
Social influence and behaviour change: A meta-analysis

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BECC Conference
December 8, 2014

SOCIAL INFLUENCE

When our opinions or actions are influenced by other people or other groups
(Cialdini, 2003; Forgas and Williams, 2001)

- ambiguous situations
- eg social norms and social comparison



SOCIAL NORMS

What others are doing



What we ought to be doing



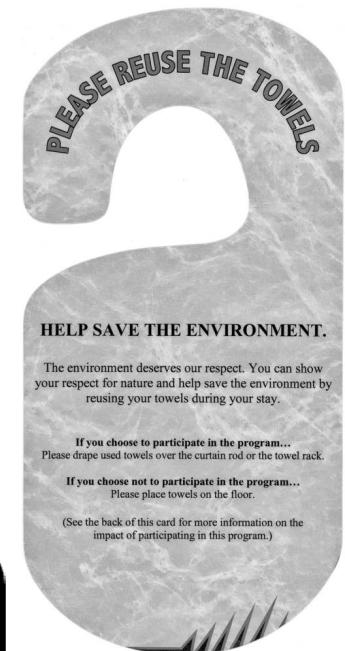
SOCIAL COMPARISON

Individual performance compared with
(similar) others



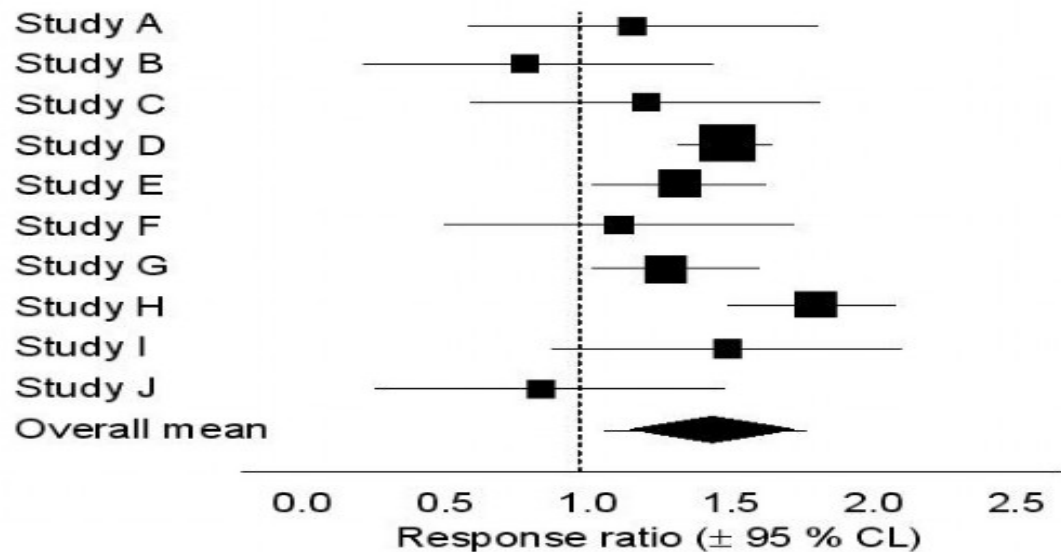
SOCIAL INFLUENCE APPROACHES

1. Social norms approaches
2. Public commitment making
3. Modelling
4. Social comparison feedback
5. Group feedback
6. Block leader approach



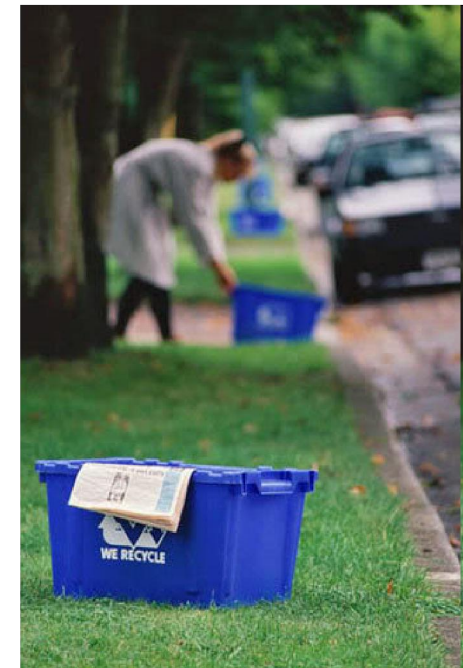
AGGREGATING FINDINGS

Meta-analysis. *An objective and quantitative methodology for synthesizing previous studies and research on a particular topic into an overall finding.*



RESEARCH QUESTIONS

- How effective are social influence approaches compared to:
 - a control group
 - another “traditional” intervention
- Does effectiveness depend on
 - type of approach
 - type of behaviour



META-ANALYSIS

INCLUSION CRITERIA

- Use of a social influence intervention
- Inclusion of control/comparison group
- Changes in behaviours (measured, observations)
- Peer reviewed
- Statistics needed to calculate effect size

- N = 27 studies, N = 5,404 participants

META-ANALYSIS

EFFECT SIZE

- Comprehensive Meta-Analysis (Borenstein et al, 2001)
- Effect size: Hedges g
- From $- \dots - 2 \dots - 1$ to $+ 1 \dots + 2 \dots + \dots$

$$d = \frac{\bar{X}_1 - \bar{X}_2}{S_{within}}$$

small effect : < .30
medium effect : .30 - .80
large effect : > .80

META-ANALYSIS

RESULTS

Social influence approaches versus control

Hedges $g = .35$
(95% CI [0.20, 0.50], $Z = 4.54$, $p < .001$)

Social influence approaches versus other interventions

Hedges $g = .22$
(95% CI [0.08, 0.36], $Z = 3.26$, $p < .01$)

META-ANALYSIS

RESULTS

	Hedges g	95% CI
Block leader	.82	[.49, 1.16]
Public commitment	.60	[.18, 0.85]
Modelling	.51	[.10, 0.71]
Group feedback	.29	[-.07, 0.66]
Social comparison	.13	[-.30, 0.57]
Social norms	.10	[.04, 0.20]

small effect : < .30
medium effect : .30 - .80
large effect : > .80

META-ANALYSIS

RESULTS

	Hedges g	95% CI
Recycling	.60	[.26, .93]
Water use	.55	[.09, 1.18]
Energy use	.29	[.01, .58]
Towel reuse	.14	[.01, .30]

small effect : < .30
medium effect : .30 - .80
large effect : > .80

LIMITATIONS

- Small number of studies
- File drawer problem
- Long term effects?
- Process of behaviour change
 - Role of similarity or group identity?

CONCLUSIONS

- Social influence effective
 - Compared to control and another intervention
- Effect depends on type of approach
 - Variability in implementation
- Effect not related to type of behaviour
 - Effective for a range of pro-environmental behaviours