Published in final edited form as:

Int J Eat Disord. 2017 March ; 50(3): 312–314. doi:10.1002/eat.22678.

Strategic Science for Eating Disorders Research & Policy Impact

Christina A. Roberto, PhD and

Perelman School of Medicine, University of Pennsylvania

Kelly D. Brownell, PhD

Sanford School of Public Policy, Duke University

Abstract

Scientific research often fails to have relevance and impact because scientists do not engage policy makers and influencers in the process of identifying information needs and generating high priority questions. To address this scholarship-policy gap, we have developed a model of *Strategic Science*. This research approach involves working with policy makers and influencers to craft research questions that will answer important and timely policy-related questions. The goal is to create tighter links between research and policy and ensure findings are communicated efficiently to change agents best positioned to apply the research to policy debates. In this paper, we lay out a model for *Strategic Science* and describe how this approach may help advance policy research and action for eating disorders.

Evidence-based policymaking is an aspiration that cuts across health and social issues, yet scientific research informs policy-making too infrequently. There are several reasons for this. First, most researchers are not trained to influence policy. Second, engagement with policy-makers is not encouraged or rewarded in most academic settings. Third, the communication of science stays largely within science. There are exceptions, but little is done to link scholarship to policy in systematic ways.¹ There are times when researchers are able to intuit policy-relevant research questions, but often research fails to have relevance and impact because scientists do not engage change agents in the process of identifying information needs and generating the highest priority questions. And when scientists do connect with change agents who make or influence policy, they often share their research, but miss the opportunity to receive input from change agents to help shape the research agenda.

To address this scholarship-policy gap in our own research on food policy and obesity, we have developed a model of *Strategic Science*.¹ This research approach is designed to create tighter links between research and policy and ensure that findings are communicated efficiently to those change agents best positioned to apply the research to policy debates. *Strategic Science* involves working with change agents to craft research questions that will answer important and timely policy-related questions. We describe how this approach can help advance policy research and action for eating disorders.

A Model of Strategic Science

Step One: Identify and Connect with Change Agents. Change agents are individuals or institutions in a position to make or influence policy. Depending on the issue, change agents may be elected leaders across levels of government or leaders of institutions, key individuals in regulatory agencies, legal authorities, the press, influential advocacy groups, national or international organizations like the World Health Organization or the Academy for Eating Disorders, or members of institutions or the general public who influence decision makers. In the same way a doctor develops a research insight from talking with a patient, or a business professor develops a research idea while talking with a business leader, conversations with change agents are likely to provide different perspectives that can spur new thinking.

Step Two: Develop Strategic Questions. Typically, scientists try to answer research questions they think will make an interesting and important contribution to their field. That type of scientific inquiry is essential. *Strategic Science* is meant to complement rather than replace traditional scientific inquiry. This approach—asking research questions with input from change agents—goes beyond traditional applied policy research that often seeks to ask policy-relevant questions without engaging those making or influencing policy. Conversations to develop strategic research questions might involve asking policy makers what data would best help inform their decision-making, where are there information gaps among the public, what legislative or legal precedents exist, etc. Conversations with legal officials, for example, might reveal the need for developing legal theory that would undergird legal, regulatory, or legislative action. Discussions with parents and school officials can point to information that would best help them identify policies for making healthier school environments. Taking a *Strategic Science* approach to research does not mean that the work cannot make important theoretical contributions or answer scientifically interesting questions. Studies can be designed to both advance science and provide change agents with useful information. Connections with change agents can also facilitate the evaluation of implemented policies, which is critical to informing future actions.

Step Three: Rigorously Answer the Strategic Research Question. Scientists are trained to conduct rigorous scholarship and are committed to unbiased inquiry, and that is their primary role in their relationship with change agents. The goal of *Strategic Science* is not for scientists to provide the *result* that the change agent may prefer, but to answer – in the most objective way possible – the *question* that the change agent needs answering.

Step Four: Communicate Information to Strengthen the Policy Bridge. Engaging in *Strategic Science* means being committed to communicating the work beyond traditional academic channels. Publishing in peer-reviewed journals is critical to ensure that the research meets scientifically rigorous standards, but this does not make research accessible to change agents. Sending a research paper to a policymaker may not be helpful without an accompanying policy brief that succinctly and clearly explains the relevance of the evidence to specific policy questions. This

step is part of a feedback loop. Once the initial relationships are formed in step one, it becomes easier to communicate the research findings to change agents.

Strategic Science Opportunities for Eating Disorders Research

There are many areas where a *Strategic Science* approach might help advance research and policy action for eating disorders. One such area is research on industries that contribute to unhealthy environments that promote disturbed eating cognitions and behaviors. Examples include the diet-product, laxative, cosmetic surgery and procedures, fashion, and advertising industries. Policy change in these areas might require identifying and partnering with legal change agents, such as state attorneys general, who would have insight into the legal and scientific research needed to propose industry regulations. In a recent paper, Austin and colleagues describe a *Strategic Science* collaboration with a state representative and community partners to introduce a bill in Massachusetts to regulate the sale of dietary supplements to minors.² Ongoing collaboration with such change agents can inform additional research questions that need to be answered (e.g., the cost-effectiveness of such a bill, estimated number of lives it will save) to make progress and facilitate the communicating of emerging research findings back to those who can use them.

The field of eating disorders research and practice has also generated innovative policy ideas to improve unhealthy eating environments, but most are untested. For example, several countries have introduced policies placing a lower limit on the body mass index of runway models.³ Research is needed to understand the impact of such policies and the barriers to having them replicated in more jurisdictions. Talking with legal officials, organizations and regulators that protect workers' health, and policy makers can help shed light on the research questions that need to be answered to advance such policies if they are indeed effective. Recently, legislators and organizations have advocated for policies to place warning labels on fashion advertisements (e.g., labels indicating the extent to which a model's image has been artificially distorted). The handful of studies that have examined this proposal have found little positive effect of such labels and some indication that they may backfire, inadvertently making people feel worse about their bodies.⁴ This highlights the importance of evaluating potential unintended consequences of such policies and communicating these results to well-intentioned change agents who can then change course instead of championing a potentially harmful policy.

A *Strategic Science* approach is not only relevant to prevention-focused research, but can also be applied to clinically focused research. In a recent commentary, Attia and colleagues highlight a very important problem in eating disorder care: the rise of behavioral health eating disorder treatment centers that are not rooted in evidence-based approaches.⁵ A *Strategic Science* approach, where change agents are identified and engaged, can help researchers understand what research questions need to be asked to inform realistic solutions to best address this significant issue.

Finally, there are increasing efforts to implement obesity prevention policies, but much less research has focused on the impact these policies have on disturbed eating behaviors and cognitions. Cities have enacted taxes on sugary beverages, there is a national law requiring

chain restaurants to post calorie information, more stringent standards for healthier school meals have been instituted, and public service campaigns have rolled out in many cities and states. Although a great deal of research focuses on the impact these policies have on eating behaviors and weight, much less research is being undertaken to assess the impact of these policies on disturbed eating behaviors and cognitions. Concerns have been raised, for example, that stigmatizing public service campaigns might exacerbate both eating disorders and obesity, but few researchers are partnered with change agents to carry out this work and communicate the results. A *Strategic Science* approach can help eating disorders researchers have a seat at the table when it comes to influencing food policies that might affect those with disordered eating.

Asking Strategic Questions, Not Generating Strategic Answers

One potential objection to a *Strategic Science* approach is that scientists might have a policy agenda that affects objectivity. The emphasis in *Strategic Science* is to ask strategic *questions*, not to generate predefined *answers* or to necessarily engage in advocacy. It means being committed to asking scientific questions to fill gaps in policy *and* sharing the results of the work with change agents, regardless of the findings. In our opinion, when research clearly points to reasonable, evidence-based policy ideas, it is hard to argue against scientists making that known to change agents. However, it is critical for scientists to clearly communicate the limitations and nuances of the work. There will of course be change agents who are motivated to confirm certain beliefs. Our job when doing this work is to ask policy-relevant questions with input from change agents and to objectively communicate the results back to them, regardless of what those results imply.

Conclusion

There are considerable opportunities for eating disorders research and practice to adopt a *Strategic Science* approach to research to inform evidence-based policy making. We believe more eating disorder scientists engaging in *Strategic Science* will generate momentum around new and innovative policy ideas and help close the scholarship-policy gap.

Acknowledgments

The authors have no conflicts of interest. Dr. Roberto is supported by the National Institute On Aging of NIH under Award Number P30AG034546. The content of this article is solely the responsibility of the authors and does not necessarily represent the official views of NIH.

References

1. Brownell KD, Roberto CA. Strategic science with policy impact. *The Lancet*. 2015; 385:2445–6.
2. Austin SB, Yu K, Tran A, Mayer B. Research-to-policy translation for prevention of disordered weight and shape control behaviors: A case example targeting dietary supplements sold for weight loss and muscle building. *Eat Behav*. in press.
3. Record KL, Austin SB. “Paris Thin”: A call to regulate life-threatening starvation of runway models in the US fashion industry. *Am J Public Health*. 2016; 106:205–206. [PubMed: 26691499]
4. Blomquist KK, Pate S, Hock A, Austin SB, Roberto CA. Evidence-based policy solutions to prevent eating disorders: Should we place warning labels on fashion advertisements? Under review.

5. Attia E, Blackwood KL, Guarda AS, Marcus MD, Rothman DJ. Marketing residential treatment programs for eating disorders: A call for transparency. *Psychiatr Serv.* 2016; 67:6.