Original article

Applying the Social Identity Approach to Public Health.

A Case Example of Theory in Practice

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Abstract

Public health interventions play a major role in protecting, enhancing and maintaining the health of a population. At present, there is a plethora of public health interventions that promote a range of health behaviours for improving the lives of people suffering from chronic disease. Psychological theories can help us to understand the mechanisms that underpin health promotion interventions. However, the application and operationalisation of theory is not always transparent when utilised in public health systems for improving chronic health outcomes. Through the lens of social identity theory, the current article aims to provide a commentary on the content and practical delivery of a health intervention used within a public health service in the UK. Specifically, we present a case example detailing the application of social identity theory within a community pulmonary rehabilitation service to improve the quality of life for patients diagnosed with chronic obstructive pulmonary disease. Furthermore, we provide some balanced reflections on the utility of the social identity approach to inform a public health intervention. 0ur article provides practical applications and recommendations for using a novel theoretical approach in a public health setting to help bridge the theory to practice nexus.

Keywords: Group Membership, Exercise, Rehabilitation, Health

Public health interventions aim to promote or protect health or prevent ill health in communities or populations and are complex. Complex interventions require theoretical underpinning to understand the mechanisms responsible for achieving change (Craig, Dieppe, Macintyre, Michie, Nazareth, & Petticrew, 2008). However, theorybased change techniques used in public health interventions are not always transparent. The obscurity of theoretically-derived techniques and their practical application can undermine the utility of public health interventions, creating a theory to practice nexus. As an example, descriptions of group-based change techniques often omit information about features relating to content and delivery (Borek, Abraham, Smith, Greaves, & Tarrant, 2015). The current article, therefore, provides an insight into the content and delivery of a group-based social identity intervention used within a community pulmonary rehabilitation service in the UK, which was based on a collaborative partnership between academic researchers and healthcare practitioners.

The social identity approach comprises of two related theories, namely social identity theory (Tajfel & Turner, 1979) and self-categorisation theory (Turner, 1985). At its core, the social identity approach stipulates that the way a person thinks and feels about self is derived from their group memberships. Group memberships can provide individuals with a sense of who they are in terms of a defined group identity (i.e., 'we' and 'us' rather than 'I' and 'me'). According to the social identity approach, two salient social processes are responsible for developing a group identity:

1)*categorisation*: awareness of similarities that collectively connect members as a group, and

2)*identification*: positively valuing the importance of belonging to a group membership. The social identity approach is particularly useful for informing interventions where people have limited access to social groups and networks (Haslam, Jetten, & Haslam, 2012). In public heath

settings, many chronically ill people often experience social isolation (Johnson, Campbell, Bowers & Nichol, 2007) and impaired social interactions due to stigmatisation and as such have limited opportunities to develop new group memberships. The social identity approach, therefore, can usefully inform public health interventions that undertake programmes in group contexts (Steffens, La Rue, Haslam, Walter, Cruwys, Munt et al., 2019). Based on the social identity approach, recent research has developed an intervention for chronic obstructive pulmonary disease (COPD) patients attending the group-based exercise component of pulmonary rehabilitation (Levy, Matata, Pilsworth, Mcgonigle, Wigelsworth, Jones, et al., 2018). Preliminary findings suggest the social identity intervention improved COPD patients' social experiences and compliance with pulmonary rehabilitation (Pilsworth, Mcgonigle, Wigelsworth, Jones, Pott, Bettany, et al., 2018). To provide a further insight into the intervention's application, what follows next is a nuanced account of the content and delivery of social identity principles in a pulmonary rehabilitation setting.

The aim of the social identity intervention was to train healthcare practitioners to create a new group identity for COPD patients attending an 8week pulmonary rehabilitation programme (see table 1). In view that COPD patients did not know each other before embarking upon pulmonary rehabilitation, the first phase of the intervention involved healthcare practitioners leading a 1-hour group discussion to create an awareness of a COPD pulmonary rehabilitation group membership. This process of categorisation accentuated the similarities between COPD patients and their differences from non-COPD suffers to build the foundations of a COPD pulmonary rehabilitation ingroup. Establishing the COPD ingroup or the sense of 'us' was facilitated by the use of three categorisation techniques;

Item	Description
Name:	Social identity intervention in pulmonary rehabilitation
Why:	Chronic obstructive pulmonary disease (COPD) is a debilitating
	lung condition that affects many people's lives in the UK. One of
	the main aims of pulmonary rehabilitation are to improve the
	quality of life for patients who have been diagnosed with COPD.
	The challenge for pulmonary rehabilitation is that many patients
	do not complete or engage appropriately with their pulmonary
	exercise rehabilitation programme. Doctors and other healthcare
	professionals delivering pulmo nary rehabilitation care believe
	that patients who are working together as part of a group
	(intervention) may better attend and engage with the exercise component of
	pulmonary rehabilitation. Accordingly, the intervention aims to build a social
	identity to encourage patients to interact and support each other and work as a team during the rehabilitation sessions to achieve mutually agreed
	pulmonary group exercise goals. However, there is an absence of research
	evidence to guide such desired changes to current practice.
What (materials):	
	the development of social identity using categorisation and group goal setting
	techniques. Healthcare practitioners used worksheet materials during the
	training to facilitate the aforementioned techniques in practice. The process of
	categorisation utilised two worksheets. The first worksheet established share
	characteristics and associated group meanings that COPD patients perceive
	to have in common with each other. The second worksheet consolidated th
	most
	important shared characteristics for establishing the foundation of a COP
	exercise in-group. Group goal setting was documented using a further tw
	worksheets. Worksheet three established specific goals, both performance an
	process, alongside the timeframe for goal completion and sources of evidence
	for recognising goal achievement. Worksheet three was also used to monito
	the group's performance and process goals and were amended accordingly t
	ensure goals remain realistic and achievable. Worksheet four facilitated goal
	evaluation by documenting the group's thoughts about their collective go
	achievements.
What	Healthcare practitioners attended two educational workshops, both of a two
(procedures):	hour duration. The first workshop facilitated an understanding of soci
	identity principals and its application to a pulmonary rehabilitation setting
	The second workshop aimed to provide healthcare practitioners with practic
	knowledge and dissemination of social identity derive
	intervention techniques into pulmonary rehabilitation practice. Bot
	workshops conveyed educational material using various implementation
	activities, such as focused group discussions, skills practice, and problem
	solving. Resources used to support such activities were handouts containing
	formal notes, PowerPoint slides, flip charts and video material.

Table 1. TIDieR table (in accordance with Hoffmann et al., 2014) for the social identity intervention in pulmonary rehabilitation

Table 1. (continued)

Who provided:	The intervention provider was healthcare practitioners who were qualified in delivering pulmonary rehabilitation for COPD patients. In addition to their responsibility for providing standard pulmonary rehabilitation care, healthcare practitioners were trained to deliver the intervention component by a Health and Care Professions Council (UK), Registered Psychologist. Healthcare practitioners were supported by the psychologist throughout the duration of the study to ensure the intervention was delivered as expected. Healthcare practitioners delivering the intervention did so for the purpose of the study and were not incentivised.
How (mode of delivery):	The intervention was provided to a group of COPD patients attending an 8- week pulmonary rehabilitation. Four COPD patient groups received the intervention, each comprising of between 6 and 15 patients. The intervention was delivered face-to-face by healthcare practitioners and composed of 3 x 1 hour interactive discussion sessions over the 8-week period.
Where:	The intervention took place across two leisure centres, as part of National Health Service (NHS) community care service. The leisure centre sites where located within a single UK borough.
When and how much:	The intervention took place over an 8-week period of pulmonary rehabilitation. COPD patients engaged in 3 x 1 hour discussion groups prior to rehabilitation (week 0), midway through rehabilitation (week 4) and after rehabilitation (week 9). To obtain a sufficient sample size, the intervention was repeated four times, with each rehabilitation period lasting 8-weeks in duration. In total, the study spanned 32-weeks and delivered 12 intervention discussion group sessions.
Tailoring:	All participants received the same intervention. Healthcare practitioners received the same training and resources for delivery.
Modification:	The intervention was not modified during the study.
How well (planned):	All healthcare practitioners having responsibility for delivering the intervention, attended the 2 x 2-hour training workshops in full (100% attendance). One healthcare practitioner was later added to the intervention delivery team and received the same workshop content on an individual basis, prior to the start of the study.
How well (actual):	Over the 32-week study, all 12-intervention discussion group sessions of 1- hour duration were delivered in full by healthcare practitioners to COPD patients attending pulmonary rehabilitation programme (100% delivery completion).

1) *self-anchoring*: projecting self-characteristics and attributes on the ingroup to provide meaning to one's new COPD pulmonary rehabilitation group membership,

2) *intergroup differentiation*: facilitating the differences between established COPD in-group attributes from those who do not suffer from COPD (out-group) to provide a sense of unity among the COPD pulmonary rehabilitation group membership, and

3) *self-stereotyping*: healthcare practitioners projecting professional knowledge of collective COPD in-group characteristics and attributes on individuals that constitute the group membership to provide a sense of belonging.

At each rehabilitation session, COPD patients wore specially designed uniform t-shirts that depicted the individual's name and an in-group logo. We believed the use of t-shirts facilitated a tangible sense of in-group distinctiveness to help facilitate the categorisation processes.

The second phase of the intervention attempted to help COPD patients positively identify as being a part of the COPD group membership. This process of identification was necessary for COPD patients to internalise the concept of being a member of a group with a common purpose. We used group goal setting to help COPD patients identify with their group and subsequently develop a collective sense of 'we'. To this end, the setting of group goals provided COPD patients with a collective sense of fate and purpose (e.g., cohesion), direction and meaning, (e.q., achievement), effort and persistence (e.g., motivation). Healthcare practitioners implemented goal setting across three stages.

Stage one involved the setting of performance and process goals prior to pulmonary rehabilitation commencing. The former refers to collective group exercise performance attainments (e.g., collective and rowing meters) the latter refers to implementation strategies to help achieve collective performance goals (e.g., prosocial

supportive behaviours). At stage two, healthcare practitioners discussed the group's goal progression through a 1-hour group discussion midway through the pulmonary rehabilitation programme. This stage allowed for the adjustment of goals to ensure they remained realistic and achievable. Some patients, for example, were likely to experience exacerbations that did affect rehabilitation attendance, completion and dropout, therefore requiring the adjustment of group goals. In stage three, healthcare practitioners evaluated the group's goal achievements towards the end of pulmonary rehabilitation. During a 1-hour group supportive discussion meeting, healthcare practitioners were able to constructively communicate appropriate evaluative feedback by attributing goal successes to the group's collective endeavours (i.e., in-group internal bias), and attributing goal shortcomings to factors outside the group's control (i.e., in-group external bias). Additionally, healthcare practitioners were able to reinforce collective qoal achievements bv communicating personal gains from being a part of the group such as confidence and enjoyment (i.e., positive reinforcement) and how the group has helped remove unpleasant individual experiences such as isolation and anxiety (i.e., negative reinforcement).

Our article provides a case example of social identity processes in action to support COPD patients derive a sense of self during pulmonary rehabilitation as a member of a group. To date, the application of social identity has mainly focused on naturalistic identities (e.g., gender, nationality, sports teams) where the development of social identity processes and group memberships are ubiquitous. However, in public health contexts, naturalistic identities are not always prevalent, as was the case for COPD patients engaging with pulmonary rehabilitation. At present, there is a nexus between the social identity approach and public health practice, particularly with respect to developing new health-related group memberships and the social identities that exist within them. Bridging the theory-practice nexus is important for utilising the social identity approach for creating new group memberships in public health interventions. "There is nothing as practical as a good theory" (Lewin, 1952, p.169), therefore we encourage the greater publication of material that informs the application of social identity processes in the public health domain.

A caveat in the development of new social identities is the ability of individuals to sustain their group membership. This is an important issue as public health interventions are often not sustainable due to being of finite duration resulting from funding restrictions (Walugembe, Sibbald, Le Ber, & Kothari, 2019). In the present case example, COPD patients attended an 8-week pulmonary rehabilitation programme and as such it was not possible for all patients to maintain their new group membership beyond this period. Potentially, this can be damaging for chronic disease populations, such as COPD patients, who can be often isolated and therefore unable to draw upon a broader network of group memberships. It essential, therefore, to consider is qroup membership continuity when developing new social identities for public health interventions. One fruitful area to explore is the role of peer-led support groups as an adjunct to public health service programmes to maintain aroup memberships and the multiple social identities that underpin them. Peer support groups have the potential to initiate a shared sense of identification that can facilitate the formation of constructive supportive relationships for people living with lifelong health conditions.

Healthcare practitioners have responsibility for leading pulmonary rehabilitation and are in a unique position to influence the social interactions of COPD patients. As such, healthcare practitioners can play an important role in delivering social identity-based interventions for public health services. Healthcare practitioners, in our intervention, undertook training on the application of social identity principles and processes within a pulmonary rehabilitation setting. However, this would not have been possible without a collaborative working partnership, alongside the development of relevant and bespoke training materials. Social identity interventions will have a greater chance of acceptance in public health settings with the establishment of effective partnerships between healthcare practitioners and the academic community, and when the application of the social identity approach has clear fit and relevance within existing health service provision.

Generally, when applying interventions within a public health service there is always the potential to experience unique organisational challenges. In our case, we encountered an issue whereby, for theoretical purposes, we wanted rehabilitation groups to have uniform structure and composition to foster patient categorisation and identification. Doing so, however, resulted in delaying the start dates for some patients enrolling on a pulmonary rehabilitation programme. The challenge for us, therefore, was to ensure that we obtained a homogenous cohort of COPD patients in the social identity intervention within an appropriate waiting timeframe, as determined by the health service provider. We recommend that social-identity based interventions in public health will benefit from ascertaining, as earlv as possible, the organisational factors external to the intervention that might influence how it operates.

To conclude, this article provides a nuanced insight towards the application of the social identity approach in a public health setting. We attempt to bridge the gap between social identity principles and practice and in doing so raise some issues about maintaining social identities and the challenges of applying this approach in a public health context. The social identity approach holds promise to innovate and inform the development and sustainability of new and existing group structures across a spectrum of public health interventions. To realise this potential, we encourage the publication of applied and contextualised insights on the practicality and usability of the social identity approach in a variety of public health settings.

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