsivrikos, Postmes, & Haslam, 2009; Jetten et al., 2014).

Possible causes of the elevated rates of psychosis among migrants have been the subject of extensive research. While the present article does not attempt to detail all of these previously proposed explanations, the extant literature suggests that biological differences do not explain ethnicity-psychosis associations. Moreover, the increased rates of psychosis among migrants do not appear to be explained by migrants living in poorer communities, vulnerable migrants selectively choosing to emigrate, or misdiagnosis of migrants by health professionals (see Sharpley et al., 2001 for a complete review). There is, however, substantial support among researchers for the idea that social factors are important.

A key finding is that ethnic density is associated with the incidence rate of psychosis in minority populations. Specifically, areas with lower numbers of ethnic minority people have higher rates of psychosis among those ethnic minority groups (Boydell et al., 2001; Halpern & Nazroo, 2000). Particularly relevant to current theorizing, in the Netherlands, Veling and colleagues (2008) found that only neighborhoods with low ethnic minority densities had elevated rates of psychosis among migrants. Migrants living in neighborhoods with a high proportion of other migrants had psychosis rates that were not statistically different from native Dutch people. One interpretation of these data is that maintaining social and cultural ties following migration may reduce the risk of psychosis.

Social identity, psychosis and paranoia

Why might problems of identity increase the risk of psychotic symptoms? In fact, there are already important indications that positive social connections can protect against psychosis, whereas the absence of these kinds of connections can be damaging to mental health. For example, insecure attachment styles, which are hypothesized to be the consequence of disrupted emotional bonds between parent and infant that flow through to adult relationships (Bowlby, 1969, 1973), have been shown to be highly prevalent in patients with positive symptoms (Korver-Nieberg, Berry, Meijer, de Haan, & Ponizovsky, 2015). It has also been shown that interpersonal traumas in childhood such as separation from caregivers, neglect, physical, sexual and emotional abuse, markedly increase the risk of developing a psychotic illness in adulthood (Varese et al., 2012). Psychosis is also associated with deprived socioeconomic conditions that are likely to make optimum social connections more difficult. For example, Wicks, Hjern, and Dalman (2014) found that being raised in an economically deprived neighborhood is a risk factor for psychosis, even after controlling for genetic risk. Moreover, incidence rates of psychosis have been reported to be particularly high in urban areas with high levels of social fragmentation, even after economic variables and ethnic composition have been controlled for (Zammit et al., 2010).

There are good reasons to think that the symptom of psychosis that is most likely to be sensitive to social identity effects is paranoid delusions. Patients who experience this symptom believe themselves to be victims of malevolent designs by others, often to the extent of fearing for their lives. This kind of belief system is the most common symptom of first psychotic episode, present in over 90 percent of patients (Moutoussis, Williams, Dayan, & Bentall, 2007), an observation that appears to be cross-culturally valid (although the exact form of persecution experienced is affected by culture; Tateyama, Asai, Hashimoto, Bartels, & Kasper, 1998). Although differing in detail, standard psychological models of paranoia agree that these beliefs arise against a background of interpersonal vulnerability and low self-esteem, leading to the over-anticipation of interpersonal threat (Bentall et al., 2001; Freeman et al., 2006). Consistent with these models, the insecure attachment styles that are prevalent in patients with psychosis have been shown to be specifically associated with paranoia in clinical (Wickham, Sitko, & Bentall, 2015), nonclinical (Pickering, Simpson, & Bentall, 2008) and epidemiological samples (Sitko, Bentall, Shevlin, & Sellwood, 2014). Attachment-disrupting early life events such as being taken into institutional care when young (Bentall, Wickham, Shevlin, & Varese, 2012) and suffering from parental neglect (Sitko et al., 2014) also appear to be a specific risk factor for paranoid symptoms.

Psychological studies indicate that paranoid patients tend to have low (Bentall et al. 2008) and highly unstable (Thewissen et al., 2008) self-esteem, coupled with negative beliefs about the attitudes of others towards the self (Fowler et al., 2006; Kinderman & Bentall, 1996) and an external locus of control in which life experiences are dominated by the actions of powerful others (Ciufolini et al., 2015; Kaney & Bentall, 1989; Lasar, 1997; Rosenbaum & Hadari, 1985). Experience sampling studies have shown that the onset of paranoid thoughts tends to be immediately preceded by a decrease in self-esteem (Thewissen et al., 2008). Further to this, lowself-esteem and negative beliefs about others have been shown to predict the maintenance of paranoid symptoms over the long-term (Fowler et al., 2012).

It was noted earlier that multiple social identities seem to protect against low self-esteem (Jetten et al. 2015) and, hence, it seems likely that such identities will prevent the development of the core schemas that fuel paranoid thinking. Furthermore, identification can help people feel more certain about their futures (Hogg, 2000) and consequently reduce beliefs that life outcomes are uncontrollable, leading to greater internal locus of control.

A Social Identity Approach to psychosis

The evidence presented thus far suggests that researchers need to pay greater attention to the social determinants of psychosis, and to consider the social-psychological mechanisms through which these determinants have their effects. We have argued that social identities assist in promoting positive self-views, maintaining social networks and reducing uncertainty, which in turn may diminish psychosis risk.

Whilst we posit that the current body of evidence necessitates a social identity approach to psychosis, this article is somewhat speculative. We do not argue that the elevated rates of psychosis among migrants can be solely explained by problems with identity, nor completely solved by interventions and policies that assist with identity formation. Rather, we propose that migrants are particularly vulnerable to feeling de-identified with their old *and* new cultures, and that this could contribute, in combination with other risk factors, to the elevated rates of psychosis observed in previous studies. To date, social identity approaches have been ignored by researchers examining psychosis, and it is our hope that this article will stimulate research that closes this gap.

Ethnic density findings are our principal clue that identity maintenance may be protective against psychosis, and we propose that these effects be replicated and extended using the social identity approach. It will be necessary to measure identification among migrants directly and to consider whether people living in low ethnic density areas who maintain strong cultural ties with their homeland are at less risk of psychosis than those who do not. A critical issue to be addressed in future research will be whether identifying with the host culture is equally protective against psychosis as maintaining identification with the culture of origin, whether maintaining some level of both cultural identities is optimal for reducing psychosis risk, and the implications of migrants' perceptions about whether the two cultures can be considered compatible or incompatible with each other. It will also be necessary to consider changes in identity over time. According to the social identity model of identity change (Iyer, Jetten, & Tsivrikos, 2008), it is important that individuals maintain self-continuity during times of change to preserve mental health. This theorizing is consistent with the proposition that migrants will have better mental health outcomes if they maintain identities associated with their home culture during acculturation, and with research showing that multiple identities predict better adjustment during life transitions (Iyer et al., 2009).

Studies that examine contact with members of ingroups and outgroups may assist in understanding the role of discrimination and identity in psychosis. Researchers may wish to test whether the quantity and quality of contact with ingroup members is more important than neighborhood level ethnic density effects in predicting psychosis. Specifically, contact with outgroup members could contribute to identity insofar as negative contact (e.g., racist comments from an outgroup member) may dampen identification with one's new culture, whilst positive contact (e.g., friendly interactions with neighbors) with outgroups may foster new identities. It should be noted here that the role of prejudice in predicting attitudes and behavior towards outgroups is mixed (see Price & Wolfers, 2007; Rachlinski, Johnson, Wistrich, & Guthrie, 2009; Shelton, Richeson, Salvatore, & Trawalter, 2005) and dependent on group status and social norms. Indeed, although majority group members are more likely to follow tolerant norms (McIntyre, Constable, & Barlow, 2015), these behaviors may be perceived as contrived by minority group members (Apfelbaum & Sommers, 2009). Thus, migrants living near other ethnic minority groups may have vastly different intergroup contact experiences compared to migrants living in majority dominated areas. It has also been shown that migrants with high pre-existing ingroup identification may be at greater risk of social disconnection when confronted with negative attitudes from outgroup members (Barlow, Louis, & Terry, 2010). Strong home culture identification may therefore lead to social disconnection if it is combined with negative outgroup

contact. Together, these data suggest that models of identification and psychosis in migrant populations should consider the moderating role of both prejudice and intergroup contact.

To construct a comprehensive model, we will also need to understand the psychological mechanisms by which identification influences psychosis. We have highlighted the important role of low self-esteem, negative beliefs about others' attitudes towards the self and an external locus of control, particularly with respect to paranoid symptoms Although self-esteem has, over time, become less central to social identity theorizing, there is nonetheless evidence that it can be promoted by multiple positive identities (Jetten et al. 2015) and this appears to be also true of cultural identities. For example, ethnic identity was found to be positively associated with self-esteem among Latino students in the U.S.A (Umaña-Taylor, 2004), and also in a longitudinal analysis of Asian, Black, and Hispanic teens (Phinney & Chavira, 1992). Given that cultural identities enhance self-esteem and that self-esteem is a risk factor for psychosis, it is plausible that self-esteem may mediate the proposed identity-psychosis relationship.

It is possible that social identity impacts on psychosis through other mechanisms. Feeling connected to multiple social groups may reduce paranoia risk by providing diverse social sounding boards on which to test beliefs. It has been proposed that paranoid delusions are maintained by cognitive processes that facilitate the processing of evidence that confirms pre-existing beliefs and prevents the processing of conflicting evidence (Freeman, Garety, Kuipers, Fowler, & Bebbington, 2002). Expanded social networks may increase the likelihood that bizarre beliefs will be challenged by ingroup members, and that conflicting evidence will be given due consideration by people with paranoid delusions. Stronger identification should therefore predict an increase in the likelihood that the opinions of other ingroup members will be considered when assessing belief validity. Of course, the extent to which multiple social identities reduce the risk

of psychosis in this manner is likely to be dependent on the diversity of groups to which one belongs. People who belong to and identify with groups that hold similar unusual beliefs are more likely to have their beliefs confirmed ("echo chamber" effect), whereas people who belong to several diverse groups are less likely to have their unusual beliefs reinforced by fellow ingroup members.

It should also be noted that simply joining as many groups as possible following migration is unlikely to be sufficient to prevent psychotic symptoms. For social identities to promote health, they must encourage positive cognitions and behavior. It has been shown, for example, that the extent to which substance users *de-identified* with their substance user category in favor of a "recoverer" identity predicted better outcomes during an identity intervention program (Dingle, Stark, Cruwys, & Best, 2014). This work highlights the importance of identity content and valence in maintaining good mental health. If people maintain maladaptive or destructive identities, then these identities could exacerbate rather than improve symptomology, as appears to happen when patients experience self-stigma (Corrigan et al 2006; Vass et al. 2015).

Cross-cultural effects will also need to be incorporated into future study designs because the way that people respond to cultural change and construct their social identities may vary across cultures (Feitosa, Salas, & Salazar, 2012). Thus, it will be important that theorizing does not assume migrants to be a single, homogenous population. For example, people migrating from collectivist cultures (which emphasize group goals over individual goals) to individualist cultures (which emphasize individual goals and uniqueness) may face different identity challenges compared to people moving in the opposite direction. It will therefore be of interest to compare psychosis risk between these two migration pathways.

Future research must also consider alternative causal pathways that might link identification and psychosis. In this article, we have outlined some reasons why we believe that weakened social identities would increase the risk of psychosis and especially paranoid symptoms. However, it is possible that some characteristics of individuals who later become psychotic make it more difficult for them to form adequate social identities in the first place. For example, there is considerable evidence that low IQ in children increases their vulnerability to psychosis (Davidson et al., 2014), especially if they live in complex urban environments, which may also make establishing adequate social identities challenging (Weiser et al., 2007). People who are at very high risk of psychosis, and who are experiencing the prodromal symptoms that typically precede a first episode of illness, may also lack the social cognitive skills that are required to maintain social identities, such as 'theory of mind' skills (Bora & Pantelis, 2013). It should be further acknowledged that a first psychotic episode may also impact on identity. In particular, as noted earlier, it is possible that because of the stigma and social difficulties associated with a mental illness diagnosis, people with psychotic symptoms may be less likely to seek out social connections and group membership. In sum, our proposed pathway could be causally reversed or, more likely, the relationship between social identity and psychosis will prove to be bidirectional and dynamic, varying according to the stage of illness. Thus, in order to develop a full understanding of the relationship between social identity and psychosis, it will be necessary to compliment cross-sectional work with longitudinal designs and experimental techniques (e.g., examining identity interventions), as well as provide robust theoretical arguments as we have attempted to do here.

Finally, it is our hope that research in this area informs prevention-based policies and programs that will reduce psychosis rates in vulnerable migrant populations. One encouraging

avenue for future investigation is the Groups 4 Health (G4H) program developed by C. Haslam, Cruwys, Haslam, and Dingle (2015) . The G4H intervention encourages the development and maintenance of positive identities through group-based therapy sessions, and preliminary findings suggests that the program reduces depression, anxiety, and loneliness by cultivating identification (C. Haslam, Cruwys, Haslam, Dingle, & Xue-Ling Chang, in press). Assessing this program in diverse populations and adapting it to accommodate new migrants and/or people experiencing psychotic symptoms may represent a viable intervention strategy, particularly if combined with broader policies that encourage cultural inclusiveness and social connection.

Conclusions

In the present article we propose that researchers examine psychosis in migrant populations through a social identity lens. The process of migration involves transitioning to an unfamiliar social, cultural and physical environment, combined with additional stressors such as discrimination and social isolation. Psychotic symptoms are exacerbated among second-generation migrants who may be at greater risk of social marginalization and de-identification, and this lack of identification may lead to psychosis triggers such as low self-esteem, external locus of control, and echo chamber effects. There is evidence that being surrounded by ingroup members reduces the risk of psychosis among migrants, and thus, maintaining identities and fostering new identities may help to reduce this risk. It will be important to identify in future research whether it is identity composition within neighborhoods, identity continuity, identity strength, or identity quantity that best predicts psychotic symptoms. Social identity development may be facilitated by positive contact with new outgroups and by maintaining cultural ties with ingroups; however, home culture identification may backfire and lead to social disconnection when combined with perceived discrimination. It is our aim that the present article will stimulate

research on psychosis using social identity approaches, and that this research will help to explain the elevated risk of psychosis in migrant populations and guide policies to address this problem.

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