


ARTICLE

GROUPS 4 RETIREMENT: A new intervention that supports well-being in the lead-up to retirement by targeting social identity management

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Abstract

Successful retirement adjustment requires careful planning in the lead up to this important life transition. While financial planning is routinely prioritized, evidence suggests that the *social* changes in retirement can be just as challenging to manage — if not more. GROUPS 4 RETIREMENT (G4R) is a new online intervention that addresses this gap by targeting the identity changes that people typically experience in retirement. This paper reports findings from two studies evaluating the acceptability and efficacy of this intervention. Study 1 ($N=89$) used a pre-post design to assess G4R and found that the intervention was positively evaluated by users and led to significant increases in their sense of thriving, perceived control, life satisfaction, anticipated retirement satisfaction, and planning intentions. Study 2 ($N=98$) tested the intervention using an experimental design in which participants were randomly assigned to either G4R or a financial planning control condition. Results showed that G4R was as effective as financial planning in improving most outcomes and showed a clear advantage in increasing anticipated retirement satisfaction and intentions to engage in social and activities planning. Together, these studies provide initial evidence of the value of engaging in social identity-focused social planning to support well-being and preparedness in the lead up to retirement.

KEYWORDS

GROUPS 4 RETIREMENT, intervention, retirement, retirement planning, social identity

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Practitioner Points

- GROUPS 4 RETIREMENT (G4R) is a theoretically derived retirement preparation program designed to help prospective retirees develop and sustain their social group memberships to support retirement adjustment.
- Retirement planning focused on *social identity management* (as seen in G4R) is valuable for supporting well-being and preparedness in the lead up to retirement.

BACKGROUND

Retiring from the workforce is experienced as a positive life transition by many (Calasanti, 1996; Johnston & Lee, 2009; Latif, 2011). However, the transition to retirement is not always straightforward, and when retirement is experienced as challenging, it can have a detrimental impact on people's mental health and well-being (Bossé et al., 1996; Haring et al., 1984; Holcomb, 2010). Various factors have been found to reduce this negative impact, not least, careful retirement planning. Whether formal or informal, such planning has been found to be important in managing expectations about the transition into retirement and life beyond it. In particular, it can contribute to the timing of work exit (Reitzes et al., 1998; Taylor & Shore, 1995), decisions about participation in bridge employment (Earl & Archibald, 2014; Topa et al., 2009), and also contribute to enhanced self-efficacy (Taylor-Carter et al., 1997), certainty about the future (Glamser & DeJong, 1975), and positive retirement attitudes (Mutran et al., 1997; Reitzes & Mutran, 2004). It is also well documented that planning improves retiree well-being (Griffin & Hesketh, 2008; Wang, 2007), retirement satisfaction (Hanisch, 1994; Noone et al., 2009; Quick & Moen, 1998; Topa et al., 2009), mental health (Fretz et al., 1989; Macewen et al., 1995), and retirement adjustment (Barbosa et al., 2016; Earl & Donaldson, 2010; Feldman, 1994; Mutran et al., 1997).

However, much of the focus in retirement planning to date has been on financial management. Financial preparedness is important — and clearly beneficial — but research indicates that prospective retirees still feel underprepared for the transition (Adams & Rau, 2011). This suggests that, while helpful, financial planning alone is not sufficient (Lusardi & Mitchell, 2007). This is likely because retirement also brings about significant changes to health, lifestyle, and interpersonal relationships that also require careful planning and management. Of these other changes, research shows that people are most likely to underestimate the impact that changes in their social lives will have on their well-being and adjustment (Taylor & Doverspike, 2003). This is despite evidence that social relationships — and in particular, those that people have with *social groups* — are important determinants of successful retirement adjustment (Haslam, Jetten, et al., 2018). Critical in this context is evidence that prior to retirement, people typically derive a strong sense of self from work-related *social identities* (i.e., a sense of the self as a member of a particular group — e.g., a particular profession, organization or work team). Accordingly, loss and change in these social identities will impact on how a person defines and perceives themselves in retirement, and this, in turn, has implications for their adjustment (Haslam, Chang, et al., 2019; Haslam, Steffens, et al., 2019; Hesketh et al., 2015).

Retirement precipitates major changes to these work-related social identities. However, we have little causal evidence of the impact that planning for these social identity changes has on retirement preparedness, not least because hitherto they have not been the target of intervention. In the present paper we address this gap and advance on previous research by introducing a new theory-derived intervention, GROUPS 4 RETIREMENT (G4R), that aims to support people through the process of social identity change in retirement. We also test the capacity for G4R to support well-being and preparedness in the context of this life transition in two proof-of-concept studies.

Existing approaches to managing retirement adjustment

Research on retirement planning has been guided by numerous theories – including role theory, continuity theory, the resource-based dynamic model, and the retirement transition adjustment framework – which specify how various factors shape retirement decisions and adjustment. For instance, *role theory* suggests that retirees experience a loss of their social role as a ‘worker’ and that this can influence retirement decisions and adjustment in different ways depending on how the role affects their motivations, values and intentions (Ashforth, 2001; Linton, 1936; Wheaton, 1990). *Continuity theory* builds on this by arguing that people are motivated to minimize the disruption caused by life transitions. According to this theory, continuation of the ‘worker’ role (e.g., through bridge employment) or shifting to another meaningful social role (e.g., as grandparent) can provide continuity in retirement and thereby contribute to successful adjustment (Atchley, 1999; Shultz & Wang, 2007). More recent theories have explicitly recognized the importance of social factors for retirement. Of these, one of the most influential is the *resource-based dynamic model* (Wang et al., 2011). This argues that retirement outcomes depend on the availability of physical, cognitive, motivational, financial, emotional and social resources and that factors within each domain (e.g., social support in the case of social resources) can be drawn on during periods of life change. The *retirement transition adjustment framework* takes this a step further to recognize the particular contribution that membership of social groups, and an associated sense of social identity, can make to adjustment by indirectly shaping perceptions of a person's sense of fit in their retirement environment (Hesketh et al., 2015).

Researchers have reported drawing on these frameworks to guide intervention. While these models all highlight the importance of different aspects of the retirement experience in supporting adjustment, unfortunately they have achieved little beyond helping individuals to focus on retirement planning. Glamser and DeJong's (1975) group retirement preparation intervention program reportedly drew on role theory and covered topics around the meaning of work and retirement, financial planning, and discussions about health, leisure and living arrangements. This was compared to individual briefing which was the usual practice, and a non-intervention control. While the researchers found that those in the group planning condition were more knowledgeable about retirement and felt better prepared than those in the individual briefing and control groups, neither intervention influenced participants' retirement attitudes. Continuity theory informed approaches have not fared any better. These encourage people to engage in bridge and part-time employment. But this provides only a temporary sense of continuity, with no benefit apart from supporting retirement planning (Seongsu et al., 2000; Zhan et al., 2009); likely due to them not specifying *which* activities are best for protecting continuity in adjustment (Van Solinge, 2012). Similarly interventions focusing on person-environment fit have had an impact on career *decisions* (e.g., quit intentions, retirement timing; Lytle et al., 2015), but not retirement adjustment.

What differentiates resource-based approaches is the opportunity to draw on multiple theories. For example, Seiferling and Michel (2017) drew on both the resource-based model and role theory in their intervention to strengthen individual resources in retirement (e.g., cognitive, social, health, finances). This proved more effective, with participants who completed the intervention feeling they had more retirement resources, lower retirement anxiety, fewer negative expectations, and greater intentions to successfully manage and shape their retirement transition than those in a waitlist-control group. Less clear, however, is which theory-informed concepts were responsible for program effects.

In sum, research into the efficacy of retirement planning interventions is scarce and, where it has been undertaken, it has produced mixed results. While a handful of studies suggest that the principles of role, continuity, and resource-based models can be built into interventions to increase retirement preparedness (Pazzim & Marin, 2017) and other adjustment-related outcomes (Seiferling & Michel, 2017), there are two important limitations shared by some of the above models. The first is that they lack the conceptual clarity needed to understand how to support adjustment and inform targeted intervention. The second is that they fail to clearly explain the contribution of social factors and how they underpin roles and continuity. Consequently, existing theories provide little guidance when it comes to designing or providing social planning in the lead-up to retirement. This is particularly important in light of meta-analytic results showing that social participation is as important as physical health in

supporting adjustment to retirement, and is significantly more important than marital status, financial status, and the conditions surrounding the transition (La Rue et al., 2022). Moreover, further analysis of the subfactors within social participation showed that social identification with groups was one of the most important factors for successful retirement adjustment. Despite these findings, existing models of retirement adjustment do not speak directly to issues of social identity change in the context of this transition. This is what the present research seeks to address.

Social identity approach to retirement adjustment

One framework that speaks directly to issues of identity change is the social identity approach. In previous research, this has been used to explore the role that group processes play in helping people to manage the changes that they typically experience while going through life transitions (Haslam, Jetten, et al., 2018). In particular, this is the focus of the *Social Identity Model of Identity Change* (SIMIC; Haslam et al., 2021) which draws on social identity theorizing (Tajfel & Turner, 1979; Turner et al., 1987, 1994) to argue that people's capacity to negotiate life change (including retirement) is heavily shaped by their membership of social groups from which they derive a sense of social identity (e.g., as a member of a family, a community, a profession). More generally, the Social Identity Approach to Health (Haslam, Jetten, et al., 2018) argues that group memberships and social identities are central to health primarily because these are a source of key social and psychological *resources* (Haslam et al., 2021; Haslam, Jetten, et al., 2018; Jetten et al., 2009). In line with this reasoning, research confirms that social identification with one or more groups provides people with a sense of (a) self-esteem (Jetten et al., 2015), (b) personal control (Greenaway et al., 2015), and (c) meaning and purpose (Cruwys et al., 2014). Social identities are also a basis for the provision and receipt of social support such that this is more forthcoming, and ultimately more beneficial, when it is provided by fellow ingroup members (Haslam et al., 2012). The key idea here, then, is that social identities generally support well-being because they allow people to participate in group life and thereby to draw on the connections and resources this provides (Haslam et al., 2021).

At the same time, though, SIMIC argues that periods of life change can threaten a person's sense of self because these are times when their social identities are in flux and therefore vulnerable to change or loss. This, in turn, can detrimentally affect health and well-being because the groups and associated social identities that give people access to valuable psychological connections and resources are either diminished or no longer accessible. To counter the effects of these losses SIMIC points to the ways in which group processes can protect health and well-being over the course of life transitions. The model proposes that a key protective factor here is membership in *multiple* social groups. In line with this claim, the beneficial effects of multiple group membership have been observed in a range of studies that have been conducted in the context of different forms of life change (e.g., brain injury, Haslam et al., 2008; moving to university, Iyer et al., 2009; moving overseas to study, Cruwys et al., 2021; Praharso et al., 2017; becoming a mother, Seymour-Smith et al., 2017). Indeed, speaking specifically to the retirement context, a longitudinal study by Steffens, Jetten, et al. (2016) found that people were more satisfied with retirement and reported better health and quality of life the more social groups they had belonged to prior to retirement.

SIMIC specifies two pathways through which multiple group memberships support health and adjustment in the context of life transitions. The first is a *social identity continuity* pathway, whereby belonging to more groups makes it more likely that a person will be able to retain some of their valued group memberships post-retirement. The second is *social identity gain* pathway whereby having multiple group memberships increases a person's ability to acquire new group memberships after a life transition, in part because these furnish them with relevant skills and experience, but also because they provide extended opportunities for forging new group-based connections. This latter pathway is particularly relevant in the retirement context where retirees typically either lose or experience significant disruption to work-related groups. Thus, SIMIC argues that belonging to multiple groups before life change is a key protective factor for adjustment, because it (1) provides a scaffold from which to develop new social group memberships, but (2) ensures that at least some group memberships are retained throughout the

transition. There are considerable data pointing to the importance of pre-life change multiple group membership (Haslam et al., 2008; Iyer et al., 2009; Smeekes et al., 2017; Steffens, Jetten, et al., 2016), but also some data pointing to the importance of multiple group memberships after life change (Kinsella et al., 2020), including after retirement (Bentley et al., 2020). Together though, these data highlight the benefit of having pre-existing groups, and points especially to the importance of engaging in social planning in the lead up to life change, where possible.

A growing number of studies provide evidence of the importance of SIMIC pathways and processes in the context of retirement. Complementing the findings reported by Steffens et al. (2016, discussed above), in a longitudinal study of recent American retirees, Haslam, Lam, et al. (2018) found that retiree identification (i.e., developing a strong sense of connectedness and belonging with retirees) and the development of new group memberships post-retirement both mediated the relationship between multiple group memberships and improvement in retirement adjustment over a three month period. Relatedly, one of the major themes that emerged from a qualitative study of recently retired academics was the importance and centrality of academic identity (Miron et al., 2021). Here, the authors found that in preparation for retirement, academics needed to disidentify from this central identity. Two of the strategies that helped them to accomplish this were reviving old social connections and making new ones in retirement, although the former was identified as the preferred strategy for this particular sample.

Importantly, SIMIC also argues that new and maintained group memberships are protective to the extent that the groups in question are *compatible* (i.e., so that groups are in harmony rather than in conflict; Haslam, Jetten, et al., 2018; Haslam, Chang, et al., 2019; Haslam, Steffens, et al., 2019; Iyer et al., 2009). This is particularly relevant in retirement, where people can often perceive worker and retiree identities to be incompatible. Speaking to this point, Bentley et al. (2020) found evidence of a positive association between group compatibility and retirement adjustment. Other studies have also found evidence of the importance of identity compatibility in the context of a variety of life changes, including recovery from addiction (Best et al., 2016) and the transition to university study (Iyer et al., 2009). Moreover, Cruwys et al. (2016) found that changes in group compatibility over time predicted changes in depression in a sample of people experiencing social isolation and depression or anxiety.

Also important for the present paper is the fact that the processes specified in SIMIC have contributed to the design of an intervention — GROUPS 4 HEALTH (G4H) — that directly targets social identity management as a means of building and sustaining social connection. This intervention focuses on developing and maintaining group memberships and social identities in ways that support health and well-being (Cruwys et al., 2021, 2022; Haslam, Chang, et al., 2019; Haslam, Steffens, et al., 2019). G4H is comprised of five modules that are facilitated face-to-face over a 6-week period. The first of these modules educates people about the value of multiple important group memberships for health and well-being. The second helps people to map their existing groups and the psychological resources they provide. The third trains people to maintain the social ties that are positive and important to them. The fourth facilitates the development of new and compatible social connections. And finally, the fifth module engages in troubleshooting and helps participants develop strategies to sustain these relationships.

Three recent clinical trials have confirmed that G4H is effective in reducing loneliness, depression and social anxiety in vulnerable populations relative to a matched control (Haslam et al., 2016), treatment as usual (Haslam, Chang, et al., 2019; Haslam, Steffens, et al., 2019), and a gold-standard intervention (Cognitive Behaviour Therapy; Cruwys et al., 2019). It has also been shown to protect people against loneliness relapse when social connectedness is threatened (as it was during COVID-19 restrictions; Cruwys et al., 2022). However, the ways in which a SIMIC-informed intervention could be developed and used to address the challenges of adjusting to retirement remain unclear. This is the primary goal of the present paper.

As we have seen, research applying the social identity approach to retirement adjustment highlights the social identity variables implicated in retirement outcomes among those who are already retired. However, we still have limited understanding of how these social identity principles can be harnessed pre-retirement to support well-being and preparedness ahead of the transition. Given the demonstrated importance of social identity maintenance and gain for positive retirement outcomes,

our objective of this paper is to see whether an online adaptation of G4H that focuses on supporting social identity change in the lead-up to retirement can deliver health benefits of a form that, as we have seen, has previously proved elusive in retirement intervention research. In taking this applied approach, the present research not only advances retirement adjustment theory, but also theory translation.

The development of GROUPS 4 RETIREMENT

With the above goal in mind, GROUPS 4 RETIREMENT (G4R) was adapted from G4H to help effectively manage social identity change in the lead-up to retirement. It does so by helping people to develop knowledge, skills and strategies that will sustain positive social group memberships in ways that support their adjustment to this transition. The adaptation process largely involved distilling the content of the G4H parent program into a self-directed, one-session, online program, specific to the retirement context, that takes approximately 45 min to complete. The one-session, online delivery format was chosen to increase reach and scalability of the program. Specific elements of content were retained on the basis of reviews of existing literature (as above). Content was retained from each of the five modules in G4H. Specific program activities were chosen based on their suitability for the online context and relevance to retirement. In a second co-design phase, five recent retirees known to the research team provided general input and informal feedback about the appropriateness and utility of the program's content (e.g., in relation to its structure, length, and relevance). Changes made to the program in response to this feedback included greater contextualization of the program in Module 1, clarification of the fact that people's social experiences of retirement can differ, and refining program language to minimize psychological jargon and its suitability for retirees.

Like its parent program, G4R covers five key topics that are intended (a) to raise awareness of the importance of group connectedness for health in retirement, (b) to help people identify existing group connections and areas for growth using online Social Identity Mapping (Bentley et al., 2020) — a procedure that helps prospective retirees visualize and optimize their social group resources in retirement, (c) to educate people about how group connections support a sense of self and identity in retirement, (d) to show, through social planning, how group memberships can be developed and sustained to support identity change in retirement, and (e) to troubleshoot potential challenges that might arise in making and sustaining group connections. Also like its parent program, the content of G4R is supported by theory and evidence. A summary of the theoretical constructs targeted by each topic is presented in Table 1.

TABLE 1 Overview of G4R components including content domains and targeted theoretical constructs.

Content domain	Description	Theoretical construct
1	Appreciating groups and the importance of group connectedness for health in retirement	Social identity approach to health/retirement adjustment
2	Mapping existing group connections to identify areas for further development and growth	Social identity approach
3	Understanding how group connections support a sense of self and identity in retirement	Social identity approach to health/retirement adjustment
4a	Planning to create new group memberships to support identity change in retirement	SIMIC: <i>social identity gain</i>
4b	Planning to nourish existing group memberships to support identity change in retirement	SIMIC: <i>social identity continuity</i>
5	Troubleshooting potential challenges in developing and strengthening group connections and reviewing practical strategies for overcoming these	

The present research

Below we report the findings of two studies that provide an initial evaluation of G4R's efficacy. Study 1 is a proof-of-concept investigation that has a single-group pre-post design. Study 2 extends on this by using a between-groups pre-post design that compares G4R to an active control in which participants take part in a financial planning program. Together, these studies had two key aims: (a) to examine the acceptability and perceived value of G4R, and (b) to determine the impact of this intervention on key retirement outcomes (not only retirement planning intentions but also well-being).

STUDY 1

This proof-of-concept study aimed to examine the acceptability of G4R and assess its influence on well-being and planning outcomes in a sample of prospective retirees recruited from Prolific.

Method

Sensitivity analysis

A sensitivity analysis indicated that Study 1 ($N=89$) had .88 power to detect a small-to-moderate effect size ($d=.30$) on primary outcomes.

Design and participants

The study employed a single group pre-post design in which participants took part in the G4R intervention and completed pre- and post-intervention surveys online. All primary outcomes were measured at baseline (Time 1, T1) and immediately following program completion (Time 2, T2). Pre-post designs of this form are readily used early in the intervention development process (as recommended for complex psychosocial interventions; Craig et al., 2008), with baseline included to provide both an indication of any influence of participants' psychological current state (on key variables of mental well-being, perceptions of connectedness) and of possible program impact. One hundred participants over 55 were recruited from Prolific and paid £5.50 (British pounds) for completing the study. They were recruited from a range of occupations and almost 90% of the sample was working full-time at the time of the study. Eleven participants did not complete the post-program survey and were subsequently excluded from analysis. The final sample consisted of 89 participants who ranged in age from 55 to 65 years ($M=58.85$, $SD=2.62$). A summary of participant characteristics is presented in Table 2.

Measures

Program acceptability

Participants were asked to provide feedback on the G4R program in two ways. First, they responded to nine items assessing a range of perceptions including usability, enjoyableness, and informativeness of the program (see Table 3 for items; Devilly & Borkovec, 2000). They did this on seven-point scales (where 1 = *strongly disagree*, 7 = *strongly agree*). Following this, participants were invited to share additional qualitative feedback via an open-response textbox.

TABLE 2 Study 1: Participant characteristics and descriptive statistics ($N=89$).

Variable	%	<i>M</i>	<i>SD</i>	Range
Age		58.58	2.62	55–65
SES		5.38	1.1	1–8
Financial status		3.88	1.70	1–7
Physical health		3.03	.88	1–5
Planned retire age		65.73	3.92	50–80
Gender				
Female	48			
Male	52			
Relationship status				
Single	8			
In a relationship	5			
Married	72			
Widowed	2			
Separated	5			
Divorced	9			
Education				
Secondary	28			
College	27			
Undergraduate	34			
Graduate	10			
Employment status				
Full-time	90			
Casual/temporary	3			
On leave	1			
Unemployed	3			
Other	2			
Plan to retire <1 year				
Yes	91			
No	9			
Ethnicity				
Caucasian	99			
African	1			
East Asian	0			
Latino/Hispanic	0			
Caribbean	0			
Mixed	0			
Other	0			
Country of birth				
United Kingdom	78			
Other	22			

TABLE 3 Means and standard deviations for each program feedback item, assessing the acceptability of G4R in Studies 1 and 2.

	Study 1		Study 2	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
I found the program easy to work through	5.66	1.39	5.96	1.27
I found the program enjoyable and informative	5.64	1.37	5.91	1.24
The program provided me with suggestions and strategies to better understand how to make the most out of my retirement	5.60	1.39	6.16	1.05
The program gave me the skills and knowledge to engage in some planning for retirement	5.07	1.39	5.65	1.05
I enjoyed the mapping aspects of the program	5.15	1.68	5.47	1.56
I learnt a lot through engaging with the program	5.16	1.53	5.53	1.42
Having completed the program, I now feel more prepared for this next stage in my life	4.70	1.51	5.22	1.28
I intend to engage in more retirement planning now that I have completed the program	5.29	1.46	5.57	1.38
I would [recommend the] program to friends and colleagues	5.44	1.28	5.35	1.32

Program outcomes

Retirement planning

The 28-item Retirement Preparation Questionnaire II (Muratore & Earl, 2010) was used to measure the extent to which participants had thought about or engaged in a variety of retirement preparation activities. This measure covered planning behaviours across four domains: financial (e.g., “attended financial planning seminars, workshops or courses”, $\alpha_{T1} = .72$, $\alpha_{T2} = .73$), health (e.g., “arranged regular health check-ups and screening”, $\alpha_{T1} = .73$, $\alpha_{T2} = .77$), activities (e.g., “made plans for leisure activity/travel”, $\alpha_{T1} = .87$, $\alpha_{T2} = .86$) and social (e.g., “searched for information on how to maintain a good social life”, $\alpha_{T1} = .87$, $\alpha_{T2} = .92$). Responses were made on seven-point scales (where 1 = *not at all*; 7 = *a very large extent*).

Thriving

Thriving was measured using the Brief Inventory of Thriving (BIT; Su et al., 2014; $\alpha_{T1} = .93$, $\alpha_{T2} = .95$) comprising 10 items assessing six core dimensions of psychological well-being (e.g., subjective well-being, optimism). The BIT was used as it is a brief indicator of mental health. An example item was “My life is going well”. Responses were made on seven-point scales (where 1 = *strongly disagree*; 7 = *strongly agree*).

Perceived control

Perceived control was measured using 2 items (“I feel in control of my life” and “I am free to live my life how I wish”), ($r_{T1} = .55$; $r_{T2} = .77$; $ps < .001$) scored on seven-point scales (where 1 = *strongly disagree*; 7 = *strongly agree*).

Life satisfaction

As recommended by Helliwell (2016), life satisfaction was measured using a single item (“Overall, how satisfied are you with your life?”; Helliwell, 2016). Responses were made scored on an eleven-point scale ranging (where 0 = *extremely dissatisfied*; 10 = *completely satisfied*).

Retirement satisfaction

Anticipated satisfaction with retirement was measured using the Satisfaction with Life in Retirement Scale (Hershey et al., 2014). This consisted of four items (e.g., “I expect that in retirement my life will be close to ideal”) that participants responded to on a seven-point scale (where 1 = *strongly disagree*; 7 = *strongly agree*). This measure had excellent internal consistency, $\alpha_{T1} = .95$ ($\alpha_{T2} = .96$).

Retirement anxiety

The 14-item Retirement Anxiety Scale (Hayslip et al., 1997) was used to measure concerns, feelings, and emotions about retirement (e.g., “I am concerned about not being able to care for myself in retirement”). Participants responded on seven-point scales (where 1 = *strongly disagree*; 7 = *strongly agree*). The measure had good internal consistency, $\alpha_{T1} = .86$; $\alpha_{T2} = .88$.

Procedure

Both studies were approved by the Human Research Ethics Committee of the first author's institution (#2015001736). Participants completed questions at baseline (T1), before participating in G4R. They were then directed to the online G4R program. Progress through this was entirely self-directed but it typically took around 45 min to complete. A summary of the G4R program is provided in the supplementary material which can be accessed via the Open Science Framework: [<https://osf.io/huv4w>]. Immediately after completing G4R, participants provided feedback about their experience of the program (T2). Overall, the study took approximately 1 h to complete. At the end of this, participants received a personal feedback report summarizing key points that had been made in the program and their responses to its content (e.g., their social identity map, details of their social plan).

Results

Program acceptability

Overall, participants responded positively to the nine feedback items assessing a range of perceptions including program usability, enjoyableness and informativeness. Mean scores on these items ranged from 4.70 to 5.66 out of 7 (see Table 3). These feedback items had excellent internal consistency ($\alpha = .95$) and had an average composite score ($M = 5.30$, $SD = 1.21$) which was significantly above the scale mean, $t(88) = 10.12$, $p < .001$. More than half the sample (58%) provided additional qualitative feedback, the vast majority of which took the form of positive comments about the program (e.g., “I feel better about retiring and more confident”). Others shared constructive feedback about a particular element of the program that could be improved (e.g., phrasing). This feedback was used to further improve the program in Study 2.

Program outcomes

A series of paired-sample t -tests (using the Holm-Bonferroni correction to adjust alpha level; Holm, 1979) were conducted to compare responses at T1 and T2 (see Table 4 for key statistics). Participants had significantly greater intention to engage in retirement planning at T2 than T1, across all types of planning (all t s > 7.86 , all p s $< .001$; see Table 4). Similarly, there was evidence of a significant increase in thriving, $M_{diff} = .28$, $t(87) = 5.43$, $p < .001$, feelings of control, $M_{diff} = .40$, $t(88) = 4.04$, $p < .001$, life satisfaction, $M_{diff} = .28$, $t(88) = 2.97$, $p = .004$, and anticipated retirement satisfaction, $M_{diff} = .59$, $t(88) = 5.49$, $p < .001$. There was no change in retirement anxiety, $M_{diff} = .11$, $t(88) = -1.66$, $p = .100$.

Discussion

Overall, G4R was shown to be an acceptable program that was well received by prospective retirees. All feedback items were scored above the midpoint, indicating that participants were generally satisfied with their experience of the program. Analysis of program outcome data showed that participating

TABLE 4 Study 1: Descriptive (means, and standard deviations) and inferential statistics (*t*-statistic and effect size) pre-post intervention.

	Pre-test		Post-test		<i>r</i>	<i>t</i>	<i>p</i>	α_{adjusted}	Glass's Δ
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>					
Thriving	4.91	1.18	5.19	1.16	.91	5.43*	<.001	.013	.56
Life satisfaction	6.29	2.11	6.57	2.03	.91	2.9*	.004	.025	.31
Retirement satisfaction	4.05	1.47	4.64	1.42	.75	5.49*	<.001	.010	.57
Perceived control	4.84	1.35	5.24	1.40	.78	4.04*	<.001	.017	.30
Retirement anxiety	4.02	1.07	3.91	1.13	.82	-1.66	.100	.050	-.17
Social planning	2.78	1.36	5.07	1.39	.52	15.91*	<.001	.006	1.72
Financial planning	3.77	1.36	4.83	1.14	.48	7.86*	<.001	.008	.76
Health planning	3.38	1.30	4.88	1.17	.59	12.77*	<.001	.006	1.27
Activities planning	3.39	1.55	5.29	1.32	.58	13.53*	<.001	.007	1.34

Note: In line with recommendations by Morris and DeShon (2002), we calculated Glass' Delta effect size using the pre-test standard deviation as this is not influenced by the intervention.

*Denotes significance after using the Holm-Bonferroni correction to adjust alpha level (adjusted alpha reported as α_{adjusted}).

in G4R led to increased intention to engage in all forms of retirement planning. This is an encouraging finding in light of evidence that planning for retirement leads to a wide range of positive outcomes (Adams & Rau, 2011; Barbosa et al., 2016; Fretz et al., 1989; Taylor & Doverspike, 2003; Topa et al., 2009).

This initial investigation also suggested that G4R is a promising intervention for promoting retirees' well-being. This contrasts with evidence from Pazzim and Marin's (2017) retirement planning intervention, which had no influence on attendee quality of life. In particular, G4R was found to increase thriving, perceived control, life satisfaction, and anticipated retirement satisfaction (with no effect on retirement anxiety). Overall, then, G4R was positively received by pre-retirees and appeared to increase their well-being and planning intentions. Yet without a control group against which to compare outcomes, it is possible to draw only limited conclusions about the program's efficacy due to expectancy effects, among other factors. We therefore conducted a second study to address this limitation.

STUDY 2

The aim of this second study was to undertake a more rigorous evaluation of G4R using a controlled experimental design. Previous studies (Pazzim & Marin, 2017; Seiferling & Michel, 2017) have used waitlist control comparisons which are appropriate when interventions are delivered over a long period of time but are less robust than designs with an active comparison control condition. Active control conditions are preferable because they control for extraneous variables (e.g., situational differences, expectancy effects). Accordingly, we sought to compare the efficacy of G4R relative to an active control which involved participants taking part in financial planning.

Method

Sensitivity analysis

A sensitivity analysis indicated that a study with $N=49$ in each of two conditions had .79 power to detect a moderate effect size ($d=.50$) on primary outcomes.

Design and participants

The study employed a 2×2 mixed design in which participants were randomly assigned to condition (G4R vs. financial planning control), and outcomes were measured at two timepoints (pre-intervention, T1 vs. post-intervention, T2). The dependent variables were the same as in Study 1. One hundred and thirty-two participants, who did not participate in Study 1 were recruited to take part from Prolific and were paid £5.50 (British pounds) for completing the study, which took 1 h to complete. Thirty-four participants dropped out before they were assigned to a program and were subsequently excluded from analysis.¹ The final sample comprised 98 participants who had a mean age of 58.86 ($SD = 4.06$). Table 5 summarizes the descriptive statistics for the full sample as well as for each condition separately. Here, we also report the results of independent t -tests which indicate that participants in the two conditions did not differ at T1.

Procedure

As in Study 1, participants completed baseline questions at T1. They were then randomly assigned to participate in the G4R program ($n = 49$) or a financial planning program ($n = 49$), developed specifically for the purpose of this study. Financial planning was chosen as a focus for the active control condition because it is the predominant form of planning offered to and undertaken by individuals at this stage of life (Taylor & Doverspike, 2003). Moreover, financial planning receives significantly more attention than social planning and is often the primary focus of both research and in practice (see Adams & Rau, 2011, for a review). The control condition was designed to be equivalent to G4R in length, general activity format, and delivery. The main difference between G4R and the control was in the program content: G4R centred around building and nurturing social connections with groups in retirement, while the financial planning control focused on managing personal finances. The key activities included in this control condition involved participants completing a series of activities in which they were asked to identify their existing finances, anticipate financial resources in retirement, and consider how these might be spent on various activities and needs in retirement. Some of the activities included in the control condition were predeveloped and freely accessible online (e.g., pension calculator). A summary of the financial planning program is provided in the supplementary material. Once participants had completed their allocated program, they provided feedback and responded to T2 questions. They were then debriefed and paid for their time.

Results

Program acceptability

Participants responded positively to G4R, with mean feedback scores for each item ranging from 5.22 to 6.16 (see Table 3). In line with Study 1, the internal consistency of the 9 feedback items was excellent ($\alpha = .96$). Overall, G4R had an average feedback score of 5.65 ($SD = 1.13$, range 1–7) which was significantly above the scale mean, $t(48) = 10.23$, $p < .001$. The financial planning control program was also well-received with a composite average feedback score above the midpoint ($\alpha = .93$, $M = 5.49$, $SD = .95$, range 2.89–7). An independent t -test revealed there was no significant difference in evaluation of the two programs, $t(93.20) = .73$, $p = .466$.

Sixty-five percent of participants assigned to receive G4R provided further qualitative feedback. As in Study 1, this feedback primarily comprised positive comments about the program (e.g., “it was

¹Excluded participants did not differ on demographic characteristics from those included in the analysis.

TABLE 5 Study 2: Overview of sample characteristics and independent *t*-test (or chi-squared test) comparisons between conditions at baseline (Time 1).

Variable	Full sample (N=98)				GROUPS 4 RETIREMENT (n=49)				Financial planning control (n=49)				<i>t</i> or χ^2	<i>p</i>
	%	<i>M</i>	<i>SD</i>	Range	%	<i>M</i>	<i>SD</i>	Range	%	<i>M</i>	<i>SD</i>	Range		
Age		58.86	4.06	40–74		58.62	4.17	40–67		59.08	3.97	50–74	.55	.586
SES		6.05	1.00	3–10		5.92	1.38	3–10		6.18	1.38	3–9	.95	.344
Financial status ^a		4.48	1.72	1–7		4.66	1.67	1–7		4.30	1.77	1–7	-1.06	.293
Physical health ^a		3.12	1.00	1–5		2.94	.94	1–5		3.31	1.02	1–5	1.84	.068
Planned retire age		66.53	5.46	54–90		66.41	4.96	54–90		66.65	5.97	58–90	.22	.826
Gender														
Female	42				39				45					
Male	58				61				55					
Relationship status														
Single	10				10				10					
In a relationship	2				<1				<1					
Married	70				71				69					
Widowed	3				<1				<1					
Separated	2				<1				0					
Divorced	12				12				12					
Education														
Secondary	21				22				20				.54	.591
College	27				31				22					
Undergraduate	23				18				29					
Graduate	29				29				29					
Employment status														
Full-time	88				94				82				1.52	.133
Part-time	1				0				<1					
Casual/temp	1				0				<1					
On leave	1				0				<1					

(Continues)

TABLE 5 (Continued)

Variable	Full sample (N=98)			GROUPS 4 RETIREMENT (n=49)			Financial planning control (n=49)			t or χ^2	p				
	%	M	SD	Range	%	M	SD	Range	%			M	SD	Range	
Unemployed	<1				0				<1						
Other	<1				0				10						
Plan to retire <1 year															
Yes	90				90				10						
No	10				10				90						
Ethnicity														.69	.493
Caucasian	90				90				90						
African	3				<1				<1						
East Asian	2				<1				<1						
Latino/Hispanic	1				<1				<1						
Caribbean	1				<1				<1						
Mixed	2				<1				<1						
Other	1				<1				<1						
Country of birth														-1.42	.160
United Kingdom	51				45				59						
Other	49				55				41						
Thriving						5.30	1.10			5.11	1.31			.79	.431
Life satisfaction						7.10	2.01			6.69	2.14			.97	.334
Retire satisfaction						4.59	1.41			4.38	1.57			.69	.489
Perceived control						5.11	1.36			5.10	1.28			.78	.437
Retirement anxiety						3.89	1.12			3.88	1.07			.05	.963
Social planning						3.10	1.39			2.91	1.13			.73	.466
Financial planning						4.27	1.37			4.08	1.48			.66	.514
Health planning						3.95	1.29			3.63	1.22			1.28	.202
Activities planning						3.76	1.59			3.90	1.37			1.31	.194

*These variables were measured at Time 2; Chi-squared test (χ^2) was used to compare conditions on categorical variables.

thought provoking”) as well as constructive feedback about a particular element that could be improved (e.g., adding further information to clarify topics and improve usability).

Program outcomes

Means, standard deviations, and effect sizes (within- and between-groups) are reported in Table 6. Nine linear mixed regression models with repeated measures were conducted to examine the relative effect of the intervention conditions across time for each outcome assessed. The results of these are summarized in Table 7. Each model included time (0 = pre or 1 = post), condition (0 = financial planning, or 1 = G4R), and their interaction as fixed effects, with random intercepts for participants to allow for individual differences in the extent to which individuals benefitted from participation. Analyses were conducted using the *lmer* function from the *lme4* package (Bates et al., 2015). The Holm-Bonferroni correction was applied to correct for multiple comparisons (Holm, 1979).

There was a significant time \times condition interaction for retirement satisfaction, $b = .44$, $t(96) = 2.81$, $p = .006$; see Figure 1. Simple effects analysis showed that anticipated retirement satisfaction increased and was significant for those who took part in G4R, $b = .66$, $t(96) = 5.94$, $p < .001$, $M_{\text{diff}} = .65$, but not for those who received financial planning, $b = .23$, $t(96) = 1.96$, $p = .052$, $M_{\text{diff}} = .22$. Similarly, analysis revealed a significant time \times condition interaction for both social planning, $b = .98$, $t(96) = 4.31$, $p < .001$ and activities planning, $b = .87$, $t(96) = 3.51$, $p < .001$. Follow-up simple effect comparisons showed that for both types of planning, increases over time were more pronounced among participants in G4R, Social: $b = 2.15$, $t(96) = 13.42$, $p < .001$, $M_{\text{diff}} = 2.15$; Activities: $b = 1.75$, $t(96) = 10.03$, $p < .001$, $M_{\text{diff}} = 1.75$ than they were for those who took part in the financial program, Social: $b = 1.17$, $t(96) = 7.33$, $p < .001$, $M_{\text{diff}} = 1.17$; Activities: $b = .88$, $t(96) = 5.06$, $p < .001$, $M_{\text{diff}} = .89$. These interactions are shown in Figures 2 and 3. No other interaction effects were significant.

Discussion

In Study 2, G4R was again well-received by participants. Importantly too, participants evaluated the financial planning program equally positively, which indicated that the financial planning condition developed for the purpose of this study provided an equivalently engaging and meaningful comparison condition. The study showed that there was no difference in the effectiveness of the programs in increasing perceived control, thriving and life satisfaction, as well as intentions to engage in financial and health planning. However, there was evidence that G4R was more beneficial than financial planning in improving participants' anticipated retirement satisfaction and increasing their intentions to engage in social and activities planning. Overall, these findings underscore the particular value of a social identity management program for increasing anticipated retirement satisfaction and planning intentions.

Overall, then, the findings of Study 2 are consistent with those of Study 1 in showing that G4R is an acceptable retirement planning program that helps to increase participants' sense of control as well as their engagement in financial and health planning. In this regard too, it proved to have equivalent benefits to financial planning — the form of planning that people most commonly undertake before retirement (Adams & Rau, 2011; Taylor & Doverspike, 2003). However, relative to this standard intervention, G4R was particularly beneficial in increasing anticipated retirement satisfaction and intentions to engage in social planning and activity planning in the lead up to retirement. These, then, appear to be important contributions that G4R can make to the retirement intervention landscape.

TABLE 6 Study 2: Descriptive statistics (means, standard deviations, and pre-post effect sizes) pre-post intervention as a function of condition.

	G4R program						Financial planning program						Between-groups d
	Pre-test		Post-test		Glass' Δ	SD	Pre-test		Post-test		Glass' Δ	SD	
	Mean	SD	Mean	SD			Mean	SD	Mean	SD			
Thriving	5.30	1.10	5.56	1.12	.38	1.31	5.11	1.31	5.29	1.32	.32	1.32	.07
Life satisfaction	7.10	2.01	7.67	1.91	.45	2.14	6.69	2.14	6.88	2.09	.21	2.09	.18
Retirement satisfaction	4.59	1.41	5.24	1.20	.70	1.57	4.38	1.57	4.60	1.52	.33	1.52	.29
Perceived control	5.11	1.36	5.44	1.25	.35	1.28	5.10	1.28	5.48	1.11	.51	1.11	-.10
Retirement anxiety	3.89	1.12	3.72	1.34	-.18	1.07	3.88	1.07	3.86	1.20	-.04	1.20	-.14
Social planning	3.10	1.39	5.24	1.27	1.66	1.13	2.91	1.13	4.09	1.29	1.29	1.29	.75
Financial planning	4.27	1.37	5.22	1.19	.66	1.48	4.08	1.48	4.91	1.26	.48	1.26	.08
Health planning	3.95	1.29	5.23	1.11	1.15	1.22	3.63	1.22	4.88	1.31	1.55	1.31	.02
Activities planning	3.76	1.59	5.51	1.22	1.41	1.37	3.90	1.37	4.79	1.35	.85	1.35	.58

Note: In line with recommendations by Morris and DeShon (2002), we calculated Glass' Delta effect size using the pre-test standard deviation of the control group as this is not influenced by the intervention. Similarly, the between-groups effect size was calculated using the following recommended formula: $d_{GPP} = \frac{(M_{post, G4HER} - M_{pre, G4HER})}{SD_{pre, G4HER}} - \frac{(M_{post, Fin} - M_{pre, Fin})}{SD_{pre, Fin}}$.

TABLE 7 Study 2: Summary statistics for mixed effects models.

Predictor	<i>b</i>	<i>SE</i>	<i>df</i>	<i>t</i>	<i>p</i>
Thriving					
Time	.20	.09	95.30	2.20*	.030
Condition	.19	.25	109.55	.79	.432
Time × Condition	.06	.13	95.18	.44	.665
Life satisfaction					
Time	.18	.16	96.00	1.18	.240
Condition	.41	.41	110.57	.99	.324
Time × Condition	.39	.22	96.00	1.77	.081
Retirement satisfaction					
Time	.22	.11	96.00	1.97	.052
Condition	.21	.29	111.38	.72	.471
Time × Condition	.44	.16	96.00	2.81*	.006
Perceived control					
Time	.39	.11	96.00	3.43*	<.001
Condition	.16	.27	114.91	.61	.540
Time × Condition	-.11	.16	96.00	-.70	.484
Retirement anxiety					
Time	-.03	.12	96.00	-.22	.826
Condition	.01	.24	122.41	.04	.966
Time × Condition	-.15	.17	96.00	-.88	.384
Social planning					
Time	1.17	.16	96.00	7.33*	<.001
Condition	.19	.26	139.74	.73	.468
Time × Condition	.98	.23	96.00	4.31*	<.001
Financial planning					
Time	.84	.21	96.00	3.93*	<.001
Condition	.19	.27	168.43	.70	.484
Time × Condition	.11	.30	96.00	.37	.710
Health planning					
Time	1.25	.14	96.00	9.22*	<.001
Condition	.33	.25	128.30	1.31	.193
Time × Condition	.02	.19	96.00	.11	.915
Activities planning					
Time	.88	.17	96.00	5.06*	<.001
Condition	-.14	.28	139.46	-.51	.612
Time × Condition	.87	.25	96.00	3.51*	<.001

Note: Nine linear regression mixed models were analysed for each outcome assessed. Each model included time, condition, and their interaction as fixed effects, and included participants as a random intercept. As such, the effect of time represents the change in outcome for those in the financial planning control. Moreover, the effect of condition is the difference between conditions at baseline; Pre = 0, Post = 1; Financial planning = 0, G4R = 1.

*Denotes significance after using the Holm-Bonferroni correction to adjust the alpha level.

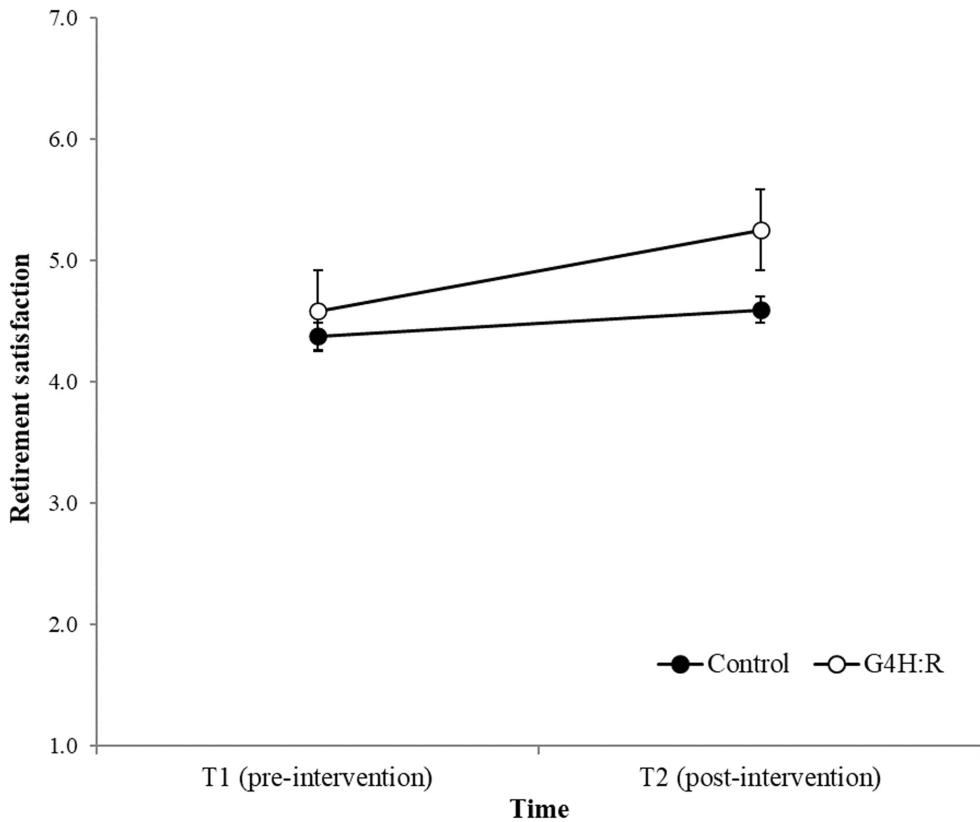


FIGURE 1 The interaction between time and condition for anticipated retirement satisfaction. Error bars represent standard error.

GENERAL DISCUSSION

Existing theories of retirement adjustment lack clear guidance about how to create a social retirement planning intervention. By drawing on the social identity approach, we developed and evaluated a retirement preparation program designed to help prospective retirees develop and sustain their social group memberships — and associated social identities — in ways that support well-being in the lead up to retirement. Results from two proof-of-concept studies provide initial evidence that G4R is an acceptable retirement planning program and that its benefits are equivalent to those derived from financial planning when it comes to improving retirement well-being and preparedness. Specifically, G4R was shown to be equally beneficial for increasing thriving, life satisfaction, perceived control, and intentions to engage in health and financial planning. At the same time, though, our findings indicate that G4R has a unique advantage over financial planning in increasing anticipated retirement satisfaction as well as intentions to engage in social and activity planning — the two forms of retirement planning upon which the program focuses.

These findings are in line with previous research that has pointed to the benefits of a social identity intervention to work with social group memberships to promote health (G4H) — the parent program which G4R was based on (Cruwys et al., 2021; Haslam, Chang, et al., 2019). Similarly, the above findings are consistent with SIMIC theorizing, and associated research which shows that social relationships — particularly those that are grounded in positive and meaningful social groups — are important resources that have the potential to protect well-being in periods of life change (Haslam et al., 2008; Iyer et al., 2009; Praherso et al., 2017; Seymour-Smith et al., 2017) and, more specifically, in the context

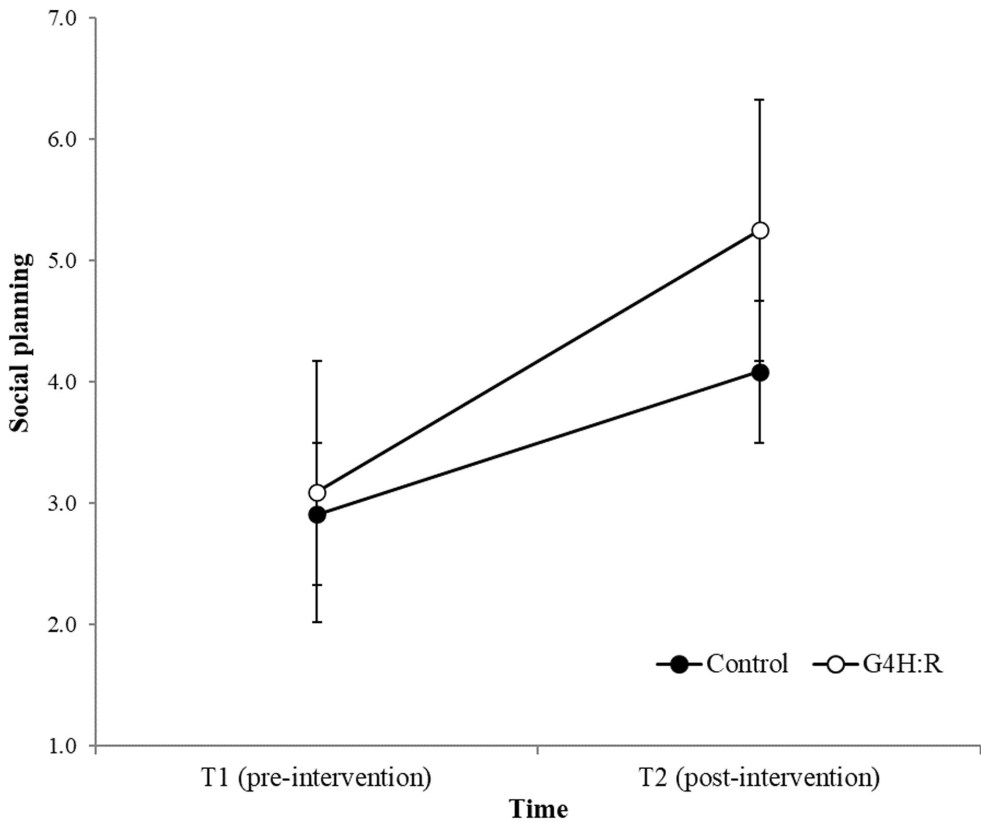


FIGURE 2 The interaction between time and condition for intentions to engage in social planning. Error bars represent standard error.

of the change associated with retirement (Haslam, Chang, et al., 2019; Haslam, Jetten, et al., 2018; Haslam, Lam, et al., 2018; Haslam, Steffens, et al., 2019; Steffens, Cruwys, et al., 2016; Steffens, Jetten, et al., 2016).

Importantly, however, the present research extends on previous work in two important ways. First, we find the first causal evidence of the impact of social identity planning on pre-retirement well-being and planning intentions. While most of the focus in retirement planning has hitherto been on managing financial resources, this highlights the value and importance of engaging in social planning. Second, this work shows that G4H can be successfully adapted to support well-being among healthy populations in the lead-up to a significant life change. Importantly too, G4R shows that a one-session, online delivery method of G4H is well-received and beneficial for those nearing retirement. This is impressive in the context of existing retirement planning programs being both longer and less effective in influencing adjustment indices (Glamser & DeJong, 1975; Pazzim & Marin, 2017; Seiferling & Michel, 2017).

Theoretical implications

In the past, researchers have paid far less attention to prospective retirees' social circumstances than they have to their financial situation. By focusing on the former, the present research therefore addresses a significant gap in the literature and one that has important theoretical implications. This is primarily because alternative theories of retirement adjustment generally (a) fail to explain when, why, and how social factors influence adjustment, and (b) lack sufficient conceptual clarity about these social factors

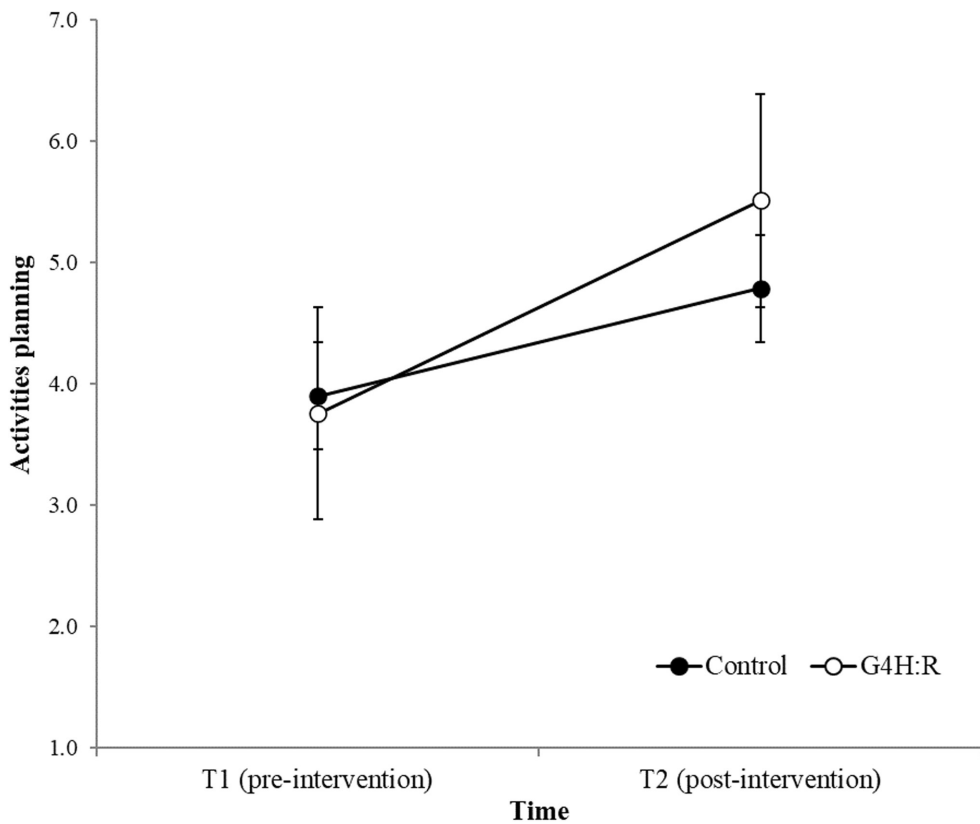


FIGURE 3 The interaction between time and condition for intentions to engage in activities planning. Error bars represent standard error.

and processes to inform intervention. By addressing some of these shortcomings, the present paper therefore speaks to the need for greater recognition of the importance of social processes that shape adjustment to retirement. In particular, the value of the social identity approach over and above current approaches to retirement adjustment is that it provides a deeper understanding of how this adjustment is shaped by connection with social groups. It also helps to explain when and why groups have more or less curative effects in arguing that groups influence health when, and to the extent that, people identify with them. SIMIC's contribution is to take this theorizing a step further by identifying the particular pathways — of social identity continuity and gain — that function to protect well-being in the context of life change. In this way, the present paper highlights the value of SIMIC as a model for understanding social group processes in the context of retirement, not least because this is the only model that attends to the social identity changes that accompany retirement and that have been shown to have a powerful bearing on its course (Haslam, Chang, et al., 2019; Haslam, Steffens, et al., 2019; Steffens, Cruwys, et al., 2016; Steffens, Jetten, et al., 2016).

This adds to existing work applying the social identity approach by testing the theoretical relevance of social identity theory, and SIMIC, to the retirement context. Where previous work has tended to use cross-sectional (and some) longitudinal designs, the present research introduces a novel, applied, approach to test these concepts. Additionally, as we have seen, this model provides practical clues about how to optimize social identity resources so that they can be drawn on — as they are in G4R — to protect well-being in retirement. This represents an important step in the translation of theory into practice in the retirement context and it highlights the significant practical implications of this body of work.

The present research shows that social identity planning offers a promising set of tools to help people plan for, and look forward to, their retirement. This finding is relevant to prospective retirees who

can benefit from consideration of the ways in which their social relationships (including those with groups) may change over the course of their transition to retirement. But the key message here relates to the particular value of retirement planning that is focused on *social identity management*. As noted above, social planning is not a priority in retirement (Adams & Rau, 2011; Taylor & Doverspike, 2003), and this reflects a major gap in understanding and service provision (Haslam, Chang, et al., 2019; Haslam, Steffens, et al., 2019). The present research shows how we might meaningfully plug that gap.

Practical implications

In the context of helping people adjust to retirement, social factors are rarely the primary focus of intervention. Indeed, even where they have been prioritized (e.g., by Seiferling & Michel, 2017), the focus tends to be on maximizing individual resources. In applying SIMIC to the retirement intervention context, this paper provides some insight into other factors that are important to target and, importantly, how to do so in an intervention context. In so doing, it is the first research to emphasize and demonstrate the importance of managing new and existing ties with social *groups* to support well-being in the lead up to retirement. While other approaches (e.g., relational crafting in the workplace; see Wrzesniewski & Dutton, 2001) focus on developing and maintaining relationships with other *individuals* G4R is unique in supporting people to develop and maintain connection with *groups*. This distinction is important because membership in multiple social groups has been identified as particularly consequential in this context and it is this that the social identity approach argues is critical for successful adjustment (Steffens, Cruwys, et al., 2016).

Thus, the findings from the present research have implications for relevant stakeholder groups (e.g., organizations, practitioners, government agencies, leaders of superannuation and pension schemes, funding bodies, and policy makers) who need to (a) recognize the importance of social identity management, and (b) take the lead in implementing policies to ensure their workers and patrons are provided with the strategies and skills they need to develop and harness social identity resources in retirement. That said, as with any theory and application, efforts to apply social identity and SIMIC theorizing to the challenges of retirement adjustment will require ongoing development and refinement, and more needs to be done to better understand how best to harness social group memberships in a range of specific occupational and cultural contexts. Critically, though, the findings presented above make a clear case for greater investment in these efforts.

Strengths, limitations, and future directions

One key strength of the present research worth noting was the use of an active control design in Study 2. This extends previous retirement planning intervention research which has largely relied on waitlist control designs. In particular, this design feature increases confidence that the results found are not explained by extraneous variables such as expectancy effects. A second key strength relates to the G4R program itself which is informed by a well-established theory and evidence base — serving not only to specify social resources that are important in life transitions, but also to explain how to optimize these to support well-being in retirement. This gives us insight into why and how G4R can benefit prospective retirees.

Nevertheless, because this research did not follow participants over a longer follow-up time period, we know little about the long-term effects of G4R and, importantly, whether the program would support sustained retirement outcomes. However, it is worth noting that the parent G4H program has been shown to have long-term benefits over the course of a year and has been shown to be more robust in protecting people's health against threats to social connectedness (i.e., COVID-19 lockdown restrictions) than cognitive behaviour therapy (Cruwys et al., 2021). Clearly though, in light of the present, brief format of G4R, there is a need for future research to track prospective

retirees into their retirement and examine the long-term effects of the program, particularly with those identified as more vulnerable (e.g., prospective retirees identified as experiencing social problems either in their workplace or wider community). Relatedly, future research should also explore the important question of *when* to intervene. As Earl and Donaldson (2010) point out, financial planning is likely to be static whereas social planning is likely to be dynamic — largely because financial resources are predictable, whereas social resources are more likely to change in unexpected ways over time. This would imply that social planning will continue to be useful throughout and beyond the transition into retirement. But, again, longitudinal research is needed to investigate whether this is the case.

Findings from Studies 1 and 2 warrant further interrogation of G4R, its mechanisms, and potential moderators that might affect its efficacy — notably, participants' general sense of social connectedness at baseline. For example, we would expect G4R to be more useful to those identified as being socially isolated in light of research showing that GROUPS 4 HEALTH is especially beneficial for people experiencing loneliness (Cruwys et al., 2021). Notably too, there is clearly a need to test gain and continuity processes in the G4R program. However, it is worth noting the research highlighted above would require a larger-scale study with a large sample size and target specific mediators and moderators. A larger sample size would also be needed to conduct Confirmatory Factor Analysis (CFA) to explore the underlying factor structure of the variables assessed and ensure independence of predictors.

Importantly too, the present research did not investigate how social identity planning in the lead up to retirement might influence work related outcomes (e.g., job satisfaction, performance). However, given that multiple group membership is linked to numerous health and well-being benefits (see Haslam, Jetten, et al., 2018 for a review) it is likely to have a positive influence on performance at work and this is even more likely to be the case when a person's work and nonwork groups are compatible with one another. Clearly though, this is an interesting empirical question for future work.

Finally, while all analysis code and supplemental materials are provided via the Open Science Framework, it should be noted that neither of the above studies was preregistered. This is something we would strongly recommend for future studies.

CONCLUSION

The present research fills a major gap in the literature by reporting the findings of two studies that evaluate a theory-based program — GROUPS 4 RETIREMENT (G4R) — designed to help people manage their group memberships and associated social identities in the lead-up to retirement. The findings of our second study indicate that this program had benefits that were at least as pronounced as those associated with a more standard program focused on financial management. However, G4R was uniquely beneficial in enhancing participants' well-being and their intention to engage in social and activity planning. These findings are consistent with mounting evidence that social groups are important determinants of health and well-being, and hence that they are an important site for intervention. This is especially true in the context of predictable life changes that have the potential to pose significant threats to well-being. Retirement is just such a context. Accordingly, moving forward, we would argue that much is to be gained by broadening the offerings provided to prospective retirees in ways that help them to build and harness their *social* resources, not just their financial ones.

AUTHOR CONTRIBUTIONS

All co-authors contributed to the design and implementation of both studies reported in this paper. CH, SB and BL contributed to program design, development and data collection. NS, NB, AH, TC and CL provided feedback on the program. CL analysed the data, interpreted the findings, and drafted the manuscript which was critically reviewed by all co-authors.

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CONFLICT OF INTEREST STATEMENT

Authors CH, AH, and TC are the developers of the GROUPS 4 HEALTH (G4H) program from which the GROUPS 4 Retirement (G4R) program is derived. These authors have an academic interest in G4R. Training is offered at cost and additional funds are directed to ongoing program development and research.

DATA AVAILABILITY STATEMENT

Supplemental materials, including the full dataset and R code can be accessed via the open science framework [<http://doi.org/10.17605/OSF.IO/HUV4W>].

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REFERENCES

- Adams, G. A., & Rau, B. L. (2011). Putting off tomorrow to do what you want today: Planning for retirement. *American Psychologist*, *66*(3), 180–192. <https://doi.org/10.1037/a0022131>
- Ashforth, B. (2001). *Role transitions in organizational life: An identity-based perspective*. Erlbaum.
- Atchley, R. C. (1999). Continuity theory, self, and social structure. In C. D. Ryff & V. W. Marshall (Eds.), *Families and retirement* (pp. 145–158). Sage Publications.
- Barbosa, L. M., Monteiro, B., & Murta, S. G. (2016). Retirement adjustment predictors – A systematic review. *Work, Aging and Retirement*, *2*(2), 262–280. <https://doi.org/10.1093/workar/waw008>
- Bates, D., Mächler, M., Bolker, B. M., & Walker, S. C. (2015). Fitting linear mixed-effects models using lme4. *Journal of Statistical Software*, *67*(1), 1–48. <https://doi.org/10.18637/jss.v067.i01>
- Bentley, S. V., Greenaway, K. H., Haslam, S. A., Cruwys, T., Steffens, N. K., Haslam, C., & Cull, B. (2020). Social identity mapping online. *Journal of Personality and Social Psychology*, *118*(2), 213–241. <https://doi.org/10.1037/pspa0000174>
- Best, D., Beckwith, M., Haslam, C., A Haslam, S., Jetten, J., Mawson, E., & Lubman, D. I. (2016). Overcoming alcohol and other drug addiction as a process of social identity transition: The social identity model of recovery (SIMOR). *Addiction Research and Theory*, *24*(2), 111–123. <https://doi.org/10.3109/16066359.2015.1075980>
- Bossé, R., Spiro, A., & Kressin, N. R. (1996). The psychology of retirement. In R. T. Woods (Ed.), *Handbook of the clinical psychology of ageing* (Vol. 2, pp. 141–157). John Wiley & Sons. <https://doi.org/10.1111/j.1532-5415.1954.tb02594.x>
- Calasanti, T. M. (1996). Gender and life satisfaction in retirement: An assessment of the male model. *The Journals of Gerontology. Series B, Psychological Sciences and Social Sciences*, *51*(1), 18–29. <https://doi.org/10.1093/geronb/51B.1.S18>
- Craig, P., Dieppe, P., Macintyre, S., Mitchie, S., Nazareth, I., & Petticrew, M. (2008). Developing and evaluating complex interventions: The new Medical Research Council guidance. *British Medical Journal*, *337*(7676), 979–983. <https://doi.org/10.1136/bmj.a1655>
- Cruwys, T., Haslam, C., Rathbone, J. A., Williams, E., & Haslam, S. A. (2021). GROUPS 4 HEALTH protects against unanticipated threats to mental health: Evaluating two interventions during COVID-19 lockdown among young people with a history of depression and loneliness. *Journal of Affective Disorders*, *295*, 316–322. <https://doi.org/10.1016/j.jad.2021.08.029>
- Cruwys, T., Haslam, C., Rathbone, J. A., Williams, E., Haslam, S. A., & Walter, Z. C. (2022). GROUPS 4 HEALTH versus cognitive behaviour therapy in young people with depression and loneliness: A randomized, phase 3, non-inferiority trial with 12-month follow-up. *British Journal of Psychiatry*, *220*, 140–147. <https://doi.org/10.1192/bjp.2021.128>
- Cruwys, T., Haslam, C., Walter, Z. C., Rathbone, J., & Williams, E. (2019). The connecting adolescents to reduce relapse (CARR) trial: Study protocol for a randomized controlled trial comparing the efficacy of Groups 4 Health and cognitive behaviour therapy in young people. *BMC Public Health*, *19*(1), 1–10. <https://doi.org/10.1186/s12889-019-7011-y>
- Cruwys, T., Haslam, S. A., Dingle, G. A., Haslam, C., & Jetten, J. (2014). Depression and social identity: An integrative review. *Personality and Social Psychology Review*, *18*(3), 215–238. <https://doi.org/10.1177/1088868314523839>
- Cruwys, T., Steffens, N. K., Haslam, S. A., Haslam, C., Jetten, J., & Dingle, G. A. (2016). Social identity mapping: A procedure for visual representation and assessment of subjective multiple group memberships. *British Journal of Social Psychology*, *55*(4), 613–642. <https://doi.org/10.1111/bjso.12155>

- Deville, G. J., & Borkovec, T. D. (2000). Psychometric properties of the credibility/expectancy questionnaire. *Journal of Behavior Therapy and Experimental Psychiatry*, *31*(2), 73–86. [https://doi.org/10.1016/S0005-7916\(00\)00012-4](https://doi.org/10.1016/S0005-7916(00)00012-4)
- Earl, J. K., & Archibald, H. (2014). Retirement planning and resources. *European Journal of Management*, *14*(2), 131–152. <https://doi.org/10.18374/ejm-14-2.13>
- Earl, J. K., & Donaldson, T. (2010). Extending the integrated model of retirement adjustment: Incorporating mastery and retirement planning. *Journal of Vocational Behavior*, *77*(2), 279–289. <https://doi.org/10.1016/j.jvb.2010.03.003>
- Feldman, D. C. (1994). The decision to retire early: A review and conceptualization. *Academy of Management Review*, *19*(2), 285–311. <https://doi.org/10.5465/amr.1994.9410210751>
- Fretz, B. R., Kluge, N. A., Ossana, S. M., Jones, S. M., & Merikangas, M. W. (1989). Intervention targets for reducing preretirement anxiety and depression. *Journal of Counseling Psychology*, *36*(3), 301–307. <https://doi.org/10.1037/0022-0167.36.3.301>
- Glamser, F. D., & DeJong, G. F. (1975). The efficacy of preretirement preparation programs for industrial workers. *Journal of Gerontology*, *30*(5), 595–600. <https://doi.org/10.1093/geronj/30.5.595>
- Greenaway, K. H., Haslam, S., Cruwys, T., Branscombe, N. R., Ysseldy, R., & Heldreth, C. (2015). From “we” to “me”: Group identification enhances perceived personal control with consequences for health and well-being. *Journal of Personality and Social Psychology*, *109*(1), 53–74. <https://doi.org/10.1037/pspi0000019>
- Griffin, B., & Hesketh, B. (2008). Post-retirement work: The individual determinants of paid and volunteer work. *Journal of Occupational and Organizational Psychology*, *81*(1), 101–121. <https://doi.org/10.1348/096317907X202518>
- Hanisch, K. A. (1994). Reasons people retire and their relations to attitudinal and behavioral correlates in retirement. *Journal of Vocational Behavior*, *45*(1), 1–16. <https://doi.org/10.1006/jvbe.1994.1023>
- Haring, J., Okun, M. A., & Williams, A. (1984). A quantitative synthesis of literature on work status and subjective well being. *Journal of Vocational Behavior*, *32*(4), 316–324.
- Haslam, C., Chang, M. X. L., Bentley, S. V., Haslam, S. A., Dingle, G. A., Jetten, J., & Cruwys, T. (2019). GROUPS 4 HEALTH reduces loneliness and social anxiety in adults with psychological distress: Findings from a randomized controlled trial. *Journal of Consulting and Clinical Psychology*, *87*(9), 787–801. <https://doi.org/10.1037/ccp0000427>
- Haslam, C., Cruwys, T., Haslam, S. A., Dingle, G., & Chang, M. X. L. (2016). Groups 4 Health: Evidence that a social-identity intervention that builds and strengthens social group membership improves mental health. *Journal of Affective Disorders*, *194*, 188–195. <https://doi.org/10.1016/j.jad.2016.01.010>
- Haslam, C., Haslam, S. A., Jetten, J., Cruwys, T., & Steffens, N. K. (2021). Life change, social identity, and health. *Annual Review of Psychology*, *72*, 635–661. <https://doi.org/10.1146/annurev-psych-060120-111721>
- Haslam, C., Holme, A., Haslam, S. A., Iyer, A., Jetten, J., & Williams, W. H. (2008). Maintaining group memberships: Social identity continuity predicts well-being after stroke. *Neuropsychological Rehabilitation*, *18*(5–6), 671–691. <https://doi.org/10.1080/09602010701643449>
- Haslam, C., Jetten, J., Cruwys, T., Dingle, G., & Haslam, S. A. (2018). *The new psychology of health: Unlocking the social cure* (1st ed.). Routledge. <https://doi.org/10.4324/9781315648569>
- Haslam, C., Lam, B. C. P., Branscombe, N. R., Steffens, N. K., Haslam, S. A., Cruwys, T., Fong, P., & Ball, T. C. (2018). Adjusting to life in retirement: The protective role of new group memberships and identification as a retiree. *European Journal of Work and Organizational Psychology*, *27*(6), 822–839. <https://doi.org/10.1080/1359432X.2018.1538127>
- Haslam, C., Steffens, N. K., Branscombe, N. R., Haslam, S. A., Cruwys, T., Lam, B. C. P., Pachana, N. A., & Yang, J. (2019). The importance of social groups for retirement adjustment: Evidence, application, and policy implications of the social identity model of identity change. *Social Issues and Policy Review*, *13*(1), 93–124. <https://doi.org/10.1111/sipr.12049>
- Haslam, S. A., Reicher, S. D., & Levine, M. (2012). When other people are heaven, when other people are hell: How social identity determines the nature and impact of social support. In J. Jetten, C. Haslam, & S. A. Haslam (Eds.), *The social cure: Identity, health and well-being* (pp. 157–174). Psychology Press. <https://doi.org/10.4324/9780203813195>
- Hayslip, B., Beyerlein, M., & Nichols, J. A. (1997). Assessing anxiety about retirement: The case of academicians. *International Journal of Aging and Human Development*, *44*(1), 15–36. <https://doi.org/10.2190/BY4B-HMQA-RDY1-HF5B>
- Helliwell, J. F. (2016). Life satisfaction and quality of development. In *Policies for happiness*. Oxford Scholarship Online. <https://doi.org/10.1093/acprof:oso/9780198758730.003.0008>
- Hershey, D. A., Gutierrez, H., & Hershey, D. A. (2014). Age differences in expected satisfaction with life in retirement. *International Journal of Aging and Human Development*, *78*(2), 93–114. <https://doi.org/10.2190/AG.78.2.a>
- Hesketh, B., Griffin, B., Dawis, R., & Bayl-Smith, P. (2015). Extensions to the dynamic aspects of the retirement transition and adjustment framework (RTAF): Adjustment behaviors, work styles, and identity. *Work, Aging and Retirement*, *1*(1), 79–91. <https://doi.org/10.1093/workar/wau004>
- Holcomb, T. F. (2010). Transitioning into retirement as a stressful life event. In T. W. Miller (Ed.), *Handbook of stressful transitions across the lifespan* (pp. 133–146). Springer Science+Business Media. https://doi.org/10.1007/978-1-4419-0748-6_7
- Holm, S. (1979). A simple sequential rejective multiple test procedure. *Scandinavian Journal of Statistics*, *6*, 65–70.
- Iyer, A., Jetten, J., Tsvirikos, D., Postmes, T., & Haslam, S. A. (2009). The more (and the more compatible) the merrier: Multiple group memberships and identity compatibility as predictors of adjustment after life transitions. *British Journal of Social Psychology*, *48*(4), 707–733. <https://doi.org/10.1348/014466608X397628>
- Jetten, J., Branscombe, N. R., Haslam, S. A., Haslam, C., Cruwys, T., Jones, J. M., Cui, L., Dingle, G., Liu, J., Murphy, S. C., Thai, A., Walter, Z., & Zhang, A. (2015). Having a lot of a good thing: Multiple important group memberships as a source of self-esteem. *PLoS One*, *10*(6), 1–29. <https://doi.org/10.1371/journal.pone.0131035>

- Jetten, J., Haslam, S. A., Iyer, A., & Haslam, C. (2009). Turning to others in times of change: Social identity and coping with stress. In S. Stürmer & M. Snyder (Eds.), *The psychology of prosocial behavior: Group processes, intergroup relations, and helping* (pp. 139–156). Blackwell Publishing Ltd. <https://doi.org/10.1002/9781444307948.ch7>
- Johnston, D. W., & Lee, W. S. (2009). Retiring to the good life? The short-term effects of retirement on health. *Economics Letters*, *103*(1), 8–11. <https://doi.org/10.1016/j.econlet.2009.01.015>
- Kinsella, E. L., Muldoon, O. T., Fortune, D. G., & Haslam, C. (2020). Collective influences on individual functioning: Multiple group memberships, self-regulation, and depression after acquired brain injury. *Neuropsychological Rehabilitation*, *30*(6), 1059–1073. <https://doi.org/10.1080/09602011.2018.1546194>
- La Rue, C. J., Haslam, C., & Steffens, N. K. (2022). A meta analysis of retirement adjustment predictors. *Journal of Vocational Behavior*, *136*, 103723. <https://doi.org/10.1016/j.jvb.2022.103723>
- Latif, E. (2011). The impact of retirement on psychological well-being in Canada. *The Journal of Socio-Economics*, *40*(4), 373–380. <https://doi.org/10.1016/j.socce.2010.12.011>
- Linton, R. (1936). *The study of man: An introduction*. Appleton-Century-Crofts.
- Lusardi, A., & Mitchell, O. S. (2007). Baby boomer retirement security: The roles of planning, financial literacy, and housing wealth. *Journal of Monetary Economics*, *54*(1), 205–224. <https://doi.org/10.1016/j.jmoneco.2006.12.001>
- Lytle, M. C., Foley, P. F., & Cotter, E. W. (2015). Career and retirement theories: Relevance for older workers across cultures. *Journal of Career Development*, *42*(3), 185–198. <https://doi.org/10.1177/0894845314547638>
- Macewen, K. E., Barling, J., Kelloway, E. K., & Higginbottom, S. F. (1995). Predicting retirement anxiety: The roles of parental socialization and personal planning. *Journal of Social Psychology*, *135*(2), 203–213. <https://doi.org/10.1080/00224545.1995.9711424>
- Miron, A. M., Branscombe, N. R., Ball, T. C., McFadden, S. H., & Haslam, C. (2021). An interpretative phenomenological analysis of social identity transition in academic retirement. *Work, Aging and Retirement*, *1–16*, 82–97. <https://doi.org/10.1093/workar/waab018>
- Morris, S. B., & DeShon, R. P. (2002). Combining effect size estimates in meta-analysis with repeated measures and independent-groups designs. *Psychological Methods*, *7*(1), 105–125. <https://doi.org/10.1037/1082-989X.7.1.105>
- Muratore, A. M., & Earl, J. K. (2010). Predicting retirement preparation through the design of a new measure. *Australian Psychologist*, *45*(2), 98–111. <https://doi.org/10.1080/00050060903524471>
- Mutran, E. J., Reitzes, D. C., & Fernandez, M. E. (1997). Factors that influence attitudes toward retirement. *Research on Aging*, *19*(3), 251–273. <https://doi.org/10.1177/0164027597193001>
- Noone, J. H., Stephens, C., & Alpass, F. M. (2009). Preretirement planning and well-being in later life: A prospective study. *Research on Aging*, *31*(3), 295–317. <https://doi.org/10.1177/0164027508330718>
- Pazzim, T. A., & Marin, A. H. (2017). Retirement preparation program: Evaluation of results: Psychology: Research and review. *Psicologia: Reflexão e Crítica*, *30*(1), 24. <https://doi.org/10.1186/s41155-017-0079-3>
- Praharso, N. F., Tear, M. J., & Cruwys, T. (2017). Stressful life transitions and wellbeing: A comparison of the stress buffering hypothesis and the social identity model of identity change. *Psychiatry Research*, *247*(June), 265–275. <https://doi.org/10.1016/j.psychres.2016.11.039>
- Quick, H. E., & Moen, P. (1998). Gender, employment, and retirement quality: A life course approach to the differential experiences of men and women. *Journal of Occupational Health Psychology*, *3*(1), 44–64. <https://doi.org/10.1037//1076-8998.3.1.44>
- Reitzes, D. C., & Mutran, E. J. (2004). The transition to retirement: Stages and factors that influence retirement adjustment. *The International Journal of Aging and Human Development*, *59*(1), 63–84. <https://doi.org/10.2190/NYPP-RFFP-5RFK-8EB8>
- Reitzes, D. C., Mutran, E. J., & Fernandez, M. E. (1998). The decision to retire: A career perspective. *Social Science Quarterly*, *79*(3), 607–619.
- Seiferling, N., & Michel, A. (2017). Building resources for retirement transition: Effects of a resource-oriented group intervention on retirement cognitions and emotions. *Work, Aging and Retirement*, *3*(4), 325–342. <https://doi.org/10.1093/workar/wax011>
- Seongsu, K., Feldman, D. C., Kim, S., & Feldman, D. C. (2000). Working in retirement: The antecedents of bridge employment and its consequences for quality of life in retirement. *Academy of Management Journal*, *43*(6), 1195–1210. <https://doi.org/10.2307/1556345>
- Seymour-Smith, M., Cruwys, T., Haslam, S. A., & Brodribb, W. (2017). Loss of group memberships predicts depression in postpartum mothers. *Social Psychiatry and Psychiatric Epidemiology*, *52*(2), 201–210. <https://doi.org/10.1007/s00127-016-1315-3>
- Shultz, K. S., & Wang, M. (2007). The influence of specific physical health conditions on retirement decisions. *The International Journal of Aging and Human Development*, *65*(2), 149–161. <https://doi.org/10.2190/AG.65.2.c>
- Smeekes, A., Verkuyten, M., Celebi, E., Acartürk, C., & Oncun, S. (2017). Social identity continuity and mental health among Syrian refugees in Turkey. *Social Psychiatry and Psychiatric Epidemiology*, *52*, 1317–1324. <https://doi.org/10.1007/s00127-017-1424-7>
- Steffens, N. K., Cruwys, T., Haslam, C., Jetten, J., & Haslam, S. A. (2016). Social group memberships in retirement are associated with reduced risk of premature death: Evidence from a longitudinal cohort study. *BMJ Open*, *6*(2), 1–9. <https://doi.org/10.1136/bmjopen-2015-010164>
- Steffens, N. K., Jetten, J., Haslam, C., Cruwys, T., & Haslam, S. A. (2016). Multiple social identities enhance health post-retirement because they are a basis for giving social support. *Frontiers in Psychology*, *7*, 1519. <https://doi.org/10.3389/fpsyg.2016.01519>

- Su, R., Tay, L., & Diener, E. (2014). The development and validation of the comprehensive inventory of thriving (CIT) and the brief inventory of thriving (BIT). *Applied Psychology, Health and Well-Being*, 6(3), 251–279. <https://doi.org/10.1111/aphw.12027>
- Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In M. A. Hogg & D. Abrams (Eds.), *Intergroup relations: Essential readings* (pp. 94–109). Psychology Press.
- Taylor, M. A., & Doverspike, D. (2003). Retirement planning and preparation. In *Retirement: Reasons, processes, and results* (pp. 53–82). Springer.
- Taylor, M. A., & Shore, L. M. F. (1995). Predictors of planned retirement age: An application of Beehr's model. *Psychology and Aging*, 10(1), 76–83. <https://doi.org/10.1037/0882-7974.10.1.76>
- Taylor-Carter, M. A., Cook, K., & Weinberg, C. (1997). Planning and expectations of the retirement experience. *Educational Gerontology*, 23(3), 273–288. <https://doi.org/10.1080/03601279702303006>
- Topa, G., Moriano, J. A., Depolo, M., Alcover, C. M., & Morales, J. F. (2009). Antecedents and consequences of retirement planning and decision-making: A meta-analysis and model. *Journal of Vocational Behavior*, 75(1), 38–55. <https://doi.org/10.1016/j.jvb.2009.03.002>
- Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). *Rediscovering the social group: A self-categorization theory*. Basil Blackwell.
- Turner, J. C., Oakes, P. J., Haslam, S. A., & McGarty, C. (1994). Self and collective: Cognition and social context. *Personality and Social Psychology Bulletin*, 20(5), 454–463. <https://doi.org/10.1177/0146167294205002>
- Van Solinge, H. (2012). *Adjustment to retirement* (M. Wang (Ed.)). Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780199746521.013.0117>
- Wang, M. (2007). Profiling retirees in the retirement transition and adjustment process: Examining the longitudinal change patterns of retirees' psychological well-being. *Journal of Applied Psychology*, 92(2), 455–474. <https://doi.org/10.1037/0021-9010.92.2.455>
- Wang, M., Henkens, K., & van Solinge, H. (2011). Retirement adjustment: A review of theoretical and empirical advancements. *American Psychologist*, 66(3), 204–213. <https://doi.org/10.1037/a0022414>
- Wheaton, B. (1990). Life transitions, role histories, and mental health. *American Sociological Review*, 55(2), 209–223. <https://doi.org/10.2307/2095627>
- Wrzesniewski, A., & Dutton, J. E. (2001). Crafting a job: Revisioning employees as active crafters of their work. *Academy of Management Review*, 26(2), 179–201.
- Zhan, Y., Wang, M., Liu, S., & Shultz, K. S. (2009). Bridge employment and retirees' health: A longitudinal investigation. *Journal of Occupational Health Psychology*, 14(4), 374–389. <https://doi.org/10.1037/a0015285>

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