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*The ‘doing’ or the ‘being’? Understanding the roles of involvement and social identity in peer-led addiction support groups.*

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#### *Abstract*

5 While the efficacy of peer-led support groups such as AA are well established for people  
6 recovering from addiction, the ‘active ingredients’ which underpin their efficacy are less well  
7 understood. Drawing on social identity perspectives, in particular the Social Identity Model  
8 of Cessation Maintenance, the current study aimed to explore the relative effects of two  
9 possible processes; social identification and involvement with the group’s activities. A  
10 sample (n = 44) of AA members completed measures pertaining to their social identification  
11 with AA, their involvement in the group’s activities and their quit efficacy. The findings  
12 suggest that AA involvement was significantly related to identity. Mediation analysis  
13 revealed a relationship between involvement and efficacy mediated by identity. However, in  
14 contrast, the identity-efficacy link was not mediated by involvement. The findings suggest  
15 social identification with AA is as, or more important than, simple involvement in the group’s  
16 activities. This suggests that group planners and facilitators should therefore encourage  
17 opportunities to generate a sense of belonging alongside the activities the group revolve  
18 around.

19

20 **Keywords:** social identity, alcoholism, addiction, alcoholics anonymous, public health



1 Tonigan, 1995; Tappin et al., 2015). Involvement has been shown also been shown in some  
2 studies to be more important than mere attendance (Sani, Herrera, Wakefield, Boroch, &  
3 Gulyas, 2012; Sheeren, 1988). However, in the extant addictions literature, little work has  
4 simultaneously explored the possible relationships between social identity and involvement.  
5 The current study investigated these two processes in the context of people seeking peer-led  
6 support for alcohol addiction. In particular, it tested the role of identity and involvement  
7 amongst members of Alcoholics Anonymous.

#### 8 *Alcoholics Anonymous*

9 AA is an effective form of peer-led support for those seeking to address alcohol related  
10 problems (Gossop et al., 2003; Humphreys, Blodgett, & Wagner, 2014; Kelly et al., 2010). It  
11 is also prevalent: AA itself reports there are 3,585 groups in England and Wales and 902 in  
12 Scotland (Alcoholics Anonymous, 2018). They estimate their membership in these territories  
13 as being between 33,000 and 40,000, leading to 3 million attendances a year. Independent  
14 research also suggests it is also a popular choice of support, with around 80% of US drinkers  
15 who are trying to quit attending one or more sessions (Dawson, Grant, Stinson, & Chou,  
16 2006). Evidence also suggests that active involvement in AA leads to positive outcomes,  
17 observed 16 years from initial help seeking behaviour (Moos & Moos, 2004, 2006).

#### 18 *The Social Identity Model of Cessation Maintenance*

19 The Social Identity Model of Cessation Maintenance (SIMCM; Frings & Albery, 2015, 2017)  
20 argues that group processes in addiction recovery are related to the level of social identity  
21 (aspects of the self which are associated with social categories, see Tajfel & Turner, 1979;  
22 Turner, Hogg, Oakes, Reicher, & Wetherell, 1987) related to being ‘in recovery’, (or ‘an ex  
23 ...’, etc.). Social identities around recovery can be based on the immediate support group an  
24 individual attends, associated with recovery (or similar) movements (e.g. ‘12 stepper’, ex-

1 gambler etc), or a more general identity developed through association with other quitters.  
2 These are likely to form part of individual's self-concept but, when activated, also guide  
3 behaviour. Research suggests that social identities supportive of recovery are protective of  
4 cessation as they (i) increase self-esteem and quit efficacy (Buckingham et al., 2013; Dingle,  
5 Stark, et al., 2015; Wolff et al., 2015), (ii) contextualise the risks and rewards of the addictive  
6 behaviour, and provide group based social norms to follow in high risk situations (Frings et  
7 al., 2016) (iii) provide a source of beneficial social support and control, including the  
8 opportunity to both receive and give support (Frings et al., 2016; Hutchinson et al., 2018).  
9 Recovery-based identities also provide a rationale for pursuing other, non-addiction related,  
10 aspirational identities and social networks which are themselves protective (Best et al., 2016;  
11 Dingle, Cruwys, & Frings, 2015).

## 12 *Identification and involvement*

13 Identity and involvement are related constructs. Taking part in group activities has been  
14 shown to bolster levels of identification across a variety of populations, and within different  
15 domains such political activism, sexual orientation identity, educational / adolescent peer  
16 groups affiliation (Eccles, Barber, Stone, & Hunt, 2003; Haggard & Williams, 1992;  
17 McKenna & Bargh, 1998; Pugh & Hart, 1999). Having a strong social identity also increases  
18 participation in group activities (Becker, Wagner, & Christ, 2011; Leach et al., 2008). As  
19 such, identity and involvement they can be seen as reciprocal processes - both closely related  
20 and self-reinforcing (Asch, 1955). Thus, from both the perspective of SIMCM and evidence  
21 drawn from the wider literature, having a social identity associated with a group may be an  
22 'active ingredient' in peer led groups such as AA, promoting positive recovery outcomes  
23 such as increased quit efficacy. Moreover, identity may relate both directly on such  
24 outcomes, and via its relationship with involvement. Similarly, involvement may have a  
25 direct effect on efficacy, and an indirect one via its relationship with identity. The current

1 study tested two mediation models to explore these possibilities. In the first, the unique  
2 relationship between involvement and a recognised proxy of quit success (quit efficacy;  
3 Buckingham et al., 2013; Dingle, Stark, et al., 2015) was modelled, alongside a test of the  
4 mediation of this effect with social identification with AA. In the second, the unique  
5 relationship with social identity on quit efficacy, and those mediated through involvement,  
6 were tested.

## 7 *Methods*

### 8 *Participants*

9 31 males and 13 females took part in the study (total  $n = 44$ ). Ages ranged from 20 to 83  
10 years ( $M = 45$ ,  $SD = 14.35$ ). All participants were recruited through opportunity sampling via  
11 a link posted on a Facebook group. To be eligible to take part, participants had to be over 18  
12 years old and had to have attended AA in the three months prior to the study. Post-hoc  
13 sensitivity analysis revealed the sample size was sufficient to detect an effect size  $f^2 = 0.24$ ,  
14 ( $\alpha = .05$ , and power = .80) in a linear regression with two predictors.

### 15 *Design*

16 A correlational design was used, with measures comprising involvement with AA, abstinence  
17 efficacy, recent relapse history and social identification with AA. Demographic information  
18 (age and gender<sup>1</sup>) and number of AA sessions attended in last 90 days were also measured).

### 19 *Materials*

20 *Involvement in AA.* Involvement in AA was assessed using 22 items adapted from the  
21 Alcoholics Anonymous Involvement Scale (AAI) developed by Project MATCH (Tonigan,

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<sup>1</sup> Ages and gender were collected from the sample separately from the main measures.

1 Connors, & Miller, 1996). The first question asked how many meetings the individual has  
2 attended in the past 90 days (scored as; No attendance (0 days = 0); quarterly to monthly (1-3  
3 days = 1); less than 1-2 times/week (4-24 days = 2); most days of the week (25-85 days = 3);  
4 daily (86-90 days = 4). The second section asked 21 questions about behaviours relating to  
5 engagement in self-help. For example, 'in the last 90 days have you had a sponsor; shared in  
6 a meeting; helped another member of AA?'. Participants responded 'Yes' (coded 1) or 'No'  
7 (coded 2). These 21 items were summed, with higher total scores indicating a greater level of  
8 involvement in AA. Internal reliability was high (Cronbach's  $\alpha = .98$ ).

9 *Abstinence self-efficacy*. Participants' abstinence self-efficacy was measured using 19  
10 questions taken from the Situational Confidence Questionnaire (Annis, 1982). The  
11 questionnaire yields an overall self-efficacy rating based on a variety of high-risk situations  
12 that may cause relapse, scored on a 5-point Likert scale; (1 = not at all confident; 2 = not very  
13 confident; 3 = moderately confident; 4 = fairly confident and 5 = extremely confident). The  
14 questionnaire comprises four dimensions; *negative affect related* (e.g. 'When I am feeling  
15 depressed; when I feel angry inside'); *positive/social affect related* (e.g. 'When I am being  
16 offered substances in a social situation'); *physical* (e.g. 'when I have a headache') and  
17 *withdrawal and urge related* (e.g. 'When I feel a craving for a substance'). The second  
18 section of the questionnaire asked 2 questions; (i) How difficult is it for you to abstain despite  
19 attending AA? (1 = extremely difficult, 2 = fairly difficult, 3 = moderately difficult, 4 = not  
20 very difficult, 5 = not difficult); (ii) How much do you agree that giving and receiving help in  
21 AA as the main factor for preventing you from relapsing? (1 = strongly disagree, 2 =  
22 disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree). Mean scores were  
23 calculated such that higher scores show stronger efficacy. Internal reliability of the scale was  
24 high (Cronbach's  $\alpha = .92$ ).

1 *Relapse rates.* Participants were asked ‘how many times have you relapsed since attending  
2 AA in the past 90 days’ and given a number of response options; 0-2 times [coded 4], 3-5  
3 times [3], 2 = 6-8 times [2], 9-11+ times [1]. Higher scores indicated low number of relapses.  
4 *Social identification with AA.* Social identification with AA was measured using items drawn  
5 from Leach et al., (2008) multicomponent social identity scale. The items used were ‘I feel  
6 committed to AA’, ‘The fact that I am in AA is an important part of my identity’, ‘Being in  
7 AA is an important part of how I see myself’, ‘I am similar to many members of AA’.  
8 Responses to these items were based on a seven-point Likert type scale; (1 = strongly  
9 disagree, 2 = disagree, 3 = somewhat disagree, 4 = neither agree nor disagree, 5 = somewhat  
10 agree, 6 = agree, 7 = strongly agree). Mean scores were calculated such that higher scores  
11 show stronger identification with AA. Internal reliability of the scale was high (Cronbach’s  $\alpha$   
12 = .94).

### 13 *Procedure*

14 Participants followed a link to the study (hosted on a Qualtrics platform). They provided  
15 informed consent online, completed the scales (in the order presented in the design section  
16 above) and were thanked and debriefed. On a separate occasion, all participants were  
17 followed up to collect demographic information.

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1 *Results*

2 *Variable characteristics.*

3 As can be seen in Table 2, all variables in the study correlated positively. To explore the  
4 potential risk of multicollinearity between identity and the other variables to be included in  
5 our main analysis, bootstrapped Pearson's correlation were undertaken. The upper and lower  
6 95% confidence intervals for the relationship with involvement were .68-.90. For efficacy,  
7 they were .59-.90.

8

1 Table 1.

2 *Descriptive statistics of study variables and their zero-order relationships.*

	<i>M (SD)</i>	<i>1.</i>	<i>2.</i>	<i>3.</i>	<i>4.</i>	<i>5.</i>
1. Number of meetings attended in last 90 days	30.90 (27.17)	--	.67***	.55***	.39**	.80***
2. Involvement	15.17 (7.49)		--	.64***	.59**	.80***
3. Efficacy	3.80(1.02)			--	.62***	.79***
4. Relapse in last 90 days.	3.68 (0.83)				--	.65***
5. Identity	5.09 (1.87)					--

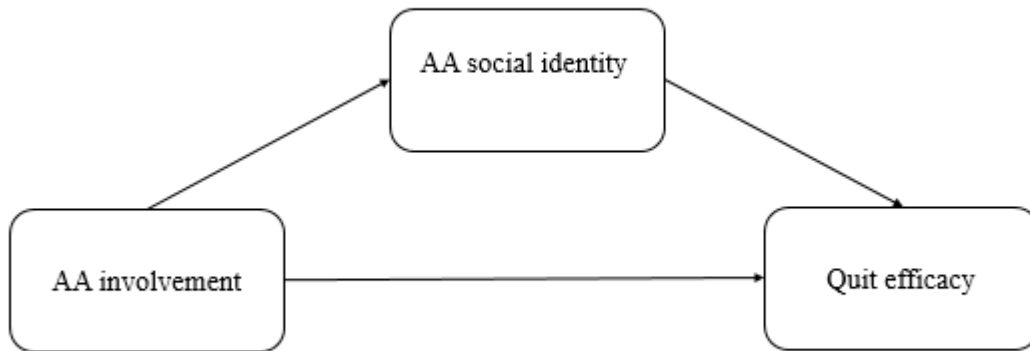
3 *Note: \*\* =  $p < .01$ , \*\*\*\* =  $p < .001$ .*

4

5 *Mediation analyses*

6 The first mediation model (see Figure 1) was tested with involvement as a predictor, identity  
 7 as a mediator and efficacy of the outcome variable was tested using the Hayes (2013) Process  
 8 macro (Model 4, with 5,000 bootstrap samples). Confidence intervals (CIs) are reported at the  
 9 95% level. The overall model was significant.  $R^2 = .62$ ,  $F(2,41) = 33.36$ ,  $p < .001$ . Identity was  
 10 predicted by involvement ( $a_{ij} = 0.21$ ,  $SE = 0.02$ ,  $t = 8.89$ ,  $p < .001$ ,  $CI_s = 0.16, 0.25$ ).  
 11 Efficacy was predicted by identity ( $b_{ij} = 0.41$ ,  $SE = 0.09$ ,  $t = 4.70$ ,  $p < .001$ ,  $CI_s = 0.23, 0.59$ ),  
 12 but not by involvement ( $c'_{1i} < 0.01$ ,  $SE = 0.02$ ,  $t = 0.22$ ,  $CI_s = -0.04, 0.05$ ). The indirect effect

1 of involvement mediated by identity was positive and significant,  $a_1b_{1j}=0.09$  SE = 0.03, CIs  
2 = 0.03, 0.15.



3  
4 The second mediation model reversed the predictor and the mediator, in order to estimate the  
5 indirect effect of identity via involvement. The overall model predicted (as expected) the  
6 same level of variance;  $R^2 = .62$ ,  $F(2,41)= 33.36$ ,  $p < .001$ . Involvement was predicted by  
7 identity ( $a_{ij} = 3.11$ , SE = 0.36,  $t = 8.69$ ,  $p < .001$ , CIs = 2.39, 3.84). Efficacy was not  
8 predicted by involvement ( $b_{ij} < 0.01$ , SE = 0.02,  $t = 0.02$ ,  $p = .823$ , CIs = -0.04, 0.05), but was  
9 positively predicted by identity ( $c'_{ij} = 0.41$ , SE = .09,  $t = 4.70$ , CIs = 0.24, 0.59). The indirect  
10 effect of identity mediated by involvement was not significant,  $a_1b_{1j} = 0.02$ , SE = 0.08, CIs =  
11 -0.21, 0.15.

12 In summary, involvement was significantly related to identity. Higher levels of involvement  
13 were also related to increased efficacy, but this effect was mediated fully by increases in  
14 social identity. Identity was positively related to involvement and efficacy, but had no  
15 indirect on efficacy via involvement.

1 *Discussion*

2 Drug and alcohol treatment services provide effective interventions and treatments to support  
3 recovery for those seeking to desist from addiction. However, the psychological mechanisms  
4 which underpin these effects are still poorly understood. The current paper tests the role of  
5 two processes – active involvement and the generation of a social identity associated with the  
6 research group, which may underpin the effectiveness.

7 In the current study, both active involvement in the activities of a peer-support group  
8 (in this case, activities such as supporting the logistical operation of the group, directly  
9 mentoring others, outreach, etc) and having a strong social identity associated with it were  
10 both significantly related to self-reported quit efficacy (an established proxy for past and  
11 future quit success; Geen, 1991; Gulliver et al., 2006; Miller et al., 1996). Identity and  
12 involvement were also strongly related (with 64% of variance in one dimension being  
13 predicted by the other). Mediation analysis revealed a relationship between involvement and  
14 efficacy mediated by identity. However, in contrast, the identity-efficacy link was not  
15 mediated by involvement.

16 These findings have several theoretical and practical implications. In the field of  
17 addiction, models such as SIMCM and SIMOR (the Social Identity Model of Recovery) both  
18 argue that social relationships and identities are an important part of the recovery process  
19 (Best et al., 2016; Frings & Albery, 2015, 2017). SIMCM explores the processes through  
20 which social identity associated with recovery operates and highlights factors such as  
21 increases in efficacy, reframing the meaning of events, social support, and normative control.  
22 SIMOR highlights the importance of social network change to include a greater number of,  
23 and identification with, multiple social groups which have no bearing on substances use or  
24 misuse (Best et al., 2016; C. Haslam et al., 2019). It also considers the transition from a

1 substance related to a recovery related social identity. The current findings support and  
2 expand both approaches- highlighting the importance of social identification with recovery,  
3 and suggesting that there are important processes which are unique to identity above and  
4 beyond taking part in the activities of the group – social identity could thus be considered one  
5 of the ‘active ingredients’ of group life in therapeutic contexts.

6         The current findings also have relevance for models of social identity which consider  
7 behavioural enactment. For instance, identity motives approach such as Vignoles’ (Vignoles,  
8 Regalia, Manzi, Golledge, & Scabini, 2006) argues that the ability to behave in line with  
9 social norms and standards and fulfil group goals are key determinants of of how we  
10 subsequently construct the *content* of our social identities. Similarly, the Situated Identity  
11 Enactment model (Cruwys, Platow, Rieger, Byrne, & Haslam, 2016) argues that taking part  
12 in the activities is a form of identity enactment, which is produced by an interaction of social  
13 context, social identity and social norms (see also Cross et al., 2017). In the current study, the  
14 observed links amongst, and differentiation between, identity and involvement supports both  
15 of these notions.

16         Insights into the ‘active ingredients’ of groups – in this case AA – also has practical  
17 implications for those running activity based or therapeutic groups, both within and beyond  
18 the realm of addiction. The finding that developing a sense of social identity is important to  
19 positive outcomes, to the same or greater extent than actual involvement, suggests group  
20 facilitators should aim to provide opportunities for such an identity to develop, and referrers  
21 should evaluate the extent these are present while selecting appropriate groups for clients.  
22 People in recovery should also consider the extent a particular group is likely to be one they  
23 can affiliate with meaningfully, to ensure higher retention rates (Marshall, Albery, & Frings,  
24 2018). In particular, attention should be paid to the extent that groups have a good *normative*  
25 *fit* (i.e. the norms of group are similar to what the one expects), *comparative fit* (i.e. the

1 distinction of what defines the group from others is psychologically meaningful) and that  
2 one's past experiences and goals allow *perceiver readiness* (i.e. that there is overlap between  
3 experiences and goals which make the identity cognitively accessible). These constructs,  
4 drawn from social categorisation theory, are theoretically and empirically supported means of  
5 helping foster social identity (S. A. Haslam, Postmes, & Ellemers, 2003; S. A. Haslam,  
6 Powell, & Turner, 2000; J. Turner, 1982). In terms of the actual operation of groups  
7 themselves, evidence suggests that inter-dependency, mutual goals and opportunities for  
8 social interaction which is not task-focussed have all been linked to development in social  
9 groups (Brown, 2001). These can be facilitated by a systematic approach to the design of  
10 sessions (Borek, Abraham, Smith, Greaves, & Tarrant, 2015; Tarrant et al., 2016).

11         The current study has a number of limitations. The sample size was relatively small.  
12 This is not uncommon in research with populations undergoing addiction recovery (i.e Frings  
13 et al., 2016) and the achieved power was sufficient to detect effect medium to large effects  
14 sizes, which can be argued to be of a magnitude required to reach clinical significance in  
15 psychosocial settings. However, it may limit the generalisability of the findings. A larger  
16 sample, incorporating a wider range of treatment modalities (i.e. SMART recovery – a form  
17 of group CBT - or online groups, for instance) would effectively address this in future  
18 research. The sample was also self-selecting. As such, it may be that the high levels of social  
19 identification and efficacy observed was in part due to the inclusion of people who chose to  
20 remain in AA, rather than a sample of people who may not be well-matched to the program.  
21 Finally, as the study adopted a cross-sectional, rather than longitudinal/prospective, approach,  
22 causation cannot be inferred. However, we note that where longitudinal work has been  
23 conducted on variables such as social identity and addiction-related outcomes, causal  
24 links have been observed (Dingle, Stark, et al., 2015; Wolff et al., 2015). In a similar vein,  
25 dimensions such as involvement and identity are also conceptually likely to be reciprocal

1 processes which interact dynamically over time, rather than having static relationships  
2 (Vignoles et al., 2006). A final related limitation is the current operationalisation of group  
3 involvement, which combined measures of social contact and engagement in group activities.  
4 Whilst this definition draws upon established approaches in the addiction field (Tonigan et  
5 al., 1996) it is possible these three components (contact, activities and identity) have  
6 differential effects on outcomes (Sani et al., 2012). Equally, levels of contact could be high  
7 whilst levels of engagement are low (or vice-versa). Both of these nuances represents avenues  
8 for future research.

9         In conclusion, the current study suggests identity is an active ingredient of peer-led  
10 support groups which relates to positive health outcomes. It appears to do so to an equal, or  
11 perhaps greater extent than does involvement in the group's activities (as well as being  
12 closely linked to such involvement). To that end, the key implication of the study is that peer  
13 led and therapeutic groups should foster social identity where possible.

14

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*Conflict of Interest Statement*

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On behalf of all authors, the corresponding author states that there is no conflict of interest.

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*Ethics statement*

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This research received ethical oversight from London South Bank University's Division of

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Psychology Research Ethics Panel and has been performed in accordance with the

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ethical standards laid down in the 1964 Declaration of Helsinki and its later

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amendments. This research was undertaken as partial fulfillment of a taught course and

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and, as such, local ethics processes did not assign a specific reference number to the

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project.