**Method in Action Case Studies:**

**Title:** Using the theory of change to support an evaluation of a health promotion intervention

**Main author of the case study:** DrLouise Warwick-Booth, Leeds Metropolitan University

**Evaluation team members and co-authors:** Professor Jane South,Dr Ruth Cross, Dr James Woodall and Rhiannon Day.

**Methods Used:** semi-structuredinterviews, focus groups, questionnaire, secondary analysis of existing data, purposive sampling

**Disciplines:** Health promotion

**Keywords**: Evaluation, realistic evaluation, theory of change, health promotion, interviews, focus groups, questionnaires, mixed methods.

**Abstract**

In 2012, I project managed a team of researchers who were commissioned to undertake an evaluation of the Sunderland Health Champions Programme. Evaluation is an activity that remains central to health promotion practice because it is concerned with assessing whether interventions are effective (Green and South 2006). Health Champions are a growing component within the British public health workforce and their roles are emphasised within the coalition’s Government’s public health strategy. However, there is the need for further exploration of the way in which Health Champions work and the effectiveness of programmes that use Health Champions as a mechanism to try to achieve positive health changes. Therefore Sunderland tPCT commissioned independent researchers, staff from the Centre for Health Promotion Research at Leeds Metropolitan University to evaluate their Health Champion Programme.

This case study provides an account of the evaluation, taking the reader through the methods that were used and in particular focusing upon the use of a theory of change approach that is associated with realistic evaluation as a specific approach. The case sheds light upon the challenges of evaluating practice initiatives as well as highlighting the usefulness of theory of change as an evaluation tool.

**Learning Outcomes**

By the end of the case you should:

Have a better understanding of the methodological challenges involved in conducting evaluation research within health promotion settings;

Understand the methodology of using theory of change to assess the success of health promotion interventions;

Be able to examine the advantages of using mixed methods approaches when conducting evaluation research;

Be able to assess the pros and cons of time-limited evaluation approaches within health promotion settings.

**Project overview and context**

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The Sunderland Health Champions Programme is an initiative which aims to improve health and address inequalities in the Sunderland area via the creation of a workforce development scheme. The programme seeks to identify staff groups and volunteers who through personal face to face contact with clients present novel opportunities to reach individuals and communities experiencing poor health and/or health inequalities. The programme set out to deliver training to these staff groups to in order to skill staff and raise people’s awareness so that services may then demonstrate the practical implementation of the idea that every contact is a health improvement contact. The pilot project which started in November 2010 was overseen by Sunderland tPCT and delivered in partnership with a range of training providers and local employers. The Sunderland Health Champion programme is based on a social movement approach to achieve an “industrial scale” approach to addressing health inequalities and, ultimately, shifting culture. It aims to do this by utilising and expanding Health Champions circles of influence (self, family and friends, clients, wider community) in relation to health improvement.

Existing evidence about Health Champions shows that they have become an important element of the lay public health workforce (White et al., 2010). More evidence is needed to understand the mechanisms of change that lead to improvements in health particularly as lay health workers often focus upon working with underserved communities in relation to health inequalities (South et al 2012). This evaluation aimed to contribute to the evidence base by exploring the specific approach used in Sunderland.

The evaluation team examining the Sunderland Health Champion programme wished to establish how well it was meeting its existing objectives and to quantify its impact upon teams, services, organisations and communities within the area in which the programme was operating.

In order to conduct a realistic evaluation, the evaluation team had the specific task of assessing the two core objectives of the programme:

a) The evaluation examined whether raising health awareness and promoting lifestyle change amongst training participants was taking place.

b) The evaluation examined how staff, volunteers and community organisations were identifying and acting upon opportunities to promote health with the service users with whom they had routine contact.

The evaluation focused especially on capturing the views and experiences of course participants and service managers in order to assess the programmes performance against its core objectives, and to ultimately measure the impact that the programme has had upon participants, organisations and communities within Sunderland.

**Context**

The Health Champions programme that is the subject of this case study emerged in the context of significant health inequalities within the Sunderland area, (NHS South of Tyne and Wear and Sunderland City Council, 2011), and a commitment and vision articulated in the NHS Sunderland Teaching Primary Care Trust Integrated Strategic Operational Plan 2011-2015 to reduce these. Part of that vision is to shift the balance from treating illness to helping and supporting individuals to live longer and healthier lives. One strategy that is attempting to achieve this is the Health Champion programme.

The strategic aim of the Sunderland Health Champions Programme is to improve the health of all disadvantaged communities in Sunderland by developing the Health Champions role as a mechanism to support local people in positively addressing both health determinants and accessing appropriate services. The Sunderland Health Champions Programme aims to address health inequalities and ultimately shift culture in relation to health by utilising and expanding Health Champions’ circles of influence (self, family and friends, clients and the wider community) as a strategy to improve health.

This Health Champion programme is taking a unique approach to developing capacity for delivery of health promotion in that the training provided is not exclusive to volunteers, but is also available to front-line employees working for the local authority and within other workplaces. Health Champions undertake five training modules, offered by different training providers including

1. Understanding Health Improvement: This is a Royal Society for Public Health (RSPH) approved course providing individuals with knowledge and understanding of the benefits of good health and well-being. It also aims to equip people with the knowledge and understanding of the principles of promoting health and well-being and to develop the public health skills to support lifestyle changes.
2. Emotional Health and Resilience: a course that aims to support staff or volunteers in terms of training them in how to promote emotional resilience in others.
3. Financial Capability: a course for staff and volunteers to enable them to support and signpost people experiencing financial difficulties.
4. Smoking Brief Intervention: a course to train people to conduct brief interventions and to provide very brief advice in relation to smoking cessation.
5. Alcohol Brief Intervention: a course training people to conduct brief interventions and to provide advice in relation to alcohol consumption, as well as training in relation to appropriate referral where necessary.

These training modules once completed lead to an individual gaining the label of a Health Champion, with the expectation that once trained the Health Champions will communicate via their existing ‘circles of influence’ as part of a team of people who educate and advise others in relation to health. For example, Health Champions should educate friends, family, clients and neighbours as the starting point for health education and improvement upon completion of their training. Therefore the programme while implemented in workplaces has an orientation to the community settings where many staff who had undertaken the training both live and work.

**Research practicalities**

The evaluation was carried out between November 2011 and April 2012. The evaluation used a mixed method design with quantitative and qualitative components.

i. Interviews were conducted with key stakeholders from different key partner organisations, both the statutory and voluntary community sectors;

ii. Focus groups were conducted with Health Champions from both statutory and voluntary community sectors.

iii. The quantitative component comprised analysis of programme monitoring data and a questionnaire-based survey to gauge impact at an individual level.

**Methods**

**Interviews:** the qualitative component of the research began with individual semi-structured interviews being conducted with key stakeholders who had developed and delivered the programme. Twenty two key stakeholders were involved in interviews conducted by the evaluation team in January and February 2012. Semi structured interviews were carried out by the research team to direct discussion around a number of key themes comprising: involvement in the programme, perceptions of the role, motivations for doing the training, recruitment processes, support and impacts on individual, community and public health. Interviews were usually carried out face to face throughout January and February 2012. However, 3 telephone interviews were carried out with stakeholders who were not able to meet in person due to time constraints.

**Focus groups**: 4 focus groups were carried out during January 2012 to capture the views of the Health Champions themselves. Given the variety of contexts in which the Sunderland Health Champions were working, it was necessary to differentiate and compare views of champions within statutory and third sector organisations and those volunteering. Thus participants from each of these sectors were invited to separate focus groups. During the focus groups the research team facilitated discussion around key themes including: how training was used, motivations for doing the training, support received and impact of the training on themselves and others. The focus groups were designed to be interactive and engaging as well as offering a chance for Health Champions to network with each other. They allowed opportunities for group discussions and chances for people to share experiences.

**Quantitative data collection:** the main quantitative component of the evaluation was a questionnaire, administered online and sent to all Health Champions. The survey was designed to complement the monitoring data already gathered through the tPCT database and covered key variables on Health Champions, the contexts they were working in and the reported impact on training. The questionnaire was administered online using SNAP (similar to Survey Monkey but with more flexibility/scope) and was complemented by administering questionnaires to Champions within the focus groups also, and making paper-based questionnaires available upon request. Finally, Sunderland tPCT held a small amount of monitoring data, which the evaluation team were able to access and analyse to produce some descriptive statistics as part of the quantitative data set.

**Sampling**

Purposive sampling was used throughout the data collection. This sampling approach is useful when there are a limited number of people who are appropriate for addressing the aims of the study. Thus, the research team working with Sunderland tPCT chose the sample based on who they thought was appropriate for the study. For the qualitative interviews a list of 38 key stakeholders involved in the programme was devised by Sunderland tPCT as the sampling frame from which to select interviewees. This initial list of key stakeholders for the programme was administered to the evaluation team in December 2011 by the tPCT and each stakeholder was contacted and invited to take part in the evaluation. 22 consented to participate in a sample that consisted of tPCT leads and staff involved in the implementation and operation of the training programme, individuals who formed the local government committee responsible for overseeing programme development, training deliverers and managers of Health Champions from the statutory, voluntary and community sectors. Wider stakeholders were also included in order to provide broader views on the strategy.

A database containing all of the champions who had successfully completed their training and consented to the tPCT to take part in the evaluation (144 Health Champions) was also provided to the evaluation team by Sunderland Teaching Primary Care Trust. Consequently, all Health Champions were invited to participate in the focus groups. 144 (out of a total 155) Health Champions consented to the tPCT to take part in the evaluation after completing all of their training. These Champions were then contacted by the evaluation team to participate in both the focus groups and in completing the questionnaire. 33 Champions participated across 4 focus groups, 16 of these Champions were from the statutory sector and 17 Champions from the community and voluntary sector.

The same Health Champions were also included in the sample for the questionnaire; thus the questionnaire sent to all 144 Health Champions. A total of 58 surveys were returned: 52 online and 6 paper submissions (40% response rate). Table 1 provides an overview of the data collection conducted within this evaluation.

**Table 1 - Overview of the data collection for the Sunderland Health Champion Evaluation**

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|  |  |  |
| --- | --- | --- |
| Aspect of the data collection  | Sampling frame  | Total respondents  |
| Qualitative semi-structured interviews | 38 key stakeholders  | tPCT staff 6 Area committees/Task and Finish Group 4Training Deliverers 4Managers of Health Champions 6Wider stakeholders 2 *TOTAL 22 interviews* |
| Qualitative semi-structured focus groups  | 144 Health Champions  | Statutory Sector Health Champions 16 Voluntary/Community Sector Health Champions 17*TOTAL 33 health champions* |
| Quantitative - questionnaire | 144 Health Champions | *TOTAL 58 completed questionnaires* |

**Ethics**

Ethical approval to conduct this study was obtained through the University research ethics process. Informed consent was obtained from all participants prior to digitally recording all interviews and focus groups. Confidentiality and anonymity was assured across all methods used and the participant’s right to withdraw without prejudice was clearly expressed to each. All quotations used in reports and associated publications paper are anonymised, simply differentiating participants only as either Health Champions or stakeholders.

**Analysis**

All qualitative data was transcribed verbatim and then initially read and re-read by the research team to ensure familiarity with the content of the transcripts. Initial coding was undertaken in order to develop a coding framework using an inductive approach to identify the full range of emerging themes from the data. The coding framework was then applied to each transcript, with data subsequently organised into major thematic categories and sub categories. Themes were discussed and agreed within the research team.

The quantitative data from the questionnaire was exported from SNAP 10 to Excel and SPSS 19. Multiple choice variables were recoded from binary codes and frequency counts were generated with the production of frequency graphs and tables; these were used to display the data.

**Research design**

The evaluation used a mixed method design, combining qualitative and quantitative data collection and analysis, in an approach that has become increasingly accepted in health promotion research (Green and South, 2006). The evaluation used both qualitative and quantitative approaches in order to strengthen the findings by allowing some triangulation from different data sources. In addition to combining both quantitative and qualitative data collection, this evaluation also used a realistic evaluation approach, specifically applying the theory of change (TOC) (Judge and Bauld, 2001).

**Theory of change in evaluation research: realistic evaluation**

The TOC approach is a way of modelling how change will happen in a programme or intervention. It arose in the work of Chen, Rossi and Weiss who focused upon complex community initiatives and was further developed by the Aspen Institute (Fulbright-Anderson et al 1998). Health promotion programmes and interventions are often implemented with only implicit assumptions about how they work. Theory of change approaches are used in evaluations of complex community interventions, such as the Sunderland Health Champion’s Programme, as they allow for the exploration of why and how interventions work (Weiss 1995). Thus, the theory of change approach is an attempt to bring any latent assumptions to the surface (Green and South 2006). A theory of change is used to document and describe progress made towards outcomes within any given intervention. Therefore, the theory of change is an approach rather than a methodology in itself. Within this approach a written explanation of how a programme is moving from its activities to its objectives is produced. A TOC approach can be used before, during or after a programme has been implemented.

The evaluation under discussion in this case study used a theory of change framework (Connell and Kubisch 1988) to explore how health awareness was raised and how lifestyle change was then promoted amongst trainers, volunteers and community organisations, after individuals had completed the required training. The advantage of using a TOC approach is that it helps partners and stakeholders make explicit the links between activities delivered and programme goals (i.e. behaviour change). At the outset of the evaluation, partners and stakeholders were brought to develop and agree their ‘theories of change’. Facilitated by the evaluation team, a map was designed of the preconditions required to bring about the long-term goal of the Sustainable Sunderland Programme. This TOC was then ‘tested’ by the evaluation team.

Using this approach improves the rigour of any evaluation, especially as there are often methodological difficulties in using other localities as control sites for example, in this instance there are no similar programmes with which comparisons can be drawn. In this case, the evaluation team have extensive experience of applying realistic evaluation and TOC approaches for complex interventions.

When applying a theory of change in any evaluation, the approach must takes account of the context and needs of the local area, the mix of programme activities and the range of changes (outcomes) that may result at individual, community and population level. The evaluation also needs to produce robust evidence to inform decision making and service improvements. The evaluation in this case study used this approach by linking the context and the ways change occurred to the resulting outcomes (CONTEXT + MECHANISM + OUTCOME) (Pawson and Tilley 1997, Judge and Bauld 2001).

**Theory of change in action: testing the theory of change**

The evaluation in this case study tested a specifically developed ‘theory of change’ (Judge and Bauld 2001). This theory of change makes explicit the links between programme goals and the different contexts and ways in which Health Champions work. It provides a framework for mapping subsequent outcomes at individual, organisational and community level which fitted with the Sunderland approach based on ‘circles of influence’. Table 2 illustrates the theory of change used within the Sunderland Health Champion evaluation, as well as the evidence collected that was used to test it.

**Table 2 – Theory of change mapped against the evidence collected within the evaluation**

|  | **Programme Objectives** | **Mechanisms** | **Assumptions** | **Evidence of change -****Quantitative findings**  | **Evidence of change -** **Qualitative findings** |
| --- | --- | --- | --- | --- | --- |
|  **Step 1** | Build a training program to develop Health Champions in Sunderland who are responsive to local needs by November 2010, utilising third sector providers where possible. | Training programme built to develop Health Champions  | Training programme will prepare people for role | N/A | Training provider evaluation: Training programme developed and evaluated well. |
| **Step 2** | Recruit and train a minimum of 500 Sunderland Health Champions (250 Washington/City-wide, 250 West/City-wide) by March 2013, focusing on front-line workers or volunteers in contact with people in disadvantaged communities (geographical or communities of interest). | Engagement – recruit and train minimum of 500 health champions | Recruitment of people willing and able to take on roleReach into organisations and communities where health inequalities exist  | By December 2011, there were 603 trainees in the Health Champions programme and 155 fully trained health champions. Wide range of organisations with health champions – spread across statutory and third sector, including many organisations working with disadvantaged communities (geographical and communities of interest). High take up by local authority.The majority of survey respondents had a role outside the office, working with clients, customers or service users. | Variety of routes – some individuals had actively sought the Health Champion training and were highly enthusiastic about participating and taking on the role. Others had been asked by their line managers to take part and were often less excited by the programme.Qualities needed to be a health champion include social skills and enthusiasm/ commitment to make a difference.  |
| **Step 3** | Increase the ability of front-line staff/ volunteers to positively influence the health of themselves and others through shared knowledge, active brief intervention and signposting by completion of all five training modules. | Equip individuals to take on health promotion role | Training will motivate, develop awareness/skills and prepare people for role.Participants will be able and ready to do role following training  | Most survey respondents found the different modules of the training course very relevant to their work as Health Champions, ranging from 86% finding the Emotional Health and Resilience module very relevant through to 62% for the Financial Capability course.Participation in training had an influence on the respondents’ health awareness. 83% of survey respondents felt more confident to make changes to improve their own health, with 55% feeling much more confident. | Health champions very positive about the training - had equipped them for role. Emotional health and Financial Capability modules seen as particularly relevantSome evidence of learning and raised awareness about determinants of health and healthy lifestyles.Health Champions recognised the boundaries of their role and understood where their expertise ended and where professional guidance was needed. Positive impact on health champions confidence, self esteem and awareness of personal lifestyle choices as a result of the training received. |
| **Step 4** | Foster an ongoing feeling of shared responsibility and identification amongst Health Champions for improving the health of the local population and addressing health inequalities. | Staff & volunteers who are health champions will use knowledge and skills to influence clients, family etc.At same time local organisations embed health champion model into routine work | Health champions are able to engage clients and other community members.Able to share knowledge, deliver brief interventions and signpost. Training makes a difference to the extent to which they ‘make every contact count’. Local organisations will offer the right type of support and encouragement to allow health champions to work effectively.Health champion model is relevant for their core work.  | Over two thirds of survey respondents had used the training to try to improve the health of people they saw at work. 82% felt confident or very confident to apply what they had learned to improve the health of clients, customers or service users, and 70% found it easy or very easy to create opportunities to do this.Respondents reported that they were actively signposting to other services: 47% of survey respondents had signposted colleagues and 67% had signposted client, customers or service users to other services in the last 2 weeks. Respondents were using both the smoking and alcohol brief intervention: 49% of survey respondents had used the smoking brief intervention with friends in the last 2 weeks, 23% had used it with family and 21% had used it in the wider community. | Health Champions worked effectively within their ‘circles of influence’ and were able to provide information on health issues and signpost people effectively to services. Heath champions talking informally to friends and family – promoting positive lifestyle choices but less evidence of signposting.Champion approach raising awareness of health issues in communities & workplaces. Champions working with members of the public actively signposting to other services.Champions able to engage people – clients reportedly more comfortable talking to champions than health professionals. |
| **Step 5** | Spread the Sunderland Health Champion model through organizations across the City to support a whole systems approach to improving health and reducing health inequalities by March 2014. | A social movement is built  | The programme can achieve industrial scale.Having many health champions throughout diverse organisations will shift culture. Health champions will have increasing circles of influence in communities and organisations | N/A | Added value to public health as additional contribution – more informal than professional services.More support needed following training, especially where Health Champions worked solo in their organisations.Health Champions and most key stakeholders felt that a ‘critical mass’ of people had been trained, but as yet the Health Champion programme was not a ‘social movement’.  |

**Sunderland Evaluation: Practical lessons learned**

Evaluation is a methodological area that has many similarities to traditional social research. As you will have learned from this case study, evaluation research uses many of the same methodologies as traditional social research. In this instance interviews, focus groups and a questionnaire were used. However, evaluation usually takes place within a political and organizational context therefore it requires slightly different skills than traditional social research. For example, when conducting evaluation researchers often use management skills, group skills and need to be capable of sensitively working with a range of stakeholders.

Bearing this in mind, it is useful to consider the following tips when doing evaluation research:

1. **Evaluation is complex:** you will need to carefully plan your evaluation, and it is often useful to work in a stepped process starting with the clarification of aims and objectives, choosing indicators, linking outcomes to methods, understanding the context, collecting data and of course bringing all of this together (see Green and South 2006, chapter 4). The Sunderland Health Champions evaluation followed this stepped process.
2. **Each evaluation will be different:** You need to be aware of the context in which each intervention is taking place in order to understand the programme, and pay attention to the need to use different research methods and approaches according to their suitability.In this case study, a specific theory of change was developed based upon the way in which the Health Champions programme was operating. Every evaluation of an intervention requires its own unique theory of change.
3. **Evaluation can be fuzzy:** you may need to measure difficult conceptsor have to think carefully about what it is realistically possible to measure within an often very limited time-frame. For example, in the evaluation of the Sunderland Health Champions it was not possible to measure any individual outcomes in terms of health improvements for the individuals who received advice and brief interventions as these contacts were not recorded, tracked or indeed monitored. Therefore, data collection had to focus upon the Health Champions themselves as well as stakeholders.
4. **Evaluation can be political:** often when working within organisations political agendas and complex associated issues can arise.Evaluators tend to be able to improve their data collection and access to participants if they can establish a good working relationship with the organisation responsible for the programme under scrutiny. The Sunderland Health Champions evaluation progressed well and resulted in learning because the tPCT staff and the evaluation team established a good partnership from the outset of the process.

**Conclusions**

Evaluation is central to health promotion practice, and is an essential activity that can address questions about what works and why it does. Despite the complexities associated with doing evaluation research there are many guidelines available to help those who engage in this activity. This case study is just one example of a realistic evaluation approach in which a theory of change was developed and then tested in order to assess the Sunderland Health Champion Programme. Given the complexity of this type of research, evaluators need to be transparent about how they collect data and make decisions within their data collection. The case study written about here is a transparent description of one realistic evaluation that worked very effectively in practice. Of course no single piece of evaluation is perfect, ideally in this case it would have been more rigourous to sample participants who had received health advice yet this was not possible. That said, using realistic evaluation methodology was a positive experience in that it facilitated the evaluation teams understanding of the context, mechanisms and outcomes associated with the Sunderland Health Champion Programme.

**References**

Connell, J. P. and A. C. Kubisch (1988). *‘Applying a Theory of Change approach to the evaluation of Comprehensive Community Initiatives: progress, prospects and problems. New approaches to evaluating community initiatives.’* In K. Fulbright-Anderson, A. Kubisch and J. Connell (Eds) Theory, measurement and analysis. Washington D.C: The Aspen Institute.

Fulbright-Anderson K., Kubisch A.C., Connell J.P. (1998) *New Approaches to Evaluating Community Initiatives. Volume 2 Theory, Measurement, and Analysis* (Eds). Washington DC: The Aspen Institute.

Green, J. and South, J. (2006) *Evaluation* Buckingham: Open University Press.

Judge K, and Bauld L. (2001). ‘Strong theory, flexible methods: evaluating complex community-based initiatives.’ *Critical Public Health.* 11(1):19-38.

Pawson R, and Tilley N. (1997) *Realistic evaluation*. London: Sage.

South, J., Branney, P. and Kinsella, K. (2012) ‘Citizens bridging the gap? Interpretations of volunteering roles in two public health projects’ *Voluntary Sector Review* 2, 3, pp. 297-315.

Sunderland Data Annex- NHS South of Tyne and Wear and Sunderland City Council (2011). *Chapter 4: Life Expectancy And Mortality And Ill Health From All Causes in Sunderland Joint Strategic Needs Assessment 2011,* Data Annex. Version 4QAd, 229-260.

Weiss, C.,H. (1995). ‘Nothing as Practical as Good Theory: Exploring Theory-based Evaluation for Comprehensive Community Initiatives for Children and Families’ In *New Approaches to Evaluating Community Initiatives: Concepts, Methods, and Contexts,* James Connell et al. (Eds)Washington, DC: Aspen Institute.

White, J., South, J., Woodall, J. and Kinsella, K. (2010) *Altogether Better thematic evaluation - community health champions and empowerment.* Leeds: Centre for Health Promotion Research, Leeds Metropolitan University.

**Exercises and Questions**

1. What do you see as the major strengths of using a realistic evaluation approach?

Can you also identify any potential weaknesses?

1. In conducting evaluation research, how might the goals of the commissioners contrast with those of the researchers? What might this mean for the evaluation process?
2. If you were conducting evaluation research, what factors do you think would influence your choice of methods?
3. There are often power imbalances within research, so can you reflect upon how some of these might be addressed in evaluation research contexts?
4. Lay people and those who are in receipt of the intervention may not be particularly interested in participating in evaluation research so consider how you might motivate them to participate in your research.
5. Finally, consider some of the ways in which you might disseminate evaluation findings given that such research has the potential to influence both policy and practice.

**Read more:**

Green, J. and South, J. (2006) *Evaluation* Buckingham: Open University Press.

Judge K, and Bauld L. (2001). ‘Strong theory, flexible methods: evaluating complex community-based initiatives.’ *Critical Public Health.* 11(1):19-38.

Pawson R, and Tilley N. (1997) *Realistic evaluation.* London: Sage.