

Can adult education change extremist attitudes?

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Although adult education leads to a moderation of racist or authoritarian attitudes amongst the general population, little is known concerning the impact of adult education on individuals with extremist racist—authoritarian views. In this paper we group individuals from the NCDS (National Child Development Study) into various racist—authoritarian categories at ages 33 and 42 using cluster analysis. Following this identification we test various hypothesis concerning the relationship between adult education and attitude change. In particular, questioning whether adult education can transform attitudes amongst those with racist—authoritarian attitudes and/or whether adult education can sustain non-extremist views. Although there is evidence of a conditional association between adult education and sustaining non-extremist views we are sceptical concerning the ability of adult education to change extremist positions. We conclude that further work on the mechanisms linking education and extremist attitudes is required if we are to identify causal processes.

Introduction

The resurgence of extremist parties in British political life is a cause for concern In both local and European elections, the BNP (British National Party) and other extremist parties have increased their proportion of the vote and even in some cases gained council seats. Even if their political impact is thankfully negligible, the extreme racist and authoritarian policies that they propagate are fundamentally opposed to community cohesion and tolerance. The extent to which educational interventions—particularly adult education—may mitigate or oppose extremes of intolerance and racism, is questionable. Although more radical traditions of adult education are directly opposed fascism along the lines of the informal education provided by organizations such as the Anti Nazi League (Gaine, 2000, p. 73) much of the mainstream policy emphasis has been on anti-racism and ethnic mixing in schools. However, beyond initial schooling there is evidence that adult education

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may lead to favourable changes in political attitudes—reducing racism, authoritarianism and increasing confidence in democratic process (Feinstein & Hammond, 2004). Less is known about whether adult education may change attitudes amongst those who hold extreme views or even whether it may protect others from moving towards an extreme attitudinal position.

Investigating the link between racist-authoritarian attitudes, behaviour and adult learning is important because of the implications for social cohesion. Implicit in our definition of social cohesion, is the assumption that a socially cohesive society is also an inclusive one. The relationship between racist-authoritarianism, traditional family values and social cohesion speaks directly to the social capitals literature and the literature on bonding and bridging. A socially cohesive society generally requires specific forms of social capital, that is, 'features of social life-networks, norms, and trust—that enable participants to act together more effectively to pursue shared objectives' (Putnam, 1996, p. 66). In a culturally and ethnically heterogeneous society, social cohesion requires high levels of bridging capital as opposed to bonding capital. Bonding capital refers to 'links between like-minded people, or the reinforcement of homogeneity', whereas bridging capital refers to 'the building of connections between heterogeneous groups; these are likely to be more fragile, but more likely also to foster social inclusion' (Putnam cited in Baron et al., 2000, p. 10). It must be noted, however, that in some societies strong social capital can co-exist with low levels of tolerance and trust (Norris, 2001). In addition, strong bonding or bridging social capital may discourage contacts with individuals from other ethnic groups which may have negative impacts on tolerance (Pettigrew, 1998).

Racism is a threat to social cohesion because it fosters social exclusion, which is fundamentally opposed to social cohesion in a heterogeneous society. We assert that authoritarian attitudes erode social cohesion because authoritarianism is associated with intolerance and a general lack of respect for difference.

The purpose of this paper is to tackle questions of whether adult education may change extremist views and/or protect individuals from acquiring such views. In the first section of the paper we explain what is meant by 'extremist views' in terms of racism and authoritarianism. We relate our conception of 'extremism' to focus on attitudinal rather than personality-based conceptions of extremism. By attitude, we mean 'the degree of favourableness or unfavourableness with respect to a psychological object' (Ajzen & Fishbein, 2000). We draw on the NCDS (National Child Development Study) attitudinal measures to develop measures of extremism. These quantitative measures are validated through relating surveyed levels of racism to regional support for the BNP. We argue that a variable-centred approach normally applied in such an analysis neglects the relevance of extreme groups and positions. This prompts us to adopt a person-centred methodology, identifying extreme (and other) groups through cluster analysis. We use these clusters in our analysis to examine whether adult education changes the attitudinal position of those who hold extreme views and/or prevents others from adopting such views. In our conclusion, we explore the limitations and possibilities for adult and other types of education in offering policy solutions to the problem of extremism.

The paper adopts a quantitative approach and a number of statistical techniques are employed. In order to map how individuals may share common patterns of attitude with regard to racism and authoritarianism we use cluster analysis to group individuals according to degree of proximity to groups with similar attitude profiles. We order these groups normatively in order of degree of desirability of attitude and use this ordering to conduct various controlled ordered probit analysis. However, we consider that this area of research is one where qualitative research and case studies may be particularly productive and return to this point in our conclusion.

Authoritarianism reconsidered

Early conceptualizations of political extremism were strongly linked with theories of the authoritarian personality and resulting debates (Adorno *et al.*, 1950). This early work has been the subject of ferocious critique. Two major criticisms of authoritarianism (as a personality trait) are made by Ray (1991) who argues that the 'causal' link between childhood upbringing, authoritarian personality and ethnocentrism has not been established in the psychological literature and that the F-scale is a poor predictor of authoritarian behaviour. The F-scale has also been criticized for being poorly associated with other attitudes (Ray, 1983).

However, Roiser and Willig (2002) argue that although the focus of the original study on essentialist personality characteristics and childhood was misguided, authoritarianism as a concept, conceptualized as a cluster of attitudes which might be open to change in adulthood, is still worthy of investigation (Roiser & Willig, 2002, p. 92). Thus although in the original Adorno *et al.* (1950) study 'recommendations leaned towards personality, dealing with child-rearing and education, rather than the public challenging of attitudes' (Roiser & Willig, 2002, p. 75) we would emphasize individuals' potential for change in later life. Indeed there has been promising work on attitude scales such as right wing authoritarianism (RWA, Altemeyer, 1981) and social conformity–autonomy (Feldman, 2003) which are not necessarily fixed by parenting processes.

In this study, we are not trying to 'resurrect' the authoritarian personality or to develop robust alternative attitude scales for authoritarianism. We note that although authoritarianism and racism are correlated, there are interesting changes in correlations of these scales through adulthood in our data. However, we claim that it is meaningful to combine racism and authoritarianism for several reasons. First, items contained within our scales are similar to those employed by Altemeyer (1981) in his conception of RWA. Moreover, in extremis, they are reflective of a similar political ideology as held by parties such as the BNP. Furthermore, there is evidence from previous research to support the view that both racism and anti-democratic attitudes might be changed through education (as summarized by Emler & Frazer, 1999, p. 251) and even adult education (Feinstein & Hammond, 2004). In short, our position is that racism and authoritarianism are far from the essentialist, F-type personality characteristics as identified by Adorno et al. (1950).

Aside from the meaning of racism-authoritarianism, a further issue in this study is whether racism and authoritarianism are beliefs, attitudes or behaviours. For illustrative purposes, we focus on racism although much of this discussion will also apply to authoritarianism. Racism may be divided into three main subcategories: the personal/individual, the institutional/structural and the social/cultural/ideological. Thus, racism can be a set of personal institutional and/or sociocultural factors that subordinates others through the use of power and privilege on the basis of racial/ ethnic characteristics. In this paper, although we take the position that beliefs influence attitudes, which in turn influence behaviour, we focus exclusively on the relationship between attitudes and behaviour. We acknowledge that the relationship between attitudes and behaviour is one that is best characterized as one of multifinality. It is clearly reasonable that two people with near identical attitudes behave in different ways. This begs the question: how do attitudes influence behaviour and under what conditions? More specifically for us, how does a decrease in a person's racist attitudes affect their behaviour with regard to persons of other races or ethnicities and vice versa? Roediger (2002) suggests that shifts in attitudes towards race tolerance may not be reflected by changes in racist practices. This is also supported by Dovidio and Gaertner (1996) who establish that changes in racist behaviour in employment practices requires legal as well as attitudinal change. We assert, however, that attitudes have some influence on behaviour (and provide an example of the correspondence between racist attitudes and support for the BNP) although exploring the myriad channels through which attitudes can and do influence behaviour and the conditions under which this influence occurs is beyond the scope of this paper. The basis of our claim is the assumption that while a change in attitude may not necessarily lead to a change in behaviour, a change in behaviour is unlikely to occur in the absence of a prior change in attitude. In other words, an ex ante change in attitudes is fundamental to creating an ex-post change in behaviour.

This leads us directly into the question of whether there are different kinds of racism and the type(s) that this study is identifying. A simple categorization of racism would identify two overarching forms of racism: overt/explicit and covert/implicit. Both overt/explicit and covert/implicit racism can be either unwitting, unconscious or unintentional (MacPherson *et al.*, 1999). According to the Steven Lawrence Inquiry:

... unwitting racism can arise because of lack of understanding, ignorance or mistaken beliefs ... well intentioned but patronizing words or actions ... unfamiliarity with the behaviour or cultural traditions of people or families from ethnic minority communities. (MacPherson *et al.*, 1999, section 6.17)

Racism is said to be unconscious when prejudiced beliefs and attitudes that remain unexamined in a critical, questioning light influence behaviour. Unintentional racism occurs where despite best intentions in many cases, the outcome of beliefs, attitudes and actions is a situation that (dis)advantages racially or ethnically defined persons or groups. However, even the overt/covert distinction masks a number of differences between various 'racisms'. For example, Kleinpenning and Hagendoorn

(1993) distinguish between biological (a belief in the hereditary superiority of one's own race), symbolic (a belief that the cultural habits of other races differ and that this may threaten one's own resources) and averse (covert) racism.

The racism scale in this paper is clearly designed to detect more overt/explicit forms of racism. It is not designed to detect 'covet/implicit' or 'covert' racism—what some may consider to be the more significant of the two types. Investigating the link between racist—authoritarian attitudes, behaviour and adult learning is important because of the implications for social cohesion. The general argument is that the attitudes of racist—authoritarians are such that, if they are translated into behaviours, could contribute to the fragmentation of society. In a culturally and ethnically heterogeneous society, social cohesion requires high levels of bridging social capital (Putnam, cited in Baron et al., 2000, p.10). Racism is a threat to social cohesion because it fosters social exclusion. We assert that authoritarian attitudes erode social cohesion because authoritarianism is associated with intolerance, and a general lack of respect for difference.

Racist-authoritarians: scale items and validity checking

Longitudinal studies enable us to explore the dynamics of attitude change which as the above discussion has shown are important if we are to move beyond a static view of the extremist personality. Our key research questions reflect these dynamics asking whether adult education can transform racist—authoritarian attitudes (that is change attitudes to a more favourable position) or can sustain a non-racist—authoritarian orientation. In order to investigate these questions we use a representative UK birth cohort study of those individuals born in 1958: the NCDS. Using longitudinal data we employ an ordered probit specification to model changes in attitude over time as a function of adult education and various control variables. We focus on two sweeps in the NCDS, at ages 33 and 42, and employ control variables from earlier sweeps.

At ages 33 and 42 respondents in NCDS were asked related questions concerning their attitudes to racism and authoritarianism. Respondents considered attitude items in a computer assisted questionnaire on a five point scale with 1 indicating the greatest amount of disagreement with the item, and 5 indicating the greatest amount of agreement. As we have shown (Preston & Feinstein, 2004) and has also been shown by previous authors (Bynner *et al.*, 2003) these items are highly correlated within scales. Moreover, the racism and authoritarianism scale are also highly correlated with each other (Pearson correlation between racism and authoritarianism is 0.27 at age 33 and 0.31 at age 42, significant at *p*<0.05) and form a unique factor when factor analysed with other NCDS attitudes (Bynner *et al.*, 2003). Details of the two attitude scales are provided below together with associated Cronbach's alpha (an indicator of inter-scale reliability) coefficients.

Racism (
$$\alpha_{33} = 0.82, \alpha_{42} = 0.81$$
)

This scale includes items on inter-racial marriage, race and neighbourhoods, degree of racial mixing in schools and race in the workplace. It covers attitudes to race,

potentially in terms of both preference and economic conceptions of racism. The items included are:

- 1. Mixed race marriage is OK.
- 2. I wouldn't mind if family of a different race moved next door.
- 3. I would mind kids going to school with different races.
- 4. I wouldn't mind working with people from other races.
- 5. I would not want a person of another race as my boss.

Authoritarianism ($\alpha_{33} = 0.65, \alpha_{42} = 0.65$)

This includes items on the death penalty, censorship, length of prison sentences, moral codes taught by schools and behaviour of young people. These represent an authoritarianism in terms of moral rigidity and punitive nature of the state. The items are:

- 1. The death penalty is necessary for some crimes.
- 2. Censorship is needed to uphold morals.
- 3. We should give lawbreakers stiffer sentences.
- 4. Young people don't have respect for traditional values.
- 5. Schools should teach children to obey authority.

Using the data in NCDS it is possible to examine whether there are ecological, or area, relationships between attitudes and behaviours. By grouping individuals by local authority we can calculate the mean level of attitude in that area as measured in the NCDS. Although such exercises must be undertaken with caution in that the attitude indicators are only for a sample of individuals in the area at age 42, there is a striking relationship between area racism as assessed in the scores in our data and area-level support for a party which has been associated with support for racial segregation. Table 1 (below) shows the levels of racism for the seven local authorities which had BNP elected councillors in 2003 (based on local council election results 1 May 2003). No other local authorities had BNP councillors at this time. We have also included Oldham as a site of racially motivated civil disorder. All of these local authorities were in the top 35 of 145 local authorities in terms of their level of racism in the NCDS for individuals at age 42. In Table 1, the third column shows their position in this ranking. Blackburn with the highest number of BNP councillors has the second highest racism score on our measure.

These results must be interpreted with caution as we are not considering all ages of individuals in an area, nor do we address a long list of factors that can and do influence voting patterns (Downs, 1957; Yang et al., 2000)

With this caveat in mind, we assert that there is evidence of a relationship between the racism attitude at an area level and support for a party that supports racial segregation, though we make no assertion about the nature of this relationship in terms of causality. The key point here is that the attitude measure is valid. The *only* six areas in the UK with BNP representation on the council in 2003 are in the

Postcode area	Racism (42)	Ranking in terms of racism at 42	BNP councillors (2003)
Blackburn (BB)	2.48	2	8
Romford (RM)	2.31	7	1
Oldham (OL)	2.28	8	
Dudley (DY)	2.22	19	1
Halifax (HX)	2.18	29	2
Stoke-on-Trent (ST)	2.17	31	1
Birmingham (B)	2.16	33	2
Enfield (EN)	2.16	34	1
All areas	2.10	125 areas	N/A

Table 1. Support for the BNP by mean level of racism in that ward

top quartile of racist areas, as measured by the NCDS (with the exception of Birmingham which was just outside this quartile). In addition, Oldham—an area which has experienced high levels of racially motivated disorder—is also in the top quartile.

As shown, we have well constructed scales for racism and authoritarianism and these scales are highly correlated. Moreover, there is some evidence of an association between adults holding racist views in an area, and support for a party with similarly racist and authoritarian policies. We now consider how we may identify those individuals who actually hold 'extremist' racist—authoritarian attitudes and why the study of these extremes might be of relevance.

Person-centred analysis

Our approach to our analysis of racist–authoritarians is a 'typological approach, focusing on people rather than variables ... typological researchers try to identify groups of people with similar personalities, focusing on the unique patterning of attribute within the person' (Kagan *et al.*, 1998, p.139). The particular strength of the typological (or person-centred) over a dimensional (or variable-centred approach) in this study is in terms of its ability to isolate groups of individuals with qualitatively distinct characteristics—racist—authoritarian extremists. In dimensional approaches, identifying individuals with extreme characteristics would be a matter of examining overlapping distributions at a particular point (e.g., the top 5% of individuals in terms of *both* racism and authoritarianism). This approach has been identified as using the 'bimodal distribution' (Bergman, 1998, p. 141). However, in a typological approach, similar individuals can be identified using a 'method for determining the similarity between individuals' personality profiles and for identifying distinct groupings of individuals' such as cluster analysis (Bergman, 1998, p. 142). Each group thus established is considered to be qualitatively and substantively

different from other groups rather than 'arbitrarily' different as in variable-centred methods which depend on where the distribution(s) are cut. In particular, extreme groups are of emergent interest in psychology and sociology:

... the domination of research in both personality and development by statistical treatments that rely on analysis of covariance and regression has frustrated a small group of investigators who have had the intuition that some samples were qualitatively different from the majority of their sample. (Kagan *et al.*, 1998, p. 66)

Extremism of racism and authoritarianism is not a matter of degree but there is a qualitative difference between those scoring highly on both scales and those who give more moderate scores. This view is substantiated through our cluster analysis (below) which identifies these 'extremists' as an identifiable and separate group.

The method by which individuals are grouped in this analysis is through cluster analysis (or pattern centred analysis). This method attempts to identify groups of people thought of as particular types. It can also be thought of as a technique of data reduction whereby respondents are grouped on the basis of their scores on various dimensions, such as attitude scales. Hence individuals are grouped in terms of their scores on variables and it is these groupings of individuals (rather than the variables themselves) which are the primary source for data analysis. Cluster analysis is increasingly being used in the analysis of political attitudes (Delhey, 1999; Moon et al., 2001; Keulder & Spilker, 2002).

To begin we conduct a cluster analysis of respondents with scores on racism and authoritarianism at 33 as the independent variables. We then repeat this analysis at 42 to see if similar clusters are established.

Figure 1 (below) shows the results of a cluster analysis exercise conducted on racism and authoritarianism data at age 33. The decision to arrive at these seven separate groups is supported through the analysis of a dendogram and to a lesser extent from the use of cluster stopping rules as seven clusters provided the best representation of the data. Using fewer than seven groups does not isolate a particularly racist and authoritarian group, whereas going beyond seven groups does not isolate a further subgroup of entrenched individuals beyond those identified in the seventh cluster.

A similar analysis was also conducted for the age 42 data with similar results. In both, we identify a group of individuals who are fairly racist and authoritarian in their views at 33 and 42: racist–authoritarians (Cluster 7 at age 33). We also identify groups who are authoritarian and not particularly racist—authoritarians (Clusters 4, 5 and 6 at age 33). Other groups are part of a 'neither' category. Note that there are no individuals in the analysis who are very racist and not authoritarian. This 'white space' (empty cell) in the cluster analysis is theoretically interesting as it means that (developmentally) racism and authoritarianism do not develop in opposition. This supports the view that racism and authoritarianism are intimately connected features of personality in adulthood and it would be interesting in future research to examine the developmental trajectories of these attitudes simultaneously through the life course. By grouping clusters together according to similar criteria of interest (as in

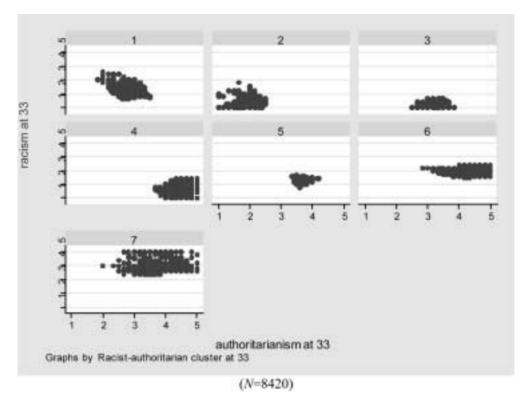


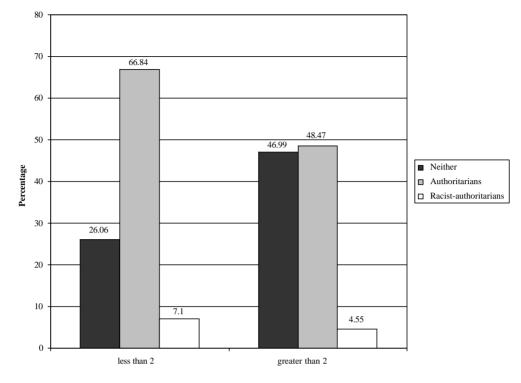
Figure 1. Cluster analysis of racism/authoritarianism at age 33

Roeser & Peck, 2003) we are able to evaluate the effectiveness of a particular policy intervention (in this case adult learning) on changing a set of related values.

We established that individuals fall into similar, but not identical, attitude clusters at 33 and 42 with respect to their orientations towards authoritarianism and racism. We next turn to examine how salient individual characteristics, namely qualification level and socio-economic status, differed across these clusters. For brevity, we present results at age 33 only.

Figure 2 (below) shows how individuals with different levels of qualification at age33 fall into each cluster type. As can be seen in the chart, 7.1% of individuals without Level 2 qualifications are racist–authoritarian as compared to 4.55% of those with Level 2 qualifications or better. Similarly, there is a higher proportion of individuals in the authoritarian category (66.84%) without Level 2 qualifications than in the more highly qualified category (48.47%). Therefore, there are relatively fewer individuals who are non-authoritarian racist in the greater than Level 2 category (46.99%) compared to the less than Level 2 category (26.06%).

These descriptive statistics reflect much that is known about the patterns of authoritarianism and racist–authoritarians amongst the UK and other populations, that is that they are concentrated amongst those with lower levels of education (Emler & Frazer, 1999). This generalization is correct when relative levels of



(Less than Level, N=4704; Level 2 or greater, N=3716)

Figure 2. Cluster type by qualification level

authoritarianism and racism are considered. However, one of the strengths of cluster analysis in this context is that it groups together types of individuals on the basis of attitude similarity. On this basis, there remain a large proportion of individuals with different levels of education in each category. For example, over 50% of individuals with Level 2 qualifications are either authoritarian or racist–authoritarian. Additionally, nearly 5% of these individuals are racist–authoritarian.

From both a policy and research perspective, those purely in the racist–authoritarian category are a particularly challenging category. In Table 2 we present descriptive statistics to indicate movement in and out of the racist–authoritarian category from age 33 to age 42.

As can be seen in Table 2 there is some entrenchment in the racist–authoritarian category; 48.5% (N=244) of respondents who were racist–authoritarian (RA) at 33 remain in this category at age 42. However, there was also considerable movement out of this extreme category: 10.7% (N=54) of respondents in this category at age 33 moved into the authoritarian (A) category at 42. A large proportion of racist–authoritarians at age 33 moved (205) moved into the 'neither' category at age 42. Similarly, there was considerable positive movement out of the authoritarian category. Although 49.5% (N=2451) of authoritarian respondents at age 33 were still in this

	RA at 42	A at 42	Neither at 42	Total
RA at 33	244	54	205	503
	48.5%	10.7%	40.8%	100%
A at 33	491	2451	2003	4945
	10.0%	49.5%	40.5%	100%
Neither at 33	77	1240	1655	2972
	2.6%	41.8%	55.6%	100%
Total	812	3745	3863	8420
	9.6%	44.5%	45.9%	100%

Table 2. Transition matrix for changes between clusters at ages 33 and 42

Note. Number of cases and row percentages shown in table, total N=8420.

category at 42 and 10.0% (N=491) respondents moved into the racist–authoritarian category at age 42 and 40.5% (N=2003) of respondents moved into the 'neither' category. Only 2.6% (N=77) of those who were neither racist–authoritarian or authoritarian at 33 ended up in the racist–authoritarian category at 42.

Table 2 indicates that, although there is some degree of entrenchment, these attitudes appear open to change over the life course, at least for the individuals identified in this cluster analysis. This is supportive of our earlier discussion that 'racism—authoritarianism' is not an essentialist personality trait, but is subject to change. We now turn to consider whether adult education is an important variable in changing a racist—authoritarian orientation.

Multivariate analysis

In previous work (Schuller *et al.*, 2004) we distinguished between the sustaining and transforming effects of adult learning. With relation to racist–authoritarian views there is an important distinction between learning which aims to move individuals from this extreme position (transforming effect) and learning which aims to keep individuals from falling into this category (a sustaining effect).

In order to model the transforming and sustaining effects of adult learning we classify individuals by attitudinal cluster at ages 33 and 42. We treat authoritarian–racists as the least desirable category (ranked 0) and 'neither' as the most desirable category (ranked 2) with authoritarians ranked 1. This reflects an underlying ordering in terms of the desirability of each attitudinal category. Then we model the effects of adult education on category change using an ordered probit specification with controls for prior qualifications, socio-economic status and gender. The ordered probit analysis provides effects in terms of marginal probabilities of a ranked outcome controlling for other variables. In this case the effect of adult education on the attitude cluster to which an individual belongs.

Three separate regressions are estimated, each treating a different but related sample. In the first ordered probit (Model 1), we model for all groups the effect of

adult learning on category membership at age 42, conditioning on the age 33 category. In the second ordered probit (Model 2), we estimate the sustaining effect of learning for individuals in the 'neither' category at age 33. That is, we test whether participation in adult learning sustains individuals in this desirable category. Our hypothesis is that for individuals in the neither category at age 33, participation in adult learning will mean that it is significantly less likely that they will be part of the authoritarian or racist–authoritarian category at age 42.

For the third ordered probit (Model 3), we model for individuals in the 'authoritarian' or 'racist-authoritarian' category at age 33 the transforming effect of learning. That is, we test whether participation in adult learning moves individuals out of these undesirable categories. Our hypothesis is that individuals in these categories at age 33 will be significantly more likely to move to the neither category at age 42 if they had pursued adult learning. Here we control for whether the individual was in the authoritarian or authoritarian-racist category at age 33.

Adult education, the topic of substantive interest, comprises four separate variables—academic courses, vocational courses, work-based courses and leisure courses. The number of academic courses is based upon the number of courses including GCSE, A level, degree or higher degree taken since 1991. The number of vocational courses is based on the number of courses including BTEC (Business and Technology Education Council) qualifications taken since 1991. We also include the numbers of non-qualification employer based work-related courses and leisure courses taken since 1991. These variables give us the number of various types of adult education course between ages 33 and 42.

As in previous work (Feinstein & Hammond, 2004) we control for the respondents' highest level of academic and vocational qualifications. We identify qualifications as 'missing' or by highest level using a scale devised using DfES qualification levels. For example, Level 3 qualifications might be A level (academic) or GNVQ Advanced (vocational). The respondents' occupational status at 33 is also included as a control using the standard Registrar-General's occupational scale. A variable is included to indicate missing data for academic qualifications, but not for vocational qualifications where the number of respondents with missing data is negligible. Female gender is an additional control. Details of control variables and descriptives are given in Appendix 1.

By using these control variables and by considering the outcome as effectively a change in racism we have dealt to some extent with selection bias. However, we can not be certain whether or not the estimated association of participation in adult education and extremism is an effect in a purely causal sense. The association may reflect elements of selection bias as well as of effects of learning participation. For example, those individuals who are racist–authoritarian may select themselves out of adult education. In recent qualitative research (Preston, 2005) we have found that racist adults were wary of adult education contexts involving diversity. Hence selection bias can not be fully ruled out. Moreover, although by using a model of change over time (in attitude, in adult education, in control variables) we remove some sources of individual variability, unobserved heterogeneity may remain. For

example, in differences in motivation between individuals. Therefore, the relationship between adult education and attitude change is best described as a conditional association rather than an effect. In the subsequent discussion we refer to effects of adult education, but would require further evidence in order to substantiate this claim. We return to this point in our conclusion.

The full results from these regressions are given in Appendix 2 and a summary of the effects of adult education is given in Table 3. Table 3 reports coefficients from the regressions. Marginal effects for the sustaining effect of adult learning (where we find significant and sizeable effects) are reported in Table 4 following a discussion of these effect sizes.

Examining the parameter estimates of adult learning on cluster membership for all respondents (Model 1) we see that for academic and leisure courses there is an effect (significant at the 1% level) that suggests that individuals who undertook these types of learning are more likely than non-participants to be in the neither category at age 42. Therefore, some types of adult learning have an effect on the cluster to which individuals belong.

However, if we break this effect down to compare between individuals by prior cluster membership (Models 2 and 3), then results are mixed.

For individuals who start in the 'neither category' (Model 2), there are significant effects of academic, leisure and work related courses in sustaining individuals in this category significant at the 1% level (5% in the case of work courses). This finding is in agreement with our hypothesis that adult education has a sustaining effect on attitudes. By comparison, for individuals who start in the 'authoritarian' or 'racist authoritarian' category (Model 3) there are no significant effects at the 5% level. We therefore find that there are no transforming effects of learning for individuals who start in this extremist group.

The effects of adult learning on these attitudes appear to be sustaining rather than transforming. All forms of adult learning seem to sustain individuals who are not racist–authoritarian or authoritarian in the desirable (neither) category. However, adult learning does not lead to a movement of individuals out of

Model	(1) All groups	(2) Sustaining effect	(3) Transforming effect
Academic AE	0.086	0.164	-0.018
	(3.40)**	(4.23)**	(0.93)
Vocational AE	-0.028	-0.053	0.001
	(1.80)	(1.94)	(0.20)
Work Related AE	0.004	0.013	0.021
	(1.26)	(2.03)*	(1.16)
Leisure AE	0.036	0.049	0.019
	(2.96)**	(2.79)**	(0.22)

Table 3. Parameter estimates of adult education on cluster membership

Note. * significant at the 5% level; ** significant at the 1% level.

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	Probability of racist– authoritarian at age 42	Probability of authoritarian at age 42	Probability of neither category at age 42
Academic	-0.8%**	-5.6%**	6.5%**
Vocational	0.3%	1.8%	-2.1%
Work-related	−0.1%*	-0.4%*	0.5%*
Leisure	-0.3%**	$-1.7\%^{\star\star}$	1.9%**

Table 4. Marginal effects of adult learning on those in the 'neither' category at age 33 (Sustaining effects)

Note. * significant at the 5% level; ** significant at the 1% level.

undesirable attitudinal categories, at least in terms of racist–authoritarian or authoritarian clusters. It is a preventative rather than a palliative measure, at least in the forms in which it was delivered to those who participated in the programmes observed in these data. It may be that more targeted programmes might have transformative possibilities but it does not appear that general adult learning has such effects.

Table 4 provides an indication of the effect sizes for the sustaining effects of adult learning.

As can be seen in Table 4 there are significant effects of adult learning on sustaining individuals who were in the 'neither' category at age 33 in that category at age 42. These effects are sizeable, particularly for academic adult education courses, in that they are of the order of greater than a percentage point. In terms of the probability of being in the racist-authoritarian category at age 42, for each academic adult education course studied between 33 and 42 there is a -0.8% probability of being in that category at age 42. There is also a reduced probability of being in this category for each work-related course taken (-0.1%/course) and each leisure course taken (-0.3%/course). Although taking a vocational course appears to increase the probability of being in this category at age 42, there is no significant effect at the 5% level. Similar effects for the same types of course are shown for the probability of being in the authoritarian category at age 42. Indeed, there is a particularly sizeable effect of taking an academic adult education course on reducing the probability of being in the authoritarian category at age 42 (-5.6%). It is also apparent from the last column of table 4 that adult learning increases the chances of remaining in the 'neither' category at age 42 given that an individual was a member of this category at age 33. For each academic adult education course taken, there is a +6.5% probability of remaining in the 'neither' category at age 42.

Discussion

What is shown by this cluster analysis is that effects of adult education are not simply uni-dimensional, but may have an effect on the continuation of connected values. Namely, adult education in terms of academic, work-related or leisure courses has

significant effects (at the 5% level) in sustaining individuals in a non-racist authoritarian / authoritarian position. However, *transformative* effects of adult education in terms of changing the views of extremist racist–authoritarians are not found.

This finding might seem initially surprising given that previous research indicates the correspondence between educational level or years of education and moderating attitudes in terms of racism and authoritarianism (Emler & Frazer, 1999). However, in this research we are dealing with fundamentally changing the views of an extremist group to those more in line with the majority of the population—this is a different research question from whether education changes ones position on an attitude scale. Adult education may make 'nicer' (slightly less racist and authoritarian) extremists, but does not appear to shift attitudes significantly—at least by using a person centred approach. We would concur with Gaine (2000, p. 78), who concludes (in terms of the effectiveness of anti-racist education in white areas) that 'it can be enormously difficult, and slow for one persons frame of reference to shift'. However, an important finding is that adult education may have an 'inoculation quality' (Côté & Levene, 2002, p. 142) in protecting individuals from adopting an extremist position in terms of racism and authoritarianism. As well as contributing to generally more tolerant views (Feinstein & Hammond, 2004) adult education may prevent individuals from agreeing with extremist statements. Of course, adult education is only part of lifelong learning. It may be that earlier education is instrumental in preventing the development of extremist views, or that targeted interventions for this group are more appropriate. Naturally, others might argue that resources might be better spent on minority-ethnic groups and that changing views that liberals find unpalatable is not the best use of state monies! We have no prior views on this point, but hope that this paper will contribute towards future debate on the social purposes of learning.

As to future research in this area, we concede that we have not established whether adult education affects attitude change in a substantive sense—only that there is a *potential* effect. Although the longitudinal design of the study (modeling change) means that we have controlled for unobserved heterogeneity in the sample we cannot rule the possibility of unobserved variability out. We are also cautious as to whether there might be reverse causality in the relationship between adult education and attitude change. We consider that there is evidence of a conditional association between adult learning and sustaining a non racist—authoritarian world view but this needs to be investigated further through both qualitative and quantitative analysis. The mechanisms by which education may lead to a change in political ideology have been well documented (Emler & Frazer, 1999) but these have focused on attitude changes in the general population. A case study approach of political extremists and their educational trajectories may be required. We also note that using the dataset we have created, and more sophisticated modeling techniques, there might be potential to examine those on the 'margins' of becoming racist—authoritarian.

Finally, we concede that political extremism of this kind is a multifaceted issue and in this paper we have not dealt with issues of whether attitudes are indicative of problematic extremist behaviour (other than voting patterns), or contextual and

institutional issues related to extremism. However, we have raised some initial scepticism regarding whether adult education is an appropriate intervention in changing extremist views, whilst giving some hope that it is important in maintaining less reactionary views.

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References

- Adorno, T., Frenkel-Brunswick, W., Levinson, D. & Sanford, R. (1950) *The authoritarian personality* (New York, Harper & Row).
- Altemeyer, B. (1981) Right wing authoritarianism (Winnipeg, University of Manitoba Press).
- Ajzen, I. & Fishbein, M. (2000) Attitudes and the attitude-behaviour relation: reasoned and automatic processes, in: W. Stroebe & M. Hewstone (Eds) *European review of social psychology* (Chichester, John Wiley & Sons), 1–33.
- Arrow, K. J. (1963) Social choice and individual values (New Haven, CT, Yale University Press).
- Baron, S., Field, J. & Schuller, T. (2000) Social capital: critical perspectives (Oxford, Oxford University Press).
- Bergman, L. (1998) A pattern-orientated approach to studying individual development: snapshots and processes, in: R. Cairns, L. Bergman & J. Kagan (Eds) *Methods and models for studying the individual* (California, Sage).
- Bynner, J., Ferri, E. & Wadsworth, M. E. (2003) Changing Britain, changing lives: three generations at the turn of the century (London, Institute of Education).
- Côté, J. & Levene, C. (2002) *Identity formation, agency and culture* (New Jersey, Lawrence Erlbaum).
- Delhey, J. (1999) *Inequality and attitudes. Post-communism, western capitalism and beyond* (Berlin, Wissenschaftszentrum Berlin für Sozialforschung).

- Dovidio, J. & Gaertner, S. (1996) Affirmative action, unintentional racial bias and intergroup relations, *Journal of Social Issues*, 52(4), 51–75.
- Downs, A. (1957) An economic theory of democracy (New York, Harper).
- Emler, N. & Frazer, E. (1999) Politics: the education effect, Oxford Review of Education, 25(1/2), 271–272.
- Feinstein, L. & Hammond, C. (2004) The contribution of adult learning to health and social capital, Oxford Review of Education, 30(2), 199–221.
- Feldman, S. (2003) Enforcing social conformity: a theory of authoritarianism, *Political Psychology*, 24(1), 41–74.
- Gaine, C. (2000) Anti-racist education in 'white areas': the limits and possibilities of change, *Race, Ethnicity and Education*, 3(1), 65–81.
- Kagan, J., Snidman, N. & Arcus, D. (1998) The value of extreme groups, in: R. Cairns, L. Bergman & J. Kagan (Eds) *Methods and models for studying the individual* (California, Sage).
- Keulder, C. & Spilker, D. (2002) In search of democrats: youth attitudes towards democracy and non-democratic alternatives (London, IPPR).
- Kleinpenning, G. & Hagendoorn, L. (1993) Forms of racism and the cumulative dimension of ethnic attitudes, *Social Psychology Quarterly*, 56(1), 21–36.
- MacPherson, W., Cook, T., Sentamu, J. & Stone, R. (1999) The Stephen Lawrence inquiry. Report of an inquiry by Sir William Macpherson of Cluny (London, Stationary Office).
- Moon, C., Pierce, J. & Lovrich, N. (2001) Political culture in the urban west: is it really different?, *State and Local Government Review*, 33(3), 195–201.
- Norris, P. (2001) Making democracies work: social capital and civic engagement in 47 societies (Boston, Harvard University).
- Pettigrew, T. (1998) Intergroup contact theory, Annual Review of Psychology, 9, 65-85.
- Preston, J. (2005) Adult learning, identity and engagement (London, Wider Benefits of Learning).
- Preston, J. & Feinstein, L. (2004) Adult education and attitude change (London, Wider Benefits of Learning).
- Putnam, R. (1996) Who killed civic America, *Prospect*, 6, 66–72.
- Ray, J. J. (1983) Half of all authoritarians are left-wing: a reply to Eysenck and Stone, *Political Psychology*, 4, 139–144.
- Ray, J. (1991) Authoritarianism is a dodo: comment on Scheepers, Felling and Peters, *European Sociological Review*, 7, 73–75.
- Roediger, D. R. (2002) *Colored white: transcending the racial past* (Berkeley, University of California Press).
- Roeser, R. & Peck, S. (2003) On lifespace configurations and educational attainments in adolescence: a person centred approach, in: W. Damon, S. Peck & R. Roeser (Eds) *New directions for child and adolescent development: volume 101. Pattern-centred approaches to studying human development in context* (San Fransisco, Jossey-Bass).
- Roiser, M. & Willig, C. (2002) The strange death of the authoritarian personality: 50 years of psychological and political debate, *History of the Human Sciences*, 15(4), 71–96.
- Schuller, T., Preston, J., Hammond, C., Brasset-Grundy, A. & Bynner, J. (2004) *The benefits of learning* (London, RoutledgeFalmer).
- Yang, M., Goldstein, H. & Heath, A. (2000) Multilevel models for repeated binary outcomes: attitudes and voting over the electoral cycle, *Journal of the Royal Statistical Society: Series A*, 163(1), 49.

Appendix 1. Control variables

Variable	Type and min/max value	Comparison category if dichotomous	Mean (2 SF)	SD (2 SF)
Number of accredited academic courses	Continuous (0–8)	N/A	.14	.53
Number of accredited vocational courses	Continuous (0–9)	N/A	.29	.81
Number of unaccredited work related courses	Continuous (0–29)	N/A	1.3	3.8
Number of unaccredited leisure courses	Continuous (0–14)	N/A	.39	1.1
Social class I at 33	Dichotomous (0-1)	Social class V at 33	.05	.21
Social class II at 33	Dichotomous (0-1)	Social class V at 33	.31	.46
Social class IIInm at 33	Dichotomous (0-1)	Social class V at 33	.21	.41
Social class IIIm at 33	Dichotomous (0-1)	Social class V at 33	.18	.39
Social class IV at 33	Dichotomous (0-1)	Social class V at 33	.14	.36
Academic qualification at Level 1	Dichotomous (0–1)	No Academic qualification	.17	.38
Academic qualification at Level 2	Dichotomous (0–1)	No Academic qualification	.41	.49
Academic qualification at Level 3	Dichotomous (0-1)	No Academic qualification	.10	.31
Academic qualification at Level 4	Dichotomous (0-1)	No Academic qualification	.14	.34
Academic qualification at Level 5	Dichotomous (0-1)	No Academic qualification	.02	.13
Vocational qualification at Level 1	Dichotomous (0-1)	No vocational qualification	.12	.33
Vocational qualification at Level 2	Dichotomous (0-1)	No vocational qualification	.14	.34
Vocational qualification at Level 3	Dichotomous (0-1)	No vocational qualification	.11	.31
Vocational qualification at Level 4	Dichotomous (0-1)	No vocational qualification	.18	.38
Female	Dichotomous (0-1)	Male	.51	.50

Appendix 2. Ordered probits

(i) All groups

Group 1 (Authoritarian-racist)	0.634
	(11.74)**
Group 2 (Authoritarian)	0.977
Number of accredited academic courses	(17.14)**
Number of accredited academic courses	0.086 (3.40)**
Number of accredited vocational courses	-0.028
Trained of decreated vocational courses	(1.80)
Number of unaccredited work related courses	0.004
	(1.26)
Number of unaccredited leisure courses	0.036
	(2.96)**
Social class IV at 33	0.012
C1 -1 III 22	(0.17)
Social class IIInm at 33	0.042 (0.60)
Social class IIIm at 33	0.002
occiai ciass IIIII at 99	(0.03)
Social class II at 33	0.049
	(0.69)
Social class I at 33	0.049
	(0.53)
Social class missing	0.025
A 1 ' 1'C ' 1 1 1 22	(0.29)
Academic qualification at Level 1 at 33	0.071 (1.58)
Academic qualification at Level 2 at 33	-0.001
Troudeline qualification at Devel 2 at 33	(0.02)
Academic qualification at Level 3 at 33	0.147
•	(2.65)**
Academic qualification at Level 4 at 33	0.260
	(4.70)**
Academic qualification at Level 5 at 33	0.457
Missing and demis qualification	(3.96)**
Missing academic qualification	0.071 (0.34)
Vocational qualification at Level 1 at 33	-0.016
vocational qualification at 20vol 1 at 33	(0.38)
Vocational qualification at Level 2 at 33	0.038
•	(0.94)
Vocational qualification at Level 3 at 33	0.037
	(0.85)
Vocational qualification at Level 4 at 33	0.001
Female	(0.02)
Гешае	0.010 (0.35)
Observations	8418

Absolute value of z statistics in parentheses * significant at 5%; ** significant at 1%.

(ii) Ordered probit for only those in the 'Neither' at age 33 (sustaining effect)

Group 1 (Authoritarian-racist)	N/A
Group 2 (Authoritarian)	N/A
Number of accredited academic courses	0.164
	(4.23)**
Number of accredited vocational courses	-0.053
	(1.94)
Number of unaccredited work related courses	0.013
	(2.03)*
Number of unaccredited leisure courses	0.049
	(2.79)**
Social class IV at 33	0.006
500M	(0.04)
Social class IIInm at 33	0.138
Social Guide IIIIIII at 33	(0.99)
Social class IIIm at 33	0.049
50 0191 01 100 22111 11 55	(0.35)
Social class II at 33	0.176
occiai class II at 33	(1.28)
Social class I at 33	0.269
occiai ciassi i at 99	(1.65)
Social class missing	0.105
occiai ciassi missing	(0.64)
Academic qualification at Level 1 at 33	-0.056
Transfer quantities at 2000 1 at 33	(0.60)
Academic qualification at Level 2 at 33	0.034
4	(0.42)
Academic qualification at Level 3 at 33	0.288
•	(2.95)**
Academic qualification at Level 4 at 33	0.413
•	(4.47)**
Academic qualification at Level 5 at 33	0.419
•	(2.91)**
Missing academic qualification	-0.194
	(0.56)
Vocational qualification at Level 1 at 33	-0.080
	(1.08)
Vocational qualification at Level 2 at 33	-0.041
	(0.53)
Vocational qualification at Level 3 at 33	-0.001
	(0.01)
Vocational qualification at Level 4 at 33	-0.067
	(1.08)
Female	-0.028
	(0.58)
Observations	2970

Absolute value of z statistics in parentheses * significant at 5%; ** significant at 1%.

(iii) Ordered probit for authoritarian racist and authoritarian category (transforming effect)

Group 1 (Authoritarian-racist)	0.624
	(11.49)**
Group 2 (Authoritarian)	0.025
NT 1 C 15 1 1 1	(0.72)
Number of accredited academic courses	-0.018
Number of accredited vocational courses	(0.93) 0.001
Number of accredited vocational courses	(0.20)
Number of unaccredited work related courses	0.021
Trained of anacorearca work related courses	(1.16)
Number of unaccredited leisure courses	0.019
	(0.22)
Social class IV at 33	0.013
	(0.16)
Social class IIInm at 33	-0.016
0 111 777 22	(0.20)
Social class IIIm at 33	0.001
Social class II at 33	(0.02) -0.085
Social class II at 33	(0.71)
Social class I at 33	0.004
00 0.111 0.1 100 2 111 0 3	(0.04)
Social class missing	0.100
	(1.95)
Academic qualification at Level 1 at 33	-0.007
	(0.14)
Academic qualification at Level 2 at 33	0.074
A 1 ' 1'C ' 17 10 10	(1.07)
Academic qualification at Level 3 at 33	0.091
Academic qualification at Level 4 at 33	(1.22) 0.658
readefine quantication at Ecvel 4 at 33	(2.52)*
Academic qualification at Level 5 at 33	0.219
•	(0.82)
Missing academic qualification	0.020
	(0.41)
Vocational qualification at Level 1 at 33	0.066
	(1.40)
Vocational qualification at Level 2 at 33	0.059
Vocational qualification at Level 3 at 33	(1.15) 0.051
vocational qualification at Level 5 at 55	(1.00)
Vocational qualification at Level 4 at 33	0.019
	(0.55)
Female Observations	5448

^{*} significant at 5%; ** significant at 1%.