An introduction to realist evaluation

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Introduction to the workshop

- Overview of evaluation
- Introduce realist evaluation as a theory
- Explore an example of the approach
- Develop some programme theory

What is evaluation?

- 'Evaluation is presented as a form of applied social research, the primary purpose of which is not to discover new knowledge, as is the case with basic research, but to study the effectiveness with which existing knowledge is used to inform and guide practical action' (Clarke, 1999)

- Does not aim for truth or certainty…..to help improve programming and policy making (Weiss, 1997:516)

What is evaluation?

- Differs from research more in terms of its intended objective than in the nature of its design and its method of execution

- No single strategy unique to evaluation design

Influenced by policy and politics

- Stakeholder groups with vested interests
- 'unlike most other social scientists, who assume an audience of peers/scholars, evaluators must negotiate whose questions will be addressed and whose interests will be served by their work' (Greene, 1994:531)
- A political activity (Rossi and Freeman, 1993)
- Evaluation results are not heeded in isolation (Weiss, 1991)

Role of the evaluator

- External evaluator role
  - Independent stance, objective, critical
  - Overview of other organisations/programmes
  - Resilience to intimidation

- Internal evaluator role
  - Vested interest in particular outcome?
  - Influenced by history and knowledge of organisation/ known views of management
  - Favour own programmes

Types of evaluation (Scriven, 1967, 1980, 1991)

- Formative -to improve the quality of the program being developed
  - done to provide feedback to people who are trying to improve something
  - to support the process of improvement
  - Identifying the strengths and weaknesses of a programme/intervention
  - Information on programme design and implementation
  - Emphasis on perceptions and experiences of programme planners, practitioners and participants
  - To ascertain if any changes are needed to improve the programme
  - Action oriented

Types of evaluation (Scriven, 1967, 1980, 1986, 1991)

- Summative- to provide decision-makers with judgments about the worth or merit of a program in relation to important criteria
  - To determine the overall effectiveness or impact of a programme or project
  - With a view to recommending whether or not it should continue
  - Conclusion-oriented

Formative/summative dichotomy (Adapted from Herman et al (1987:26) in Clarke, 1999)

	Formative	**Summative**
Target audience	Programme managers/ practitioners	Policy-makers, funders, the public
Focus of data collection	Clarification of goals, nature of implementation, identifying outcomes	Implementation issues, outcome measures
Role of evaluator	Interactive	Independent
Methodology	Quantitative and qualitative (emphasis on latter)	Emphasis on quantitative
Frequency of data collection	Continuous monitoring	Limited
Reporting procedures	Informal via discussion groups and meetings	Formal reports
Frequency of reporting	Throughout period of observation/ study	On completion of evaluation

Theory based evaluation

- Theories of change
  - Weiss, 1972, 1995, 1997– Theories of change in community based programmes
  - Pawson and Tilley, 1997 – realist(ic) evaluation

- **theory in evaluation – specifying how a particular programme or intervention is supposed to operate (logic models)**
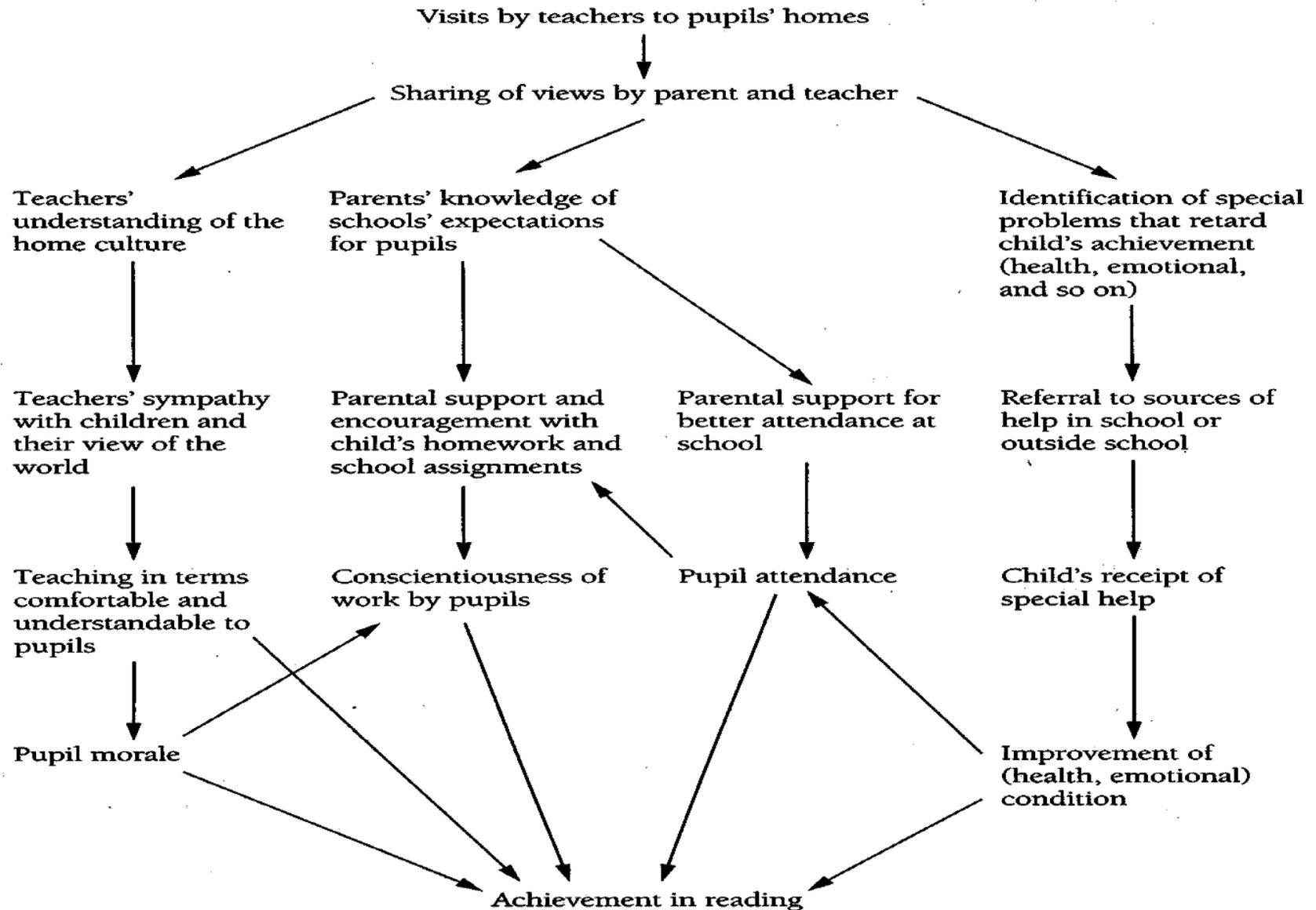
Theory-based evaluation

- 'The term "theory-based" evaluation….means an evaluation based on a model, theory or philosophy about how the programme works; a model, theory, or philosophy which indicates the causal relationships supposedly operating in the program' (Fitzgibbon and Morris, 1996:178)

Two prominent types of theory based evaluations (see Blamey and Mackenzie (2002, 2007), Stame (2004) for distinction)

- Realistic Evaluation

- Theory-of-Change

    – Approaches include theory-based evaluation (Weiss, 1995, 2000), theory-driven evaluation (Chen, 1990), and contribution analysis (Mayne, 2001, 2006). All develop a theory of change for the intervention and then verify the extent to which the theory matches what is observed.

Figure 3.1. Theory of a Program of Teacher Home Visits

Visits by teachers to pupils' homes

↓

Sharing of views by parent and teacher

Teachers' understanding of the home culture

↓

Teachers' sympathy with children and their view of the world

↓

Teaching in terms comfortable and understandable to pupils

↓

Pupil morale

Parents' knowledge of schools' expectations for pupils

↓

Parental support and encouragement with child's homework and school assignments

↓

Conscientiousness of work by pupils

Parental support for better attendance at school

Pupil attendance

Identification of special problems that retard child's achievement (health, emotional, and so on)

↓

Referral to sources of help in school or outside school

↓

Child's receipt of special help

↓

Improvement of (health, emotional) condition

Achievement in reading

Source: Weiss, 1972, p. 50.

Programme theory

- Deals with the mechanisms that intervene between the delivery of programme service and the outcomes of interest that are observed
- Focuses on participants' responses to programme service
- Mechanism of change is not the programme activities per se but the response that the activities generate
- Mechanisms are cognitive, affective or social responses leading to (desired) outcomes

Exercise 1: developing a programme theory

- The intervention: a contraceptive counselling programme aiming to reduce teenage pregnancies
- In groups – discuss what the mechanisms of change might be.
- What might facilitate or impede the intervention?
- What might you need to consider about the context of implementation? Clients? Practitioners?
- Develop a logic model

The Realist perspective (Pawson and Tilley, 1994,1997, 2006)

- Question the uncritical enthusiasm for the traditional, experimental paradigm and quasi-experimental designs
- Study of context, mechanism and outcome – to provide real insight into the underlying causal mechanisms that produce the resultant effects/outcomes

- 'it is not the actual programmes which "work" but the reasoning and opportunities of the people experiencing the programmes which make them work' (1993:2)
- Key question: "What works, for whom and in what circumstances?"

Realist explanation

Example of gunpowder
- Does gunpowder blow up when a flame is applied?
  - Yes if the conditions are right
  - Doesn't ignite if damp, or if mixture is wrong, or no oxygen, or heat only applied for a brief time
- The *outcome* (explosion) of an *action* (applying flame) follows from *mechanisms* (chemical composition of gunpowder) acting in particular *contexts*.

- Examples of realistic evaluations are found in Byng, Norman and Redfern (2005); Leeuw, Gilse and Kreft (1999); and Leone (2008).

Applying realist evaluation

- Establish a logic model for the intervention and implementation contexts (overlap with theory of change approach)

- Hypothesise Context-Mechanism-Outcome configurations for your intervention

- Think about what data you need to collect; be sensitive to potential barriers, facilitators, intervening contexts

- Collect data, analyse then revisit CMO's and revise/develop new CMOs

Optimised Suicide Prevention and its Implementation in Europe: The OSPI process evaluation informed by the realist approach

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Background

- Evaluation of multi-level suicide prevention programmes is limited (beyond surveillance of trends in suicide)

- Most focus on outcomes of single (training) interventions.

- Few attempts to evaluate the overall strategy, or implementation processes

- Problems of evaluating a small number behaviour (suicide) using outcomes only

- Contribution of a realist evaluation approach

OSPI as a case study

- describe the complexity of OSPI

- describe methods of OSPI evaluation

- illustrate the importance of situating outcomes within the context that they are achieved: the public awareness campaign

OSPI: A complex programme

- 4 intervention regions + 4 control regions: Hungary, Ireland, Germany, Portugal

- Multi-level interventions
  - GPs/primary care   Training
  - Public   Campaigns
  - Community facilitators   Training
  - At risk groups   Multiple offers
  - Restriction of means   Region specific

- A set of core interventions with a required level of intensity (per head of population) + optional interventions

Based on a Realist Evaluation approach (Pawson & Tilley 1997)

- The 'social world' isn't like the laboratory

- Realist evaluation: the study of context, mechanism and outcome (CMO)

- 'it is not the actual programmes which "work" but the reasoning and opportunities of the people experiencing the programmes which make them work'

- Identifying mechanisms/strategies of implementation in each site, and for each level of intervention, to understand outcomes and inform best practice for implementation

- Implementation Process, Context and Outcomes Evaluation

Methods

Outcomes evaluation

- Primary outcomes

  - Regional data on completed suicides and suicidal acts for intervention and control regions

- Intermediate outcomes

  - Outcomes of GP/primary care awareness and education training

  - Outcomes of Community Facilitator awareness and education training

  - Impact of Public Health Campaign on awareness and attitudes/stigma for intervention and control regions

  - Impact on media reporting of suicides

Process/context evaluation

- Macro-level data for each: **Eurostat data**

- 6 monthly tracking questionnaires: activity and intensity (n=5 x 4 regions)

- Longitudinal qualitative interviews &/or focus groups (6 monthly x 5)
  - 47 interviews
  - 12 focus groups

- Observations and fieldnotes taken during OSPI meetings, sharing implementation progress and issues (6 monthly)

- Final focus groups to agree key areas for best practice implementation/lessons learned (x3)

- Community capacity index and network mapping workshops with key stakeholders (x4)

Public awareness campaign

- To improve mental health literacy, including a before and after public survey
- Activity: flyers, public figures speaking as mental health advocates at public events, cinema spots, radio slots talking about mental health, posters

Public Awareness Campaign

- Similar key messages
- Exceeded required intensity per head of population

Region	Level 3 Public awareness
Germany Leipzig population 500,000	Leaflets: 175,200 Posters: 2,748 Events: 39 (+6 other)
Hungary Miskolc population 180,000	Leaflets: 60,000 Posters: 3,300 Events: 10 (+16 other)
Ireland Limerick population 184,055	Leaflets: 27,885 Posters: 4,350 Events: 2
Portugal Amadora population 200,000	Leaflets: 50,000 Posters: 6,300 Events: 8

Quantitative Data Collection

3. Public health campaign: advertising

5.1. → We would like to find out about the intensity of your advertising campaign. In March 2010, you told us about where you distributed flyers, brochures and posters. Please could you provide some details about the numbers distributed and the phases of distribution?

¤	Total distributed¤	Waves/phases of distribution? Please give details. E.g. Flyer campaign in February (n=?), July (n=?) and December (n=?) or distributed at 5 month intervals¤
Flyers¤	Ca. 150.000¤	• → April 2010 distribution of 100.000 flyers as an inlay in a weekly offical, but free newspaper in Leipzig ("Amtsblatt") ¶ • → Distributed in all public events (number of distribution not in detail registered)¶ • → Distribution to all training participants stating interest during training (registered via participant list) — mailed to them by post afterwards¶ • → Distribution by volunteers / service users engaged in LAAD in various institutions involved in mental health in Leipzig¶ • → Mailed to people interested for further distribution, stating their interest via mail etc. — e.g. work psychologists of companies for mental health day etc.¶ • → Delivered to local pharmacists / doctors in packages of about 25 by volunteer mostly engaged in flyer distribution¶ • → Distribution in own and other clinics / institutions engaged in LAAD¶ • → Planned: further distribution to all GPs / pharmacists in Leipzig with mailing in March 2011¤
Brochures¤	3027¤	• → Distributed mostly to GPs after training — for giving away in their waiting areas / to patients and relatives in need¶

		• → Distributed to other training participants if stating interest during training (registered via participant list) – mailed to them by post afterwards¶ • → Distribution in limited number for further distribution to patients / relatives to other institutions active in the area of mental health in Leipzig¶ • → Distribution also during public events --> direct give-away to patients, relatives, people interested¤
Posters A0¤	625¤	• → Distribution via public informational pillars in 2 campaigns; first one having 6 waves, second one containing 1 wave only:¶

Date¤	Number distributed¤	¤
11.-21.12.2009¤	100¤	¤
19.-28.01.2010¤	100¤	¤
19.02.-1.03.2010¤	100¤	¤
23.03.-01.04.2010¤	100¤	¤
20.04.-29.04.2010¤	50¤	¤
11.05.-20.05.2010¤	75¤	¤
¤	¤	¤
28.09.- 07.10.2010¤	100¤	¤
¤	¤	¤

Posters A3¤	Ca. 1860¤	• Distribution in 2 waves via advertising spaces in public transportation (trams and buses): 1400 (700: 22.02. – 28.02.2010; 700: 22.11. - 5.12.2010)¶ • Distribution in 2 waves via "Studentenwerk Leipzig" – Association assisting students and maintaining all related facilites (students' cafeterias, living houses...): 57 in 12/09 – 01/10 and 53 in 07/08 2010)¶

Quantitative Data Collection: synthesising

HUNGARY INTERVENTION DETAILS									
Level 1: Primary Care	Sept-Dec 2009	Jan-March 2010	April-June 2010	July-Sept 2010	Oct-Dec 2010	Jan-March 2011	April-June 2011	July-Sept 2011	Oct-Dec 2011
Single Trainings									
GPs		50					5		
Nurses						74	48	30	
Cinical psychologists				10					
Doctors and nurses at toxicology department							23		
Train the trainer sessions									
GPs				5					
Nurses				10					
Cinical psychologists				9					
Information DVD's to GPs			100						
Information DVD's for patients			200						
CBT Training									
Level 2: Public Campaign									
Flyer/leaflet/brochure			10,000				50,000		
Posters			500				2,500	300	
Opening ceremony			120						
Launch for GPs			50						
Press conference			15						
Public information events (e.g. depression day, jogging against depression etc)			1		2	3		3	
Involvement of well-known patron			3						
Billboards /placards (e.g. 4x5 metres)								53	
Press kits			15						
Information CDs									
Cinema and / or radio spot						300	500	350	
Promotional gifts			200	300		100	50	50	
Local newspaper articles about OSPI					2	4	1	2	1
Event for relatives of persons with depression									
Panel discussion about depression with local experts			2	2	2	3	5		1
Presentations about depression in colleges/schools							2		

Quantitative comparison

Level 2 Core interventions	achieved	proposed numbers		achieved	proposed numbers		achieved	proposed numbers		achieved	proposed numbers
Flyers	175,200	188,202		60,000	62,596		40,000	67,337		130,000	64,343
Poster (large, A0, e.g. at bus shelters)	625	463			154		25	166		245	158
Poster (small, A3)	1,950	1,440		3,000	479			147		4,800	492
Opening ceremony	1			1			1			1	
Press conference	1									1	
Well-known patron	2			4			1			1	
Public informational events	45	54		9	18		1	19		8	18
Optional interventions											
Placard (4*5m)	-	21			7		20	7			7
Poster (medium, A1)	173	1,440			479			515			492
Poster (very small A4)	-	1,440			479		10,000	147			492
Brochures	see level 4	31,367			10,433		yes	11			10,724
Press kits	10	514			171		yes	184		10	176
Informational CDs	-	926			308			331			317
Cinema spot (months of broadcast)	13			8							
Other interventions											
Website	1			2							
Giveaways (ballpens, keyrings)	800						2400				
Informational spot in student cafeterias (months of broadcast)	yes										
Newsletter	monthly										
No. of articles in ...											
local newspapers	29			10			13			2	
web	26						2				
TV broadcasts	4										
Web TV programmes	3						1(Youtube)				
Radio broadcasts	2						4			2	
Radio spot (months of braodcast)	-			2							
Teletext	-			1							
Other poster formats ... A5	-			250							
B2 (50x70cm)	-			50							
Bus tailboards	-			3							

Exercise 2:

- Thinking about the public awareness campaign, what contexts might be have an impact on this?

- What might get in the way of success?

- Develop some CMO configurations related to this campaign

- What data might you want to collect to explore these?

Qualitative Data collection

- 6 monthly interviews explored:
  - **Context** of public health campaign
  - Enabling or inhibiting factors to take-up of campaign messages
  - Capacity for the campaign
  - Reach and targetting
- 6 monthly meeting observations explored:
  - Implementation issues for researchers
  - Barriers and facilitators

Transcripts and fieldnotes

Transcripts

- The recent natural disasters that affected our region marked the mood of the people living here, but I have not met anyone who became exasperated especially in this situation. That is very interesting. In a way... I swear, this is the case. Yes.
- During the flooding there were no suicide attempts.
- Yes. We would think that now that the water flooded the homes of many people, they would be so disappointed and overwhelmed by bad mood, but it seems that man is strong and wants to step on.
- And the helping attitude only gets stronger in people when a natural disaster occurs. Terribly. In Miskolc the 3rd district was strongly affected. There was a family, who received 6-8 strangers, because they had no place to sleep.

Fieldnotes

Advertising/information materials: there was some discussion around the fact that the Hungary team were developing a web page with information materials. Andras queried whether this should be standardised for all four sites. Some discussion about whether this should be hosted on the pre-existing OSPI site or whether this should remain unique to each country. There was no complete resolution to this although there was general agreement that the template devised by Hungary might usefully be used by the other countries. *We need to find out if they record hits on this website in order to estimate some sort of potential impact. (Email sent 24 May) The ISP records hits but they get very little information along with this.*

Qualitative analysis

| Steering/advisory group meetings | • Engaging a diverse mix of potential gatekeepers ((Ireland Int 6-1; p5) facilitated recruitment to interviews; assisted with accessing and identifying appropriate people for training sessions (Mtg notes Budapest) ; See also Ireland Int 5-3: p2 & p7

• Facilitates networking and engagement between sectors/disciplines (Int 6-1)

• Now have 23 members from across a range of sectors (Mt notes & obs Rome: 5)

Hope to use the advisory group to sustain OSPI activities after the life of the project (Ireland Int 4-3: p9)

Advisory group members act as gatekeepers to their organisations – e.g. disseminate OSPI public awareness materials (Ireland Int 5-3: 1) | • Maintaining a sense of participation and engagement with steering group members rather than simply reporting back to them (Int data)

• Need to ensure that they have adequate opportunity to input into discussions so that they feel that their experience and knowledge is being tapped into (Int data)

• Problem of engaging members of the clergy because of small numbers and lack of a bishop in the area. This is related to the recent child abuse scandal that involved Catholic priests. (Int data & mtg notes) | • Ensure that meetings are designed to engage participants e.g. explore different formats

• Need to ensure that members do not feel that they are simply gatekeepers

• Engagement: Credibility of an academic, European funded project, evidence-based interventions in partnership with other European countries; gives sense of being part of something larger (Ireland In 1-1) | |

| General engagement/developing capacity/resources | • Building on existing interventions/expertise within the intervention site rather than developing something completely new, therefore provides 'added value' and complementarity (Ireland Int 1-1, 6-1: pp 5-6)

• Want to be part of something bigger – learn from European partners (Ireland Int 1-1: p3)

• Building on EAAD expertise (ALL)

• Secured additional €20,000 from Electric Aid Ireland

• Adding capacity to local initiatives (Ire FG1-2: p2 & p12)

• OSPI provides a model of suicide prevention perceived as 'evidence-based' (Int 1-3: p1)

• The training is seen to be having immediate benefits – applied in practice e.g. Guardai who soon after training sucessfully deal with suicide attempts (Ireland Int 2-3: 3)

• Engagement in training motivated by high profile suicides in the area (Ireland 3-3: p2)

• OSPI 4 hour training is more accessible to | • Difficult to separate effect of OSPI from pre-existing interventions

• Meeting expectations of local partners is difficult – e.g. someone from Water Safety said that his/her interest in particpating in OSPI was related to the sessions that they do in schools (on water safety) and would like suicide prevention to be included in that. In response to this, Ella gently reminds this participant of the dangers/difficulties of talking to very young children about suicide (cf Ireland FG1-2: pp 4-5). Perhaps an example of dealing with 'misguided' expectations? (Interp)

• Also HSE have problems that public expect them | | Example of participatory style of working – in response to murder suicide in the local area, they raised this issue at the training and provided some literature on the topic to participants. Responded/adapted to local needs (Ireland Int 4-3: p10)

Local mental health capacity extended by Pieta House opening – providing source of community referral in addition to existing services (Ireland Int 5-3: |

Putting Outcomes in context
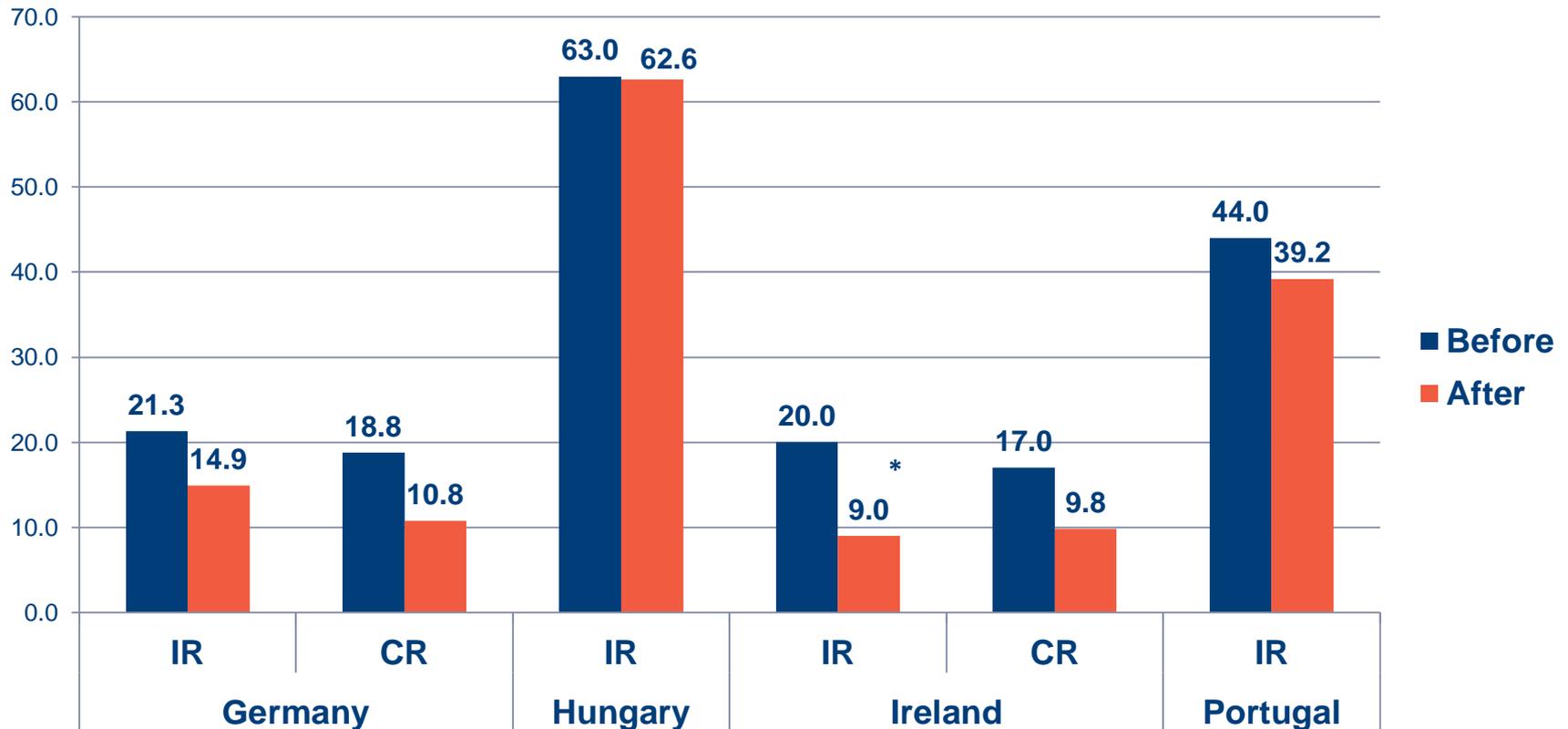
OSPI PUBLIC AWARENESS CAMPAIGN

Public awareness campaign

% heard campaign
(intervention regions)
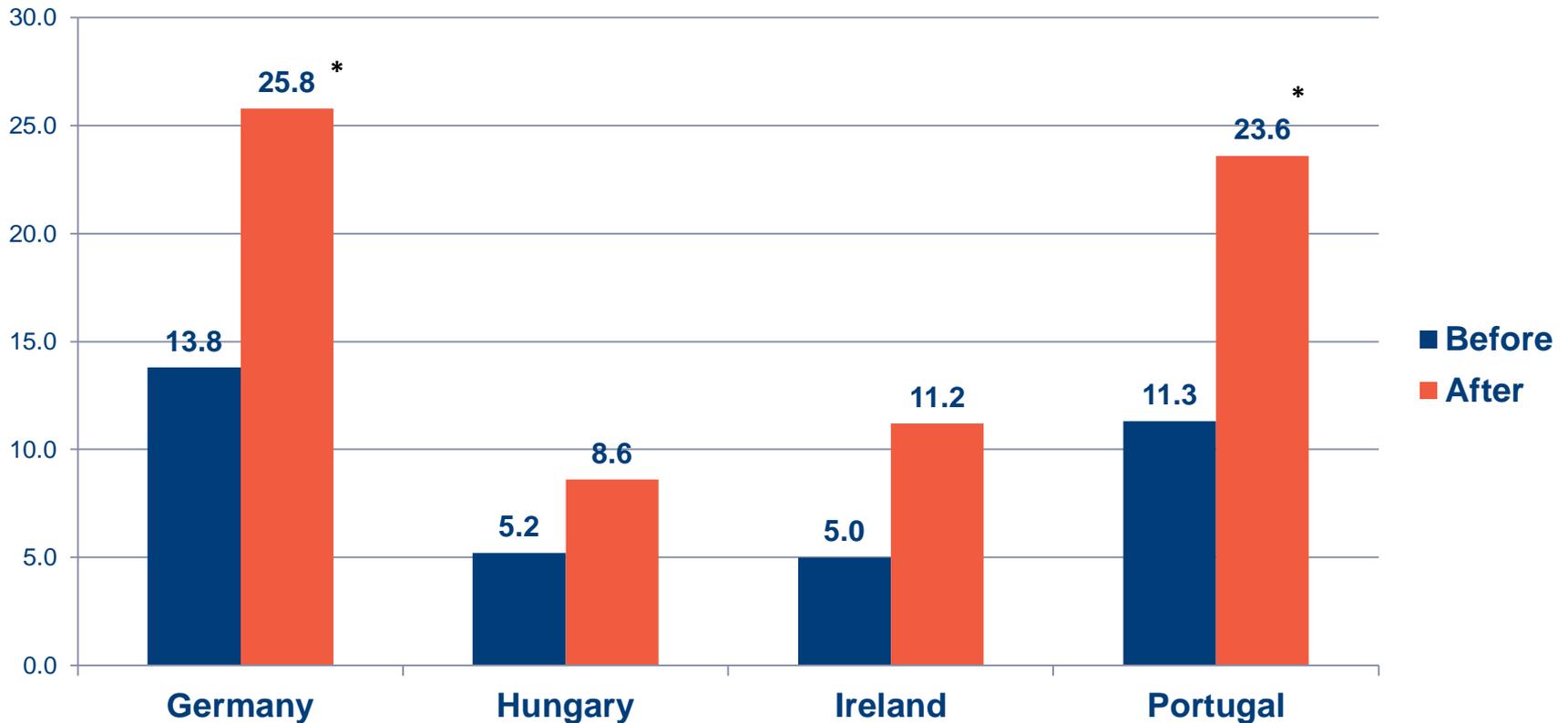
Mental health literacy

People with depression could snap out of it if they wanted
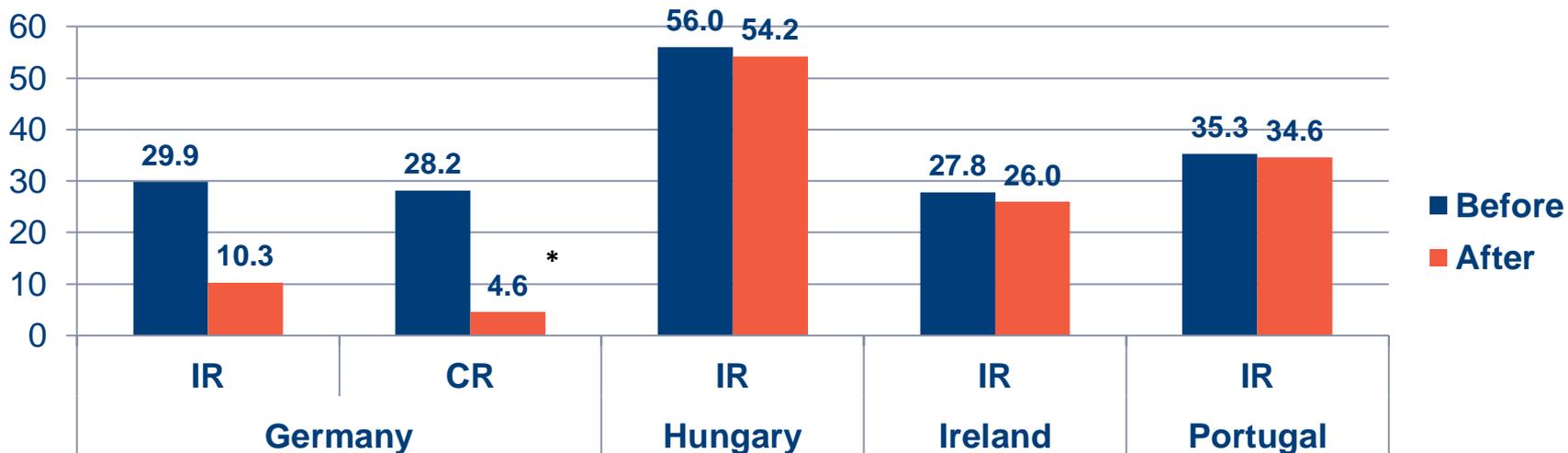(% agree)

Intermediate outcomes: attitudes to help seeking

Hungary lowest across all countries in 'openness to help' and perceived 'value of help'

Highest across all countries in agreement that 'talking is a poor way' to get help

… talking poor way to get help
(% agree)

Context: Germany

Baseline: May 2009; Follow-Up: Dec. 2010

- Intervening context:
  - The death of Robert Enke on 10th November 2009 resulting in higher visibility of the campaign
- Historical context:
  - German Alliance Against Depression: reputation and contamination?
- Implementation
  - Extensive involvement of service users, carers, volunteers in dissemination
  - Many more public events

Context: Hungary

- Intervening context:
  - Campaign visibility diluted because of:
    - Widespread flooding
    - Election campaign
  - Campaign impact diluted because of:
    - Greater impact of the recession and longer duration compared to Leipzig
- Historical/cultural context:
  - Low baseline of level of mental health literacy

- Implementation
  - Intervention site remote from OSPI implementation team
  - Key communities of high socioeconomic deprivation and with specific ethnicity issues (Gypsy communities) were not intensely targeted; campaign messages/format questioned

Conclusions

- Need to understand implementation contexts
- CMO analysis identifies enablers and barriers to implementation
- Lessons for future implementation
- Situates outcomes within contexts
- Goes beyond experimental study design
- E.g. Hungary: effectiveness v context

Study papers

- **Harris F,** Maxwell M, O'Connor R. et al. (2013) Developing social capital in implementing a complex intervention: a process evaluation of the early implementation of a suicide prevention intervention in four European countries, *BMC Public Health,* 13: 158. DOI: 10.1186/1471-2458-13-158 http://www.biomedcentral.com/1471-2458/13/158

- Harris, F. M., Maxwell, M., O'Connor, R et al. (2016) Exploring synergistic interactions and catalysts in complex interventions: longitudinal, mixed methods case studies of an optimised multi-level suicide prevention intervention in four European countries (Ospi-Europe). *BMC public health, 16*(1), 268. https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-016-2942-z

- Hegerl U, Maxwell M, Harris F. et al. (2011) Prevention of suicidal behaviour: results of a controlled community-based intervention study in four European countries, *PLoS ONE,* https://doi.org/10.1371/journal.pone.0224602