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A Social Identity Approach to Understanding and Promoting Physical Activity

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Abstract Against the backdrop of a global physical inactivity crisis, attempts to both understand and positively influence physical activity behaviours are characterized by a focus on individual-level factors (e.g. cognitions, attitudes, motivation). We outline a new perspective, drawn from an emerging body of work exploring the applicability of social identity and self-categorization theories to domains of sport and health, from which to understand and address this pervasive problem. This social identity approach suggests that the groups to which people belong can be, and often are, incorporated into their sense of self and, through this, are powerful determinants of physical activity-related behaviour. We start by reviewing the current state of physical activity research and highlighting the potential for the social identity approach to help understand how social factors influence these behaviours. Next, we outline the theoretical underpinnings of the social identity approach and provide three key examples that speak to the analytical and practical value of the social identity approach in physical activity settings. Specifically, we argue that social identity (1) can be harnessed to promote engagement in physical activity, (2) underpins exercise group behaviour, and (3) underpins effective leadership in exercise settings. We conclude by identifying prospects for a range of theory-informed research developments.

Key Points

Social factors have a significant impact on physical activity behaviours, and our understanding of their influence will be improved by applying theories of group behaviour to this context.

The social identity approach provides a valuable framework from which to explore the impact of social factors on physical activity behaviours.

Through three broad examples, we illustrate how the social identity approach has the potential to enrich both theory and practice in the physical activity domain.

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1 Introduction

In this article, we highlight the potential for a social identity approach to advance understanding and promotion of physical activity behaviours.[1] Since the 1970s, this approach has been applied to a vast array of contexts, including politics [2–5], business and organizations [6],

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[1] We consider physical activity in the widest sense, including exercise and sport participation. We use the term 'exercise' where applicable throughout the article when referring specifically to physical activity that is planned, structured, and repetitive, with the aim of maintaining or improving physical fitness [1].

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sport [7], and, of particular relevance to the present article, health [8–11]. One of the key propositions of the social identity approach is that psychology and behaviour are both heavily structured by the group memberships that individuals internalise as part of their sense of self [12, 13]. Indeed, because physical activity is often conducted within group settings (e.g. Nordic walking groups, exercise groups, and sports teams), it represents a domain to which a social identity approach could have particular relevance.

In the sections that follow, we first explore current approaches to understanding and promoting physical activity. Despite their differences, these converge in highlighting a need for greater consideration of the impact of social factors on health-related behaviours. We then provide a brief introduction to the social identity approach, before offering three examples of how the approach can fruitfully contribute to understanding and application in the field of physical activity.

2 Physical Activity, Health, and Participation Rates

The influence of physical activity on health and well-being is well documented. Physiological benefits include a reduced risk of contracting coronary heart disease [14, 15], developing various types of cancers [16], and having a stroke [17]; psychological benefits include reduced anxiety [18, 19], reduced likelihood of depression [20, 21], and improved self-esteem [22]. Conversely, physical inactivity has been identified as the fourth leading cause of death worldwide [23], with estimates suggesting that, of all deaths from non-communicable diseases, 6–10% can be attributed to physical inactivity [24]. Enhancing long-term participation in physical activity has consequently been identified as a key objective for researchers, government-funded organizations, and public health agencies. For example, World Health Organization member states have agreed a plan to target a 10% reduction in physical inactivity by 2025 [25]. However, notwithstanding attempts to address this problem, participation rates remain poor; global data from 146 countries suggest that almost one-quarter of adults (23.3%) worldwide are insufficiently active [26].

3 Current Approaches to Understanding and Promoting Physical Activity

Given this physical inactivity pandemic [23, 26], considerable effort has been devoted to understanding physical activity behaviours. Indeed, research concerning the correlates and determinants of physical activity has accelerated in the past 2 decades. Concentrating largely on demographic or individual factors such as age, sex, health status, cognitions, attitudes, and motivation [27], this research has often explored the capacity for theories that predominantly focus on individuals as individuals, such as self-determination theory [28] and the theory of planned behaviour [29], to predict and explain behaviour change [30–32].[2]

Similarly, interventions to promote physical activity have generally employed individual-level psychological and cognitive–behavioural strategies, such as education, self-monitoring, cognitive restructuring, and goal setting [35–37]. Such efforts often also involve attempting to progress individuals through specified stages of behaviour change—for example, as described in the transtheoretical model (TTM) [38]. Although there is some evidence for both the efficacy of these techniques [39] and the predictive utility of these models [40], support for the TTM is relatively weak [41], with mixed findings emerging from studies examining its utility as a predictor of behaviour change and as a basis for intervention [42, 43].

Trends over time indicate that physical activity levels remain stagnant at best and may even be decreasing. Indeed, in the USA, for example, physical *in*activity rates among people aged ≥6 years increased by 0.9% between 2010 and 2015 [44]. The latest data also suggest that worldwide physical activity levels are not increasing, despite many countries having a national physical activity policy or plan [28]. Furthermore, meta-analyses of physical activity interventions have often reported small overall effect sizes [45, 46] and large heterogeneity in effect size strength [47]. All these trends suggest that, despite the considerable volume of research that has been conducted, further work is still required to identify—and mobilize—the most effective strategies for behaviour change in this domain.

4 Recent Advances in Understanding Behaviour Change

Researchers have recently explored new avenues in attempting to advance understanding of behaviour change, including the development of taxonomies of the numerous strategies that have been employed in the context of smoking cessation [48], alcohol consumption [49], and healthy eating and physical activity [50, 51]. Researchers have also explored (1) how best to frame behaviour change messages [52, 53], (2) the utility of new mobile and sensing technologies [54, 55], and (3) the relationship between affective responses to exercise and exercise adherence [56].

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[2] Although we note that these theories do mention social factors (e.g. related to the notions of subjective norms, integrated regulation), they lack an analysis of the self as derived from social groups in a social context [33, 34].

In addition to these new lines of enquiry, researchers have begun to acknowledge the importance of moving beyond an exclusive focus on individual-level approaches to behaviour change to ecological models that consider the numerous individual, environmental, policy, and social determinants of health behaviours [27, 33, 57]. Representing an important shift from traditional theoretical approaches, the assumption at the heart of these models is that understanding behaviour change at different levels (e.g. both individual and collective) is critical for the development of successful interventions [57]. By way of example, initial findings identify the physical activity benefits associated with attending to, and engaging with, a person's social support and social capital, and the norms that develop in group contexts [58, 59]. Research has also shown that when people possess more favourable perceptions regarding 'protective social factors' in their communities (e.g. in relation to the quality of social networks, the degree of social cohesion, and the level of trust in neighbours) they are more likely to engage in physical activity [60, 61].

Similar findings have been documented in the broader health domain, with research consistently demonstrating the impact of social factors on individuals' mental and physical health [62, 63]. Of particular relevance to the present article, research informed by the social identity approach has also emphasized the health benefits (both mental and physical) that accrue from people possessing, maintaining, and developing social identities derived from meaningful memberships of social groups [10]. In particular, research has shown that internalized social group memberships have positive effects on health in a range of contexts—including choirs [64], care homes [65], and, of most interest to this article, sports teams [66]. In these various settings, increased social identification has also been shown to have positive consequences for mental health-based indicators of self-esteem [67], quality of life [68], depression [69], and stress [70]. To flesh these ideas out, in the sections that follow, we provide a brief introduction to the social identity approach,[3] followed by three illustrative applications of the approach to the field of physical activity.

5 The Social Identity Approach

The social identity approach comprises two theories: social identity theory [12, 71, 72] and self-categorization theory [73–76]. The broad goal of the approach is to provide a

comprehensive analysis of the way in which individual psychology is structured by group life. The approach starts by recognizing that individuals can define themselves, and behave, not only as individuals (in terms of personal identity as 'I' and 'me' [73]) but also as group members (in terms of social identity as 'we' and 'us'). Moreover, it proposes that when people categorize themselves as members of a group, this gives their behaviour a distinct meaning, in part because it motivates them to positively differentiate their ingroup from comparison outgroups on valued dimensions. That is, when an individual's sense of who they are is defined in terms of 'we' rather than 'I', they strive to see 'us' as special and as different from other groups [6].

According to this approach, group behaviour is associated with a change in the structure of the self whereby, through a process of depersonalization, the self comes to be perceived as categorically interchangeable with other ingroup members [74]. Defining oneself in terms of a specific social identity is associated with a desire both to discover the meaning of that identity and to align one's attitudes and behaviours with others who share it [6, 76]. So, for example, the more a person identifies with a gym class or exercise group (e.g. as a CrossFit exerciser), a running group (e.g. as a parkrunner), or a team (e.g. as a soccer player of team X), the more that person will be motivated to discover and align themselves with the norms, values, and ideals of what it means to be a member of that group.

6 The Social Identity Approach Applied to Physical Activity

6.1 Social Identity can be Harnessed to Promote Engagement in Physical Activity

In line with the foregoing arguments, research by Terry and Hogg [77] found that individuals who identified strongly with a group in which exercise was normative reported greater intentions to engage in regular exercise than those who identified weakly with the group. These findings have subsequently been supported by a large body of experimental research in the broader health domain, which has shown that people are more likely to engage in healthy behaviours if, and to the extent that, these are congruent with the content of a salient social identity [78, 79]. For example, young adults report weaker intentions to reduce alcohol consumption when their social identity as a 'university student' rather than as a 'British person' is made salient [79]. Showing too that identity-based intentions translate into identity-congruent behaviour, Strachan et al. [80] found that runners who identified more strongly with

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[3] This brief introduction to the social identity approach should not be considered a treatise on the topic; readers are referred to Haslam [6] and Rees et al. [7] for detailed explications of the approach.

their running group completed a greater proportion of their runs with the group but were less confident they would continue running should the group disband. Complementing both self-determination theory [28] and the theory of planned behaviour [29], these findings reinforce the notion that intentions predict behaviour. Crucially, however, they extend this proposition by demonstrating that this effect is particularly strong when those intentions are structured by internalized social identities.

Other research informed by the social identity approach has extended these ideas by highlighting the importance of the structure of exercise environments in fostering identity development. Across multiple studies, Beauchamp and colleagues [81, 82] and Dunlop and Beauchamp [83, 84] have shown that people feel more inclined to exercise with others with whom they share membership in a particular social category (e.g. as 'us women'). Among other things, these researchers found that age and sex are particularly common markers of shared social identity in exercise settings and that participants who perceived themselves to be similar to other group members in terms of physical characteristics (i.e. age, physical appearance, and physical condition) displayed greater levels of adherence to an exercise programme than those who perceived themselves to be dissimilar to other group members [83].

Such findings suggest that people seek out and create ingroups (and outgroups) in exercise settings [85] and that the opportunity to exercise with other ingroup (rather than outgroup) members is therefore an important determinant of their continued engagement in exercise [86]. They also suggest that people who design exercise programmes need to attend to both (1) the opportunities these provide for emergent social identities and (2) the ways in which the programme allows these identities to be enacted and maintained (e.g. through interaction with ingroup members).

Supporting these assertions, a recent randomized controlled trial of the Football Fans in Training (FFIT) programme revealed a significant 4.36% difference in percentage weight loss between intervention and control groups at 12-month follow-up [87]. FFIT is a 12-week programme delivered exclusively to overweight male football fans to improve their diet and physical activity. Crucially, participants share a common social identity as fans of the same team, with interaction between ingroup members assured. Such interaction is also facilitated within many other recently developed exercise programmes (e.g. 'Baby Bootcamp', 'Karate 4 Kids', 'Swimming for Seniors'), suggesting the value of social identities is already well understood (albeit implicitly) by their initiators.

These various lines of research all speak to the idea that social identities can have profound implications for participation in, and adherence to, physical activity. However, as yet, the body of research that supports such claims is relatively small. Moreover, it is further limited by a predominant focus on healthy, non-clinical populations. Given the additional barriers to participation experienced by clinical populations (e.g. lack of mobility, reliance on carers), research examining the impact of social identity within clinical exercise settings (e.g. cardiac rehabilitation, obesity care, disability groups) would represent a valuable adjunct to continued non-clinical research. Indeed, such groups would represent a unique challenge to programmes designed to provide opportunities for social identities to emerge and be harnessed.

6.2 Social Identity Underpins Exercise Group Behaviour

Examination of the benefits of group exercise environments, where multiple individuals undertake the same structured exercise activity, is not new. Indeed, the effectiveness of interventions that involve individual- and group-based exercise environments have been studied extensively, with good evidence that group environments are more effective than individual environments in promoting adherence. Efforts to develop cohesiveness within exercise groups have proved particularly effective [88]. Research across multiple settings and populations has demonstrated a range of positive outcomes from exercising in so-called 'true groups' where group dynamics principles have been used to increase cohesiveness [88]. Most notably, these benefits include long-term increases in physical activity [89–91] (see Estabrooks et al. [92]; Harden et al. [93] for recent reviews).

Research examining the effectiveness of these 'true groups' also reveals that successful interventions foster the development of social identity. For example, the influential model by Carron and Spink [94] proposes that a sense of distinctiveness plays an important role in motivating members of exercise groups to engage in group-relevant activity (see also Bruner and Spink [95, 96]). Clarifying the causal role of social identification in these outcomes, experimental research that enhanced social identification by providing group t-shirts and encouraging participants to develop a group name found this led to greater subsequent effort in a group task [97].

Such findings suggest that social identity is a key mechanism that underpins the effectiveness of group-based programmes in exercise settings. Again, though, this hypothesis is yet to be extensively tested. In particular, there is a need for much more empirical research to explore the role that social identities play in the effectiveness of various forms of exercise groups, interventions, and

programmes in the world at large (e.g. gym membership, CrossFit, parkrun).

6.3 Social Identity Underpins Effective Leadership in Exercise Settings

According to the social identity approach, it is the shift in self-categorization from a personal to a social identity that underpins social collaboration and indeed all forms of group behaviour [73]. Extending this reasoning, social identity theorizing contends that, when people categorize themselves as members of the same group (i.e. in terms of shared social identity), this provides the basis for mutual social influence [75]. However, at the same time, the capacity for any given individual to exert influence varies as a function of his or her capacity to represent and embody the meaning of the group in a given social context. Put slightly differently, this means that any individual group member's ability to exert leadership depends on his or her ingroup prototypicality [98–100].

More generally, from a social identity perspective, successful leadership depends on a leader's ability to create, represent, advance, and embed a shared sense of identity among group members [99, 101]. In line with this idea, evidence suggests that exercise leaders are more likely to have a positive role in shaping the affective states and effectiveness of group members' behaviours if they both stand for, and stand up for, the group [102, 103].

Although the efficacy of the social identity approach to leadership has yet to be extensively examined in exercise settings, a vast body of other research supports its applicability to this context. Benefits associated with identity leadership in other (mainly organizational) contexts include increased satisfaction [104–106], effort [107, 108], and support for leaders [98, 109, 110] as well as reduced turnover intentions [105, 106] and burnout [111]. Such findings appear to have clear relevance to exercise settings. For example, higher levels of burnout have been extensively linked to motivation loss and dropout among sports team players [112–115], emphasizing the value of minimizing the occurrence of burnout in exercise settings.

Finally, the social identity perspective suggests that, before an individual can lead a group, he/she first has to understand it [100]. This suggests there would be particular value in exercise leaders (1) taking opportunities to learn about group history, culture, and functioning and (2) attending to collective group values, norms, and goals. Understanding these nuanced dimensions of group identity will enhance their capacity to be perceived as a prototypical group member and thus engender support (e.g. through demonstrating a level of effort congruent with the expectations and desires of group members) and facilitate the achievement of group and individual goals (e.g. through devising and delivering appropriate group sessions).

Again, though, empirical tests of the identity leadership approach in clinical and non-clinical exercise settings are now needed to confirm its seemingly substantial potential and to identify factors that moderate (i.e. either facilitate or stifle) its impact. Aspects of the approach may, for example, be less applicable in clinical settings (e.g. cardiac rehabilitation), where medical expertise may be favoured over leader prototypicality. However, at the same time, the relative value of leaders helping to create an appropriate identity for such a group (e.g. in which supportiveness and celebrating others' progress is considered normative) may be substantial. These nuances await research. Indeed, the research Steffens et al. [111] conducted in an organizational setting represented the first attempt to explore the role of social identity as a lynchpin between leadership and health. Nevertheless, Wegge et al. [116] suggested this might "have merely exposed the tip of what is a large theoretical iceberg." Building on these sentiments, we believe the approach has an equally significant potential in exercise contexts where health and well-being are even more centre stage.

7 Conclusion

The social identity approach represents a potentially fruitful but greatly under-examined framework for understanding and promoting physical activity. It also presents a viable alternative to the individualistic treatments that currently dominate the theoretical landscape. In the limited space available here, we have provided three brief illustrations of the ways in which this approach might enrich theory and practice. Our hope is that, though barely sketched out here, the framework we have outlined will serve as the foundation for an exciting new wave of original research into the role that group and identity dynamics play in shaping physical activity behaviours. Certainly, the clear applicability of the approach to this domain, and the substantial contribution it has already made in others, makes us confident that the approach has the capacity to drive a groundswell of empirical research, and that the advances this would yield would be considerable.

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