

# Scientific Prematurity as a Basis for Bad Policy

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Policy makers rely on the academic community to inform their decisions. In new policy areas - which, incidentally, are almost always emerging fields - researchers occasionally make recommendations without a body of well-developed theory and empirical results to support their judgment. Given that maintaining the status quo is a policy decision in itself, there always is going to be a need to create policy before definitive results are available. However, when researchers and others translate and disseminate scientific information to policy makers, messaging that extolls its limitations, the need for future refinement, or potential for complete revision becomes as important as the initial recommendations. Without this kind of clear forward looking guidance, research dissemination would not be undertaken responsibly. Scientific hubris is an exceptionally dangerous illness for socio-economic welfare, and it is particularly pervasive when researchers only dabble in the field of public policy.

When considering research to practice in the field of general mental health, the rules are fairly stringent. The American Psychological Association offers well-developed guidelines for best practices by defining treatments that meet requirements for sufficient empirical support (e.g., effective in randomized control trails). The onus is on treatment providers to stay apprised of the current research, particularly when working with insurance providers that stipulate use of known effective treatment protocols.

Research to policy lacks the same rigor. In work that often consists of one-off studies, researchers can provide recommendations without conclusive or causal evidence for support. Policy makers, meanwhile, can glom onto those recommendations that provide immediate, glamorized, preferable, or self-serving outcomes. The implications of early research findings (often stated by researchers

as standing fact) to policy can have an immutable trajectory. Researchers must therefore take more responsibility to properly qualify their recommendations at all points in the decision making process, and to do so transparently.

The social adaptation model of gambling<sup>1</sup> provides a good example of how social policies can remain static in the face of dynamic research. During the past several decades, the prevalence of gambling problems generally has remained stable, despite the proliferation of gambling opportunities. Yet, governments and the public remain cautious in the face of new gambling development, even as adjacent jurisdictions or underground economies serve their residents.

Policy tasks for researchers are not easy. Good policy considers theory, available evidence, potential unintended consequences, and potential unintended benefits. Good policy does this all while weighing the probability and scale of possible outcomes. This amounts to a lot of guesswork in new fields of research. Good policy also draws from different fields of study, each of whose researchers may have conflicting recommendations.

When online gambling emerged as a new medium, most indications seemed to point to it as a probable source of major harm. Heavy legislative restrictions may have been appropriate, given the potential negative impacts perceived at the time, and the relatively small economic benefits compared to other forms of gambling. Despite the (perhaps overly dramatic) anecdotal forecasts and caricatures that were fraught with images of players gambling in the bathtub while their children lost the family inheritance, erring on the side of caution seemed to have been the prudent decision. Even if researchers identified the means by which online gambling may have been less harmful - e.g. lower average bet sizes, easier access to help resources from the gaming device, no servicescape engineering designed to prolong the gambling session - on the balance, the potential costs outweighed potential benefits. However, given work by LaPlante, Nelson, LaBrie, and Shaffer (2011), Gainsbury et al. (2013), Hing et al. (2014), Philander and MacKay (2014), and others, research is tipping in the direction of non-causation.<sup>2</sup> In other words, the relationship between gambling severity and online gambling may not be direct and factors such as overall gambling involvement should be considered. This kind of distinction is where policy advice needs to catch up to research.

Within the academic community, there is an onus on researchers and referees to

be more open-minded when opinions and findings are at odds with prevailing, but limited, wisdom - particularly when those dissenting voices have policy relevance for economic and social welfare. The burden of proof should never bend, but studies (with, perhaps, well qualified statements) that challenge short-lived status quos should not be held to a higher standard than those studies which treat the status quo as a lemma. Proof by counterexample is a powerful tool in establishing boundaries of thought, and therein, the reach of public policies.

Although imperfect policy decisions will always be made, the manner in which researchers present and modify policy recommendations is instrumental to providing the flexibility needed to remedy those imperfections. The researcher's job may include tentative statements, qualified recommendations, and revocation of previous claims. Whereas researchers are bound to make errors in their recommendations to policy makers, we need to take a measured approach in our messaging, be open to new thoughts, and be willing to revise our theories in accordance with new results. Policy makers need to be informed of the fault lines under their foundations, and researchers need to avoid convincing themselves that policy outcomes can validate scientific results. A healthy dose of skepticism should not go away after the first piece of legislation is passed.

- Kahlil S. Philander, PhD and Terri-Lynn MacKay, PhD

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