



AQMeN (Applied Quantitative Methods Network)

Collaborative Small Grants Scheme

END OF AWARD REPORT

**The impact of social media on young people's attitudes towards
independence**

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The project

Overview

Building on the ESRC/AQMeN funded project exploring social media platforms in the Scottish independence referendum, this AQMeN small grant allowed an extension of our experimental research component and allowed us to extend our survey experiment to two secondary schools in Scotland. Our objective, using a survey experiment was to assess the extent to which negative comments in respect of 'Scotland'/Scottish independence, that are made in social media forums, have an impact on vote intention in the upcoming referendum.

Our results suggest that, contrary to expectations, there is no discernible impact on referendum vote intention depending on exposure to negative 'Scotland'/Scottish independence comments emanating in social media on intended behaviour. Our study did observe that participation in the research did see a movement away from a pro-Union stance, notwithstanding one's original answer to the independence question. We explain this small but significant movement by arguing that when people deliberate/consider the issues, they move towards a consensus point and away from the extremes.

Methodology

An experimental survey design was adopted. Our sample comprised students from two secondary schools in Scotland, namely Knox Academy Haddington in Edinburgh and Williamwood High in Glasgow. Students who were studying Modern Studies were asked to participate voluntarily in the survey after relevant consent had been obtained. In total, 249 school children took part in our survey (126 from Knox and 123 from Williamwood). The surveys were administered in Knox Academy on Friday 4 October 2013 and in Williamwood High School on Wednesday 9 October 2013. This sample of secondary school students was in addition to a sample of 860 university students from Strathclyde and Edinburgh Universities who also participated in a similar experimental exercise.

We devised a questionnaire measuring individual's attitudes on a range of social and political issues as well as collecting relevant demographic information. Two different types of questionnaire were developed: half of our sample were exposed to a version of the survey that contained three negative social media messages about Scotland and Scottish independence (the comments were taken from the *BBC Have Your Say* forums discussing Scottish independence) ranging from low to high in their intensity of negativity (treatment group). The remaining half of the sample was subject to surveys without these treatments (control group). Our dependent variable was an 11-point scale assessing likelihood of voting 'no' in the referendum (a pro-union position) versus voting 'yes' in the referendum (a pro-independence position). We asked this

question at two time points in both types of surveys (T1 and T2). Questionnaires were randomly distributed to participants with all data at our disposal anonymized.

Activities

1. Design of survey: Summer 2013.
2. Data collection in schools (and universities in larger project).
3. Data collation and creation of dataset: October-November 2013.
4. Data analysis: November 2013-January 2014.
5. Debriefing visit to participants: December 2013-February 2014.

Analysis

A range of descriptive and bivariate analysis was conducted on all variables of interest. Initial paired sample t-tests were conducted to establish whether our treatment group differed from our control group on average. This was followed by extensive regression analyses exploring individuals who moved between T1 and T2 employing linear and logistic regression as well as repeated measures GLM.

Findings/ Outputs

Findings

Our results show that being exposed to negative social media comments about Scotland/Scottish independence had no discernible impact on vote intention in the referendum, against our expectations. Our wider study also found that campaign material with a negative Westminster message did not have any impact on vote intention in the referendum, again not in line with our expectations in respect of campaign materials. In our concluding discussion, we speculate as to the reasons why we did not observe the expected effects including weakness of our treatments.

What we did observe was that participation in our study did result in a small but significant movement among all groups away from the pro-Union side. We account for this small but significant movement by arguing that when people deliberate/consider the issues, they move towards a consensus point and away from the extremes.

Outputs

1. *Knowledge exchange:*
 - Forthcoming academic article detailing our results - first draft to be presented at the Political Studies Association Annual Conference in Manchester in April 2014. We are

also scheduled to present our findings at the European Political Science Conference in Edinburgh in June 2014.

- Forthcoming blog post on the Future of UK and Scotland website which will launch the preliminary findings of the project – March 2014.

2. *Data and quantitative training:*

A dataset of our experiment complete with 1,060 respondents answers to a range of social and political attitude questions. This dataset will be made publically available at the completion of all analysis of the research and will also be used by the team in the AQMeN workshop on using the 'R' programme in April 2014.

3. *Career development:*

- David Nelson (MA graduate) obtained skills in data collection, collation and inputting, data analysis and enhanced their programming experience of SPSS. He also learned about how to devise and conduct experiments.
- Stephen Quinlan (Postdoctoral fellow) enhanced his skills of experimental methods and general linear models.

A: Project beneficiaries

A1: Graduate student on the project

MA graduate student obtained skills in data collection, collation and inputting, data analysis and enhanced their programming experience of SPSS.

A2: Academic and research staff on the project

Staff gained further experience of experimental design and of analysis techniques. They also produced an academic article and a blog post.

A3: Participants in our study.

Participants in the study learned about the experimental method and were introduced to the potential impacts social media can have on the political landscape, and made more aware of general issues associated with the independence referendum and politics more generally through participation in our research and a comprehensive debrief explaining the methods we employed and our preliminary results.

A4: Academic community at large.

Our results exploring the impact of negative comments made in social media forums on voter behaviour in the referendum is of general interest to the academic community at large

considering that national identity is considered to be an important factor in the referendum and the fact that to our knowledge, the issue of expressions of national identity stereotypes had not been explored to any great extent, especially on young people.

Furthermore, our results will be of interest to academics and politicians alike as it demonstrates that deliberation on the issue of independence has the opportunity of altering a person's position with respect to the independence debate.

A5: AQMeN

Data emanating from this project will form the basis of the AQMeN workshop on using the 'R' programme in April 2014. We also are scheduled to contribute to the AQMeN spring 2014 newsletter announcing our results' findings.

B. Project impact

Participation in the project by our subjects (i.e.: secondary school children at Knox Academy and Williamwood and university students at Strathclyde and Edinburgh if we include the main project) has allowed students to gain an understanding of a) social media and its potential impacts on political behaviour and b) the Scottish referendum more generally. Having agreed to voluntarily participate in our survey, all participants were afforded the opportunity of a comprehensive debriefing session from the project through a presentation to their class. This included a summary of the study's preliminary results for each class, an explanation of the experimental method, and a question and answer session focusing on social science methods and the Scottish independence referendum more generally.

In terms of wider impact, our results are scheduled to be launched in a blog piece on the *Future of UK and Scotland* website in March 2013. This will be followed by the presentation of an academic paper detailing our findings at the Political Studies Association Annual Conference in Manchester in April 2013, which will be attended by fellow academics and the media. Our intention is, following revisions based on comments received at the conference, is to submit our paper to a journal for publication. Concurrently, we will be approaching media organisations such as STV and the BBC shortly as a means of further publicizing our results beyond academics as we expect that our research findings will be of interest to political campaigns and decision makers, as well as the public more generally, especially as the referendum campaign enters its final phase.

C. Collaborative components

Collaboration on this project can be broken down into two dimensions. The first is the collaboration between team members which was inter-disciplinary bringing together political science, social policy, and marketing scholars, and inter-institutional between the University of Strathclyde and the University of Edinburgh.

Our second dimension of collaboration is our close working relationship with the two secondary schools that agreed to participate, namely Knox Academy Haddington, Edinburgh and Williamwood High School in Glasgow. This collaboration involved two research visits to each school: the first was to collect the data and also to allow students an opportunity to discuss the referendum in broad terms. The second visit was part of the debriefing session discussed above where each class was provided with information on experimental designs, the results of the project etc....¹

D. Innovative use of advanced quantitative methods

Our research design, namely the survey experiment was innovative in itself for a number of reasons:

- 1) Unit of analysis was schoolchildren who are coming of age to vote in the referendum this year. To our knowledge, this is the first time this group have been experimented upon with vote intention in mind.
- 2) The experiment marked the first attempt that we are aware of to test negative social media comments focusing on stereotypes/identities on voter behaviour.
- 3) The number of participants (n=249 schoolchildren) as well as 860 university students from the wider project ensured that there were an adequate number of participants to test our theoretical assumptions.

E. Knowledge exchange value of the report

As mentioned in our application (see under 'Timetable for completion of the project'), KE activities and subsequent publications are designed to coincide with the working schedule of the main ESRC social media grant which complements and integrates into this project.

Achieved to date:

- 1) We have been working with the Political Studies Association to publicise our core findings re: things to look out for when interacting with social media as part of a wider project on encouraging youth engagement, participation and citizenship. This builds upon the AQMeN Independence Teaching Pack (Eichhorn et al. 2013) we are a part of and attempts to broaden the audience for the AQMeN materials (and for our

¹ Debriefing session is scheduled at Knox Academy for later this spring.

subsequent update) to the rest of the UK. We are also keen for our audience to extend beyond schools, as all those engaging with social media should be aware of issues to consider that we illustrate from our research findings. Our report will be launched at the Political Studies Association Annual Conference in Manchester in April 2014 and we have been advised by Professor Matthew Flinders on how to maximise our publicity and impact on the work we have produced.

- 2) We returned to one school (Edinburgh school yet to do subject to their timing) and as part of the Modern Studies and research methods classes, we explained and visually illustrated our quantitative experimental survey design to a series of classes (N of students =100+).
- 3) Training of a postgraduate research assistant in data entry and data analysis and matters of experimental design and analysis
- 4) Additional methods skills (especially GLM) honed by Quinlan and Shephard

Forthcoming (2014):

- Academic article detailing our results - first draft to be presented at the Political Studies Association Annual Conference in Manchester in April 2014. We are also scheduled to present our findings at the European Political Science Conference in Edinburgh in June 2014.
- Blog post on the Future of UK and Scotland website which will launch the preliminary findings of the project – March 2014.
- AQMeN seminar (TBA)
- Contact parliaments and youth parliaments and relevant groups to disseminate core findings (TBA)

F. Attached documents and resources

The full comprehensive dataset will be deposited with AQMeN along with all relevant syntax files from any publications arising upon the completion of analysis and confirmation of publication.