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From social curse to social cure: A self-help group community intervention for people affected by leprosy in Nepal

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Abstract

Leprosy is endemic in Nepal and disproportionately affects the most marginalized. Leprosy related stigma can be characterized as a social curse, because those affected are excluded from group life and social participation which has severe implications for psychological health. The Nepal Leprosy Trust run a community-based self-help group intervention that aims to develop a new empowered identity to re-establish access to multiple group memberships' through social participation. In this applied cross-sectional study, informed by the Social Identity Model of Identity Change, we assess this intervention. Participants (N = 98) were members of self-help groups in 10 rural villages in Nepal, and completed measures of self-help group identification, access to multiple groups, internalized stigma and well-being. Mediation models indicated that self-help group identification was indirectly linked to reduced stigma and increased well-being through access to multiple groups. Supporting the Social Identity Model of Identity Change, we present novel evidence that group-based interventions can offer new valued identities that link to social cure resources, even in the most adverse circumstances. Please refer to the

1 | INTRODUCTION

Leprosy is a bacterial disease that is endemic in Nepal, and typically affects those whose immune functioning is compromised because of poverty and adversity (Cheung, 2018). At the same time, multi-drug therapy is a successful medical treatment, and, if taken early enough can help prevent disability. However, fear of stigma and discrimination creates a vicious circle where people affected often deny the symptoms and avoid seeking help until they are permanently impaired (Robertson, Nicholls, & Butlin, 2000). This fear is not unfounded: leprosy leads to stigmatization, disconnection and isolation (Boku et al., 2010; Calcraft, 2006; Stevelink, Van Brakel, & Augustine, 2011), and these effects impact those affected, their family (Kaur & Van Brakel, 2002) and even leprosy workers (Harris, 2011).

It is often the visible disabilities associated with leprosy that result in exclusion from social participation (Cross & Choudhary, 2005; Nicholls et al., 2005; Plagerson, 2005). Participation restrictions occur at all levels of society including at the hands of the family (Cheung, 2018). People affected are often denied access to employment, education and sometimes health care, access to festivals, gatherings, markets, the local water supply, and other public facilities (Stevelink et al., 2011). The psychological impact of these exclusions can be severe (Boku et al., 2010).

According to the Social Cure literature (C. Haslam, Jetten, Cruwys, Dingle, & Haslam, 2018; Jetten, Haslam, & Haslam, 2012), new social identities developed in group-based interventions can play a powerful role in improving health. The related Social Identity Model of Identity Change (SIMIC; C. Haslam, Haslam, Jetten, Cruwys, & Steffens, 2021), predicts that when people experience life-changing circumstances, such as an acquired brain injury (Kinsella, Muldoon, Fortune, & Haslam, 2020) or in this instance contracting leprosy, joining new groups and having access to multiple groups can be beneficial. Relatedly, interventions to tackle the effects of leprosy are often group-based. Typically, education and leadership training are provided with the goal of establishing a new valued social identity that will improve member's access to multiple groups' through social participation, and in this way decrease stigma, and increase well-being (Cross & Choudhary, 2005). So here, we examine SIMIC predictions in a cross-sectional study using an existing group-based leprosy intervention.

Our study then asks if, among people with high rates of disability, group-based leprosy interventions can establish a new social identity and re-establish access to multiple groups (such as; family, community, occupation, spiritual group) through social participation? And if so, do these processes improve health? The study makes an important contribution to social cure literature by investigating the role of social identification and access to multiple groups' in stigma elimination in adverse circumstances. Additionally, it represents a break from an over-reliance in the social sciences on Western, Educated, Industrialized, Rich and Democratic (WEIRD) samples (Henrich, Heine, & Norenzayan, 2010). Study respondents participate in self-help groups established by the Nepal Leprosy Trust (NLT), an NGO working with communities affected by leprosy and poverty, in Nepal. NLT established the Lalgadh Leprosy Hospital and Services Centre, which alongside medical treatment also offers community-based outreach.

2 | THE IMPORTANCE OF IDENTITY RESOURCES FOR HEALTH

A core principle of Social Identity research that began in the 1960s (Tajfel, 1972; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987), is that people's sense of self is often informed by their internalized group memberships. Social identifications give us a sense of who we are and where we belong in the world. At the turn of the millennium, this approach was

extended with social cure theorizing (S. A. Haslam, Jetten, Postmes, & Haslam, 2009), and the observation that social identification can facilitate access to beneficial, tangible, psychological resources, such as, support, connection, control, and agency. This finding is now well established (Jetten et al., 2017; Wakefield, Bowe, Kellezi, McNamara, & Stevenson, 2019).

Social identification facilitates trust, which enables health-promoting identity resources to be exchanged in the spirit in which they are intended. Consequently, research investigating group-based interventions show that social identification drives their success in a range of contexts, including multiple sclerosis (Wakefield, Bickley, & Sani, 2013), acquired-brain injury (Walsh, Fortune, Gallagher, & Muldoon, 2014), and suicide awareness (Kearns, Muldoon, Msetfi, & Surgenor, 2017). A recent synthesis of studies exploring successful group-based interventions found that social identification is the "active ingredient" (Steffens et al., 2019).

On the other hand, evidence shows that lack of social connections can effectively be a social curse. Indeed, isolation is as damaging to health as smoking, obesity, elevated blood pressure, and high cholesterol (Pantell et al., 2013; Putnam, 2000). Research exploring the impact of rape in Kosovo during the Balkans conflict, concluded that it was a humiliating violation of group norms. This silenced and shamed those affected, denying them support from their family or wider community, exacerbating the negative consequence of these survivors' war experiences (Kellezi & Reicher, 2012). In a community study, the stigma associated with socio-economic disadvantage, as well as crime related divisions and prejudiced authorities, undermined the reciprocal support, well-being and collective action intentions among residents of deprived communities (McNamara, Stevenson, & Muldoon, 2013).

SIMIC (C. Haslam et al., 2021) states that life-changing events often involve social identity process that impact health, for better or for worse. Contracting leprosy is a life-changing event that challenges the self-continuity, and personal and social identities of those affected. Crucially, these changes are consequential because they affect people's access to identity resources (S. A. Haslam et al., 2009). However, SIMIC predicts that belonging to multiple groups, maintaining old identities or joining new groups, particularly if they are compatible with existing social identities, can protect against the consequences of life-changing events (Cruwys et al., 2016). For example, Kinsella and colleagues (2020) found that belonging to multiple groups provided people living with acquired brain injury with multiple opportunities for social interaction, which helped with self-regulation, and reduced depression symptoms.

In Asian cultures, people diagnosed with leprosy are already stigmatized and marginalized in wider society because of extreme poverty, low levels of education, landlessness, and low caste position. Leprosy can result in being viewed by others in their communities as a "curse" resulting in isolation and depleted social identity resources. Those affected often develop nerve damage and disabilities are often rejected by their communities (Kazeem & Adegun, 2011) and may internalize the heavily stigmatized "leper" identity and the associated guilt and blame (Heijnders & Van Der Meij, 2006). Although group-based therapy does not target the prejudice that causes the stigma directly, the self-help group approach aims to empower those affected to challenge widely held misunderstandings through their transformation.

Multi-drug treatment and self-care practice (such as, wound cleaning and skin care) are long-term therapies that are initiated at Lalgadh Leprosy Hospital. Beneficiaries are encouraged to form self-help groups among leprosy-affected people in their communities to support each other with treatment. Whilst social support is one intention of self-help groups, another is leprosy stigma elimination through empowerment. Because leprosy related stigma is both social and internalised an objective of the approach is to redefine the self-concept and social image of self-help group participants through civic education and health literacy. Gaining educational capital in this way endeavours to; boost participants social status, vicariously educate family and wider community that leprosy is curable and re-establish participation in family and community life (Cross & Kumar Sah, 2014). Another aim is to empower those affected by shifting their self-concept from victim of a spoilt identity to a knowledgeable self-help group participant and valued community member. The identity transformation aspires to enable social participation, reduce internalized stigma and by proxy improve well-being (Cross, Beise, & Choudhary, 2017; Cross & Choudhary, 2005; Cross & Kumar Sah, 2014). Being able to participate in one meaningful group strengthens and acts as a platform for other social identities (such as mother, or worker, or community leader) which are also central to well-being (Jetten et al., 2017). According to SIMIC (C. Haslam et al., 2021), access to multiple groups with a range of associated identity resources should act as a social cure.

3 | THE PRESENT STUDY

In partnership with the Nepal Leprosy Trust, this study explores the self-help group approach to identity transformation among leprosy-affected people in Nepal. An important question is whether the self-help group approach can overcome the association between leprosy-related disabilities and participation restrictions (Cross & Choudhary, 2005; Nicholls et al., 2005; Plagerson, 2005). SIMIC (C. Haslam et al., 2021) predicts that stronger self-help group identification should be associated with reduced stigma and increased well-being because of the platform it offers to access multiple identity resources. We predict that these relationships will hold while accounting for leprosy related disabilities. First, it is hypothesized that self-help group identification will link to reduced internalized stigma through access to multiple groups (H1). Second, self-help group identification will relate to increased well-being through access to multiple groups (H2).

4 | METHOD

4.1 | Participants

Participants were from 10 self-help groups in 10 rural villages, in four districts (Dhanusha, Mahottari, Sarlahi and Sindhuli) with high rates of leprosy and disability. Groups are facilitated by a community team offering leadership training, support in micro-finance, and self-care as well as literacy, health, leprosy and civic education.

The final sample ($N = 98$) was 59% ($n = 58$) men, 36% ($n = 35$) women and five who did not declare gender. Age ranged from 18 to 85 years ($M = 54.19$, $SD = 17.07$). Eighty eight participants were married and seven single. All self-help group participants had had a leprosy diagnosis, some had recovered but continue to practice self-care, while others (15%, $n = 15$) still had the disease and 20% ($n = 19$) also have a leprosy-affected family member. Most (72%, $n = 71$) were affected by a leprosy-related disability, 40% ($n = 39$) had a visible leprosy-related disability and 32% ($n = 32$) had a non-visible disability. Information about the length of time since diagnoses and since becoming self-help group members was not available. The majority, 60% ($n = 58$) had no education, 4% ($n = 4$) were literate and 23% ($n = 22$) had primary school education. Levels of poverty were extreme, the mean per family income of 112,030.86 Nepali rupees ($SD = 118,860.48$), is equivalent to €877.00 per year.

In terms of caste/ethnic groups, the majority (57%) were Dalit ($n = 43$) or Janajati ($n = 13$). The remainder were Madheshi ($n = 34$) and eight participants described themselves as "other." Many Dalit (formerly untouchable castes) and Janajati consider themselves oppressed.

4.2 | Measures

Data collection was complicated by participants' extremely limited literacy and unfamiliarity with responding to survey statements and Likert scales. To aid comprehension, a laminated picture of the Likert response format was used which showed five glasses with water increasing in volume, representing empty (1 = *Not at all*) to full of water (5 = *Extremely/always*). This response format has been tested and validated for use with populations with limited literacy previously (Tewari, Khan, Hopkins, Srinivasan, & Reicher, 2012).

4.3 | Predictor variable

Self-help group identification was measured with three items adapted from Leach et al.' (2008) measure of in-group identification. Example item: "I feel that I am similar to other members of the self-help group." Mean scores created a total score, with higher scores indicating higher levels of identification. The alpha was $\alpha = .83$.

4.4 | Mediator variable

Perceived access to multiple groups—was measured with seven items adapted from Van Brakel et al.' (2006) social participation scale, which has been used in Nepal previously. Items include "In your experience of being affected by leprosy, do you take part in different social events (like sports, gossip, meeting, spiritual or social happening) the same way your friends/relatives do?" Mean scores created a total score, higher scores indicating higher access to multiple groups. The alpha was α = .85.

4.5 | Criterion variable I

Internalized-stigma—was measured with four items from Van Brakel & Lusli, (2017) Stigma Assessment Reduction Impact (SARI) scale, a cross culturally validated instrument. All items were from the internalized stigma subscale. Sample item includes "Do you blame yourself for being affected by leprosy?" Mean scores created a total score, higher scores indicating higher levels of internalized stigma. The alpha was α = .70.

4.6 | Criterion variable II

Psychological well-being—was measured with 12 items from the General Health Questionnaire, Goldberg and Hillier (1979). Participants indicated whether in the past month they had "Been able to fully concentrate on the things you were doing" (reverse coded) and "Could not fall asleep due to tension." Mean scores created a total score, higher scores indicating higher levels of well-being. The alpha was α = .88.

4.7 | Engaged approach

Our sample can be characterized as hard-to-reach because of their remote geographical locations and vulnerable social location, as ethnic and caste minorities, experiencing extreme poverty, leprosy, disability and stigma (Ellard-Gray, Jeffrey, Choubak, & Crann, 2015). Under these conditions, participants are often depicted as passive victims rather than active agents in changing their circumstances. To avoid this, we took a participatory-engaged approach to the research and worked closely with outreach workers at Lalgadh Hospital as gatekeepers, to develop the survey, and for data collection. Although participant narrative, voice and reflection were not possible, this survey study nevertheless had potentially empowering effects for participants who were contributing towards validating the outreach services for other leprosy-affected people and towards future funding applications (Kessi & Boonzaier, 2017). Perhaps this is why buy-in and participation in the study among self-help group members was high, averaging at around 60%.

4.8 | Procedure

The study was further complicated by language issues. The survey was compiled in English and sent to Nepal where one native Nepali speaker translated from English to Nepali, and a second back translated from Nepali to English. The English version was checked for accuracy, and adjustments were made to the Nepali version.

The first, second, and last authors travelled to Nepal and gave a one-day training workshop with outreach workers, who acted as research assistants. On an arranged day, we travelled to participants' rural villages for data collection, which lasted the following 2 weeks. Self-help group members met us in their usual meeting place under a

tree for shade and outreach workers invited group members to participate. Consent was confirmed with an ink pad and thumbprint, outreach workers verbally translated the survey into local languages, and surveys were completed in a quiet place and took on average 30 min. Female participants were matched with a female research assistant where at all possible.

4.9 | Ethical issues

During training, considerable time was devoted to talking about the power imbalance between participants, community outreach workers, and white, Western researchers. Low literacy levels meant participants' privacy and control was decreased. Participants were assured their participation was voluntary, and they could withdraw at any time. It was made clear and unequivocal that the outreach services did not depend on their participation. There are some missing data points because participants were advised to answer only questions they were willing to answer.

5 | RESULTS

5.1 | Overview of analysis

To begin, we examined the relationships between all variables using simple correlations. Then, using the PROCESS mediation tool (Hayes, 2013), we examined our hypotheses. We examined separately in two mediation models whether multiple groups mediated the relation (1) between self-help group identification and reduced internalized stigma, and (2) between self-help group identification and increased psychological well-being (see below).

5.2 | Model 1: Self-help group identification, internalized-stigma and multiple groups

First, we investigated the correlations between the constructs (Table 1). As expected, there was a significant positive correlation between self-help group identification and access to multiple groups, $r(96) = 0.37$, $p < .001$. There was also a significant negative correlation between access to multiple groups and internalized stigma, $r(96) = -0.39$, $p = .001$. Collectively, these correlations were consistent with our hypotheses and constituted medium effect sizes (Cohen, 1988). Next, we investigated the correlations between the constructs and demographic variables: age, gender, ethnicity, visible, and non-visible disability. The only significant correlations were between visible disability (scored 1 = *yes* and 2 = *no*) and access to multiple groups $r(95) = 0.25$, $p < .01$, and between visible disability and internalized stigma $r(96) = -0.27$, $p < .01$. The correlation between self-help group identification and internalized stigma was not significant, $r(96) = -0.15$, $p = .15$.

TABLE 1 Zero-order correlations between self-help group identification, multiple groups, internalized stigma, well-being and visible and non-visible disability

	Mean	*SD*	Group identification	Multiple groups	Internalized stigma	Well-being	Visible disability	Non-visible disability
Group identification	3.82	.33	-	.35*	−.17	.33*	.09	−.17
Multiple groups	3.20	.76		-	−.42*	.70*	.25*	−.16
Internalized stigma	1.31	.99			-	−.47*	−.27*	−.05
Well-being	2.65	.75				-	.14	.30*

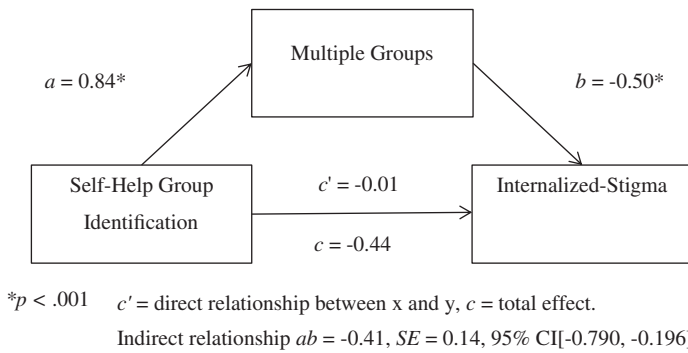*Note: *$p \le .001$; *SD* = Standard Deviation.

FIGURE 1 Conceptual representation of the mediation model. An outline of the relationship between self-help group identification and lower internalized-stigma significantly mediated by increased access to multiple groups. *p < .001. c′ = direct relationship between x and y, c = total effect. Indirect relationship ab = −0.41, SE = 0.14, 95% CI[−0.790, −0.196]. Controlling for demographics ab = −0.31, SE = 0.14, 95% CI[−0.666, −0.095]

Having investigated the relationships between these constructs, we tested our hypothesis that self-help group identification would relate to less internalized stigma via access to multiple groups. To test this indirect relationship, we conducted a mediation analysis using Hayes's (2013, Model 4) PROCESS macro. As anticipated, self-help group identification significantly predicted higher levels of access to multiple groups, b = 0.84, SE = 0.22, t(98) = 3.85, p < .001, 95% CI[0.406, 1.237]. Access to multiple groups significantly predicted less internalized stigma, b = −0.50, SE = 0.13, t(98) = −3.77, p < .001, 95% CI[−0.762, −0.236]. Consistent with our hypothesis, we found a significant indirect relationship of increased self-help group identification on decreased internalized stigma via access to multiple groups, ab = −0.42, SE = 0.15, 95% CI[−0.790, −0.197], using 10,000 bias-corrected bootstraps (Figure 1). The direct relationship was not significant, b = −0.02, SE = 0.30, p = .95. A post-hoc power analysis estimated power for detecting this indirect relationship (Schoemann, Boulton, & Short, 2017), which was (1 − β) = 0.91 (1,000 replications with 20,000 Monte-Carlo draws), assuming a type-I error of α = .05 (two-tailed).

We further tested the robustness of the effect by adding age, gender, ethnicity, visible disability and non-visible disability into the mediation model as covariates. The indirect relationship of increased self-help group identification on decreased internalized stigma via access to multiple groups was maintained when controlling for demographics, ab = −0.31, SE = 0.14, 95% CI[−0.666, −0.096]. Thus, our hypothesis was supported; self-help group identification was related to less internalized stigma through increased access to multiple groups.

5.3 | Model 2: Self-help group identification, psychological well-being and multiple groups

Initially, we examined the correlations between the three constructs. As previously stated, self-help group identification correlated positively and significantly with access to multiple groups, r(96) = 0.37, p < .001. Furthermore, we found a significant positive correlation between self-help group identification and psychological well-being, r(96) = 0.34, p = .001. There was also a significant positive correlation between psychological well-being and access to multiple groups, r(96) = 0.64, p < .001. The only significant correlation between demographics and our main constructs was between psychological well-being and non-visible disability, r(94) = 0.31, p < .003. Collectively, these correlations were consistent with our hypothesis and constituted medium effect sizes (Cohen, 1988).

Next, we tested our second proposed model. In this model, we predicted that self-help group identification would be related to increased well-being via access to multiple groups. To test this indirect relationship, we conducted a mediation analysis using Hayes's (2013, Model 4) PROCESS macro. As before, self-help group identification
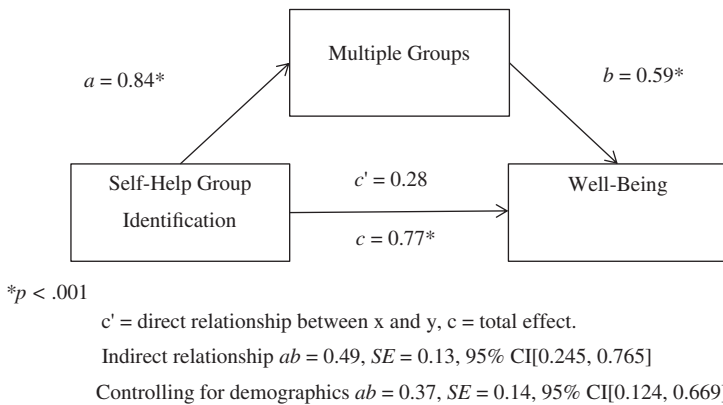
FIGURE 2 Conceptual representation of the mediation model. *p < .001. c′ = direct relationship between x and y, c = total effect. Indirect relationship ab = 0.49, SE = 0.13, 95% CI[0.245, 0.765]. Controlling for demographics ab = 0.37, SE = 0.14, 95% CI[0.124, 0.669]. The relationship between self-help group identification and psychological well-being significantly mediated by access to multiple groups

significantly predicted higher access to multiple groups, $b = 0.84$, $SE = 0.22$, $t(98) = 3.85$, $p < .001$, 95% CI[0.406, 1.237]. Multiple groups significantly predicted higher levels of psychological well-being, $b = 0.59$, $SE = 0.08$, $t(98) = 7.05$, $p < .001$, 95% CI[0.422, 0.753]. As expected, we found a significant indirect relationship of self-help group identification on increased well-being via increased access to multiple groups, $ab = 0.49$, $SE = 0.13$, 95% CI [0.245, 0.765], using 10,000 bias-corrected bootstraps (Figure 2). The direct relationship of self-help group identification on psychological well-being was not significant, $b = 0.28$, $SE = 0.19$, $p = .14$. A post-hoc power analysis estimated power for detecting this indirect relationship (Schoemann et al., 2017), which was $(1 - \beta) = 0.96$ (1,000 replications with 20,000 Monte-Carlo draws), assuming a type-I error of $\alpha = .05$ (two-tailed).

We further tested the robustness of the relationships by adding age, gender, ethnicity, visible disability and non-visible disability into the mediation model as covariates. The indirect relationship of increased self-help group identification on increased psychological well-being via access to multiple groups was maintained when controlling for demographics $ab = 0.37$, $SE = 0.14$, 95% CI[0.124, 0.669]. Thus, our hypothesis was supported. In summary, we tested our two theoretically based models. We found that self-help group identification was separately related to lower internalized stigma and higher well-being via access to multiple groups.

6 | DISCUSSION

The overarching aim of this research was to examine whether identifying with a community-based self-help group served as a social cure for people affected by leprosy. Specifically we investigated if a self-help group intervention can establish a new supportive social identification, which can predict people's ability to access multiple groups, reduced internalized stigma, and improved well-being. In doing so, we make tentative claims towards the broader question of whether a group-based intervention may be used to overcome a social curse associated with being stigmatized. The present research was conducted among a hard-to-reach sample of leprosy-affected people living in poverty in rural villages in Nepal. While there is a growing body of research on the curative properties of groups (C. Haslam et al., 2018), this is the first study to demonstrate how for people affected by leprosy, group-based identification is associated with increased well-being, because it potentially increases peoples sense of their ability to engage in multiple group domains. This serves as a social cure for the negative psychological and social consequences of living with this stigmatized identity.

The current study makes important contributions to knowledge, lending support to SIMIC (C. Haslam et al., 2021), and offering novel theoretical and applied, practical insights. Consistent with the idea that group membership can be the basis of a social cure (C. Haslam et al., 2018; Jetten et al., 2012) or social curse (Kellezi & Reicher, 2012; McNamara et al., 2013), in this instance a sense of identification with a self-help group appears to facilitate identity resources flowing from the perceived ability to engage in multiple group domains. This predicts social cure effects (through increased well-being) and negates social curse effects (through reduced internalized stigma).

Drawing on conceptual insights from social cure and SIMIC approaches, this study extends previous work by examining if the social curative resources afforded to people through the sense of identification with a valued group, had the ability to directly assuage the adverse psychological effects of belonging to a devalued group, in a developing country. We provide evidence of these associations over and above the effects of leprosy-related disability (Nicholls et al., 2005). Specifically, one of the "social curses" inflicted on those affected by visible impairments associated with leprosy is stigma, both internalized as guilt and blame, and societal resulting in rejection (Kazeem & Adegun, 2011). This can seriously damage a person's health and well-being (Cross & Choudhary, 2005). Novel to the literature, this study found social identification enabled participation in multiple groups, for instance in family, community, occupational and spiritual groups, and this appears to be one mechanism through which their identification with the self-help group reduced the social curse effects. In this case, participation in group life not only serves as an inoculation against the traumatizing isolation of stigma, it also served as a healing, curative agent with positive consequences for well-being (Muldoon et al., 2019). These social psychological factors, and how they relate to one another in a real-life setting have been under explored in the social cure literature, thus these findings offer unique contributions to specific social cure hypotheses as well as to the broader theorizing and principles.

Currently there is a critical need for tested interventions to improve the quality of life for people—including those affected by leprosy. Leprosy is not only a disease that is chronically stigmatized (Stevelink et al., 2011), it disproportionately affects the marginalized, disadvantaged and poor (Cheung, 2018). One of the purposes of this community based self-help group intervention is to empower people who are vulnerable due to the complex and far-reaching effects of leprosy. The current results are a preliminary advance in the desired direction and suggest that identifying with a meaningful social group has the potential to promote health (Borek et al., 2015) and undo the harmful effects of stigma. In the longer term, this is likely to have important consequences for early intervention and help seeking associated with leprosy. Interventions that tackle stigma through targeting affected groups may have positive consequences for those in the early stages of the disease.

Although evidence of underlying pathways was found, the cross-sectional design and nature of the data impedes any conclusive causal interpretation. Though the current findings are in line with the predicted directionality guided by previous theoretical and empirical evidence (C. Haslam et al., 2018; Jetten et al., 2012; Stevelink et al., 2011), further studies incorporating longitudinal designs are recommended to determine and support causality. This, coupled with comparison groups, is essential for social cure intervention research going forward. At the same time, however, continuous predictor variables are acceptable to include in mediation analyses when the proposed model and indirect effect(s) are informed by theory, as was the case for this research (Hayes, 2013). Beyond statistics, the theoretical framework and plausibility of our models are central. As a result, while acknowledging this limitation of our research design, we believe that our study still provides valuable insights and an appropriate basis to build on social cure intervention research.

Despite these limitations, our work benefits from the application of a social cure model to a very different circumstance and context than previous studies. The social sciences as a whole over-rely on WEIRD samples, and research implicitly assumes that findings from these studies are representative and generalizable despite this not necessarily being the case (Henrich et al., 2010). This may be a particularly important bias to be aware of, given that patterns of identification with groups are intrinsically shaped by the specific social, cultural and historical contexts. As such, investigating central tenets of the SIMIC in this real-life context, using a sample of non-Western,

non-educated, non-industrialized and poor individuals affected by one of the most stigmatized diseases worldwide (Stevelink et al., 2011) represents an important addition to this literature.

In conclusion, group memberships have the ability to serve as a social curse or social cure (Jetten et al., 2012; Wakefield et al., 2019). People affected by leprosy belong to one of the most stigmatized groups worldwide, and experience social curse effects that can be more detrimental to health than the underlying health condition. The current study offers promising evidence that group-based self-help interventions have the potential to offer alternative group memberships that promote health (Borek et al., 2015) and that can overcome some of the social curse effects of leprosy by increasing social participation and access to multiple groups. These findings add to the accumulating research pointing to the transformative power of belonging to groups, and offers novel theoretical support for the social curative effects of a self-help group in tackling the health costs of marginalization associated with stigmatized diseases. The self-help group approach though commonly employed is rarely empirically tested. The approach can sustain participation in social life, and combat internalized stigma, and as such, this line of investigation is timely and needed. We suggest future researchers build on these findings and examine the principles and underlying dynamics of the SIMIC in different settings and samples, to facilitate knowledge of how social curative identity resources can be used to overcome the damaging effects of life-changing events, and social curse effects of stigmatized identities, across different social and cultural contexts.

CONFLICT OF INTEREST

The authors declare that there are no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

ETHICS STATMENT

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. Informed consent was obtained from all individual participants included in the study.

DATA AVAILABILITY STATEMENT

Data openly available in a public repository that issues datasets with DOIs. All data is are available upon request.

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SUPPORTING INFORMATION

Additional supporting information may be found online in the Supporting Information section at the end of this article.