



# A test of the Social Identity Model of Cessation Maintenance: The content and role of social control



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## ABSTRACT

Engagement with self-help groups is a predictor of positive outcomes for those attempting to control their addictive behaviours. In common with other groups, self-help groups have to manage non-normative ('deviant') behaviour to ensure the social values of the group remain preserved, and the group can fulfil its aims. These processes may protect group members from relapse. Drawing on the Social Identity Model of Cessation Maintenance, the current study asked a number ( $n = 44$ ) of attendees of fellowship (AA/NA/CA) and of SMART groups to list behaviours they saw as normative and deviant, and rate a variety of responses to deviant behaviours. Costs of relapse to both the self and the group were also measured alongside self-efficacy regarding cessation and identity as both an active addict and as a member of a self-help group. Results suggest that social control responses to deviance grouped into education, punishment and avoidant type responses. More social control was perceived by highly identifying self-help group members. Educational responses were seen as used by groups more extensively than other responses. Punishment responses were mediated by the perceived costs an individual's relapse incurred on the rest of the group. These findings inform our understanding of what standards of normative and deviant behaviour self-help groups hold, and how they react to violations of such norms. They also have a number of implications for practitioners and facilitators in regard to using social identities as part of the treatment process.

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## 1. Introduction

Self-help group membership has been shown to be a powerful mechanism with which addicts can achieve and maintain cessation. Typically, research shows group membership as a highly valuable part of the treatment process (see e.g. Kelly, Stout, Magill, Tonigan, & Pagano, 2010; Blonigen, Timko, Finney, Moos, & Moos, 2011; Kelly, Hoepfner, Stout, & Pagano, 2012). Participation in such groups is also prevalent – Dawson, Grant, Stinson, and Chou (2006) estimate that 80% of people in the US who are seeking to abstain from problematic alcohol consumption will attend Alcoholics Anonymous at some point. Despite the potential effectiveness of such groups, and their widespread use, little research to date has explored how they function.

In the current study we explore one process which may underpin the efficacy of self-help groups – namely the social support and control that groups offer and exert upon their members. We explore this process through a comprehensive theoretical account of addiction cessation maintenance – the Social Identity Model of Cessation Maintenance (SIMCM; see Frings & Albery, 2015; *in press* for a detailed

theoretical formulation). We define addictive behaviours in a broad sense as any appetitive behaviour, the implementation of which has habitual components, and for which cessation is sufficiently difficult to make multiple change attempts a key characteristic. We define addicts as individuals who engage in these addictive behaviours to an extent which is psychologically and socially problematic for them and/or to the extent they wish to or are motivated to cease. Cessation is defined as a reduction in the level of behaviour to agreed planned target level, up to and including complete abstinence. Finally, we define a self-help group as one in which the majority of the support is provided by knowledgeable others and facilitation is aimed at mutual problem solving rather than didactic instruction or psychoanalytic interpretation.

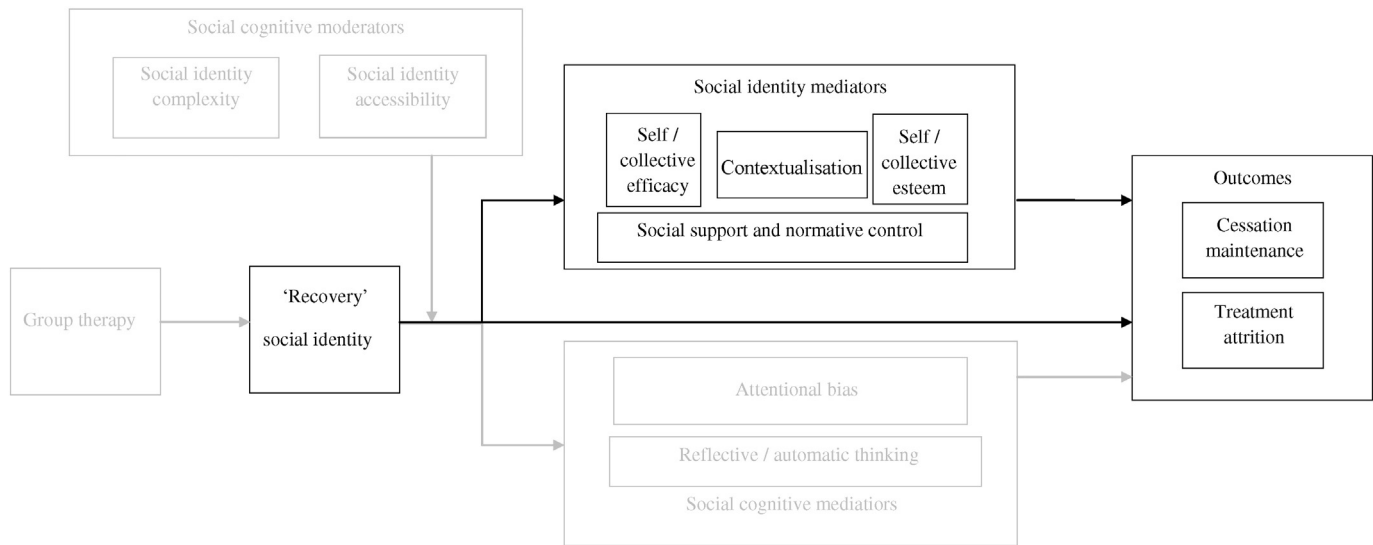
## 2. Social Identity Model of Cessation Maintenance (SIMCM)

### 2.1. The Social Identity Model of Cessation Maintenance

SIMCM (depicted in Fig. 1) proposes that people who are attempting to abstain from (or change) their appetitive behaviours can draw on social identities (i.e. those identities shared with similar others, see Tajfel & Turner, 1979) around cessation to assist them. For the purposes of the current paper we define an active addict identity as the identity an individual holds which relates to the period in their life in which they were

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Note: Parts of the figure in grey represent aspects of the SIMCM model not tested directly in the current paper

Fig. 1. The Social Identity Model of Cessation Maintenance (SIMCM). Note: Parts of the figure in grey represent aspects of the SIMCM model not tested directly in the current paper.

actively engaging in addictive behaviour, and which they may still retain during treatment and cessation. We also operationalise self-help identity as identities associated with specific self-help groups an individual is a member of. More broadly, identities associated with cessation explored in the extant literature are referred to as 'recovery identities' (which may include being an ex-smoker, a recovering alcoholic, etc.).

Fig. 1 depicts the SIMCM model in full. In brief, it is argued that social identities associated with cessation can include thinking of oneself as an ex-smoker, former gambler or member of self-help groups (i.e. Alcoholics Anonymous). As can be seen in the social identity mediators section of Fig. 1, these identities contain beliefs about the efficacy of group members in maintaining cessation, norms and conventions on how to behave both in day to day life and when given the opportunity to partake in the behaviour. Such beliefs should affect outcomes (for instance, higher quit efficacy is linked to fewer lapses, see Buckingham, Frings, & Albery, 2013).

## 2.2. Identity effects on behaviour: social cognitive effects

Much like traditional social identity perspectives, SIMCM argues that identities are activated cognitively (i.e. becomes psychological impactful on the individual) when they are relevant to the situational context. SIMCM argues this process is underpinned by the presence of cues in the environment (social or physical) which leads to activation. For instance, for an ex-alcoholic, being presented with a related cue (a pint of beer) may activate related construct (recovering alcoholic). It also argues that this activation can occur either explicitly (with conscious recognition) or in a more automatic implicit processing style (i.e. implicitly). Upon activation, psychological constructs related to the identity (i.e. efficacy) are also activated (or primed to be activated easily). This may also encompass more ready activation of cessation orientated behaviours over consumption orientated behaviours: For instance, activation of an identity as a recovering alcoholic may be associated with saying 'no' to a drink.

SIMCM also argues that the activation of these identities is dependent on a number of social cognitive moderators (see Social cognitive moderators, Fig. 1). Such moderators may include category accessibility (the baseline level of activation needed to prime the construct, i.e. its sensitivity to relevant cues). Where a cue has multiple links (i.e. beer with recovering alcoholic and also with active addict), the level of accessibility for each will determine which affects cognition and behaviour (i.e. in the above example, if the active addict identity is activated

more strongly than the recovering alcoholic identity, risky behaviours such as drinking may also be activated). This moderator is thought to be complimented by a second construct- complexity (the range of cues which contribute to such activation). Constructs which include a wider range of cues are more likely to be activated in a wider range of situational contexts. Once active, identities associated with recovery are thought to be associated with other social cognitive processes which may affect outcomes (see Fig. 1, Social cognitive mediators). These include attentional bias (interference in cognitive processing when faced with an addiction relevant cue) and changes in the extent to which thinking and behaviour is automatic or reflective. This social cognitive account of identity effects are explored more fully in theoretical papers including Frings and Albery (2015) and Frings and Albery (in press).

## 2.3. Identity effects on behaviour: social influence effects

Alongside these various psychological effects which are largely internal, membership of a group of individuals who are 'quitting' also brings about within-group social influences which are facilitative of cessation (see Fig. 1, Social identity mediators). Indeed, in self-help groups, all members share the same purpose, making them similar in their needs, goals and motivation to remain members of these groups. Thus, group members are hypothesised to facilitate social support (both material and psychological) and social control on other group members' behaviour. This is achieved by establishing group norms aiming to facilitate behaviours consistent with cessation and attempts to manage non-normative behaviour amongst those who eventually relapse or violate the group norms. Such responses are traditionally defined as external social control, but more often referred to in the current literature as "social control" (see Innes, 2003).

A number of predictions made by SIMCM have been tested empirically. Generally, having social connections with non-addictive/recovery orientated others has been shown to be facilitative of positive health outcomes for recovering addicts (see Best et al., 2014; van Melick, McCartney, & Best, 2013). The importance of social identity as a 'recovering addict' in particular was explored in a recent interview study of 21 people who were resident in a therapeutic community (Dingle, Cruwys, & Frings, 2015). Community members highlighted a number of social identity related triggers which prompted them to seek treatment (for instance, losing a valued social identity, or being identified by others as an 'addict' or 'junkie'). They also highlighted the importance of a

collective identity as a recovering addict on their treatment progress – in particular the effect of playing a substantive citizenship role in the operation of the group (e.g. as a ‘House Manager’). More directly, one prediction that SIMCM makes is that higher levels of identity as a ‘recovering addict’ (or equivalent) will be linked with higher levels of self-efficacy around cessation. In line with this, Buckingham et al. (2013) showed quantitatively that increased differentiation between addict and self-help identities was linked to higher levels of cessation efficacy amongst members of Alcoholic Anonymous and Narcotics Anonymous (Study 1) and amongst smokers (Study 2). Similarly, longitudinal work shows that differentiation between such identities sometimes increases over time, and are predictive of success at maintaining retention and abstinence (Beckwith, Best, Dingle, Perryman, & Lubman, 2015; Dingle, Stark, Cruwys & Best, 2015). Other work supports the existence of implicitly held concepts around the self and addiction (although not specifically around identities, e.g. Gray, LaPlante, Bannon, Ambady, & Shaffer, 2011; Lindgren et al., 2013). For instance, Lindgren et al. (2013) showed that, amongst an undergraduate population, associations between categories of the ‘drinker’ and ‘me’ predicted self-reported alcohol consumption, alcohol related harm and levels of alcohol craving. Somewhat more directly, Wolff, von Hippel, Brener, and von Hippel (2015) showed that amongst members of a number of Australian abstinence based residential treatment programs, greater levels of associations between the self and drug alcohol/drug use (measured using an IAT) predicted poorer treatment retention and outcomes for up to a year post-testing.

#### 2.4. SIMCM and social support/control

One aspect of SIMCM which has yet to receive empirical support is the role of social control amongst group members. SIMCM, in line with other accounts of group functioning (e.g. Tajfel & Turner, 1979; Festinger, 1950), argues that group members are motivated to maintain behavioural and attitudinal group norms in order to maintain the group’s ability to achieve its goals (group locomotion), maintain the subjective validity of group values and normative expectations (i.e. the group’s social reality) (see Festinger, 1950, 1954), and maintain the subjective validity of positive comparisons between one’s own group and others (i.e. the positive social identity, see Tajfel, 1978). To date, no research has investigated quantitatively which of these norms those involved in self-help groups for addiction typically hold. Thus, one aim of the current study was to explore the relative proportion of norms related to group locomotion (e.g. those affecting the group’s ability to meet goals) and social reality (e.g. those reflecting the image of the group to others, including prototypical behaviours) which group members generate when thinking about their groups. It also aimed to look at how group members are expected to respond to violations of such norms, through the social control responses they select.

#### 2.5. Social support/control responses

Responses to group members who violate group norms (known in the social identification approach literature as ingroup deviants, see Marques, Abrams, & Serodio, 2001) can include both inclusive and exclusionary responses (e.g., Israel, 1956; Levine, 1989; Orcutt, 1973). We define all these responses collectively as social support/control responses. Many studies in the small group tradition show that non-normative members receive higher levels of communication than do other members (e.g. Schachter, 1950; Festinger, Gerard, Hymovitch, Kelley, & Raven, 1952) and the content of this is often persuasive in nature (Frings & Abrams, 2010; Frings, Abrams, Marques, & Randsley de Moura, 2010). Such inclusionary and exclusionary responses to deviants (group members who violate group norms) are more likely if group members feel capable of achieving change (at least for persuasive communication, Frings, Hurst, Cleveland, Blascovich, & Abrams, 2012), the violator is a member of one’s own group (Marques et al., 2001) or

when non-normative behaviour is outside one’s own control (e.g. LePine & Dyne, 2001). They also vary in form depending on how new or established group members are (Moreland, Levine & Cini, 1993; Pinto, Marques, Levine, & Abrams, 2010). Such responses benefit the group by correcting potentially damaging behaviour in a proportionate way. If such measures fail, or the norm violation is very serious, groups may punish group members. The form of punishment varies from group to group and over time (see Jacobs & Kent, 2007), but can range from hostile communication (directed in order to exert pressure on the deviant to conform), to social isolation which falls short of exclusion, reducing availability of group resources to an individual, the use of fines/penalties (e.g. Horne & Cutlip, 2002) and many others. Levels of punishment seem to be limited in part by the extent to which it is seen as an acceptable response by other group members (Lee & Tedeschi, 1996). A final option open to groups is to exclude participants from the group’s life, either psychologically (avoiding interaction with the participants) or physically (actually excluding them from group membership) (Jacobs & Kent, 2007; Moreland, Levine, & Cini, 1993). This response removes the deviant from the group’s life, preventing damage to the group’s social reality or locomotion. It also, however, runs the risk that members who could become normative with less severe responses (and remain productive group members) are prematurely ejected from the group, and too many exclusions ultimately weakens the social fabric of the group. Thus, exclusion is typically used less often than other forms of response.

#### 2.6. Social support/control responses in addiction

Within the addiction literature, providing social support and a clear normative structure for appropriate behaviours has been identified as two of the ‘active ingredients’ of self-help groups (Moos, 2008). Social support in addiction may take various forms. Where sponsor systems are in place, social support may extend to an experienced other almost always available to seek help and advice from (see Whelan, Marshal, Ball, & Humphreys, 2009). Social support may also include helping recovering addicts access other services which may benefit them, shielding recovering addicts from other using/active addicts that remain in their social network, providing help in identifying strategies to avoid risky situations, sharing tales of recovery which convey social meaning for lapse and relapse and providing a positive vision of the future (see Banerjee & Greene, 2012; Jensen, 2000; Kaskutas et al., 2005). Importantly for the current study, this ‘social meaning making’ may in particular contextualise what a lapse or relapse back to problematic behaviours means in terms of cost to the self and others. Group members can highlight to one another the personal costs of lapsing that they have experienced in the past (in terms of damaged relationships, loss of control, etc.). It may also highlight the cost of such behaviours to others including the friends, family, and the group itself. Simultaneously, the cost to the group when others within it do actually relapse (for instance, the effect on the group of a relapse by a senior member or one ‘in service’ in the fellowships) may lead individual group members experience such costs to the group themselves.

The mechanisms listed above are generally inclusive in nature. However, more punitive responses have been observed in past research and practice. Tiebout et al. (1963; cited in White & Miller, 2007) advocated the role of aggressive confrontation in a “Break ‘em down to build ‘em up” approach to self-help group facilitation. For one incarnation of AA (LA Hispanic groups, see Hoffman, 1994), this is referred to as ‘rough therapy’ which involves high levels of aggressive interpersonal confrontation. Perhaps more commonly, sponsors in the AA system are sometimes judged as being overly critical and controlling (i.e. being a ‘Step Nazi’, see Wheelan et al., 2009a, 2009b) although sometimes an emotionally cold approach is seen as appropriate (see Jensen, 2000, p. 40). Ethnographic research reveals that criticism of others, although generally being perceived as anti-normative in and of itself, is used as a social control mechanism by AA members, particularly high status ones

(Hoffmann, 2006). More extremely, now discredited AA offshoots developed in the 1960s (e.g. Synanon) also used punishment of dissension as a 'therapeutic' tool in self-help groups (see Yablonsky, 1965). Currently, exclusion remains a common feature of formal groups which have strictures on engaging in the problematic behaviour during treatment (see SAMHSA, 2005). Although potentially damaging for those who cannot behave normatively, the threat of possible future expulsions or loss of status from the group may also be protective to those at risk of such behaviour: Social identities are thought to be a positive source of self-esteem (Tajfel & Turner, 1979), and a source of positive differentiation between the self and others. In the case of addicts, this includes differentiation between the self (as a recovering addict) and the category addicts (an often stigmatized group). SIMCM argues that one implication of this is that the cost of risking this identity by engaging in prohibited behaviours (e.g. their addictive behaviour) which negatively affect the group will be higher for individuals who identify with the group.

Although various social control responses have been both posited and documented in the literature no research has directly explored the extent to which members of self-help recovery groups perceive each type of social control response as being used by their group. Thus, a further aim of the current study was to measure various social control responses, examine how they cluster together, and how prevalent each cluster is. Finally, no research has explicitly investigated the possible relationships between levels of social identity, perceptions of social control, or how social identities influence the perceived different cost of lapses and relapse. However, non-addiction related literature in this area allows us to generate predictions about these relationships.

### 2.7. Evidence from the non-addiction literature

Social control has been widely explored in the general social psychology literature. For instance, group members who are committed to the group are also committed to maintain intergroup boundaries, ensure normative behaviours are understood by others and engage in social support and control (see e.g. Abrams, Marques, Brown, & Henson, 2000). Group members who identify more highly with the group are thus more likely to perceive higher levels of social control from the group. In support of this, some research shows that perception that group's social control is effective is linked to higher ingroup identification (Pinto, Marques, Paez, 2015). The nature of self-help groups may also influence what type of social control responses are perceived to be used. In general, such groups have a philosophy of accepting those who others reject, being non-judgemental and enabling people to help themselves (see e.g. Alcoholics Anonymous, 2001; MacGregor & Herring, 2010). Social control responses which are punitive appear to run contrary to such ideals. As such, it can be expected that inclusive educational responses are likely been seen as more likely than punishment or exclusionary responses. However, all groups must balance a desire to be inclusive with the requirement to maintain their social reality and group locomotion. Exclusionary social control responses are particularly likely when the cost of behaviours to the group is high. Evidence from outside the addiction field supports this. For instance, Kruglanski and Webster (1991) showed group members who dissent from group norms faced more negative evaluations when the group was under time pressure to complete a task, or when the task was very difficult. Marques et al. (2001) showed that negative responses to groups were most severe when group status was manipulated to appear insecure. In social dilemma research (e.g. von Rueden & Gurven, 2012), punishment is only usually meted out when a cost/benefit ratio of an action is favourable (as would increasingly be the case when the cost of the deviancy to the group is high). Applying this reasoning to self-help groups, SIMCM predicts that, when behaviour (e.g. lapses and relapses, as well as violation of group locomotion or social reality norms) are seen as affecting the group as a whole, higher levels of exclusionary social controls (e.g. punishment and exclusion) may be expected.

### 2.8. Aims and hypotheses

In summary, the current study aimed to explore (i) the content of norms amongst addiction recovery-based self-help groups, (ii) measure group members' perceptions of how their groups engage in social control, and (iii) explore the links between self-help identity and different social control responses, cost to the self/group of lapses and relapses and cessation efficacy. As well as exploratory work into the types of norms held by addiction groups (e.g. those related to social reality concerns and group locomotion concerns) a number of specific predictions were made. In line with SIMCM and previous research, a higher level of self-help identity was predicted to be linked to greater perceptions of self efficacy in maintaining cessation (H1), greater perceived costs of lapses and relapse to both the self (H2a) and the group (H2b) and higher levels of social control/support (H3). In terms of social control responses, it was predicted that inclusive/supportive responses would be seen as more extensively employed than punitive and exclusionary ones (H4). Finally, for punitive and exclusionary responses (such as avoidance) the effect of self-help identity on the frequency of perceived usage should be mediated by the perceived cost of a norm violation to the group (H5). This mediation should not be observed for inclusive/supportive responses (H6).

## 3. Methods and materials

### 3.1. Participants

A total of forty four participants were recruited from AA ( $n = 12$ ), CA ( $n = 11$ ), NA ( $n = 10$ ) and SMART<sup>1</sup> ( $n = 11$ ) self-help groups. The sample was 56.8% male ( $n = 25$ ). Ages ranged from 22 to 63 years ( $M = 39.80$ ,  $SD = 11.16$ ). Participants had been attending self-help groups for between 1 and 120 months ( $M = 21.98$ ,  $SD = 24.26$ ) and reported being 'clean' for between 0 and 120 months ( $M = 21.98$ ,  $SD = 24.26$ ).

### 3.2. Design

A correlational design was used. Measures taken included levels of identity as a self-help group member and as an active addict, measures of social control response, levels of self and collective efficacy regarding cessation maintenance and cost of lapse and relapse to the self and the group. Rather than pre-supposing a set of norms held by self-help groups, or assuming uniformity of perceived norms between members, the current study asked participants to self-generate norms and respond in that group context.

### 3.3. Materials

Scales which made reference to a particular group membership (e.g. AA/NA/SMART) were adjusted to match the identity they were measuring. Such adjustments are indicated in the following description by [group]).

#### 3.3.1. Goals and norms

Each participant was asked: 'Please think about [group] as a group. Please list what you consider to be the main 'goals' of this group. Please list as many or as few as you wish'. They listed these under the heading 'Goals of my group include'. They were also asked 'Please list what behaviours/accepted behaviours and attitudes you think could be considered 'good' norms and 'bad' norms for this group. Please list as many or as few as you wish'. These were listed under the headings

<sup>1</sup> SMART is a non-fellowship self-help group. The key differences between it and the fellowships is that it has no 'higher power' and a more structured approach to facilitation, including the use of CBT and problem solving training. For more details, please see MacGregor & Herring (2010). ANOVA revealed no differences between type of group on identity, levels of social control, efficacies or relapse/lapse costs.

'Good' behaviours/accepted norms and 'bad behaviours/not accepted norms' and allowed the measurement of normative and deviant behaviours respectively.

### 3.3.2. Self-help group identity

Levels of identification with the self-help group that the participant attended was measured using items adapted from the Leach et al. (2008) social identity measures using the centrality and satisfaction scales. These subscales were selected to provide a brief scale which had a balance of identity and evaluative aspects. These items were measured on 7 point Likert scales (1 = Not at all, 7 = Very much) and comprised: 'I often think about the fact that I am in [group]', 'The fact that I am in [group] is an important part of my identity', 'Being in [group] is an important part of how I see myself', 'I am glad to be in [group]', 'I think that in [group] members have a lot to be proud of', 'It is pleasant to be in [group]', 'Being in [group] gives me a good feeling'. Cronbach's  $\alpha = .97$ .

### 3.3.3. Active addict identity

The same items as used to measure self-help group identity were used to measure active addict identity, with the replacement of [group] with 'drug/alcohol user'. Cronbach's  $\alpha = .70$ .

### 3.3.4. Social control responses

The social control response scale consisted of eighteen items, each of which measured the use of a specific responses (e.g. the extent to which the group 'explains to group members who have acted incorrectly how to change' or 'punishes group members who behave out of line'). The scale as a whole was prefaced by the instruction 'Please think about [group] as a group. To what extent do you think that people in [group]'. The various social control responses listed can be seen in Table 2. Responses were made on 7 point Likert scales (1 = Not at all, 7 = Very much). Subscales were created on the basis of factor analysis (see Results, below).

### 3.3.5. Self-efficacy

Self-efficacy towards remaining abstinent was measured using the following items: 'I can remain abstinent', 'I can manage my addiction', 'It is unlikely I will remain abstinent from my addictive behaviour' (subsequently reversed scored) and 'I think I can achieve my recovery goals'. Responses were made on 7 point Likert scales (1 = Not at all, 7 = Very much). Means were calculated such that higher scores indicate greater perceived efficacy. Cronbach's  $\alpha = .81$ .

### 3.3.6. Collective efficacy

The same items were used to measure collective efficacy, amended to reflect 'As a group, [group] members are'. Cronbach's  $\alpha = .64$ .

### 3.3.7. Cost of lapse to self and to the group

Participants responded to three items for the cost of lapses to self and three items for the cost of a lapse to the group. The instruction for this scale was: 'Think about what would happen if you experienced a 'slip' (a short return, however brief, to your addictive behaviour) in the next week. To what extent would this be' followed by items 'negative to [yourself/other group members]', 'harmful to [yourself/other group members]' and 'a costly problem for [yourself/other group members]'. Responses were made on 7 point Likert scales (1 = Not at all, 7 = Very much). We computed two scores (cost of lapse to self; cost of lapse to the group) corresponding to the average of these items (Cronbach's  $\alpha > .96$ ). Means were calculated such that higher scores indicated greater perceived cost.

### 3.3.8. Cost of relapse to self and to the group

The instructions for these scales were 'Think about what would happen if you experienced a sustained relapse to your addictive behaviour in the next week. To what extent would this;' followed by the same

items as the cost of lapse scales. Cronbach's  $\alpha > .99$ . Means were calculated such that higher scores indicate greater perceived cost.

### 3.3.9. Time in group/time abstinent

To avoid priming these concepts during the study, participants were followed up after the main data collection. At this point they were asked to record 'the number of months you had remained clean' and the 'number of months you have attended [group]'. All participants who undertook the first phase provided this information.

## 3.4. Procedure

Participants were recruited through their AA/SMART groups (with appropriate permissions at organisational and local meeting levels). All participants were given the questionnaire packs in an envelope and asked to complete them in one sitting at their convenience and return them to the researcher at a subsequent meeting. Data collection took place over eight weeks and a 75% return rate was achieved. Ethical oversight of the study was provided by a university's research ethics committee.

## 4. Results

### 4.1. Frequency and type of identified goals and norms

Norms and goals were independently rated by two researchers. Lists of goals and norms were coded as to whether they were entirely concerned with social reality (i.e. norms and goals representing the values or goals of the group, e.g. 'staying clean') or entirely to do with group locomotion (i.e. those norms and goals which promote or inhibit group function e.g. being rude in meetings and sexual activity with other group members) or a combination of the two.

Goals included 'passing the AA message on', maintaining sobriety, helping others maintain sobriety, stop drinking, getting/staying clean/not using, helping others get clean, setting small goals and generating motivation. For norms coded for social reality, positive normative behaviour included 'being clean/trying to get clean'. Deviant social reality related behaviours were typically 'failing to stay clean/using'. For group locomotion coded behaviours, positive normative behaviours included listening, supporting newcomers, being empathetic, being honest with others, being on time for meetings and maintaining confidentiality. Deviant behaviour included talking over others or having private chats during meetings, being disrespectful or abusive towards others, being aggressive or violent, dwelling on 'war stories', arriving at meetings intoxicated, relapsing/using, and having sex with newcomers/other group members.

Inter-rater reliability was ICC[2] = .97 for goals, ICC[2] = .86 for items listed under the positive norm heading and ICC[2] = .82 for items listed under the negative norm heading. Where the raters disagreed, a discussion was undertaken and an agreement reached.

Table 1 displays how many goals, normative behaviours and deviant behaviours listed by participants were coded as concerned entirely with social reality issues, entirely with group locomotion issues, or featured either a combination of the two or neither. Chi-square analysis undertaken on this frequency data revealed a non-even distribution of observations,  $\chi^2(6) = 17.95$ ,  $p = .006$ . The same analysis excluding combination and non-specified observations was also significant,  $\chi^2(2) = 14.45$ ,  $p < .001$ . The pattern of frequencies suggests that goals

**Table 1**  
Frequencies of different goal and norm types.

Dimension	Focus of concern			
	Social reality	Group locomotion	Combination	None specified
Goals	20	10	6	9
Normative behaviours	8	21	3	12
Deviant behaviour	5	19	5	15

**Table 2**  
Factor loadings of items in the social control response scale.

	Education	Factor punishment	Avoidance
Makes it clear to group members what is 'good' and 'bad' behaviour	<b>.893</b>	.016	-.110
Ensures group members know what is expected of them	<b>.888</b>	-.266	.095
Provides group members with clear guidance on how to behave	<b>.898</b>	-.270	.075
Encourages group members to meet the group's goals	<b>.904</b>	.154	.039
Celebrates behaviour which is in line with the groups goals	<b>.934</b>	.084	.002
Supports group members in achieving the groups goals	<b>.920</b>	.135	-.022
Explains to group members who have acted incorrectly how to change	<b>.841</b>	.159	-.168
Educates group members who struggle with behaving in line with the group's norms	<b>.903</b>	-.231	.109
Tries to help group members' correct their behaviour when they break the 'rules'	<b>.908</b>	.107	-.150
Punishes group members who behave out of line	.039	<b>.799</b>	.245
Takes disciplinary action against group members who violate accepted behavioural norms	.188	<b>.830</b>	.341
Penalises group members who act in unhelpful ways	.195	.409	<b>.721</b>
'Freeze out' group members who misbehave	-.015	<b>.859</b>	.481
Exclude group members who violate accepted behavioural norms	-.016	<b>.954</b>	.342
Try to force people who break the rules out of the group	-.018	<b>.955</b>	.445
Ignore people who break the rules out of the group	-.125	<b>.921</b>	.480
Try and avoid group members who violate accepted behavioural norms	-.160	.465	<b>.892</b>
Try less hard to help group members violate accepted behavioural norms	-.152	.522	<b>.893</b>

Note: Loadings in bold indicate the final factor allocation of each item.

focus on social reality were listed more frequently, whilst the listed behaviours (both normative and deviant) largely concerned group locomotion issues.

The number of goals listed ranged from 0 to 8 ( $M = 1.43, SD = 1.56$ ). The number of deviant behaviours ranged from 0 to 10 ( $M = 1.61, SD = 2.04$ ) and the number of normative norms ranged from 0 to 7 ( $M = 1.43, SD = 1.77$ ).

#### 4.2. Types of social control mechanisms

Factor analysis was conducted on the social control response scale items. As there was no a-priori reason to expect types of social control response to be orthogonal, an oblimin rotation method was employed. A three factor solution emerged (with Eigen values  $> 1$ ). Factor 1 explained 41.32% of the variance in the solution, Factor 2 explained 33.86% of the variance and Factor 3 explained 8.13% of the variance. The rotated loadings of each item on each factor can be seen in Table 2. Inspection of the items loading onto each factor showed that those associated with Factor 1 referred to 'Education' as a social response. Those loading onto Factor 2 referred to a mixture of punitive and exclusive reactions. In order to simplify this factor designation, we denominated it as 'Punishment'. For Factor 3, items referred to 'Avoidance' (a different form of exclusive reactions since, in contrast to the previous factor, it is based on the absence of action towards the target). Aggregated scores for each of the factors 'Education', 'Punishment' and 'Avoidance' were calculated.

A number ( $n = 9$ ) or participants listed neither a goal nor a norm. These participants were excluded from the subsequent analysis. ANOVA was conducted on the extent to which participants perceived the group as engaging in each kind of social control response. There was a main effect of response type,  $F(2,68) = 74.59, p < .001, \eta^2_p = .69$ . Simple effects analysis revealed that education responses were seen as used more extensively ( $M = 5.32, SD = 1.20$ ) than punishment responses ( $M = 2.54, SD = 1.12$ ),  $p < .001$ , and avoidance responses ( $M = 2.31, SD = 1.07$ ),  $p < .001$ . The extent to which groups used punishment and avoidance responses did not differ,  $p = .26$ . These results support the hypothesis that, generally, self-help groups are perceived by their members to use supportive responses more extensively than punitive and exclusionary ones (H4).

#### 4.3. Relationship between social control mechanisms, identity, efficacy and cost of lapse/relapse

To examine the relationship between each social control dimension, levels of each identity, efficacies and cost of relapses partial correlations

were calculated. As such variables could be influenced by the length that group members had attempted cessation self-reported months clean was controlled for in each correlation. Coefficients for each partial correlation (and significance levels) can be seen in Table 3. Of particular note are significant positive correlations between self-help group identity and self and collective efficacy (H1). Self-help group identity also significantly related to increased cost of both lapses and relapses for the self and the group (H2a, H2b). Increased levels of perceived educational social control responses were linked with higher self-help group identity (H3), self and collective efficacy and cost of lapse and relapse to the self. It was also marginally associated with increased cost of lapse to the group ( $p = .06$ ). Higher levels of punishment response were associated with increased cost of lapse to the self and marginally to increased cost of lapses to the group ( $p = .091$ ) and costs of relapse to the self ( $p = .078$ ) and the group ( $p = .072$ ). Generally, higher levels of collective efficacy were significantly associated with higher self-efficacy. Interestingly, higher levels of identity as an active addict and higher levels of perceived use of punishment responses were both linked to being a member of the group for longer.

#### 4.4. Mediation analysis

To test the hypothesis that the extent to which the expected relationship between self-help group identity and perceived usage of punishment and avoidance is mediated by perceived cost to the group (H5) and also that a similar mediation should not occur for education responses (H6), mediation models were constructed and tested using the method outlined by Hayes (2013, Model 4). In these models, self-help group identity was used as a predictor, and cost of a lapse to the group as a mediator<sup>2</sup>. In one model, the outcome variable was likelihood of punishment responses. In the second, it was the likelihood of avoidance responses, and in the third, educational responses. Initially, models were constructed with months clean as a covariate. However, this variable did not act as a covariate in any of the overall models. Thus, a second set of models were reconstructed without a covariate. Models consisted of 1000 bootstrapped samples. Confidence intervals at 95% are reported.

In partial support of H5, when punishment was the outcome variable, the overall model was marginally significant,  $R^2 = .20$ ,  $F(2,32) = 2.60, p = .09$ . Self-help group identity was positively related to perceived cost of a lapse to the group ( $a_i = .50, t(33) = 2.84, LCI =$

<sup>2</sup> In contrast to earlier methodologies designed to test mediation, the methodology outlined in Hayes (2013) allows the testing of indirect effects between a predictor and a outcome via a mediator even in instances when no direct relationship between the predictor and outcome is observed.

**Table 3**  
Partial correlations between variables (controlling for months clean).

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
(1) Education responses	–	–.11	–.36*	.64***	.28	.50**	.50**	.38*	.33†	.33†	.24	–.12
(2) Punishment responses		–	.45**	–.03	.32*	–.20	<.01	.39*	.30†	.31†	.31†	.23**
(3) Avoidance responses			–	–.15	–.13	–.22	–.19	.12	–.09	.21	.06	–.09
(4) Self–help group identity				–	.29†	.72***	.51**	.49**	.50**	.51**	.48**	–.10
(5) Active addict identity					–	.03	.27	.38*	.31†	.31†	.33†	.46**
(6) Self–efficacy						–	.58**	.49**	.59***	.53***	–.28	–.28
(7) Collective efficacy							–	.43*	.38*	.55***	.50**	.16
(8) Cost of lapse (self)								–	.80***	.80***	.81***	.19
(9) Cost of lapse (group)									–	.57***	.78***	.07
(10) Cost of relapse (self)										–	.71***	.07
(11) Cost of relapse (group)											–	.30†
(12) Months in group												–

Note:  $df = 32$  for each correlation. Subscripts denote significant partial \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ , † $p < .10$ .

.14, UCI = .85) but not to levels of punishment response ( $c' = -.17$ ,  $t(32) = 1.23$ , LCI =  $-.46$ , UCI = .11). Perceived cost to the group predicted levels of punishment response ( $b_i = .28$ ,  $t(32) = 2.27$ , LCI = .03, UCI = .54). The indirect effect of self-help group identity on punishment responses via cost was positive and significant,  $a_i b_i = .14$ , LCI = .02, UCI = .45). In contrast, when avoidance response was the outcome variable, the overall model did not approach significance  $R^2 = .07$ ,  $F(2,32) = .49$ ,  $p = .615$ . No direct or indirect effects approached significance.

In support of H6 when educational response was included as the outcome variable, the overall model was significant  $R^2 = .38$ ,  $F(2,32) = 9.98$ ,  $p < .001$ . Self-help group identity was positively related to perceived cost of a lapse to the group ( $a_i = .50$ ,  $t(33) = 2.84$ , LCI = .14, UCI = .85) and to levels of educational normative response ( $c' = .47$ ,  $t(32) = 3.69$ , LCI = .21, UCI = .73). Perceived cost to the group did not predict levels of educational response ( $b_i = -.07$ ,  $t(32) = .63$ , LCI =  $-.16$ , UCI = .30). The indirect effect of identity on educational response via cost was non-significant,  $a_i b_i = -.04$ , LCI =  $-.06$ , UCI = .21).

In summary, self-help group identity related positively to punishment responses, but this effect was entirely via perceived cost of relapse to the group. For avoidance, there were no relationships between identity, perceived cost and likelihood of response. Finally, group identity related to expected levels of educational responses directly, and levels of such responses did not involve perceived cost.

## 5. Discussion

Self-help groups for addiction research have been shown to be an effective form of therapy for many addicts (see Moos, 2008). The processes which underpin this effectiveness have been outlined by the Social Identity Model of Cessation Maintenance (SIMCM, Frings & Albery, 2015; in press). SIMCM argues that development of social identities associated with recovery (or being an ex-smoker, former gambler, etc.) is a causative factor in positive health outcomes amongst addicts. These can include identities associated with self-help groups such as AA. One untested processes which SIMCM argues will facilitate this process is social control/support employed by groups. This is thought to operate at least in part by providing a sense of social support which bolsters efficacy, and by simultaneously increasing the perceived cost of relapse. The current study aimed to test a number of predictions made by SIMCM. First, it tested the relationship between self-help group identity and efficacy (H1), identity and cost of lapses and relapses (H2a, H2b), the use of social control/support (H3), and the extent to which inclusive and exclusionary responses were used (H4). It also tested the mediational effect of perceived cost on the expected link between self-help group identity and social control response use, predicting a mediation to be present for exclusionary (H5) but not inclusive responses (H6).

In the current study greater levels of a self-help group identity were linked with higher levels of perceived cessation efficacy (H1). This

finding is in line with predictions made by SIMCM and mirrors previous empirical evidence (e.g. Buckingham et al., 2013; Dingle et al., 2015). The current study extends this body of work by looking at what sort of norms self-help groups hold, and how they enforce them. In the current study, group goals reflected social reality orientated aims (such as staying clean). However, the norms themselves revolved around group locomotion issues – behaviours which inhibited the group from fulfilling its self-help function (e.g. participating intoxicated, sexual contact between senior and new members) were seen as deviant, whilst behaviours which facilitated it (e.g. listening, respecting confidentiality) were seen as normative. Interestingly (but slightly anecdotally given the small sample of AA/NA/CA members), few of the current participants explicitly listed any of the twelve steps<sup>3</sup> when describing normative and non-normative behaviour. This may suggest that the group's perception of social reality may possibly be based on group level experiences which move beyond set texts to the social experience and process of the group itself.

Higher levels of self-help group identity were also linked to higher levels of cost of both lapses and relapses to the self and the group (H2a, H2b). These effects could be driven by the perceived risk of losing a valued ingroup identity by resuming an addictive behaviour, or because group norms around cessation contextualise the meaning of a lapse or relapse in such as way as they are seen as more impactful on the individual. Group members typically saw educational social control responses as more prevalent than punishment or exclusion (H4). This is in line with accounts of, for instance, the fellowships, where a desire to accept anyone with a willingness to change and being non-judgemental is encouraged. Equally, SMART has a philosophy of support and inclusion. There was also a trend (which was significant at a one-tailed level, but not in more conservative two tailed approaches) for punishment and exclusion responses to be linked to higher levels of cost of both lapses and relapses to both the group and individual. Closer examination of the mediation effects of self-help group identity on social response usage suggest that the effects of identity were linked to usage of educational responses directly, but punishment responses only indirectly, via perceived cost (H3, H5, H6). This suggests that groups are using social support/control to fulfil the dual functions of assisting individual group members in their cessation whilst simultaneously policing themselves to ensure the group can continue to function. Indeed, individuals who perceived their group as engaging in educational normative responses also felt more efficacious in their own cessation. Finally, people who had a high active addict identity also saw punishment responses as more likely. Interestingly, active addict identity was unrelated to collective and self efficacy. Although not the focus of the current

<sup>3</sup> The twelve steps are a set of actions, many with reference to God or a higher power, which AA and the fellowships argue must be undertaken to successfully maintain abstinence. They involve admitting one is powerless over the behaviour, taking responsibility for one's actions, making amends for past wrong-doings, engaging in self-reflection and carrying the AA message to other alcoholics.

paper, this lack of effect is worthy of further study. It may be that in the early stages of recovery, when a self-help (or equivalent) identity is not established, a strong negative correlation between active addict ID and efficacy would be observed. Once the self-help identity is established, the active addict identity becomes relatively unimportant in judgement of efficacy.

In the current study, group members generated their own norms and expressed how they thought the group would react to violation of such norms. Many group members generated multiple norms. One possibility is that some norm violations (for instance, sexual relationships between senior and novice members) are perceived as more serious than others (e.g. consistent tardiness) and may attract different forms of responses. Equally, the emphasis on some norms may be different in some groups relative to others (for instance, in some therapeutic communities, arriving late for group therapy is a norm violation which is punished severely as a proxy for lack of self-discipline in general). Future research could aim to link particular norm violations to particular responses for a particular group, and such an approach may be beneficial for facilitators. A general conclusion can be made that it is supportive responses which are used most often, and the degree of cost associated to the group by a member's actions dictates more severe responses. However, the finding that group members who have been in the group for longer perceived higher levels of punishment responses suggests that this effect may be bounded by differences in experience. It is possible that punishment responses are rare and as such only more experienced group members are familiar with them being engaged in.

One strength of the current study is that, along with recent work on social connections amongst addicts (Best et al., 2014; van Melick et al., 2013) and work on therapeutic communities (Beckwith et al., 2015), the current study included populations of diverse samples including, but not limited to, the Anonymous fellowship movement. Increased diversity within samples is a positive development as it ensures effects are not limited to a particular set of social structures. Although such comparisons were not the aim of the current study, and only limited conclusions can be drawn from these findings, they suggest that similar identity and cessation relevant processes occur across various self-help groups (in this case, the fellowship model and SMART groups).

The current study also supports findings from a recently published, and closely related, theoretical model investigating the effects of social identity on recovery outcomes, the Social Identity Model of Recovery (Best et al., 2015). Similar to SIMCM, SIMOR argues that members of addicts' social circles provide a source of positive recovery capital, or can alternatively increase relapse risk. 'Recovery' is perceived as a journey involving changes in social networks and social activities (e.g. who recovering addicts see, and what they do with them). From this (and SIMCM's) perspective, the current evidence could be seen as a stage in this journey in which protective behaviours are normalised and risky behaviours made deviant.

One limitation of the current study is that was based on hypothetical rather than observed responses. Although actual reactions made by group members were not recorded, the current study gives a clear idea of how group members expect the group to react. It should also be noted that such expectancies link to perceived costs, and should also act as norms which detail how members think they should behave when faced with the normative infractions of others, as such provide a meaningful insight into actual behaviour. Future research could either investigate retrospective accounts of responses to lapse or relapse, or devise some form of behavioural measure. A second limitation is that actual levels of cessation could not be measured in the current study, rather efficacy was used as a proxy. One possibility is that social support/control do not relate to actual cessation. Given both theoretical work linking efficacy to outcomes (e.g. Schwarzer, 2008) and also empirical work which links lapses to efficacy (e.g. Buckingham et al., 2013) we find this argument difficult to sustain.

Although exploratory, the current study does have implications for practitioners and group facilitators. Specifically, it suggests that an awareness of the expectations that the group has of its members may be beneficial for cessation. It also suggests that care should be taken to ensure that group members feel supported by one another. Finally, it suggests that building a strong sense of identity within groups may well encourage positive cessation outcomes.

One area the current work highlights for further study is the negative impact of social control. Although social control responses associated with punishment or exclusion appear to be relatively uncommon, it is likely that they will affect norm-violating addicts significantly. Social rejection has been shown to have similar cognitive and neurological effects to physical pain (see Eisenberger, Lieberman, & Williams, 2003) and the forced removal of a positive group identity may well leave recovering addicts with little option but to fall back on potentially destructive identities and social networks. Future research should therefore explore ways in which groups can minimise the frequencies of such responses to the greatest extent possible.

## 6. Conclusion

In conclusion, the current study suggests that group members, particularly those who identify highly with their self-help groups, perceive a high level of generally supportive social control. Highly identifying group members also perceived lapse and relapse behaviour as more costly to themselves, and the group as a whole.

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## Conflict of interest

No authors have conflicts of interest to declare.

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