SCOTTISH GOVERNMENT SOCIAL RESEARCH GROUP SOCIAL SCIENCE METHODS SERIES

Guide 4: Understanding and measuring attitudes

"Public attitudes matter in a democracy. Not only do they influence voting behaviour in elections, but they also influence policy, helping to shape whether or in what form certain proposals reach the statute book and even whether existing policies succeed. So, as an important element of political discourse, they are better measured than imputed."

Roger Jowell, 2005

What are attitudes?

An attitude can be defined as 'a psychological tendency to view a particular object or behaviour with a degree of favour or disfavour'. Attitudes are generally understood to be formed through a process of individual subjective evaluation (involving a rational assessment of costs and benefits), but also influenced by affective and emotional responses and related beliefs. Attitudes are defined as being specific to an object or behaviour while beliefs are more generic, relating to a wider worldview, and tend to be more stable.

Methods for capturing attitudes

A recent mapping exercise of the collection and use of attitudinal data across the Scottish Government² found that most SG studies on attitudes used quantitative methods. This included standalone surveys, questions in omnibus surveys and questions or modules on larger, existing surveys (most commonly Scottish Household Survey and the Scottish Social Attitudes Survey).

In such studies, attitudes are typically measured using two main types of scales: either **Likert Scales**, where there are five response categories ranging between two extreme positions, e.g. strongly agree and strongly disagree, or using **semantic differential** questions, which contain a set of opposites, e.g. easy – difficult, and the space between the opposites is graded from 0 expressing the lowest evaluation to 6 representing the highest evaluation, e.g. how would you rate the role of your teacher? Difficult (6) – Easy (0); Irritable (6) – Calm (0); Active (6) – Passive (0).

Quantitative approaches to attitudinal data collection are used widely by national government because they are the only way to assess the prevalence of attitudes across a population. Another advantage of quantitative attitudinal data is that it allows us to track changes in societal attitudes over time, e.g. by asking the same questions in the annual Scottish Social Attitudes Survey, as well as compare differences across space, e.g. through asking same questions in different countries using (for example) the British Social Attitudes Survey and European Social Survey.

A potential disadvantage of quantitative surveys is that it requires respondents to consider and make judgements about often complex or emotive issues in a relatively short space of time. A consequence of this is that surveys can oversimplify the issues under examination as well as the nature of public opinion with respect to those issues. Nonetheless, qualitative methods can effectively complement quantitative methods by examining more deeply the factors underlying attitudes. A, number of studies in the mapping exercise took a mixed method approaches. A smaller number of projects employed a purely qualitative approach.

¹ Albarracin at al (2005) Attitudes: Introduction and Scope, in Albarracin, D., Johnson, B. and Zanna, M. (eds), The Handbook of Attitudes, Routledge, p.4

² Conducted as part of a wider Review of the Collection and Use of Public Attitudes Data, Office of the Chief Researcher, October 2007

Uses of Attitudinal data

One of the key uses of attitudinal data in government is in the design, development and evaluation of behavioural interventions. Based on the perceived link (see below) between attitudes and behaviours, attitudinal data can provide a framework for examining the attitudinal influences that precede the behaviour change that the intervention seeks by investigating factors which might inhibit and or encourage the desired behaviours.

Attitudinal data can also help identify the social influences and actors that have the biggest impact on the attitudes of groups targeted for behavioural change, thereby allowing for indirect targeting of interventions. For example, policies aiming to reduce challenging behaviours among children may more usefully direct efforts at parents, through parenting skills training and support, rather than the children themselves, through anti-social behaviour orders³.

Public attitudes data can also identify individual differences within target groups, thereby alerting government to the potential need to provide different interventions for different groups in society. For example, attitudinal data on mental health and depression shows that there are significant age and gender effects, with older people and males holding the least positive attitudes towards people with depression⁴.

Finally, attitudinal data can be used in policy evaluation and subsequent policy improvements. This is where such data is currently most widely used by governments. Interventions seeking to effect behaviour change can be evaluated in terms of impact on attitudinal target variables as well as in terms of change in end behaviour itself, e.g. the impact of HIV prevention programme effectiveness can be judged against attitudes to safe sex as well as actual safe sex behaviour.

Attitudes and behaviours – key theoretical issues

As discussed above, the use of attitudinal data in the design and evaluation of behavioural interventions is based on a belief that attitudes and behaviours are linked. While empirical research does not support the use of attitudes as a *direct* proxy for behaviours, it is generally accepted that attitudes do have an *indirect* impact on behaviour alongside 'third' variables such as social norms.

There are a number of theories seeking to model the process whereby attitudes might be translated into behaviours. One of the most commonly used and accessible of these is Ajzen's Theory of Planned Behaviour (TPB), which is formed on the basic premise that attitudes are significantly correlated to behavioural intentions, which in turn are the proximal determinants of behaviour. A diagrammatical representation of the model is shown in Figure 1.

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³ Halpern, D., Bates, C., Mulgan, G., Aldridge, S., Beales, G & Heathfield, A. "Personal Responsibility and Changing Behaviour: the state of knowledge and its implications for public policy" (Feb 2004) Cabinet Office. London, http://www.cabinetoffice.gov.uk/strategy/work_areas/personal_responsibility.aspx

⁴ Connery, H.¹; Davidson, K. (2006) A survey of attitudes to depression in the general public: A comparison of age and gender differences, Journal of Mental Health, Volume 15 (2), pp. 179-189(11)

Beliefs about outcomes

Attitude towards the behaviour

Relative importance of attitude and norm

Beliefs about

Subjective

norm

Perceived Behavioural Control

Figure 1: Theory of Planned Behaviour model (Ajzen, 1991)

Source: GSR Public Perceptions Knowledge Review

what others

think

Another consideration when measuring the influence of attitudes on behaviour, is the 'principle of compatibility', which holds that when attempting to predict behaviours from attitudes, the behaviour and attitude in question should be defined at the same level of generality or specificity. This is because *general* attitudes towards an object tend to be poor predictors of any *specific* behaviour directed at that object, as the same general attitude may be expressed through a variety of quite different behaviours. For example, general positive attitudes towards conserving environmental resources may lead to individuals engaging in different specific behaviours, e.g. recycling glass or paper, using public transport more, turning down the heating, etc. However, when an aggregate measure is produced that measures whether people performed *any* of a large number of related behaviours in a particular area, correlations with general attitudes tend to be much stronger⁵.

A final theoretical issue is the influence of behaviours on attitudes. When a correlation between an attitude and a behaviour is found, it is often assumed that the attitude 'came first' and influenced behaviour. However, quantitative attitudinal research can only show correlation, not causation. There is a body of literature on how behaviours can influence attitudes, as well as being influenced by them. Behaviours can contribute to attitude formation, e.g. someone may agree to join a neighbourhood watch programme without much thought, and after having attended meetings, delivered flyers etc may rationalise these efforts by deciding that neighbourhood watch programmes are important ⁶. They have thereby gone from not having considered the issue at all to holding a positive attitude about it.

⁵ Azjen and Fishbein (2005) the Influence of Attitudes on Behaviour, in Albarracin, D., Johnson, B. and Zanna, M. (eds), The Handbook of Attitudes, Routledge, London

⁶ Olson, J and Stone, J (2005) The Influence of Behaviour on Attitudes, in Albarracin, D., Johnson, B. and Zanna, M. (eds), The Handbook of Attitudes, Routledge, London

Behaviours can also cause people to change their pre-existing attitudes through a variety of mechanisms, most of which can be explained by the theory of dissonance. This theory holds that people prefer harmonious associations between their attitudes, beliefs and behaviours and that when there is an inconsistency, or dissonance, people experience psychological discomfort. This discomfort motivates people to reduce the inconsistency, either by changing their behaviour or, where this would be too difficult or the action is irrevocable, changing their attitudes. This involves avoiding or disregarding information that supports the old, dissonant attitude, and finding support for the new attitude.

The two way relationship between behaviours and attitudes is also evident in government policy. Government policy is sometimes about updating the statute book to reflect wider societal changes (including attitudinal changes) which have already occurred. An example of this is the range of family law legislation in recent years in Scotland covering issues such as cohabitation, civil partnership and parental rights. However, policy may also drive changes in attitude through effecting behaviour change. An example of this is the smoking ban. Two years prior to the introduction of the ban, most people in Scotland thought smoking should be restricted, but only a quarter that it should be banned. By the time the ban was introduced in 2006, the figure supporting a complete ban had doubled to over 50%, increasing slightly further again by 2007. Arguably this shows that in some cases public policy can lead public opinion ⁸.

Perceptions and satisfaction data

Perceptions are related to attitudes, and the two concepts can be difficult to disentangle. Put simply, perception can be understood as a process of interpretation by which individuals ascribe meaning to things⁹ distinct from the evaluation process involved in attitudes. Perceptions both influence attitudes and are influenced by them. How an individual perceives particular people, things or policies will have an important influence on the attitudinal evaluation of these people, things or policies. On the other hand, attitudes will affect perceptions, as we tend to ignore or be more critical of information that contradicts our attitudes.

Measures of public perceptions of social policies, government institutions, and the quality of public services are used widely in government. The area where perceptions data is currently most widely used is in policy evaluation as an outcome indicator. Typically, measures focus on a particular type of perception, satisfaction. This is entirely appropriate where the policy goal is to specifically improve people's perceptions, as, for example, in a number of the indicators in the National Performance Framework, e.g. 'public perception of the general crime rate in local area'; 'percentage of adults who rate their neighbourhood as a good place to live'. However, using satisfaction data as a proxy for more 'objective' effectiveness/performance indicators in evaluating public services is more problematic for the following key reasons.

First, there is a 'perceptions gap' between people's generally positive perceptions of what is happening in their local area compared with consistently more negative perceptions of the equivalent service nationally. For example, a 2005 survey found that 68% of respondents were satisfied with their local NHS service, but only 47% with the NHS nationally ¹⁰. One reason for this effect may be the sources of information that inform perceptions at different levels. Perceptions of the neighbourhood are more likely to be based on personal experience or contacts, while information on the nation tends to come from national media coverage, which is more likely to focus on the negative. On another level, it is also argued

⁸ Data from the Scottish Social Attitudes Survey, 2004 -2007

⁷ Olson and stone (2005), as above

⁹ Eagly, A and Chaiken, S (1993) The Psychology of Attitudes, HBJ College Publishers, Fort Worth

that a gap exists between the public's poor perceptions of the performance of certain key public services and objective measures which have shown improvements in performance 11.

A second issue with satisfaction measures is that satisfaction with public services does not only reflect perceptions of performance, but also crucially depends on citizen's expectations. There is evidence that good perceived performance raises expectations for the future, which in turn can have a negative impact on satisfaction ratings. Better information provision can also lead to higher expectations, although evidence shows a positive correlation between satisfaction and feeling informed, showing the complexity in the relationship between expectations and satisfaction.

Conclusions

Government use of attitudinal data is currently focused mainly on policy evaluation and the subsequent further development of policies. One area where there remains significant scope for attitudinal research to be used more extensively is in the initial stages policy development that requires behaviour change — and clearly most government interventions require behaviour change at individual, household, business, community or national level. Attitudinal data can help us understand attitudes and behavioural intentions which influence the relevant behaviours; identify social influences and actors in the groups targeted for behaviour change; as well as highlight key differences within target groups.

To best support the design and evaluation of policy interventions, research should focus on relating specific attitudes to specific behaviours. Quantitative survey data can also usefully be combined with qualitative elements providing in-depth information on the relationship between attitudes and behaviours and the attitudes of particular sub groups. Investment in longer term studies and interventions which allow for the capture of attitudes as well as associated behaviour change will also help improve policy development.

Examples of the collection and use of public attitudes data

The Scottish Social Attitudes Survey

2007 Core module report: http://www.scotland.gov.uk/Resource/Doc/223197/0060077.pdf

Policy context: The desire to improve public trust, political efficacy and attitudes to government in general was a key factor informing the development of procedures for the new devolved institutions in 1999, many of which were specifically designed to encourage broader public engagement in decision-making. The Scottish Social Attitudes survey (SSAS) is the only robust and regular data source on trust in government, and without it, it would be impossible to track over time the extent to which devolved government in Scotland has been successful in meeting the original aspirations of the architects of devolution.

Methodology: The SSAS was established in 1999, and has run annually ever since, with a dedicated module on attitudes to government being included since 2004. It consists of around 1,500 face to face CAPI interviews with a representative probability sample of the Scottish population.

Result: Time series data shows that the proportion of respondents who trust the devolved Scottish government to act in Scotland's interest has been significantly higher than the proportion who trust the UK government to do the same in every year since 1999. Data from the SSAS on public perceptions of government is used by corporate management for monitoring purposes (in the 'balance scorecard').

¹¹ See Ben Page (Ipsos MORI) presentation here for further detail on the local/national and perception/performance perceptions gaps: http://intranet/lnExec/AboutUs/Professional-Groups/SocialResearchGroup/PuttingCitizensFirstPresn

FOOLSSPEED 2002 Campaign Evaluation

http://www.scotland.gov.uk/Publications/2002/10/15695/12380

Policy context: The 5 year 'FOOLSSPEED' campaign was designed to reduce urban speeding in Scotland, and was targeted particularly at 25-44 year old male drivers. It centred around three 40-second TV adverts and was designed around a psychological model of behaviour (Theory of Planned Behaviour) and deliberately avoided using graphic, fear-arousing imagery.

Methodology: The evaluation of the campaign was conducted using a three-year longitudinal survey of a quota sample of drivers aged 17–54. The aims of the evaluation were to: assess recall and awareness of the adverts; examine drivers' responses in terms of comprehension of and identification with key messages; and measure drivers' reported behaviour, attitudes, beliefs, subjective norms and perceived behavioural control in relation to speeding. Attitudes data were used here to make an explicit link between attitudes, beliefs, social influences and associated speeding behaviours, with the Theory of Planned Behaviour providing a framework for exploring the relationship between attitudes, behavioural intentions and actual behaviours.

Result: The evaluation provides strong evidence that the campaign was associated with a positive change in attitudes and beliefs towards speeding, and validates the use of belief-based advertising of road safety messages. The success of the adverts, has had a strong influence on subsequent road safety campaigns, both across the UK and further afield.

USA Strategy Research 2007

http://www.scotland.gov.uk/Publications/2007/09/18092425/0

Policy context: The USA Strategy is one of three international strategies (China, Germany and the USA) aimed at promoting Scotland and Scottish devolved policy interests internationally by increasing engagement, encouraging collaboration and improving co-ordination of activities undertaken by government and others.

The USA Strategy had a series of identified targets and indicators to monitor achievement against its objectives, including two targets based on perceptions of and attitudes towards Scotland among the general public and business people. There was no existing baseline measure of perceptions of Scotland within the USA, therefore the study was designed to meet this requirement. The research also aimed to increase understanding of decision making in relation to studying in and forming business links with Scotland and to test marketing materials promoting Scotland, to help support future policy development.

Methodology: The methodology comprised a scoping phase with initial desk research, followed by online surveys with the general public and business people; follow-up focus groups with the general public, students, academics and the business community, and an evaluation of promotional materials. The study aims were to provide baseline data on the profile and understanding of Scotland among the general public and business people; an understanding of decision-making in relation to studying in and forming business links with Scotland; and information on perceptions of Scotland and specific marketing materials.

Result: The research was not used as originally intended (to measure progress within the USA Strategy) because of the change in government that took place in May 2007. However, the research is informing the process of refocusing the Scottish Government's efforts in the USA and reviewing the previous administration's strategy. It has also fed into broader work with students and academics to promote Scotland as a place to study and work and has also added to the wider evidence base for use across the office, including new strategy development around the Fresh Talent Initiative and has flagged the value of using perceptions data in meeting national performance indicators.

Key references/Links

Roger Jowell, Options for Monitoring Public Attitudes to Transport Issues, Department of Transport, copy available from OCR

Albarracin, D., Johnson, B. and Zanna, M. (2005), The Handbook of Attitudes, Routledge, London

Scottish Social Attitudes Survey data archive, http://www.esds.ac.uk/government/ssa/

Scottish Social Attitudes Survey publications list:

http://www.natcen.ac.uk/scotland/pages/sc scsrpublications.htm#SSA

This guide was prepared by Franca Eirich (OCR) and Kirstie Corbett (Lifelong Learning)