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Aims and Scope

The primary focus of the Policy Studies Journal (PSJ) is the study of public policy. Published on behalf of the Policy Studies Organization and the American Political Science Association's Public Policy Section, PSJ publishes individually submitted articles and symposia of exceptional quality by social scientists and other public policy researchers and leaders. The journal addresses a wide range of public policy issues at all levels of government, and welcomes a comparative approach. We accept a variety of manuscript types.

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The 2017 Public Policy Yearbook: Recent Trends in Public Policy Research

Hank Jenkins-Smith, Julie Krutz, Nina Carlson, and Christopher Weible

The articles presented in this supplemental issue mark the ninth edition of the *Policy Studies Journal's Public Policy Yearbook*. This issue includes three retrospective review articles summarizing recent developments in public policy research across the following focus areas: comparative public policy, governance, and policy analysis and evaluation. The issue also includes a special topic paper that examines both the breadth and depth of applications of the Advocacy Coalition Framework (ACF). We provide a brief description of these articles in greater detail below. You can also find the main content of the 2017 *Yearbook* online at: www.psjyearbook.com.

In addition to the annual publication of retrospective review articles in various policy subfields, a significant portion of our efforts with the *PSJ Yearbook* is providing avenues for readers to make connections with public policy scholars from around the world. The *Public Policy Yearbook* is an international listing of experts in various public policy domains, working on public policy problems all over the globe. Each year, we collect information from public policy scholars about their fields of study, research focus areas, published works, and contact information.¹ This information is then published as part of a directory of individual profiles on the *Yearbook's* website. The multidisciplinary nature of public policy research can make it challenging to identify the experts studying various policy problems, and the *Yearbook* provides users with an easier way to do so. Our intent is to provide a convenient tool for policy scholars to increase and broaden the visibility of their work, as well as to provide a means to network with other scholars. By using the website, readers can search for a scholar through a range of search criteria options, which include: a scholar's first or last name, geographic location, institution, or primary research interests. By visiting the *Yearbook's* website, www.psjyearbook.com, users can utilize a free web-based interface to easily search for various policy scholars' contact information, as well as up-to-date summaries describing listed scholars' self-reported descriptions of current and future research ideas and projects.

In this introduction, we provide a brief snapshot of current developments in public policy research. We also briefly introduce the articles included in this supplemental issue. For more detailed information on the *Yearbook* website and 27

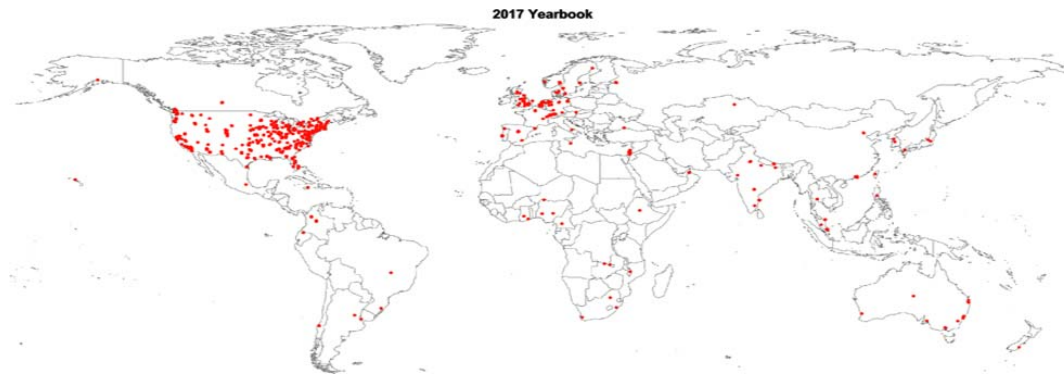


Figure 1. The *Yearbook's* Geographic Representation Spans 51 Different Countries.

previously published retrospective review articles, we welcome readers to look at previously published editorial articles. Each year, we also present information on the demographics and research interests of *Yearbook* members and detailed information on the functionality of the *Yearbook* website. An updated version of those discussions is presented below, but we invite readers to look back at previous articles for more detail on how developments identified within the *Yearbook* have evolved over time.

Characteristics of *Yearbook* Participants and New Developments in Policy Scholarship

As we do each year, in Fall 2016 we reached out to the *Yearbook's* current listing of policy scholars, asking each member to update the information published on his or her profile.² This annual updating process allows us to verify the accuracy of listed scholars' contact information and to encourage members to list recently published articles and/or their research in progress. As is evident in Figure 1, our most recent update shows that the *Yearbook* continues to represent a broad cross-section of policy scholars from around the world; the 2017 *Yearbook* has 892 members, working in 51 different countries. Approximately 72 percent of *Yearbook* members work within the United States and the remaining 28 percent of members work in 50 countries around the globe.

The *Yearbook* is inclusive of scholars at a wide variety of institutions globally. Figure 2 shows the distribution of *Yearbook* members working across six continents. While the largest concentrations of *Yearbook* scholars are in North America and Europe, growing numbers are located in Asia, Latin America, Australia and New Zealand, and Africa.

For those unfamiliar with the *Yearbook*, each year we use the self-reported content of *Yearbook* scholars' profiles to develop indicators for public policy scholars' evolving research agendas. The following discussion shows recent developments and patterns in the research foci of 892 scholars included in the 2017 *Yearbook*. We use several descriptive indicators that summarize and characterize scholars' evolving research agendas, including scholars' self-reported descriptions of their "current and

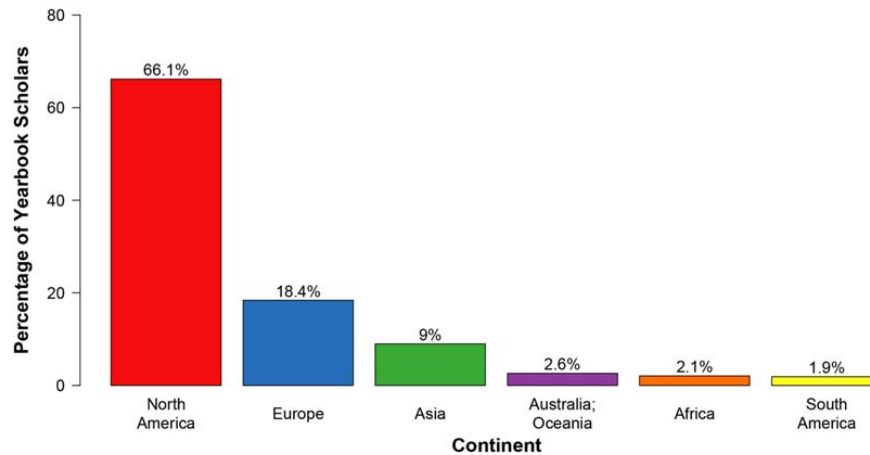


Figure 2. The *Yearbook's* Geographic Representation Spans Six Continents.

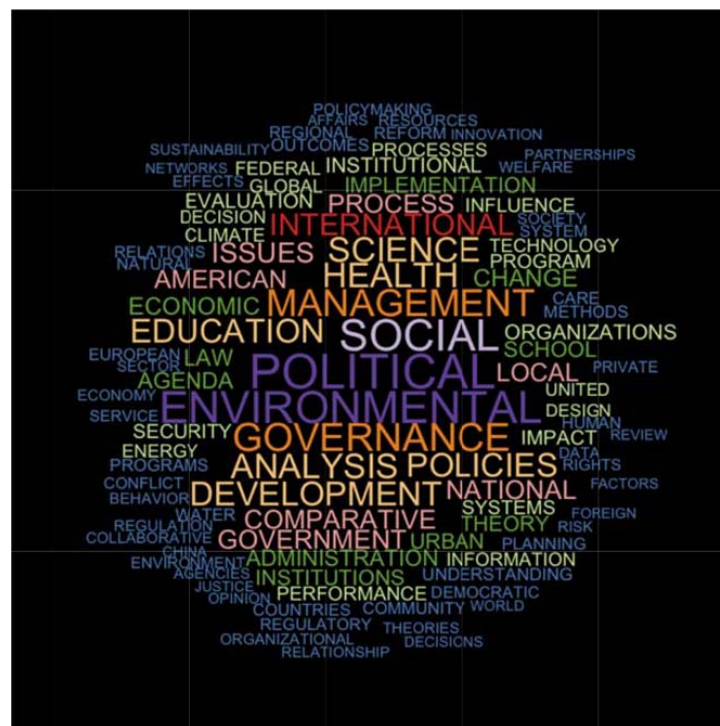


Figure 3. The Relative Size of Each Term Denotes the Frequency with Which Key Terms Appear in Scholars' Listing of Their "Current and Future Research Expectations."

future research expectations" and scholars' self-placement within 18 theoretical and substantive focus subfields of public policy.³

First, *Yearbook* scholars are asked to provide a paragraph describing their current and ongoing research agendas. When writing this paragraph, scholars may be as brief or as detailed as they choose. By scanning the content in the 2017 current research summary paragraphs, we can illustrate current trends among scholars' work by creating a word cloud populated by frequently used terms (see Figure 3). The word cloud provides a graphical representation of the aggregate foci of scholars'

substantive and theoretical work, and provides us with a comparative perspective of the evolution of research agendas. Figure 3 presents the one hundred terms that appeared most frequently in the “Current and Future Research Expectations” section of scholars’ profiles and any additional keyword tags that scholars supplied to describe their research agendas. In 2017, the prominent research interests, characterized by the ten most frequently appearing terms, include the following: political, environmental, social, governance, management, health, analysis, science, development, and education. When comparing this word cloud with those from recent years (Jenkins-Smith & Troussset 2010, 2011; Jenkins-Smith, Troussset, & Weible, 2012, 2013; Troussset, Jenkins-Smith, Carlson, & Weible, 2015; Troussset, Jenkins-Smith & Weible 2014), it appears that the proportion of research trends among *Yearbook* members has remained stable and similar over time.

The trends identified within the “Current and Future Research Expectations” section of scholars’ profiles are consistent with *Yearbook* members’ self-identifications in the *Yearbook*’s listed public policy focus areas. When scholars are asked to update the information listed on their profiles, they are presented with a list of 18 categories that represent a broad spectrum of subfields in public policy scholarship. They are first asked to check as many of the categories as they choose to describe their research agendas. In addition, for the last several years, we asked scholars to indicate which category best describes their primary theoretical focus area and which best describes their primary substantive focus area. The five theoretical focus areas include: agenda-setting, adoption, and implementation; policy analysis; policy history; policy process theory; and public opinion. The 13 substantive focus areas include: comparative public policy, defense and security policy, economic policy, education policy, energy and natural resource policy, environmental policy, governance, health policy, international relations and policy, law and policy, science and technology policy, social policy, and urban public policy.

Figures 4 and 5 show the proportion of scholars indicating one of the theoretical and substantive specializations as their *primary* focus area. As shown in Figure 4, the most prominent theoretical focus area was policy analysis and evaluation. The second and third most common areas were policy process theory and agenda-setting, adoption, and implementation. As shown in Figure 5, across the substantive focus areas the largest proportions of scholars study issues in governance, environmental policy, and social policy. These were also the most prominent categories in 2015 and 2016.

Public Policy Research Retrospective Review Articles

In addition to the *Yearbook*’s listing of experts in various public policy domains, each year we also publish a set of review papers that summarize recent developments in public policy research. We have included three new retrospective review articles in this special issue. These review articles offer readers quick access to recent developments in various policy subfields, because they can provide both a basic introduction and a coherent current perspective on the field to emerging scholars interested in understanding various policy problems. To write these review articles,

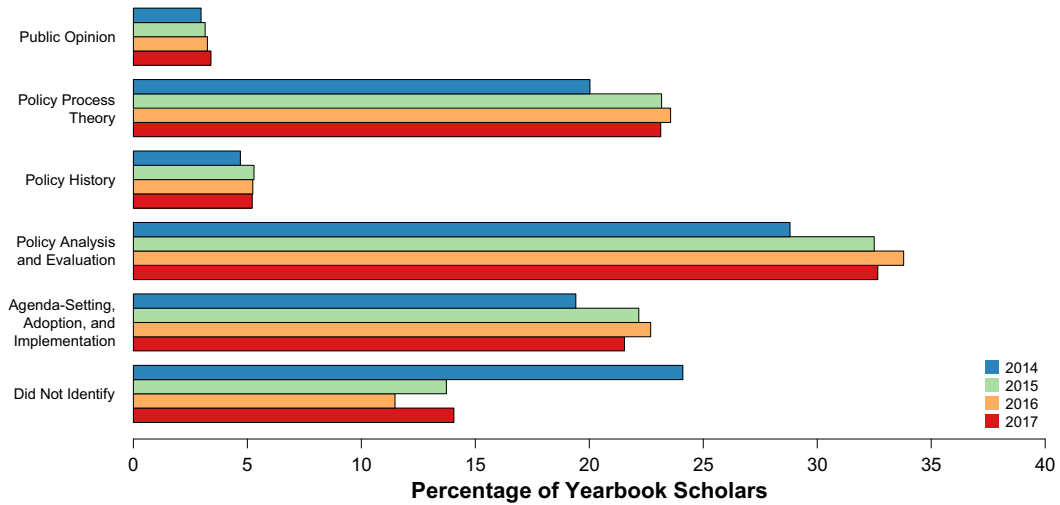


Figure 4. Scholars' Primary Theoretical Focus Area.

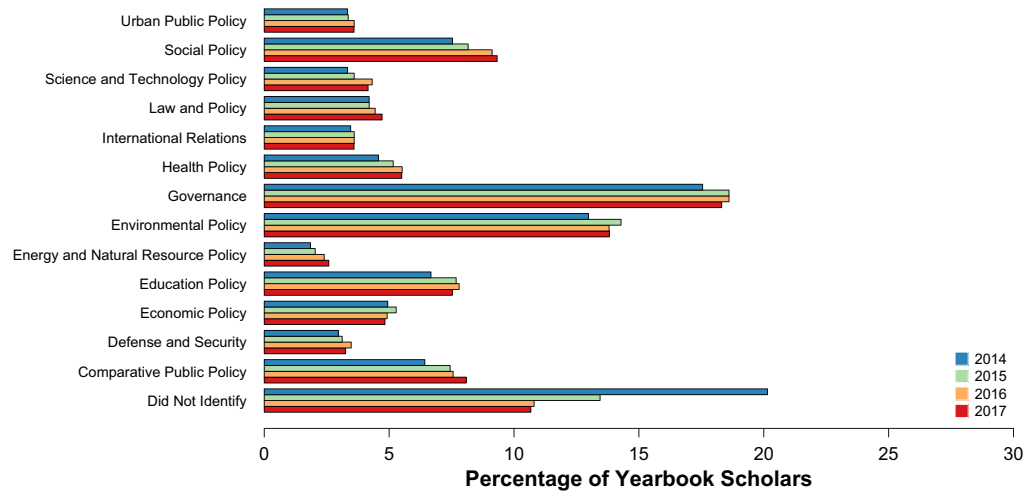


Figure 5. Scholars' Primary Substantive Focus Area.

each year we solicit recommendations for advanced graduate students working under the guidance of leading public policy scholars. This year, as part of this supplemental issue of the *Policy Studies Journal*, we are including review articles on the topics of comparative public policy, governance, and policy analysis and evaluation. These articles contain key developments in the following areas.

Comparative Public Policy

Matt Wilder (2017) discusses the need to be attentive to similarities and differences regarding the institutional contexts in which policymaking takes place. He highlights amendments to established approaches intended to deal with problems of comparison and identifies promising new perspectives from which comparative analysis may be conducted. Wilder also discusses how the latest wave of

comparative policy scholarship, having accounted for institutional variation, looks beyond institutions to policy discourses in order to explain how ideas, norms, and political culture affect how policy actors maneuver within, maintain, or change the institutional environment in which they operate.

Governance

Nick H. K. Or and Ana C. Aranda-Jan (2017) review the dynamic role of state and non-state actors in governance. They first discuss the main arguments for and against the state being the main actor in governance in recent literature. They then review some of the literature about the changing role of state and nonstate actors in response to the 2007–08 global financial crisis from 2011 to 2015, specifically the increased control over financial markets and second, austerity measures. Or and Aranda-Jan also illustrate different trajectories of governance that go beyond the now well-established New Public Management paradigm of public sector reforms, and conclude that no single actor provides the best mode of governance for all circumstances, discussing instead that governance is hybrid and dynamic.

Policy Analysis and Evaluation

Maithreyi Gopalan and Maureen A. Pirog (2017) discuss the historical use of behavioral research in public policy analysis, which has been particularly emphasized in the last decade. Their review discusses how much of this research has focused on how behavioral insights used by governments at all levels can improve the delivery of governmental services and improve compliance and use of government services by the public. Gopalan and Pirog then review recent trends in policy initiatives that specifically incorporate behavioral insights in the United States and outline a framework for further integrating behavioral insights into the various stages of policy analysis and policy design.

Special Topic Paper

In addition, as with prior issues, we have included an article by Jonathan J. Pierce, Holly L. Peterson, Michael D. Jones, Samantha Garrard, and Theresa Vu (2017) that is of broad interest to public policy scholars that, for various reasons, may not readily find a home in traditional peer-reviewed journals. This year we include a paper that catalogues and analyzes 161 applications of the ACF in order to better understand how the ACF is applied. Building on a previous review of 80 applications of the ACF (1987–2006) conducted by Weible, Sabatier, and McQueen (2009), this review examines both the depth and breadth of the framework. The paper also explores how the three theoretical foci of the framework—advocacy coalitions, policy change, and policy oriented learning—are applied. After conducting the analysis, the findings suggest that the ACF balances common approaches for applying the framework with the specificity of particular contexts.

We hope that scholars continue to utilize these review articles as a quick way to update themselves on the current state of research within specific focus areas. We invite you to read previously published review articles, which can be found on the *Yearbook's* website or within previous volumes of the *PSJ*. We also encourage you to recommend outstanding graduate students to author future iterations of retrospective reviews.

Final Remarks

Our goal is to make the *Yearbook* a convenient and accessible tool for scholars, practitioners, students, or laypersons to find the right scholars, articles, and networks working on the full range of public policy questions. The *Yearbook* is intended to be a continuously updated resource for networking and collaboration among scholars, as well as a no-cost platform for scholars to publicize their research accomplishments and active projects. The *Yearbook* is a valuable resource for students of public policy and public management who need to dig deeper into policy questions and seek ready access to the current state of research in their policy domain of interest.

If you are interested in updating an existing profile or if you are not currently listed but are interested in becoming a member of the *Yearbook*, we have made several improvements to our system to ease the process of creating a profile. Scholars can access to their profiles at any time and make direct changes to their listings. Users can select from two different updating options by visiting the *Yearbook* website at: <http://www.psjyearbook.com/person/update>.

The first option is for scholars who already have a listed profile. On the webpage listed above, under the tab "Current Members," scholars can submit the email address they currently have on file with the *Yearbook*. Our system will then immediately send a personalized link via email that the scholar can use to access their current profile information. By visiting that personalized link, scholars can submit changes to their profile listings and these changes will be updated on the *Yearbook* website immediately.

The second option is for policy scholars who do not yet have a listed profile, but who would like to become a member of the *Yearbook*. Scholars can list their profile at no charge. By visiting the webpage listed above, scholars can click the tab labeled "Submit Your Information," or can go directly to our easy-to-use form at: <http://psjyearbook.com/entry/addme>. Once scholars submit their profile information, our system will await approval by an editor to list that profile on the website.⁴ Once that initial profile has been approved, scholars can go back in and edit their profiles immediately, as described in the previous paragraph. If you have any questions about this process, we welcome you to contact us at: psjyearbook@gmail.com.

Although scholars are able to access their profiles at any time and make direct changes to their listings, we will continue running an annual fall recruitment and updating campaign. In the annual fall campaign, we send invitations to both current and potential new policy scholars to update their entries in the *Yearbook*. We do this to ensure that the *Yearbook* content stays as up-to-date as possible. We will continue our efforts to include faculty from public policy and public management schools and departments around the globe, as well as reaching out to graduate students, post-docs, and practitioners in public policy that make up the next generation of leaders in public policy

research and analysis. We ask that current members assist in this effort by forwarding our invitations to affiliate policy scholars, practitioners, and graduate students.

Finally, the production and operation of the *Yearbook* could not have been accomplished without the help of many hands. We would like to recognize Matthew Henderson for the design and implementation of the online website, web-tools, and data graphics. We also thank Courtney Thornton for her help in editing *Yearbook* entries and review articles. Additionally, we are thankful for the support and help we receive from the Policy Studies Organization and Wiley-Blackwell. Finally, we would like to thank Dr. Paul Rich, President of the Policy Studies Organization, for his financial support and encouragement for the *Yearbook*.

We hope that you will find the *Yearbook* to be a valuable resource in your work on public policy.

Hank Jenkins-Smith
Julie Krutz
Nina Carlson
Christopher Weible
Yearbook Editors

Notes

1. *Yearbook* membership is free of charge and open to all policy scholars and practitioners worldwide. Since the *Yearbook's* inception in 2009, we have sought to broaden the participation of public policy scholars across disciplines, organizations, and nations. The challenge is that, given the nature of public policy research, the domain of public policy scholars and practitioners is highly varied. Public policy research is multidisciplinary in nature, and policy scholars and practitioners inhabit a wide range of institutional settings (universities, governmental agencies, research labs, nonprofit organizations, think tanks, and many others). Initially our invitations were sent to the listed members of the Public Policy Section of the American Political Science Association, as well as members of the Policy Studies Organization. We worked with editors of public policy journals to reach policy scholars globally. More recently, we sent electronic and printed invitations to public policy and public administration departments across the United States and Europe, asking each department to forward the invitation to their public policy faculty members, graduate students, and affiliates. Lastly, our online member updating system allows for current and new members to offer contact information for colleagues and graduate students who should be included. We will continue to undertake an active recruitment and update effort in the fall of each year to be sure our content is up to date and as broadly inclusive as possible.
2. Although we undertake a systematic recruitment effort once a year, it is important to note that scholars can update their profiles or join the *Yearbook* at any time. The website allows scholars to easily access their profiles by submitting their email address on the website profile management portal. The *Yearbook's* website also allows for new members to join, at no cost, through the use of a short online form.
3. When updating their profiles, scholars are asked to check off as many categories as are applicable to describe their research agendas.
4. This initial approval is necessary to avoid publishing "spam."

References

- Gopalan, Maithreyi, and Maureen A. Pirog. 2017. "Applying Behavioral Insights in Policy Analysis: Recent Trends in the United States." *Policy Studies Journal* 45 (S1): S82–S114.

- Jenkins-Smith, Hank C., and Sarah Trouset. 2010. "2010 Public Policy Yearbook." *Policy Studies Journal* 38 (S1): xi–xiii.
- . 2011. "2011 Public Policy Yearbook." *Policy Studies Journal* 39 (S1): vii–xiii.
- Jenkins-Smith, Hank C., Sarah Trouset, and Chris Weible. 2012. "2012 Public Policy Yearbook: Evolving Scholarship in Public Policy." *Policy Studies Journal* 40 (S1): 1–9.
- . 2013. "2013 Public Policy Yearbook: Evolving Scholarship in Public Policy." *Policy Studies Journal* 41 (S1): 1–10.
- Or, Nick H. K., and Ana C. Aranda-Jan. 2017. "The Dynamic Role of State and Nonstate Actors: Governance after Global Financial Crisis." *Policy Studies Journal* 45 (S1): S67–S81.
- Pierce, Jonathan J., Holly L. Peterson, Michael D. Jones, Samantha P. Garrard, and Theresa Vu. 2017. "There and Back Again: A Tale of the Advocacy Coalition Framework." *Policy Studies Journal* 45 (S1): S13–S46.
- Trouset, Sarah, Hank C. Jenkins-Smith, Nina Carlson, and Chris Weible. 2015. "2015 Public Policy Yearbook: Tracking Research in Public Policy." *Policy Studies Journal* 43 (S1): 1–11.
- Trouset, Sarah, Hank C. Jenkins-Smith, and Chris Weible. 2014. "2014 Public Policy Yearbook: Recent Developments in Public Policy Research." *Policy Studies Journal* 42 (S1): 1–11.
- Weible, Christopher M., Paul A. Sabatier, and Kelly McQueen. 2009. "Themes and Variations: Taking Stock of the Advocacy Coalition Framework." *Policy Studies Journal* 37 (1): 121–40.
- Wilder, Matt. 2017. "Comparative Public Policy: Origins, Themes, New Directions." *Policy Studies Journal* 45 (S1): S47–S66.

There and Back Again: A Tale of the Advocacy Coalition Framework

Jonathan J. Pierce, Holly L. Peterson, Michael D. Jones, Samantha P. Garrard, and Theresa Vu

To better understand how the Advocacy Coalition Framework (ACF) is applied, this article catalogues and analyzes 161 applications of the ACF from 2007 to 2014. Building on a previous review of 80 applications of the ACF (1987–2006) conducted by Weible, Sabatier, and McQueen in 2009, this review examines both the breadth and depth of the framework. In terms of breadth, there are over 130 unique first authors from 25 countries, in almost 100 journals applying the framework, including a majority outside of the United States. In terms of depth, a plurality of applications analyzes environment and energy, subsystems at the national level, and utilizes qualitative methods of data collection and analyses. This review also explores how the three theoretical foci of the framework—advocacy coalitions, policy change, and policy-oriented learning—are applied. Our findings suggest that the ACF balances common approaches for applying the framework with the specificity of particular contexts.

KEY WORDS: policy process, public policy, literature review, policy change, learning

去而复返：倡导联盟框架的故事

为更好地理解如何应用倡导联盟框架（简称ACF），本文将2007-2014年间有关ACF的161项应用进行了分类和分析。基于2009年Weible, Sabatier 和 McQueen对1987年至2006年共80次ACF应用的检验，本文对该框架的广度和深度都进行了研究。就广度而言，来自25个国家的130多位学者以第一作者的身份在近100种刊物上应用了该框架，其中大部分作者来自美国以外的其他国家。在深度方面，大量的框架应用从国家层面上分析了环境、能源和次系统，并使用了数据收集和分析的定性方法。本文同时还探索了如何应用该框架的三个理论中心，它们分别是：倡导联盟、政策变化和政策导向学习。结果表明，ACF能在特殊情况和框架应用的一般方法之间找到平衡。

关键词: 倡导联盟框架 (ACF)

Introduction

Paul Sabatier in “The Need for Better Theories” (1999), argued that theories of the policy process should seek to meet the following criteria: (1) have concepts that

are internally valid, include causal mechanisms, falsifiable hypotheses, and be broad in scope; (2) be subject to empirical testing that may lead to conceptual and theoretical development; (3) seek to explain much of the policy process and have normative elements; and (4) address both actors and institutions. Toward this end, Sabatier's edited 1999 volume—*Theories of the Policy Process*—presented multiple frameworks and theories of the policy process that aspire to achieve these lofty expectations. One such framework within this now classic text is the Advocacy Coalition Framework (ACF) developed by Paul Sabatier and Hank Jenkins-Smith.

For at least the past two decades, the ACF's emblematic concepts have been a staple of both policy process scholarship and policy focused graduate programs around the world. These concepts include policy subsystems, advocacy coalitions, belief systems, and policy-oriented learning. Along the way, frequent assessments of the framework have described and updated these concepts, discussed the proliferation of applications, and charted a path for future research (Jenkins-Smith, Nohrstedt, Weible, & Sabatier, 2014; Sabatier & Jenkins-Smith, 1999; Sabatier & Weible, 2007; Weible, Sabatier, & Flowers, 2008; Weible, Sabatier, & McQueen, 2009; Weible, Siddiki, & Pierce, 2011). These assessments cite archetypal examples and present an aspirational framework providing guidance to scholars on how to understand and apply the ACF in a manner that is likely to achieve Sabatier's criteria. However, do applications of the ACF meet the aspirations and guidelines of the framework? The only previous study to address this question using a comprehensive systematic approach was Weible et al. (2009), which analyzed 80 applications of the ACF from 1986 to 2006. It found that many applications fall short of Sabatier's lofty goals. Since 2007, the ACF has developed new concepts and has been cited over 1,000 times. Therefore, one purpose of this article is to address the question of whether applications of the ACF are meeting the aspirational standards of the framework.

This article describes how the ACF has been applied from 2007 to 2014 and analyzes how these applications compare to the initial aspirations of the framework. In doing so, however, analyses are also preeminently concerned with a recent ambition articulated by Jenkins-Smith, Nohrstedt, et al. (2014) that the ACF should seek balance between generalizable applications of the framework and problem-focused applications relevant to particular contexts (p. 207)—an ambition that merges two goals frequently at odds with one another. Thus, a goal of this research is also to assess how ACF scholarship, in the aggregate, balances these goals of meeting general and aspirational guidelines while still addressing diverse phenomenon in specific contexts.

Overview of the ACF

The ACF is designed to guide policy research by providing a common language and focusing on relevant analytical components and relationships within a policy subsystem (Weible, Sabatier, et al., 2011). The framework is especially helpful in explaining public policy during contentious processes that may involve substantial conflicts over goals and technical and scientific information (Pierce & Weible, 2016). It has been revised multiple times with the most prominent revisions occurring in

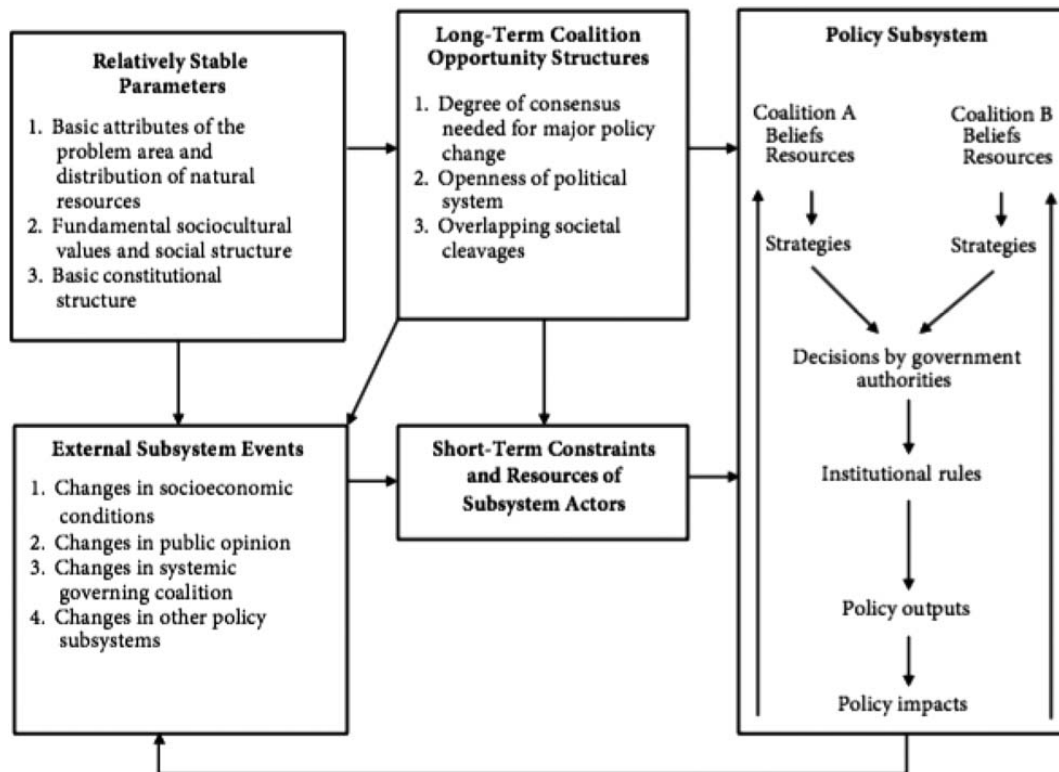


Figure 1. Flow Diagram of the Advocacy Coalition Framework.

Source: Jenkins-Smith, Nohrstedt, et al. (2014).

edited volumes of the *Theories of the Policy Process* edited by Paul Sabatier and, more recently, by Christopher Weible (e.g., Jenkins-Smith, Nohrstedt, et al., 2014; Sabatier & Jenkins-Smith, 1999; Sabatier & Weible, 2007).

Figure 1 provides a flow diagram of the ACF. In this figure, coalitions compete within a policy subsystem to translate their beliefs into policies. They use strategies to influence government authorities, which eventually influence policy. Coalition beliefs and actions are impacted by long- and short-term opportunities, constraints, and resources that are affected by both relatively stable parameters and external subsystem events. The impacts of government decisions feed back into the subsystem, and also may affect factors external to the subsystem (see Jenkins-Smith, Nohrstedt, et al., 2014, for a further description).

Assumptions

For the ACF, the primary unit of analysis is the policy subsystem. A policy subsystem is comprised of all relevant actors trying to influence policy and politics involved in a bounded geographic area and/or authority or potential authority in relation to a specific policy issue (Jenkins-Smith, Nohrstedt, et al., 2014). Policy subsystems may be nested either vertically through levels of government, or horizontally across different jurisdictions or topical issues (Sabatier & Jenkins-Smith, 1993). A strategy for studying policy actors in a policy subsystem is to organize them into

advocacy coalitions based on their policy core beliefs (Weible & Nohrstedt, 2012). Policy actors are boundedly and instrumentally rational individuals that use belief systems or sets of abstract patterns and causal relationships to make sense of the world (Jenkins-Smith, Nohrstedt, et al., 2014). In addition, based on prospect theory, the ACF assumes that people remember losses more than gains (Quattrone & Tversky, 1988). This means that individuals are susceptible to a “devil shift,” whereby they overestimate both the power and the malice of opponents.

Policies are projections of the beliefs and subsequent behavior of coalitions and their members (Lasswell & Kaplan, 1950). Last, the ACF suggests a time period of at least a decade to understand policy process and change (Weible & Nohrstedt, 2012). For the ACF, public policy in many ways is the translation of the winning coalition’s beliefs (Jenkins-Smith, Nohrstedt, et al., 2014).

Theoretical Foci

Advocacy Coalitions. Advocacy coalitions are groups of policy actors that share policy core beliefs and coordinate their behavior to influence the policy process (Pierce & Weible, 2016). Research regarding coalitions may consider identification of coalitions, hierarchical belief systems, coordination, coalition stability, and defections. The traditional hypotheses related to advocacy coalitions include (Sabatier & Weible, 2007, p. 220):

Coalition Hypothesis 1—Allies and Opponents: On major controversies within a policy subsystem when policy core beliefs are in dispute, the lineup of allies and opponents tends to be rather stable over periods of a decade or so.

Coalition Hypothesis 2—Policy Core Beliefs: Actors within an advocacy coalition will show substantial consensus on issues pertaining to the policy core, although less so on secondary aspects.

Coalition Hypothesis 3—Secondary Beliefs: An actor (or coalition) will give up secondary aspects of her (its) belief system before acknowledging weaknesses in the policy core.

Coalition Hypothesis 4—Official Policy Actors: Within a coalition, administrative agencies will usually advocate more moderate positions than their interest group allies.

Coalition Hypothesis 5—Unofficial Policy Actors: Actors within purposive groups are more constrained in their expression of beliefs and policy positions than actors from material groups.

Policy-Oriented Learning. Policy-oriented learning occurs when policy actors consider alternative forms of beliefs associated with obtaining a goal (Sabatier & Jenkins-Smith, 1993). Alternatives in beliefs might refer to new problem definitions, policy solutions, or strategies for influencing government decisions (Jenkins-Smith, Nohrstedt, et al., 2014). Research regarding policy-oriented learning might focus on identification of learning among or between coalitions, policy brokers (policy actors

operating between coalitions), or belief change. ACF hypotheses related to policy-oriented learning include (Jenkins-Smith, Nohrstedt, et al., 2014, pp. 199–200):

Learning Hypothesis 1—Learning Across Coalitions: Policy-oriented learning across belief systems is most likely when there is an intermediate level of informed conflict between the two coalitions. This requires that (1) each have the technical resources to engage in debate, and (2) the conflict be between secondary aspects of one belief system and core elements of the other or, alternatively, between important secondary aspects of the two belief systems.

Learning Hypothesis 2—Learning Professional Forums: Policy-oriented learning across belief systems is most likely when there exists a forum that is (1) prestigious enough to force professionals from different coalitions to participate, and (2) dominated by professional norms.

Learning Hypothesis 3—Quantitative Learning: Problems for which accepted quantitative data and theory exist are more conducive to policy-oriented learning across belief systems than those in which data and theory are generally qualitative, quite subjective, or altogether lacking.

Learning Hypothesis 4—Normative Learning: Problems involving natural systems are more conducive to policy-oriented learning across belief systems than those involving purely social or political systems because, in the former, many of the critical variables are not themselves active strategists and because controlled experimentation is more feasible.

Learning Hypothesis 5—Technical Information: Even when the accumulation of technical information does not change the views of the opposing coalition, it can have important impacts on policy—at least in the short run—by altering the views of policy brokers.

Policy Change. Public policies are the translations of beliefs of past winners of policy processes (Pierce & Weible, 2016). Therefore, policies can be analyzed in terms of belief systems. The ACF associates major policy change with changes in policy core beliefs and minor policy change with changes in secondary beliefs (Sabatier & Jenkins-Smith, 1999). The framework identifies four major pathways to policy change within the policy subsystem: external shocks (Sabatier & Weible, 2007), internal subsystem events (Sabatier & Weible, 2007), policy-oriented learning (Jenkins-Smith, Nohrstedt, et al., 2014), and negotiated agreements (Sabatier & Weible, 2007). Research focusing on policy change often targets the type of policy change and pathway. A fifth alternative form of policy change may occur if there is a change in the governing coalition or an imposition of a policy change by a superior authority. Hypotheses for policy change include:

Policy Change Hypothesis 1—Bottom-up Policy Change: Significant perturbations external to the subsystem, a significant perturbation internal to the subsystem, policy-oriented learning, negotiated agreement, or some combination thereof are

necessary, but not sufficient, sources of change in the policy core attributes of a governmental program (Weible & Nohrstedt, 2012, p. 133).

Policy Change Hypothesis 2—Top-down Policy Change: The policy core attributes of a government program in a specific jurisdiction will not be significantly revised as long as the subsystem advocacy coalition that instated the program remains in power within that jurisdiction—except when the change is imposed by a hierarchically superior jurisdiction (Jenkins-Smith, Nohrstedt, et al., 2014, pp. 203–4).

Methods

The first step in our review process was to produce a list of peer-reviewed journal articles. We utilized the Web of Science database to create a list of peer-reviewed journal articles in English that cite at least one of the following six ACF origin and revision publications: Paul Sabatier, *Journal of Public Policy* (1986); Paul Sabatier, *Policy Sciences* (1988); Paul Sabatier and Hank Jenkins-Smith (eds), *Policy Change and Learning: An Advocacy Coalition Approach* (1993); Paul Sabatier, *Journal of European Public Policy* (1998); Paul Sabatier and Hank Jenkins-Smith, “An Advocacy Coalition Framework: An Assessment” in *Theories of the Policy Process* (1999); Paul Sabatier and Christopher Weible, “The Advocacy Coalition Framework: Innovations and Clarifications” in *Theories of the Policy Process, Second Edition* (2007). These six journal articles, book, and book chapters were utilized because they establish the theoretical basis and development of the ACF. They describe the assumptions, scope, and hypotheses of the framework. A previous study of ACF applications by Weible et al. (2009) examined peer-reviewed journal articles, books, and book chapters from 1987 to 2006 ($n = 80$) and was the starting point for this research; however, this study methodologically departs from Weible et al. (2009), who utilized previous lists of applications found in Sabatier and Jenkins-Smith (1999) and Sabatier and Weible (2007), as well as searches for key words on Web of Science and Google Scholar.

This review’s search criterion deviates from the aforementioned study for a few reasons. First, this search does not use the lists of past applications by Sabatier and Jenkins-Smith (1999) and Sabatier and Weible (2007) as these are prior to this study’s range of interest, 2007–2014, and the list of applications in Jenkins-Smith, Nohrstedt, et al. (2014) was published after this data set was collected. Second, searches of Web of Science were used instead of Google Scholar to avoid data collection errors associated with Google Scholar’s duplicate citation listings, its limit on results returned from a single search, and the search engine’s restrictions regarding accessing numerous search results in a single session. Third, using Web of Science’s Cited Reference Search rather than keywords provided the advantage of a systematic search algorithm that produced replicable results. Lastly, the search criteria were limited to peer-reviewed journal articles for three reasons: to establish a bound of quality agreed upon within the field, to increase comparability across cases, and practical reasons related to conducting content analysis on hundreds of documents such as ease of document sharing and limits on document length. The search criteria

included only English language peer-reviewed journal articles between 2007 and 2014. This initial search resulted in a total of 1,067 articles. Not every application of the ACF between 2007 and 2014 is captured here; rather, this design attempted to include as many applications as possible given these search parameters.

Content analysis was conducted on the articles in two rounds. First, five coders recorded the bibliographic information of each article. This included 10 identification codes such as title, author, journal name, etc. Four codes were utilized to differentiate between applications and those articles that only cited one of the six theoretical foundational documents. These codes include: (1) the frequency that the keywords “coalition,” “learn,” or “advocacy” occur in the title, abstract, and the (2) frequency that the six theoretical foundational documents are cited. Only articles with two or more of the keywords or two or more citations in the text were included. This process led to the removal of about half of the articles, leaving 512 potential applications.

Using the frequency of keywords and citations alone can lead to Type I errors if all 512 articles are used. Thus, the following additional criterion was applied to determine if an article is an application: (3) data and/or a case study, (4) be about a topic, and (5) analyzes one or more theoretical component of the ACF (coalitions, policy change, and/or policy-oriented learning). For example, Albright (2011) and Ansell, Reckhow, and Kelly (2009) were included as applications because they fit the following criteria: (1) multiple use of keywords “advocacy” and “coalition”; (2) multiple citations of theoretical foundation documents; (3) case study and/or data analyzed; (4) analyze specific topics; and (5) Ansell et al. (2009) analyze advocacy coalitions, and Albright (2011) analyzes policy change. Conversely, Alcantara, Leron, and Spicer (2012) and Jenkins-Smith, Silva, Gupta, and Ripberger (2014) were not included as applications. Both journal articles meet the first two criteria of keywords and citations, but did not meet either of the additional criteria. Alcantara et al. (2012) examine variation in implementation using learning as a variable of interest, but do not examine policy-oriented learning from an ACF perspective. Jenkins-Smith, Silva, et al. (2014) propose that cultural theory should be integrated into the ACF to explain hierarchical belief systems, but do not include a case study or analyze data, and was not about a topic. Using this subjective process, we ended up with 161 articles identified as applications. To mitigate subjectivity, inter-coder reliability assessments for this coding were acceptable with more than 50 percent of a random sample of articles being reviewed by an inter-coder.¹

All the 161 applications are referenced in this article through in-text citations and listed in the references. In the second round of coding, seven coders conducted content analysis. The entire codebook is available in the Supporting Information. This codebook analyzes the articles for scope, purpose, methods, coalitions, learning, policy change, and additional notes. Overall, the codebook includes 15 codes in the first round and 53 codes in the second round for a total of 68 codes.

To ensure reliable results, the codebook uses specific wording to minimize interpretation and binary coding for presence. To determine inter-coder reliability, a random number generator was utilized and 87/161 articles (54 percent) were coded by two coders. This sample is sufficient to determine inter-coder reliability at a 95

percent confidence level with 6 percent confidence interval. All codes showed greater than or equal to 80 percent agreement, which is considered reliable (Lacy & Riffe, 1996), and a Cohen's Kappa produced a score of 0.40 or greater for 41 nominal codes (considered a moderate level of agreement—see Landis & Koch, 1977). Therefore, based on both percentage agreement and Cohen's Kappa, these codes achieve acceptable levels of inter-coder reliability.

Analysis

The following section presents content analysis of data collected from 161 peer-reviewed articles applying the ACF. It reflects how the ACF struggles to balance specificity of unique contexts with generalizable concepts and methods. This section is divided into two parts: *description of applications* and *theoretical components*.

Description of Applications

Our first series of analyses provide a general description of the breadth of the ACF applications by examining the popularity, flexibility, and general utility of the framework. Descriptors include author information, journal information, policy domains, geographic area studied, governance level, and methods used.

Author and Journal Information. The wide range of author institutions, journals, as well as the volatile increase in the number of publications since 2007 indicates that the ACF is a popular and robust theory of the policy process. Of the 161 articles analyzed, 138 have different first authors with only 14 having the same first author on multiple articles. The most prolific ACF first authors are Christopher Weible (5) (e.g., Weible, 2008), Daniel Nohrstedt (4) (e.g., Nohrstedt, 2010), and Karin Ingold (4) (e.g., Ingold & Gschwend, 2014). In total, there are 326 authors of applications of the ACF. Applications of the ACF tend to have multiple authors. Seventy-nine (49 percent) applications only had one author, while 82 (51 percent) had multiple authors with the median and mean number of authors on an application being two.

First authors represented 122 different universities or institutes, 25 different countries, and 4 continents. An example of an institute is the Forest Research Institute in Zvolen, part of the Ministry of Agriculture in Slovak Republic (e.g., Sarvašová, Šálka, & Dobšinská, 2013). Twenty-two universities or institutes produced multiple applications with the most frequent being University of Berne, Switzerland (7) (e.g., Ingold & Fischer, 2014); University of Colorado Denver, USA (7) (e.g., Weible, Pattison, & Sabatier, 2010); University of Copenhagen, Denmark (4) (e.g., Nedergaard, 2007); and Uppsala University, Sweden (4) (e.g., Nohrstedt, 2013).

Based on first author university affiliation, the most frequent countries of authorship are the United States (52) (e.g., Schilling & Keyes, 2008), United Kingdom (18) (e.g., Smith, 2013), Switzerland (12) (e.g., Fischer, 2014), Canada (11) (e.g., Fitzpatrick, Fonseca, & McAllister, 2011), and Sweden (10) (e.g., Hysing & Olsson, 2008). However, based on continent of authorship, the most frequent is Europe (77) (e.g., Eriksson, Karlsson, & Reuter, 2010). This is followed by North America (65) (e.g., Vergari,

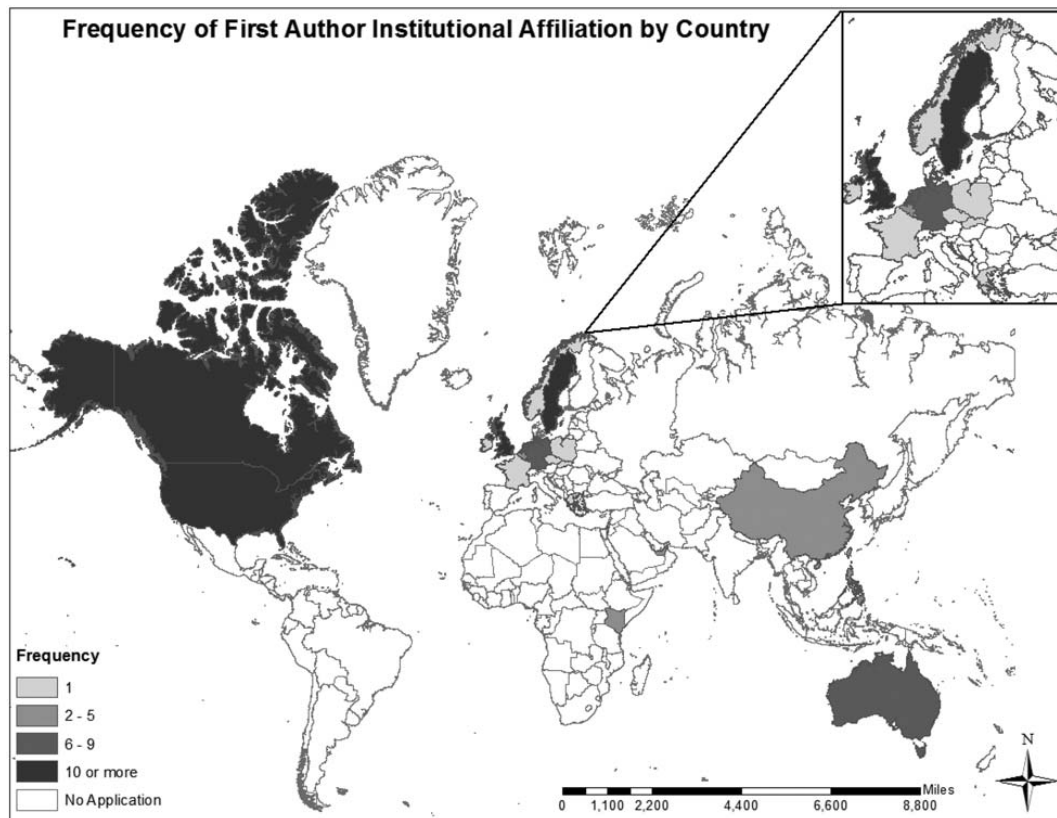


Figure 2. First Author University or Institute Affiliation by Country ($n = 161$).

2007), Asia (13) (e.g., Jang, Kim, & Han, 2010), Oceania (7) (e.g., Beem, 2012), and Africa (3) (e.g., Marfo & McKeown, 2013). The ACF is predominantly an international policy process theory with the majority of authors coming from outside of North America. Figure 2 depicts the number of applications distributed by the author's country of origin based on university or institution.

The high percentage of unique first authors, and variation among universities/institutes and countries demonstrates that the ACF has diverse users. The ACF has diffused across the globe, indicating its popularity, durability, and tractability.

The ACF is applied in 98 unique journals. The journals that publish applications of the ACF at least five times include: *Policy Studies Journal* (16) (e.g., Ansell et al., 2009), *Journal of Public Administration Research and Theory* (6) (e.g., Brecher, Brazill, Weitzman, & Silver, 2010), *Review of Policy Research* (6) (e.g., Elgin & Weible, 2013), *Journal of Comparative Policy Analysis* (5) (e.g., Gupta, 2014), *Forest Policy and Economics* (5) (e.g., Sotirov & Memmler, 2012), and *Educational Policy* (5) (e.g., Cibulka & Myers, 2008). Public policy journals most frequently publish ACF applications. This demonstrates the popularity of the framework among policy process scholars. There are 73 journals (45 percent) that published only a single application of the ACF. These journals vary greatly in their scope and purpose. They include political science, *American Journal of Political Science* (e.g., Leifeld & Schneider, 2012); region or country specific, *Philippine Political Science Journal* (e.g., Lansang, 2011); domain specific, *Energy Policy* (e.g., Jegen & Audet, 2011); and interdisciplinary, *Innovation: The European Journal of*

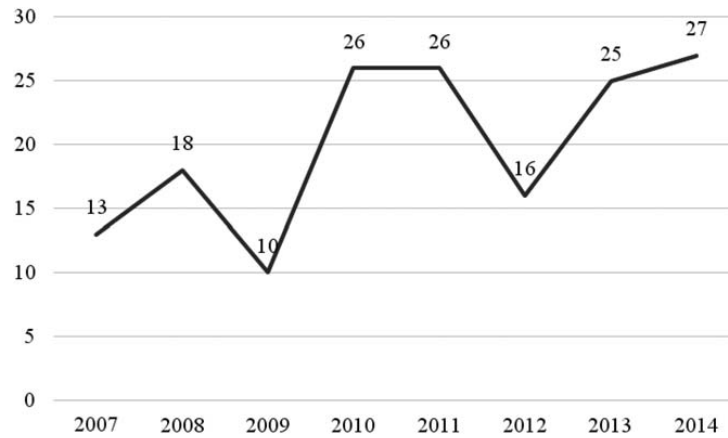


Figure 3. ACF Applications by Year, 2007–14 ($n = 161$).

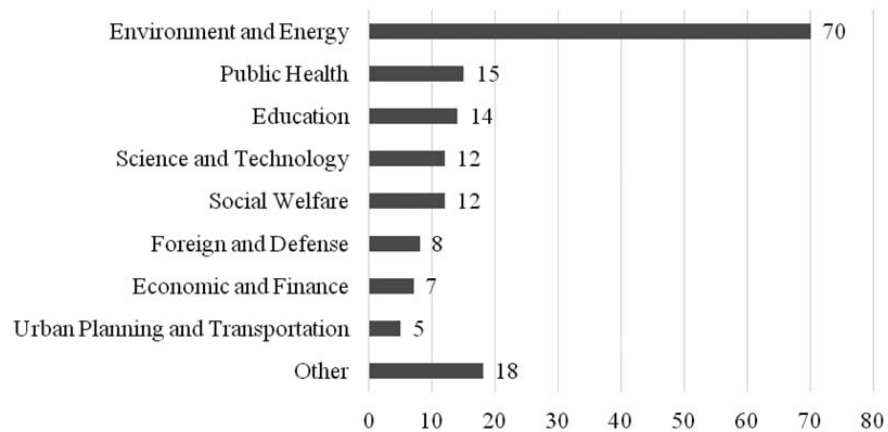


Figure 4. ACF Applications by Policy Domain ($n = 161$).

Social Science Research (e.g., Roßegger & Ramin, 2013). Taken in tandem, the range of journals publishing the ACF along with the finding of over 100 unique first authors exhibit the breadth of research agendas and the overall malleability of the framework.

The publication of ACF applications has been volatile year to year. Since 2007, published ACF applications range from a low of 10 articles in 2009 to a high of 27 articles in 2014. In addition, from 2010 to 2014, the mean number of articles published annually is 24 with only 1 year below that total. This demonstrates that in recent years the ACF has achieved a sustained level of over 20 applications annually. In contrast, Weible et al. (2009) found that 10 was the maximum number of applications between 1987 and 2006 while also counting books and book chapters. Therefore, the ACF is growing in its popularity among scholars. Figure 3 only includes peer-reviewed journal articles and indicates clear growth in the number of ACF applications since 2007.

Policy Domains. Nine unique policy domains including an “Other” category were identified (see Figure 4). Applications were coded for either having a single domain

or if they had multiple domains they were coded as comparative. There are only four applications that compare across different policy domains (e.g., Nedergaard, 2009). Any domain that has less than five applications, including the comparative applications, is included in the "Other" category. The "Other" includes such domains as: criminal justice (e.g., Bromfield, 2012), sports (e.g., Parrish, 2008), tourism (e.g., Airey & Chong, 2010), and emergency management (e.g., Albright, 2011). The most frequent policy domain representing a clear plurality of applications is environment and energy with 70 (43 percent) applications (e.g., Blatter, 2009; Bukowski, 2007; Hansen, 2013). Other common policy domains include: public health (15) (e.g., Breton, Richard, Gagnon, Jacques, & Bergeron, 2008; Poulsen, 2014), education (14) (e.g., Beverwijk, Goedegebuure, & Huisman, 2008; DeBray, Scott, Lubienski, & Jabbar, 2014; Shakespeare, 2008), social welfare (12) (e.g., Klindt, 2011), science and technology (12) (e.g., Amougou & Larson, 2008; Kettell & Cairney, 2010), defense and foreign policy (8) (e.g., Pierce, 2011), economics and finance (7) (e.g., Buller & Lindstrom, 2013; Dressel, 2012), and urban planning and transportation (5) (e.g., Olsson, 2009). It is evident that the general focus of scholars applying the ACF is on environment and energy issues, but the framework is flexible enough to be applicable to a wide range of public issues. Weible et al. (2009) found that a majority of applications were about the environment and energy; this demonstrates a continuation of this trend, but it no longer represents the majority of applications.

Geographic Area Studied. The ACF is applied to policy subsystems around the globe. There are applications discussing 54 unique countries.² The total number of countries identified is 201 including duplications and 20 applications with multiple countries, such as Huntjens et al. (2011) comparing 11 countries. Jenkins-Smith, Nohrstedt, et al. (2014) state that there are no comparative applications across political systems systematically comparing policy subsystems, coalition behavior, and policy processes. However, we find that there are multiple studies comparing aspects of the ACF across political systems. For example, Montpetit (2011) compares the role of scientists as policy actors in Canada, the United States, United Kingdom, and France. Montpetit (2009) compares policy actor learning in the European Union (EU) with Canada and the United States. Huntjens et al. (2011) compare policy-oriented learning among policy actors in eight different river basins in 11 different countries including Uganda, Rwanda, Uzbekistan, the Netherlands, and the Ukraine. These are some examples of the 20 applications that analyze policy subsystems in multiple countries.

The most frequent single country is the United States (53), (e.g., Fisher, Leifeld, & Iwaki, 2013), but this only represents about a third of the applications. This is followed by the United Kingdom (15) (e.g., Dudley, 2007), Switzerland (14) (e.g., Mavrot, 2012), and Sweden (10) (e.g., Sandström, 2010). Some examples of applications in more-remote and less-common countries include: Burkina Faso (Cherlet & Venot, 2013), Bulgaria (Brusis, 2010), China (Francesch-Huidobro & Mai, 2012; Li, 2012), Estonia (Adams, Cotella, & Nunes, 2014), France (Bandelow & Kundolf, 2011), Greece (Stamelos & Kavasakalis, 2013), Iceland (Nedergaard, 2009), India (Rastogi, Hickey, Badola, & Hussain, 2013), Indonesia (Fidelman et al., 2014), Ireland (Adshhead, 2011), Israel (Lahat, 2011; Mandelkern & Shalev, 2010), Kenya (Kingiri, 2011),

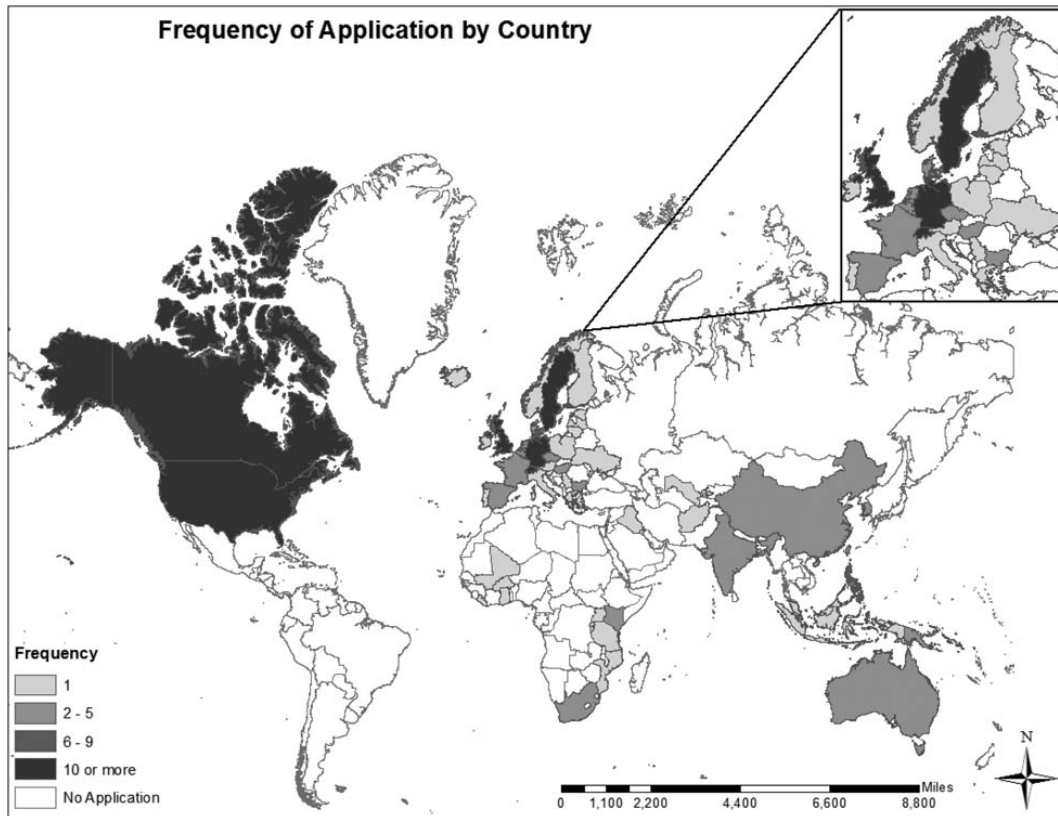


Figure 5. ACF Applications by Country Including Multiple Country Applications ($n = 201$).

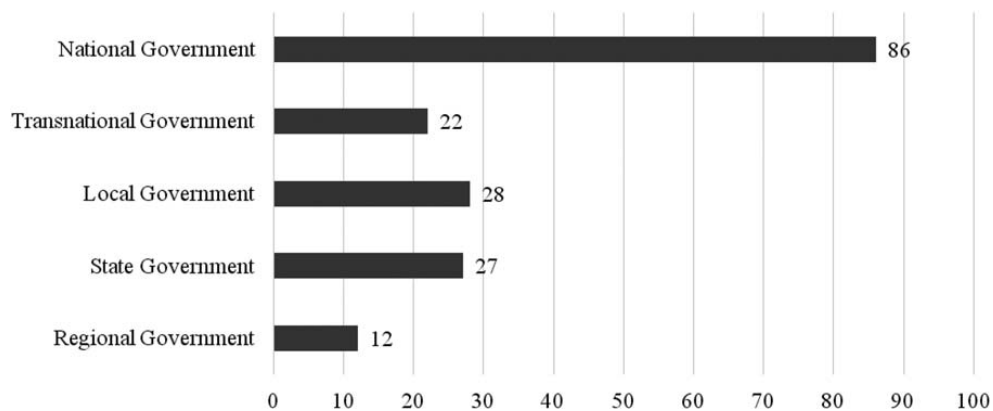


Figure 6. ACF Application by Level of Government ($n = 175$).

Liberia (Runkle, LaFollette, & Alamu, 2013), Papua New Guinea (Babon et al., 2014), Portugal (Huntjens et al., 2011), South Africa (Hirschi & Widmer, 2010), and South Korea (Kim, 2011). Figure 5 illustrates a total of 201 applications by country.³

The continent that is the most frequently studied using the ACF is Europe with 111 applications including 16 EU-only applications (e.g., Sloboda, Szabó-Gilinger, Vigers, & Šimičić, 2010). This is followed by North America with 64 applications (e.g., Sstrom, 2010), Asia with 25 applications (Han, Swedlow, & Unger, 2014), Africa with 13 applications (Kingiri, 2014), and Oceania with 5 applications (Battams &

Baum, 2010). The only continent other than Antarctica that does not have an application is South America. Also, the applications in North America are only in the United States and Canada. Weible et al. (2009) did find multiple applications from South America but found comparatively fewer applications in Asia and Africa. This may be due to the language restriction of only including English-language peer-reviewed journal articles. Overall, the frequency of the ACF applied to Europe demonstrates that it is not a U.S.-centric policy framework, and the presence of applications in countries such as China (e.g., Li, 2012), Kenya (Kingiri, 2011), and Liberia (Runkle et al., 2013) show its utility in less-democratic and developing countries that were once criticisms of the ACF (Andersson, 1998; Kübler, 2001; Parsons, 1995).

Governance Level. To investigate the governance level of the subsystem(s), the following categories are used (see Figure 6): local, state, regional, national, and transnational (EU and other international governing institutions). This coding does not capture policy actors that may be from different levels of government but rather focuses only on the level of government identified by the policy subsystem. There are 10 applications that analyze more than one level of government. For example, Leach, Weible, Vince, Siddiki, and Calanni (2014) analyze marine aquaculture partnerships at three levels of government: local, regional, and state. Therefore, because these 10 applications include subsystems at multiple levels of governance, there is a total of 175 levels of governance from the 161 applications. The results show that 86 subsystems are at the national level (e.g., Leifeld, 2013). In addition, there are several other applications, 22 that either focus on the EU (e.g., Mailand, 2010) or other international institutions such as the Nordic Council of Ministers (Nedergaard, 2009) that are identified as “transnational.” Local governments account for 28 applications (e.g., Lubell, 2007), state governments 27 (e.g., Heikkila et al., 2014; Heinmiller, 2013), and regional governments 12 (e.g., Van den Bulck & Donders, 2014). Weible et al. (2009) did not collect data on the level of government analyzed in the policy subsystem so a comparison is not available. Our data, however, show that since 2007 the ACF is primarily used to explain national policy processes.

Methods Used. Coders identified articles as applying one of the following methodological categories: only quantitative, only qualitative, or mixed methods (both quantitative and qualitative). For purposes of coding, quantitative is any numerical data collection and analysis, qualitative is any linguistic-based data collection and analysis, and mixed methods include both quantitative and qualitative elements such as combining qualitative interviews with quantitative surveys (e.g., Henry, 2011). The most frequent type of methodology and a clear majority are qualitative methods with 107 (66 percent) applications (e.g., Meijerink, 2008). Mixed methods account for 39 (24 percent) applications (e.g., Nohrstedt, 2010) and there are 15 (9 percent) (e.g., Henry, Lubell, & McCoy, 2011) quantitative-only applications.⁴ Mixed methods and qualitative applications account for 146 applications. Mixed methods and quantitative applications combined account for 54 applications. Therefore, the vast majority of applications include a qualitative component of data collection or analysis, while in comparison about one third of the applications include any numerical data collection and analysis, indicating a clear preference for qualitative data and/or analysis.

The most frequent method of data collection is interviews in 101 (63 percent) applications (e.g., Knox-Hayes, 2012; Marichal, 2009). The number of interviews conducted varies greatly from only 5 by Klindt (2011) to 250 interviews by Fischer (2014). In comparison, Weible et al. (2009) found that 30 percent of applications utilized some type of interview data. The number of applications using interviews has doubled. A majority, 94 (58 percent) applications use some form of self-reported document analysis. These also represent a wide range in terms of the number of observations. Interviews and document analysis are frequently utilized in tandem. In total, 65 (40 percent) applications combine interviews and document analysis (e.g., Hirsch, Baxter, & Brown, 2010; Nedergaard, 2008). The preferred method of data collection for applying the ACF are interviews and document analysis. This is a recent phenomenon as Weible et al. (2009) found only 10 percent of applications utilized both interviews and document analysis.

In many cases, the number of documents analyzed are not provided (e.g., Princen, 2007; Roßegger & Ramin, 2013; Stensdal, 2014). For example, Afonso (2014) states, "The analysis relies primarily on newspaper reports, government reports, responses to government consultations, party manifestos and secondary literature" (p. 573). In contrast, some applications identify and analyze hundreds or even over a thousand documents, such as Montefrio and Sonnenfeld (2011) and Fisher et al. (2013). There were 14 (9 percent) applications that do not indicate any form of data collection (e.g., Smith, 2009). In total, 52 (32 percent) applications do not specify how many observations are made. For example, Adams et al. (2014) state the following about data collection "The documentary analysis was supplemented by a series of face-to face and telephone interviews with selected key stakeholders" (p. 714). The organization categories for stakeholders are specified, but not how many stakeholders are interviewed, the interview questions, how many documents, and how they are analyzed. By not specifying and making transparent the methods of data collection, replicability becomes impossible. This is a similar issue identified by Weible et al. (2009), who found 41 percent of applications did not specify the methods of data collection. These applications demonstrate a marked improvement of about 10 percent, but still about one third of applications do not specify how data collection occurs beyond stating that document analysis or interviews were conducted. This explains the tension in balancing common approaches for applying the framework, with addressing diverse issues in unique contexts.

Other common forms of data collection that are identified include: surveys in 34 (21 percent) applications (e.g., Leach et al., 2014), participant observation in 13 (8 percent) applications (e.g., Fleury, Grenier, Vallée, Hurtubise, & Lévesque, 2014), and focus groups in 5 (3 percent) applications (e.g., Wilson, Barakat, Vohra, Ritvo, & Boon, 2008). In comparison with Weible et al. (2009), there is little change in the number of applications that use surveys (17 percent); however, there are minor increases in participant observation, which was identified by Weible et al. (2009) in only 3 percent of applications and focus groups were not identified at all. This represents a diversification in terms of data collection among current ACF applications.

Overall, the typical application of the ACF is conducted by European or North American scholars; studies environment and energy issues in Europe or North America

at the national level of governance; and uses qualitative methods, including interviews and document analysis. However, the framework is also being applied by scholars in Asia, Africa, and Oceania, studying a wide range of public issues in over one hundred countries including comparative studies at all levels of governance, and using both qualitative and quantitative methods. On balance, the ACF is growing in popularity among all scholars and subsequently becoming a pluralistic framework being used on multiple continents by hundreds of authors to study diverse subsystems.

Theoretical Components

The ACF has three general theoretical foci. These are advocacy coalitions, policy change, and policy-oriented learning (Jenkins-Smith, Nohrstedt, et al., 2014). Data were collected from the applications examining each of these foci as well as identifying the presence of theoretical components such as belief systems of advocacy coalitions and the different pathways to policy change.

Advocacy Coalitions. One of the basic concepts of the ACF is the advocacy coalition, the policy actors that coordinate their actions in a nontrivial way to achieve policy objectives (Jenkins-Smith, Nohrstedt, et al., 2014). Applications of the ACF range widely on how they identify advocacy coalitions and what they focus on. Data were collected from applications about advocacy coalitions including: (1) how many advocacy coalitions are identified (0, 1, 2, or more), (2) what beliefs are identified (deep core, policy core, or secondary), (3) if coordination is identified, and (4) whether the coalitions exhibit stability and/or defection over time.

A vast majority of applications identify at least one advocacy coalition. In total, 143 (89 percent) applications identify at least one advocacy coalition, which means 18 (11 percent) did not identify any advocacy coalitions (e.g., Beard, 2013; Montpetit, 2011; Ripberger, Gupta, Silva, & Jenkins-Smith, 2014). The applications that did not identify any advocacy coalitions tend to focus on specific components of the ACF such as deep core beliefs of policy actors (e.g., Ripberger et al., 2014). In addition, 22 (14 percent) applications only identify a single advocacy coalition (e.g., Kwon, 2007; Michalowitz, 2007; Parsell, Fitzpatrick, & Busch-Geertsema, 2014; Patel, 2013). In comparison Weible et al. (2009) found that 9 percent of applications did not identify an advocacy coalition, and only 1 percent identified only a single advocacy coalition. This demonstrates that about 10 percent of applications continue not to identify an advocacy coalition and an increasing trend of studying single-coalition subsystems.

The vast majority of applications, 121 (75 percent), identify two or more advocacy coalitions (e.g., Dela Santa, 2013; Dougherty, Natow, Bork, Jones, & Vega, 2013). These applications may identify competing advocacy coalitions as dominant and minority (e.g., Montefrio, 2014) or may not indicate such qualifying differences (e.g., Miller, 2011). Many applications identify more than two advocacy coalitions such as Ingold (2011) that identifies three advocacy coalitions. In comparison, Weible et al. (2009) found that 90 percent of applications before 2007 had two or more advocacy coalitions. This demonstrates a trend in applications studying the ACF that are no longer dependent on identifying two or more advocacy coalitions.

The ACF posits that policy actors have belief systems that are hierarchical. These beliefs are the glue that brings together policy actors to engage in the policy process (Jenkins-Smith, Nohrstedt, et al., 2014). These beliefs are identified as either deep core, policy core, or instrumental/secondary beliefs. For identifying advocacy coalitions and understanding policy change the focus tends to be on policy core beliefs. In general, 145 (90 percent) applications identify coalition beliefs whether specifying the category or not. However, 16 (10 percent) applications did not identify any beliefs (e.g., Frahsa, Rütten, Roeger, Abu-Omar, & Schow, 2014; Howarth, 2013; Ness, 2010). There are 50 (31 percent) applications that identify beliefs in general, but did not specify the category (e.g., DeBray-Pelot, Lubienski, & Scott, 2007; Van Overveld, Hermans, & Verliefde, 2010). This demonstrates that a large minority of applications (a combined 41 percent) are not categorizing belief systems as prescribed by Jenkins-Smith, Nohrstedt, et al. (2014). Weible et al. (2009) did not report results about belief systems.

Applications were also analyzed to determine if they explicitly discussed whether members of the advocacy coalitions coordinate.⁵ In the past, failure to examine coordination was identified as a major limitation of the ACF (Schlager, 1995). Indeed, Weible et al.'s (2009, p. 132) review of past ACF applications noted a lack of coalitional coordination in ACF applications, identifying only a handful of applications discussing coordination (Abrar, Lovenduski, & Margetts, 2000; Farquharson, 2003; Sato, 1999) and only two using data to investigate the concept (Weible, 2005; Weible & Sabatier, 2005). Following these indications that coalitional coordination was systematically overlooked in ACF applications, Jenkins-Smith, Nohrstedt, et al. (2014) developed explanations of coalitional response to collective action threats. In a departure from previous works, this analysis finds 58 (36 percent) applications explicitly identify coordination (e.g., Baumann & White, 2014; Caveen, Gray, Stead, & Polunin, 2013; Crow, 2008), evidence of a notable increase since Weible et al. (2009). Now a full third of applications identify coordination, suggesting the concept is finally receiving attention.

A final theoretical focus is whether ACF applications find that policy actors defect from advocacy coalitions or if membership is relatively stable over time. Stability is much more frequent in comparison to defection. Coalition stability is identified in 27 (17 percent) applications (e.g., Heikkila et al., 2014; Ingold & Varone, 2012), while five (3 percent) applications explicitly discuss defection (e.g., Svihula & Estes, 2007). Weible et al. (2009) identified stability or defection among 16 percent of applications. Therefore, the study of stability and defection among advocacy coalitions remains relatively stable.

Policy Change. Content analysis of policy change includes whether it is identified, if it is major and/or minor change, and if a pathway(s) to policy change are identified: (1) external events or perturbations, (2) internal events within the policy subsystem such as policy failure, (3) policy-oriented learning that influences policy change, and (4) negotiated agreement as well as the presence of a policy broker (Jenkins-Smith, Nohrstedt, et al., 2014). Overall, 67 (42 percent) ACF applications analyze either policy change or stasis (e.g., Nohrstedt, 2008, 2010, 2011; Stich & Miller, 2008).

A minority of applications, 19 (12 percent), qualify policy change as either major or minor. Sabatier and Jenkins-Smith (1999) describe this difference as a major strength of the ACF. They argue that major policy changes are changes among the policy core beliefs including the objectives of a government policy or program, while minor policy changes are in relation to the secondary or instrumental aspects of the policy. Only one application analyzes both major and minor policy changes (Fischer, 2014). There are 12 applications that analyze major policy changes (e.g., Winkel & Sotirov, 2011). In contrast, eight applications analyze minor policy change (e.g., Penning-Rowsell, Priest, & Johnson, 2014). While applications of the ACF should categorize policy change as either major or minor (Jenkins-Smith, Nohrstedt, et al., 2014), this is not the case in practice.

Overall, the most frequent source of policy change is policy-oriented learning, which was identified in 46 (29 percent) of ACF applications (e.g., Heikkila et al., 2014). Learning may facilitate minor policy changes over time such as the utilization of policy analysis as an enlightenment function (Sabatier, 1988), or it may lead to major policy changes in conjunction with internal or external events (Jenkins-Smith, Nohrstedt, et al., 2014). For example, Heikkila et al.'s (2014) research studying regulation of hydraulic fracturing finds that policy-oriented learning occurred among an advocacy coalition and may have been a predecessor to policy change. Weible et al. (2009) identify 20 (25 percent) applications of policy-oriented learning hypotheses, but these are not explicitly connected to policy change. This may explain the slight increase in the number of applications applying learning to policy change.

A second pathway to policy change is attributing the change to a source external to the policy subsystem. These may include changes in socioeconomic conditions, regime change, outputs from other policy subsystems, and extreme events such as crises and disasters (Jenkins-Smith, Nohrstedt, et al., 2014). External events like these increase the likelihood of major policy change, but are also dependent on the actions of advocacy coalitions (Sabatier & Weible, 2007). In total, 45 (28 percent) applications identify a source external to the policy subsystem as influencing policy change (e.g., Dougherty, Nienhuser, & Vega, 2010; Nohrstedt, 2008). Weible et al. (2009) found 18 (22 percent) applications tested the hypothesis that external perturbations are a necessary, but not sufficient, condition of policy change. This indicates a slight increase in the application of external events as a source of policy change.

In juxtaposition to external sources of policy change, there are also events internal to the policy subsystem such as crises or policy failures within the territorial boundaries and/or topical area of the policy subsystem that may lead to policy change (Sabatier & Weible, 2007). Ten (6 percent) applications identify this as a source of policy change (e.g., Diaz-Kope, Lombard, & Miller-Stevens, 2013). Weible et al. (2009) did not report the number of applications describing internal events as influencing policy change because it was not introduced until Sabatier and Weible (2007).

The final pathway to policy change is negotiation between coalitions, which was analyzed in 22 (14 percent) applications associated with policy change (e.g., Ingold, 2011; Ley & Weber, 2014). Applications identifying negotiation also tend to identify a policy broker (e.g., Ingold, 2011). According to Sabatier (1993), policy brokers are

often elected officials or civil servants who may favor one coalition over another, but whose dominant concern is keeping the level of political conflict within acceptable limits and reaching a reasonable solution (p. 27). Weible et al. (2009) do not identify negotiation because it was not introduced until Sabatier and Weible (2007). Since its introduction in Sabatier and Weible (2007), negotiation has become a frequent pathway to analyze policy change. Therefore, new concepts such as internal events and negation are being applied.

Policy-Oriented Learning. Policy-oriented learning has always been a central focus of the ACF and is defined as “enduring alterations of thought or behavioral intentions that result from experience and which are concerned with the attainment or revision of the precepts of the belief system of individuals or of collectives (such as advocacy coalitions)” (Sabatier & Jenkins-Smith, 1993, p. 42). Policy-oriented learning then could mean learning by an individual, an advocacy coalition, or between advocacy coalitions. It may or may not be connected explicitly to a policy change. Overall, policy-oriented learning is identified in 48 (29 percent) applications (e.g., Cairney, 2007; Heikkila et al., 2014; Nohrstedt, 2011; Weible, 2008). In comparison, Weible et al. (2009) identified 20 (25 percent) applications that explicitly applied a hypothesis related to policy-oriented learning. The number of applications applying policy-oriented learning has been relatively stable.

The process and influence of policy-oriented learning varies greatly among the applications. Learning is identified at different levels within and between coalitions, and can influence belief and policy change. In the articles reviewed, learning is identified at the individual level (e.g., Kingiri, 2011; Weible, 2008), the coalition level (e.g., Cairney, 2007), across coalitions (e.g., Nohrstedt, 2013; Weber, Driessen, Schueler, & Runhaar, 2013), and within coalitions, for instance in strategy alterations (e.g., Han et al., 2014; Kingiri, 2014; Nohrstedt, 2011). Learning across coalitions was also identified as leading to coordination between the coalitions (e.g., Johnson, Payne, McNeese, & Allen, 2012) and to changes in coalition alignments and the emergence of new alignments among policy actors (e.g., Kuebler, 2007). In these applications, learning within a coalition was also found to lead to a coalition giving up secondary beliefs to maintain policy core beliefs (e.g., Ellison & Newmark, 2010). Additionally, learning is identified as a function of new scientific and technical information (e.g., Stensdal, 2014) and the exchange of ideas in professional forums and government committees (e.g., Beem, 2012; Nedergaard, 2009). Finally, learning also leads to policy change (e.g., Bandelow & Kundolf, 2011) sometimes identified as minor as it relates to instrumental policy beliefs (e.g., Schröer, 2014; Van Gossum, Ledene, Arts, De Vreese, & Verheyen, 2008). Based on this analysis, learning within the ACF occurs at various levels of analyses and has various causes and influences related to individuals, coalitions, and policy.

Integration and Comparison with Other Frameworks, Theories, and Concepts. The ACF is applied on its own and either in comparison or integrated with other theories and frameworks. There are 83 (52 percent) applications explicitly comparing or integrating the ACF with frameworks or theories of the policy process, or other theoretical concepts. This demonstrates that a slight majority of applications are not solo ACF

applications, but rather seek to provide further understanding about the policy process by either integrating or comparing the ACF with other frameworks, theories, and/or theoretical concepts. In comparison, Weible et al. (2009) found that 36 (45 percent) applications used another theory or framework in addition to the ACF. During its history, about half of ACF applications are not solo ACF applications, but instead either compare or combine the ACF with other theories.

Many policy process frameworks and theories are utilized in these applications including: punctuated equilibrium theory (e.g., Beard, 2013; Dziengel, 2010), multiple streams (e.g., Olsson, 2009; Van Gossum et al., 2008), network analysis (e.g., Ansell et al., 2009), regime theory (e.g., Blatter, 2009), narrative policy framework (e.g., Shanahan, McBeth, Hathaway, & Arnell, 2008), social construction and policy design (e.g., Weible, Siddiki, et al., 2011), diffusion of innovation (e.g., Amougou & Larson, 2008), and institutional analysis and development (e.g., Cheng, Danks, & Allred, 2011; Lansang, 2011). The ACF is often compared or integrated with various theories and theoretical concepts that stretch across policy, public administration, and political science including: resource dependence (e.g., Leifeld & Schneider, 2012), discourse coalitions (e.g., Leifeld, 2013; Szarka, 2010), agenda setting (e.g., Smith, 2009), policy paradigms (e.g., Quaglia, 2010), cultural theory (e.g., Nohrstedt, 2013), policy entrepreneur (e.g., Mann & Gennaio, 2010), epistemic communities (e.g., Francesch-Huidobro & Mai, 2012), socio-ecological systems (e.g., Weible et al., 2010), and stakeholder analysis (Weible, 2007). This demonstrates the flexibility of the framework to be inclusive or comparable with various theories and theoretical concepts.

Applications of the ACF identify advocacy coalitions with a growing number only identifying a single coalition. The beliefs of these coalitions are identified, but a large minority does not use the hierarchical categories of the ACF. Also, a majority of applications still do not discuss cooperation and/or coordination among policy actors. Theories of policy change and policy-oriented learning are each analyzed in about a third of applications. There is a balance between the three theories of the ACF with no single theory dominating the rest. Advocacy coalitions are identified among almost all applications because they are necessary before exploring theories of policy change and policy-oriented learning. About half of the applications of the ACF explicitly compare or utilize other frameworks, theories, or theoretical concepts along with the framework. This demonstrates innovation on the part of those adopting the framework, and the flexibility of the framework inasmuch that it is responsive to such innovations.

Assessing the ACF

The above analyses concentrated on describing the breadth and depth of the applications. This section assesses how applications of the ACF compare to the aspirational criteria Sabatier (1999) first laid out in the *Theories of the Policy Process*. However, for contemporary comparison and to better reflect the current state of the ACF, this assessment utilizes the four criteria as prescribed by Cairney and Heikkila (2014) that were adapted from Sabatier (2007), which are based on Sabatier (1999). Table 1

Table 1. Assessing the ACF Research Program

How active is the research program?	Cairney and Heikkila (2014)	Updated Assessment
Analytically applied and results published.	Numerous applications; 224 listed between 1987 and 2013	Over 1,000 unique citations of core works; total number of applications 161 in journal articles (2007–2014)
Tested in multiple contexts and with multiple methods.	Applications in multiple countries and settings, but with initial bias toward United States and environmental policy: Methods are mixed	Majority of applications and plurality of authors now in Europe, arguably overcoming U.S.-centric bias; Plurality of applications remain environment and energy domains; Majority of applications at national level of government; Majority of methods are qualitative with mostly interviews and/or documents as sources of data
A shared research agenda including common concepts and methods.	Coding forms and surveys often available; many ACF survey questions replicated, but application of protocols not always consistent	<i>Advocacy Coalition(s)</i> : majority identify at least one coalition and specify category of belief, with minority addressing coordination; <i>Policy Change</i> : majority identify policy change utilizing at least one of four pathways; <i>Learning</i> : about 1/3 apply learning with a great amount of variation for role of learning; <i>Methods</i> : majority remain qualitative case studies often making it difficult for generalizability and replicability
Development of the framework over time.	Hard core of the theory maintained, with multiple revisions including 1993, 1998, and 2007	Hard core of the theory remains; new revisions being utilized with majority of applications in Europe and utilization of new policy change pathways (negotiation and internal shocks)

below restates the evaluation by Cairney and Heikkila (2014) of the current state of the ACF, and also summarizes this assessment of the ACF.

Analytically Applied and Its Results Published

A way to assess the overall health of a framework and research agenda is to notice how prolifically it is published. This review's initial population of English language peer-reviewed journal articles citing the core theoretical texts during 2007–14 produced 1,067 unique citations. After removing articles that only cited the framework and did not apply it directly, 161 or 15 percent are applications, whereas other reviews of the policy process theories such as Pierce et al. (2014) found 111 applications of the social construction and policy design from 1993 to 2013,⁶ and Jones et al. (2016) found 311 applications of multiple streams approach from 2000 to 2013. In

comparison this review of ACF applications is over a much shorter period of time and still produced a relatively robust number of applications. Finally, the number of applications has relatively doubled from 2007 to 2014 in comparison to the 80 applications during 1987–2006 as found by Weible et al. (2009). It is evident that the framework is analytically applied and results are published in peer-reviewed literature.

Tested in Multiple Contexts and with Multiple Methods

Data were collected and analyzed based on the policy subsystem and included policy domain, geographic domain, and level of government. Nine unique policy domains are identified with at least five applications, and the policy domain of environment and energy is identified among a plurality of applications. This supports a possible continued bias toward environment and energy as argued by Cairney and Heikkila (2014); however, the majority of applications are no longer applied to this domain as found by Weible et al. (2009).

Applications are identified in 54 unique countries not including the applications that focus generally on the entire EU. For a single country the most frequent application is in the United States, but based on continent of application, Europe has the majority of applications. Also, applications are identified in Asia, Africa, and Oceania, but none in South America. While there may have been an initial bias toward the United States as found by Weible et al. (2009) and argued by Cairney and Heikkila (2014), this is no longer the case.

Cairney and Heikkila (2014) and Weible et al. (2009) do not mention level of government, but this study takes it into account. It finds that a slight majority of applications focus on the national level of governance. While the ACF has been applied at other levels of government there appears to be a bias by scholars to apply it at the national level of government. This may be troubling for ACF scholars as Sabatier (1993) argues:

To examine policy change only at the national level will, in most instances, be seriously misleading. In the United States and many other countries, policy innovations normally occur first at a subnational level and then may get expanded into nationwide programs, (p. 17)

The ACF was intended to better capture bottom-up policy processes operating at the subnational levels of government, but recent applications have focused more so at the national level. This demonstrates a clear difference between how the ACF is applied and its original intention.

Cairney and Heikkila (2014) argue that the methods applied in ACF applications are mixed. Weible et al. (2009) found that a majority of applications were either unspecified or dependent solely on interviews for data, making them qualitative. This research supports that the majority of recent applications are qualitative. Also, a majority utilize interviews and/or documents for data collection, and approximately one third do not specify how many observations are made. There is a mixture of

methods, but the balance is clearly toward qualitative work. This might be expected as a strength of qualitative research is explaining how and why a phenomenon occurs (Goertz & Mahoney, 2012), so it is of particular interest to those applying theories of policy change and policy-oriented learning. The framework would benefit from increased quantitative investigation, which may help in terms of validity and replicability. Research exploring specific operationalizations of ACF phenomena, particularly over time, would be especially helpful. Integration with other frameworks such as policy diffusion (e.g., Berry & Berry, 2014) or PET (e.g., Baumgartner & Jones, 1993) may help to facilitate quantitative designs and protect against theory tenacity and confirmation bias (Weible, 2014). Whether qualitative or quantitative methods are used, all scholars should be transparent about how data are collected and analyzed, which currently is not being practiced by about one third of applications.

A Shared Research Agenda Including Common Concepts and Methods

Cairney and Heikkila (2014) state that:

The ACF's core studies treat key concepts and their interaction consistently and coherently—but with considerable scope for independent scholars to use the ACF very loosely, without testing any of its hypotheses . . . ACF also has shared approaches and protocols that are commonly made available to scholars, but the consistency in application of these protocols is less clear. (p. 374)

One of the strengths of the ACF is that applications utilize the core theories related to advocacy coalitions, policy change, and/or policy-oriented learning. For example, the vast majority of applications identify at least one coalition, and a majority of applications identify deep core, policy core, or secondary beliefs. However, although this review finds evidence of an increase in explicitly identifying forms of coordination, the concept remains underutilized by a majority of ACF applications. The other major theories of the ACF—policy change and policy-oriented learning—are also well represented among the applications. Overall, the vast majority of policy change applications identify and apply at least one of the four pathways of policy change described by Jenkins-Smith, Nohrstedt, et al. (2014). Policy-oriented learning is identified in a minority of applications and is much more ambiguous than pathways to policy change. This is not surprising as Jenkins-Smith, Nohrstedt et al. (2014) argue “if there is an understudied area in the ACF, it is the topic of policy-oriented learning” (p. 205). Policy-oriented learning remains an area that needs conceptual and methodological development.

Jenkins-Smith, Nohrstedt, et al. (2014) call for balancing general methods and concepts with specific contexts. They argue that there are three issues to advance the ACF: the application of the ACF in different governing systems, guidelines for data collection, and best methods for analyzing theories of the ACF (p. 207). While this research does not explicitly compare governing systems, it did identify applications

in the United States, Switzerland, Sweden, China, South Korea, Kenya, Mozambique, Israel, and Burkina Faso that represent different governing systems. While there are a variety of forms of data collection, the majority of applications are not applying universal or theory centric guidelines. Finally, Sabatier and Jenkins-Smith (1993) provide a methodological appendix for content analysis of documents that can be utilized to collect data about policy actor belief systems and could be adopted for interviews. Such guidelines could be considered best methods at least for the study of belief systems of policy actors. Such guidelines for more quantitatively orientated designs may also prove useful for those applying the framework. Overall, best practices and guidelines (whether universal or theory specific) are necessary.

Development of the Framework over Time

According to Cairney and Heikkila (2014), “The framework has maintained its basic assumptions, but hypotheses and concepts have been modified over time” (p. 374). The core assumptions of the framework have not been undone and the core theories about coalitions, policy change, and policy-oriented learning continue to be applied. Even the major components of these theories such as hierarchical belief systems and the various pathways to policy change are well established and consistently applied. Some of the recent developments of the framework identified by Sabatier and Weible (2007) have been highlighted by this research and are now frequently applied. The ACF continues to evolve and be revised based on empirical findings (i. e., Jenkins-Smith, Nohrstedt, et al., 2014; Jenkins-Smith, Silva, et al., 2014; Sabatier, 1998; Sabatier & Jenkins-Smith, 1999; Sabatier & Weible, 2007), and subsequently scholars applying the ACF have responded incorporating these revisions and suggestions into applications.

Conclusion

The ACF has a productive and expanding research agenda. It has been applied at least 161 times since 2007 in nearly 100 different peer-reviewed English language journals. Since 2010, the ACF has been steadily producing about 25 applications annually, which is significant growth compared to the 10 or fewer applications identified annually for 2000–06 by Weible et al. (2009) (including non-peer-reviewed sources). The ACF is a popular framework among policy process as well as other scholars.

The ACF has a high level of portability and appeal to scholars throughout the world. There were 138 unique first authors writing from 25 different countries applying the framework to 54 unique countries with multiple applications in every continent except for South America and Antarctica. The framework has been applied frequently across five different levels of government and to 16 different policy domains not including four applications that applied the framework comparatively over multiple domains. Given the diversity among applications, there are also clear tendencies. The majority of applications have multiple authors that are either European or from the United States. Applications tend to focus on a European country or

the United States at the national level and tend to examine environmental and energy issues. There is a distinct lack of applications of the ACF in Spanish or Portuguese speaking countries of Latin and South America.

Methodologically, these are primarily qualitative single case studies that utilize interviews and/or document analysis. Most of these qualitative studies meet empirical standards (Goertz & Mahoney, 2012), but a third do not identify how or what observations are made. This practice limits the accumulation of knowledge through reliable and replicable methods. However, the ACF has pluralistic purposes of generating both generalizable knowledge of the policy process, as well as knowledge about specific phenomenon (Jenkins-Smith, Nohrstedt, et al., 2014). This is a strength of the ACF as a framework that it can include common approaches while still capturing and representing unique contexts.

ACF applications do share a common research agenda. The applications do work within the ACF's theories of advocacy coalitions, policy change, and policy-oriented learning. Applications utilize a policy subsystem approach even if it tends to be at the national level of government. Components of advocacy coalitions such as hierarchical beliefs are common and a majority of studies examining policy change identify at least one pathway. However, there are still too many applications that only refer to beliefs in general without using the hierarchical categories. Another common limitation is the absence of discussing coordination among policy actors. Policy-oriented learning also remains a problematic area of research for ACF scholars.

There are two main limitations to this research. First, it does not capture every application of the ACF from 2007 to 2014. Only applications that were in English and in peer-reviewed journals are included. Therefore, non-English applications would have been missed such as possible applications in Sweden, Germany, or in Spanish-speaking countries. Applications that are books, book chapters, and other mediums are also not included. Second, content analysis is conducted on these 161 applications utilizing multiple coders. The level of interpretation by these coders is mitigated by having codes focusing on presence rather than frequency or strength. Also, multiple forms of inter-coder reliability are tested and found acceptable. While systemic issues may have been mitigated there will be systematic errors when utilizing almost 5,000 pages of material as the source of data.

Jenkins-Smith, Nohrstedt, et al. (2014) state that the "future trajectory of the ACF depends on the innovative and creative efforts of numerous analysts from around the world" (p. 204). Based on the variation of levels of government, policy domains, journals, and countries of application, ACF scholars are an innovative and creative group. However, the accumulation of general knowledge will also depend on how it is applied. Paul Sabatier (1999) called upon all policy process scholars to hold their research to rigorous theoretical and empirical standards. In 2009, Weible et al. found that a large number of ACF applications relied upon unspecified methodologies, and this taking stock of the ACF exercise has yielded quite similar results. Weible et al. (2009) argued that moving forward "the goal should be intersubjectively reliable methods that serve as the cornerstone for making research transparent and provide a basis for collective learning" (135). Given this analysis of ACF applications, the need for increased transparency, reliability, and falsifiability unfortunately remains. ACF

scholarship should diligently move toward these goals. However, Jenkins-Smith, Nohrstedt, et al. (2014) discuss the need to balance transparent replicable methods with being able to apply the framework to diverse and unique contexts. Jenkins-Smith et al. raise a difficult question for the ACF and any scientific research agenda, what is the proper balance between specificity and generalizability? This data and analyses show that the scales of the ACF tilt toward specificity and likely do so at the expense of generalizability. Many of the applications reviewed here could devote more attention to transparency of method without sacrificing or altering content or findings.

Today, there is a strong core of methodologically rigorous and prolific ACF scholars across the world using transparent replicable methods testing theories and hypotheses as described by Sabatier and Jenkins-Smith (1993, 1999). Conversely, however, the majority of applications are by scholars who only apply the ACF once to explore a question about a specific case study. No doubt, the presence of both of these types of applications—theory testing and framework adopting—reflects the strength of the ACF. The ACF is a popular, durable, and flexible framework that grows with each adoption of the framework exploring specific contexts and cases, as well as a rigorous core seeking to refine theories through hypothesis testing.

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Notes

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1. A total of 256 articles were randomly selected for inter-coder reliability during this coding. This sample is sufficient to determine inter-coder reliability given the population, a 95 percent confidence level and 5 percent confidence interval. Five coders had an inter-coder reliability rate of greater than 80 percent on applications. Inter-coder reliability at or above the 80 percent threshold is considered reliable for a random sample of this size (Lacy & Riffe, 1996; Lombard, Snyder-Duch, & Campanella Bracken, 2002; Riffe, Lacy, & Fico, 2005).
2. All of these reported descriptive statistics do not include the 16 applications that only examined the European Union (EU) as one geographical and political entity (e.g., Feindt, 2010; Quaglia, 2012). In addition, Montpetit (2011) compares policy subsystems of the EU with the United States and Canada making a total of 17 applications examining the EU as one political entity.

3. Figure 5 includes applications with multiple countries (e.g., Mann & Gennaio, 2010) and excluding the 16 European Union only applications.
4. Weible et al. (2009) do not identify the category of methodology utilized in applications, but rather focus on the specific method of data collection such as interviews or content analysis.
5. Coding for this concept included both coordination as well as collaboration.
6. Pierce et al. (2014) also included books and book chapters as well as peer reviewed journal articles.

References

- Abrar, Stefania, Joni Lovenduski, and Helen Margetts. 2000. "Feminist Ideas and Domestic Violence Policy Change." *Political Studies* 48: 239–62.
- Adams, Neil, Giancarlo Cotella, and Richard Nunes. 2014. "The Engagement of Territorial Knowledge Communities with European Spatial Planning and the Territorial Cohesion Debate: A Baltic Perspective." *European Planning Studies* 22 (4): 712–34.
- Adshead, Maura. 2011. "An Advocacy Coalition Framework Approach to the Rise and Fall of Social Partnership." *Irish Political Studies* 26 (1): 73–93.
- Afonso, Alexandre. 2014. "How to Please Voters Without Alienating Friends? Parties, Organised Interests and Advocacy Coalitions in Swiss Immigration Policy." *Comparative European Politics* 12 (6): 568–83.
- Airey, David, and King Chong. 2010. "National Policy-Makers for Tourism in China." *Annals of Tourism Research* 37 (2): 295–314.
- Albright, Elizabeth A. 2011. "Policy Change and Learning in Response to Extreme Flood Events in Hungary: An Advocacy Coalition Approach." *Policy Studies Journal* 39 (3): 485–511.
- Alcantara, Christopher, Roberto Lerone, and Zachary Spicer. 2012. "Responding to Policy Change from Above: Municipality Accountability and Transparency Regimes in Ontario." *Journal of Canadian Studies* 46 (1): 112–37.
- Amougou, Jules, and James S. Larson. 2008. "Comparing Implementation of Internet Diffusion in the United States and France: Policies, Beliefs, and Institutions." *Review of Policy Research* 25 (6): 563–78.
- Andersson, Magnus. 1998. *Change and Continuity in Poland's Environmental Policy*. Dordrecht, the Netherlands: Kluwer Academic Publishers.
- Ansell, Chris, Sarah Reckhow, and Andrew Kelly. 2009. "How to Reform a Reform Coalition: Outreach, Agenda Expansion, and Brokerage in Urban School Reform." *Policy Studies Journal* 37 (4): 717–43.
- Babon, Andrea, Daniel McIntyre, Gae Y. Gowae, Caleb Gallemore, Rachel Carmenta, Monica Di Gregorio, and Maria Brockhaus. 2014. "Advocacy Coalitions, REDD+, and Forest Governance in Papua New Guinea: How Likely Is Transformational Change?" *Ecology and Society* 19 (3): 16.
- Bandelow, Nils C. and Stefan Kundolf. 2011. "Belief Systems and the Emergence of Advocacy Coalitions in Nascent Subsystems: A Case Study of the European GNSS Program Galileo." *German Policy Studies* 7 (2): 113–39.
- Battams, Samantha, and Fran Baum. 2010. "What Policies and Policy Processes Are Needed to Ensure that People with Psychiatric Disabilities Have Access to Appropriate Housing?" *Social Science & Medicine* 70 (7): 1026–34.
- Baumann, Christiane, and Stuart White. 2014. "Collaborative Stakeholder Dialogue: A Catalyst for Better Transport Policy Choices." *International Journal of Sustainable Transportation* 9 (1): 30–38.
- Baumgartner, Frank R., and Bryan D. Jones. 1993. *Agendas and Instability in American Politics*. Chicago: University of Chicago Press.
- Beard, Virginia. 2013. "A Theoretical Understanding of Housing and Homelessness: Federal Homelessness and Housing Policy Through the lenses of Punctuated Equilibrium Theory and Advocacy Coalition Framework." *Poverty and Public Policy* 5 (1): 67–87.
- Beem, Betsi. 2012. "Learning the Wrong Lessons? Science and Fisheries Management in the Chesapeake Bay Blue Crab Fishery." *Public Understanding of Science* 21 (4): 401–17.

- Berry, Frances Stokes, and William D. Berry. 2014. "Innovation and Diffusion Models in Policy Research." In *Theories of the Policy Process*, ed. Paul A. Sabatier and Christopher Weible. Boulder, CO: Westview Press. 307–59.
- Beverwijk, Jasmine, Leo Goedegebuure, and Jeroen Huisman. 2008. "Policy Change in Nascent Subsystems: Mozambican Higher Education Policy 1993–2003." *Policy Sciences* 41 (4): 357–77.
- Blatter, Joachim. 2009. "Performing Symbolic Politics and International Environmental Regulation: Tracing and Theorizing a Causal Mechanism beyond Regime Theory." *Global Environmental Politics* 9 (4): 81–110.
- Brecher, Charles, Caitlyn Brazill, Beth C. Weitzman, and Diana Silver. 2010. "Understanding the Political Context of 'New' Policy Issues: The Use of the Advocacy Coalition Framework in the Case of Expanded After-School Programs." *Journal of Public Administration Research and Theory* 20 (2): 335–55.
- Breton, Eric, Lucie Richard, France Gagnon, Marie Jacques, and Pierre Bergeron. 2008. "Health Promotion Research and Practice Require Sound Policy Analysis Models: The case of Quebec's Tobacco Act." *Social Science & Medicine* 67 (11): 1679–89.
- Bromfield, Nicole Footen. 2012. "Underlying Motives, Moral Agendas and Unlikely Partnerships: The Formulation of the U.S. Trafficking in Victims Protection Act through the Data and Voices of Key Policy Players." *Advances in Social Work* 13 (2): 243–61.
- Brusis, Martin. 2010. "European Union Incentives and Regional Interest Representation in Central and East European Countries." *Acta Politica* 45 (1–2): 70–89.
- Bukowski, Jeanie. 2007. "Spanish Water Policy and the National Hydrological Plan: An Advocacy Coalition Approach to Policy Change." *South European Society and Politics* 12 (1): 39–57.
- Buller, Jim, and Nicole Lindstrom. 2013. "Hedging Its Bets: The UK and the Politics of European Financial Services Regulation." *New Political Economy* 18 (3): 391–409.
- Cairney, Paul. 2007. "A 'Multiple Lenses' Approach to Policy Change: The Case of Tobacco Policy in the UK." *British Politics* 2 (1): 45–68.
- Cairney, Paul, and Tanya Heikkila. 2014. "A Comparison of Theories of the Policy Process." In *Theories of the Policy Process*, ed. by Paul A. Sabatier and Christopher M. Weible. Boulder, CO: Westview Press, 363–407.
- Caveen, Alex. J., Tim S. Gray, Selina M. Stead, and Nicolas V. C. Polunin. 2013. "MPA Policy: What Lies Behind the Science?" *Marine Policy* 37: 3–10.
- Cheng, Abtony S., Cecilia Danks, and Shoma R. Allred. 2011. "The Role of Social and Policy Learning in Changing Forest Governance: An Examination of Community-Based Forestry Initiatives in the US." *Forest Policy and Economics* 13 (2): 89–96.
- Cherlet, Jan, and Jean-Philippe Venot. 2013. "Structure and Agency: Understanding Water Policy Changes in West Africa." *Water Policy* 15 (3): 479–95.
- Cibulka, James G., and Nathan Myers. 2008. "Fearful Reformers—The Institutionalization of the Christian Right in American Politics." *Educational Policy* 22 (1): 155–80.
- Crow, Deserai A. 2008. "Stakeholder Behavior and Legislative Influence: A Case Study of Recreational Water Rights in Colorado." *Social Science Journal* 45 (4): 646–58.
- DeBray, Elizabeth, Janelle T. Scott, Christopher A. Lubienski, and Huriya Jabbar. 2014. "Intermediary Organizations in Charter School Policy Coalitions Evidence from New Orleans." *Educational Policy* 28 (2): 175–206.
- DeBray-Pelot, Elizabeth H., Christopher A. Lubienski, and Janelle T. Scott. 2007. "The Institutional Landscape of Interest Group Politics and School Choice." *Peabody Journal of Education* 82 (2): 405–28.
- Dela Santa, Edieser. 2013. "The Politics of Implementing Philippine Tourism Policy: A Policy Network and Advocacy Coalition Framework Approach." *Asia Pacific Journal of Tourism Research* 18 (8): 913–33.
- Diaz-Kope, Luisa M., John R. Lombard, Katrina Miller-Stevens. 2013. "A Shift in Federal Policy Regulation of the Automobile Industry: Policy Brokers and the ACF." *Politics & Policy* 41 (4): 563–87.
- Dougherty, Kevin J., H. Kenny Nienhuser, and Blanca E. Vega. 2010. "Undocumented Immigrants and State Higher Education Policy: The Politics of In-State Tuition Eligibility in Texas and Arizona." *Review of Higher Education* 34 (1): 123–73.

- Dougherty, Kevin J., Rebecca S. Natow, Rachel Hare Bork, Sosanya M. Jones, and Blanca E. Vega. 2013. "Accounting for Higher Education Accountability: Political Origins of State Performance Funding for Higher Education." *Teachers College Record* 115 (1): 50.
- Dressel, Björn. 2012. "Targeting the Public Purse: Advocacy Coalitions and Public Finance in the Philippines." *Administration & Society* 44 (6): 65S–84S.
- Dudley, Geoffrey. 2007. "Individuals and the Dynamics of Policy Learning: The Case of the Third Battle of Newbury." *Public Administration* 85 (2): 405–28.
- Dziengel, Lake. 2010. "Advocacy Coalitions and Punctuated Equilibrium in the Same-Sex Marriage Debate: Learning from Pro-LGBT Policy Changes in Minneapolis and Minnesota." *Journal of Gay & Lesbian Social Services* 22 (1–2): 165–82.
- Elgin, Dallas J., and Christopher M. Weible. 2013. "A Stakeholder Analysis of Colorado Climate and Energy Issues Using Policy Analytical Capacity and the Advocacy Coalition Framework." *Review of Policy Research* 30 (1): 114–33.
- Ellison, Brian A., and Adam J. Newmark. 2010. "Building the Reservoir to Nowhere: The Role of Agencies in Advocacy Coalitions." *Policy Studies Journal* 38 (4): 653–78.
- Eriksson, Johan, Mikael Karlsson, and Marta Reuter. 2010. "Technocracy, Politicization, and Noninvolvement: Politics of Expertise in the European Regulation of Chemicals." *Review of Policy Research* 27 (2): 167–85.
- Farquharson, Karen. 2003. "Influencing Policy Transnationally: Pro- and Anti-Tobacco Global Advocacy Coalitions." *Australian Journal of Public Administration* 62 (4): 80–92.
- Feindt, Peter H. 2010. "Policy-Learning and Environmental Policy Integration in the Common Agricultural Policy 1973–2003." *Public Administration* 88 (2): 296–314.
- Fidelman, Pedro, Louisa S. Evans, Simon Foale, Christopher Weible, Franciska Von Heland, and Dallas Elgin. 2014. "Coalition Cohesion for Regional Marine Governance: A Stakeholder Analysis of the Coral Triangle Initiative." *Ocean & Coastal Management* 95: 117–28.
- Fischer, Manuel. 2014. "Coalition Structures and Policy Change in a Consensus Democracy." *Policy Studies Journal* 42 (3): 344–66.
- Fisher, Dana R., Philip Leifeld, and Yoko Iwaki. 2013. "Mapping the Ideological Networks of American Climate Politics." *Climatic Change* 116 (3–4): 523–45.
- Fitzpatrick, Patricia, Alberto Fonseca, and Mary Louise McAllister. 2011. "From the Whitehorse Mining Initiative Towards Sustainable Mining: Lessons Learned." *Journal of Cleaner Production* 19 (4): 376–84.
- Fleury, Marie-Josée, Guy Grenier, Catherine Vallée, Roch Hurtubise, and Paul-André Lévesque. 2014. "The Role of Advocacy Coalitions in a Project Implementation Process: The Example of the Planning Phase of the at Home/Chez Soi Project Dealing with Homelessness in Montreal." *Evaluation and Program Planning* 45: 42–9.
- Frahsa, Annika, Alfred Rütten, Ulrike Roeger, Karim Abu-Omar, and Diana Schow. 2014. "Enabling the Powerful? Participatory Action Research with Local Policymakers and Professionals for Physical Activity Promotion with Women in Difficult Life Situations." *Health Promotion International* 29 (1): 171–84.
- Francesch-Huidobro, Maria, and Qianqing Mai. 2012. "Climate Advocacy Coalitions in Guangdong, China." *Administration & Society* 44 (6): 43S–64S.
- Goertz, Gary, and James Mahoney. 2012. *A Tale of Two Cultures: Qualitative and Quantitative Research in the Social Sciences*. Princeton, NJ: Princeton University Press.
- Gupta, Kuhika. 2014. "A Comparative Policy Analysis of Coalition Strategies: Case Studies of Nuclear Energy and Forest Management in India." *Journal of Comparative Policy Analysis* 16 (4): 356–72.
- Han, Heejin, Brendon Swedlow, and Danny Unger. 2014. "Policy Advocacy Coalitions as Causes of Policy Change in China? Analyzing Evidence from Contemporary Environmental Politics." *Journal of Comparative Policy Analysis* 16 (4): 313–34.
- Hansen, Janus. 2013. "The Danish Biofuel Debate: Coupling Scientific and Politico-Economic Claims." *Science as Culture* 23 (1): 73–97.

- Heikkila, Tanya, Jonathan J. Pierce, Samuel Gallaher, Jennifer Kagan, Deserai A. Crow, and Christopher M. Weible. 2014. "Understanding a Period of Policy Change: The Case of Hydraulic Fracturing Disclosure Policy in Colorado." *Review of Policy Research* 31 (2): 65–87.
- Heinmiller, B. Timothy. 2013. "Advocacy Coalitions and the Alberta Water Act." *Canadian Journal of Political Science* 46 (3): 525–47.
- Henry, Adam Douglas. 2011. "Ideology, Power, and the Structure of Policy Networks." *Policy Studies Journal* 39 (3): 361–83.
- Henry, Adam Douglas, Mark Lubell, and Michael McCoy. 2011. "Belief Systems and Social Capital as Drivers of Policy Network Structure: The Case of California Regional Planning." *Journal of Public Administration Research and Theory* 21 (3): 419–44.
- Hirsch, Rachel, Jamie Baxter, and C. Brown. 2010. "The Importance of Skillful Community Leaders: Understanding Municipal Pesticide Policy Change in Calgary and Halifax." *Journal of Environmental Planning and Management* 53 (6): 743–57.
- Hirschi, Christian, and Thomas Widmer. 2010. "Policy Change and Policy Stasis: Comparing Swiss Foreign Policy Towards South Africa (1968–94) and Iraq (1990–91)." *Policy Studies Journal* 38 (3): 537–63.
- Howarth, Anita. 2013. "The Weakest Link in Existing Studies: Media-Government Risk Interactions." *Journal of Risk Research* 16 (1): 1–18.
- Huntjens, Patrick, Claudia Pahl-Wostl, Benoit Rihoux, Maja Schlüter, Zsuzsanna Flachner, Susana Neto, Romana Koskova, Chris Dickens, and Isah Nabide Kiti. 2011. "Adaptive Water Management and Policy Learning in a Changing Climate: A Formal Comparative Analysis of Eight Water Management Regimes in Europe, Africa and Asia." *Environmental Policy and Governance* 21 (3): 145–63.
- Hysing, Erik, and Jan Olsson. 2008. "Contextualising the Advocacy Coalition Framework: Theorising Change in Swedish Forest Policy." *Environmental Politics* 17 (5): 730–48.
- Ingold, Karin. 2011. "Network Structures within Policy Processes: Coalitions, Power, and Brokerage in Swiss Climate Policy." *Policy Studies Journal* 39 (3): 435–59.
- Ingold, Karin, and Manuel Fischer. 2014. "Drivers of Collaboration to Mitigate Climate Change: An Illustration of Swiss Climate Policy over 15 Years." *Global Environmental Change-Human and Policy Dimensions* 24: 88–98.
- Ingold, Karin, and Muriel Gschwend. 2014. "Science in Policy-Making: Neutral Experts or Strategic Policy-Makers?" *West European Politics* 37 (5): 993–1018.
- Ingold, Karin, and Frédéric Varone. 2012. "Treating Policy Brokers Seriously: Evidence from the Climate Policy." *Journal of Public Administration Research and Theory* 22 (2): 319–46.
- Jang, Jiho, Sunhyuk Kim, and Chonghee Han. 2010. "Advocacy Coalitions in Regulating Big Business in South Korea: Change of Chaebol's Holding Company Policy." *Korea Observer* 41 (2): 161–88.
- Jegen, Maya, and Gabriel Audet. 2011. "Advocacy Coalitions and Wind Power Development: Insights from Quebec." *Energy Policy* 39 (11): 7439–47.
- Jenkins-Smith, Hank C., Daniel Nohrstedt, Christopher M. Weible, and Paul A. Sabatier. 2014. "The Advocacy Coalition Framework: Foundations, Evolution, and Ongoing Research." In *Theories of the Policy Process*, ed. Paul A. Sabatier and Christopher M. Weible. Boulder, CO: Westview Press, 183–223.
- Jenkins-Smith, Hank C., Carol L. Silva, Kuhika Gupta, and Joseph T. Ripberger. 2014. "Belief System Continuity in Policy Advocacy Coalitions: Using Cultural Theory to Specify Belief Systems, Coalitions, and Sources of Change." *Policy Studies Journal* 42 (4): 484–508.
- Johnson, Donna B., Elizabeth C. Payne, Molly A. McNeese, and Deborah Allen. 2012. "Menu-Labeling Policy in King County, Washington." *American Journal of Preventive Medicine* 43 (3): S130–5.
- Jones, Michael D., Holly L. Peterson, Jonathan J. Pierce, Nicole Herweg, Amiel Bernal, Holly Lamberta Raney, and Nikolaos Zahariadis. 2016. "A River Runs Through It: A Multiple Streams Meta-Review." *Policy Studies Journal* 44 (1): 13–36.
- Kettell, Steven, and Paul Cairney. 2010. "Taking the Power of Ideas Seriously—The Case of the United Kingdom's 2008 Human Fertilisation and Embryology Bill." *Policy Studies* 31 (3): 301–17.

- Kim, Doo-Rae. 2011. "Do Local Policy Networks Deter the Race to the Bottom in Environmental Regulation? The Case of South Korea." *Environment and Planning C-Government and Policy* 29 (6): 1037–53.
- Kingiri, Ann Njoki. 2011. "Conflicting Advocacy Coalitions in an Evolving Modern Biotechnology Regulatory Subsystem: Policy Learning and Influencing Kenya's Regulatory Policy Process." *Science and Public Policy* 38 (3): 199–211.
- . 2014. "Comparative Strategic Behavior of Advocacy Coalitions and Policy Brokers: The Case of Kenya's Biosafety Regulatory Policy." *Journal of Comparative Policy Analysis* 16 (4): 373–95.
- Klindt, Mads Peter. 2011. "From Rhetorical Action to Policy Learning: Understanding the European Commission's Elaboration of the Flexicurity Concept." *Journal of Common Market Studies* 49 (5): 971–94.
- Knox-Hayes, Janelle. 2012. "Negotiating Climate Legislation: Policy Path Dependence and Coalition Stabilization." *Regulation & Governance* 6 (4): 545–67.
- Kübler, Daniel. 2001. "Understanding Policy Change with the Advocacy Coalition Framework: An Application to Swiss Drug Policy." *Journal of European Public Policy* 8 (4): 623–41.
- Kuebler, Daniel. 2007. "Understanding the Recent Expansion of Swiss Family Policy: An Idea-Centred Approach." *Journal of Social Policy* 36: 217–37.
- Kwon, Huck-ju. 2007. "Advocacy Coalitions and Health Politics in Korea." *Social Policy & Administration* 41 (2): 148–61.
- Lacy, Stephen, and Daniel Riffe. 1996. "Sampling Error and Selecting Intercoder Reliability Samples for Nominal Content Categories." *Journalism & Mass Communication Quarterly* 73 (4): 963–73.
- Lahat, Lihi. 2011. "How Can Leaders' Perceptions Guide Policy Analysis in an Era of Governance?" *Policy Sciences* 44 (2): 135–55.
- Landis, J. Richard, and Gary G. Koch. 1977. "The Measurement of Observer Agreement for Categorical Data." *Biometrics* 33 (1): 159–74.
- Lansang, Liza G. F. 2011. "NGOs, Coalition Building and the Campaign for a Minerals Management Policy in the Philippines." *Philippine Political Science Journal* 32 (55): 127–66.
- Lasswell, Harold D., and Abraham Kaplan. 1950. *Power and Society; A Framework for Political Inquiry*. New Haven, CT: Yale University Press.
- Leach, William D., Christopher M. Weible, Scott R. Vince, Saba N. Siddiki, and John C. Calanni. 2014. "Fostering Learning through Collaboration: Knowledge Acquisition and Belief Change in Marine Aquaculture Partnerships." *Journal of Public Administration Research and Theory* 24 (3): 591–622.
- Leifeld, Philip. 2013. "Reconceptualizing Major Policy Change in the Advocacy Coalition Framework: A Discourse Network Analysis of German Pension Politics." *Policy Studies Journal* 41 (1): 169–98.
- Leifeld, Philip, and Volker Schneider. 2012. "Information Exchange in Policy Networks." *American Journal of Political Science* 56 (3): 731–44.
- Ley, Aaron J., and Edward Weber. 2014. "Policy Change and Venue Choices: Field Burning in Idaho and Washington." *Society & Natural Resources* 27 (6): 645–55.
- Li, Wanxin. 2012. "Advocating Environmental Interests in China." *Administration & Society* 44 (6): 26S–42S.
- Lombard, Matthew, Jennifer Snyder-Duch, and Cheryl Campanella Bracken. 2002. "Content Analysis in Mass Communication: Assessment and Reporting of Intercoder Reliability." *Human Communication Research* 28 (4): 587–604.
- Lubell, Mark. 2007. "Familiarity Breeds Trust: Collective Action in a Policy Domain." *Journal of Politics* 69 (1): 237–50.
- Mailand, Mikkel. 2010. "The Common European Flexicurity Principles: How a Fragile Consensus Was Reached." *European Journal of Industrial Relations* 16 (3): 241–57.
- Mandelkern, Ronen, and Michael Shalev. 2010. "Power and the Ascendance of New Economic Policy Ideas Lessons from the 1980s Crisis in Israel." *World Politics* 62 (3): 459–95.
- Mann, Stefan, and Maria-Pia Gennaio. 2010. "The Central Role of Centralisation in Environmental Policy Initialisation." *Journal of Environmental Planning and Management* 53 (3): 283–95.

- Marfo, Emmanuel, and James P. McKeown. 2013. "Negotiating the Supply of Legal Timber to the Domestic Market in Ghana: Explaining Policy Change Intent Using the Advocacy Coalition Framework." *Forest Policy and Economics* 32: 23–31.
- Marichal, Jose. 2009. "Frame Evolution: A New Approach to Understanding Changes in Diversity Reforms at Public Universities in the United States." *Social Science Journal* 46 (1): 171–91.
- Mavrot, Céline. 2012. "The Status of Ideas in Controversies on Public Policy. Analyzing Beliefs as Dependent Variables: A Case Study on Harm Reduction Policies in Switzerland." *German Policy Studies* 8 (1): 113–56.
- Meijerink, Sander. 2008. "Explaining Continuity and Change in International Policies: Issue Linkage, Venue Change, and Learning on Policies for the River Scheldt Estuary 1967–2005." *Environment and Planning A* 40 (4): 848–66.
- Michalowicz, Irina. 2007. "What Determines Influence? Assessing Conditions for Decision-Making Influence of Interest Groups in the EU." *Journal of European Public Policy* 14 (1): 132–51.
- Miller, Edward. Alan. 2011. "Repealing Federal Oversight of State Health Policy: Lessons from the Boren Amendment." *Review of Policy Research* 28 (1): 5–23.
- Montefrío, Marvin Joseph F. 2014. "State versus Indigenous Peoples' Rights: Comparative Analysis of Stable System Parameters, Policy Constraints and the Process of Delegitimation." *Journal of Comparative Policy Analysis* 16 (4): 335–55.
- Montefrío, Marvin Joseph F., and David A. Sonnenfeld. 2011. "Forests, Fuel, or Food? Competing Coalitions and Biofuels Policy Making in the Philippines." *Journal of Environment & Development* 20 (1): 27–49.
- Montpetit, Éric. 2009. "Governance and Policy Learning in the European Union: A Comparison with North America." *Journal of European Public Policy* 16 (8): 1185–203.
- . 2011. "Scientific Credibility, Disagreement, and Error Costs in 17 Biotechnology Policy Subsystems." *Policy Studies Journal* 39 (3): 513–33.
- Nedergaard, Peter. 2007. "Maximizing Policy Learning in International Committees: An Analysis of the European Open Method of Coordination (OMC) Committees." *Scandinavian Political Studies* 30 (4): 521–46.
- . 2008. "The Reform of the 2004 Common Agricultural Policy: An Advocacy Coalition Explanation." *Policy Studies* 29 (2): 179–95.
- . 2009. "Policy Learning Processes in International Committees." *Public Management Review* 11 (1): 23–37.
- Ness, Erik C. 2010. "The Politics of Determining Merit Aid Eligibility Criteria: An Analysis of the Policy Process." *Journal of Higher Education* 81 (1): 33–60.
- Nohrstedt, Daniel. 2008. "The Politics of Crisis Policymaking: Chernobyl and Swedish Nuclear Energy Policy." *Policy Studies Journal* 36 (2): 257–78.
- . 2010. "Do Advocacy Coalitions Matter? Crisis and Change in Swedish Nuclear Energy Policy." *Journal of Public Administration Research and Theory* 20 (2): 309–33.
- . 2011. "Shifting Resources and Venues Producing Policy Change in Contested Subsystems: A Case Study of Swedish Signals Intelligence Policy." *Policy Studies Journal* 39 (3): 461–84.
- . 2013. "Advocacy Coalitions in Crisis Resolution: Understanding Policy Dispute in the European Volcanic Ash Cloud Crisis." *Public Administration* 91 (4): 964–79.
- Olsson, Jan. 2009. "The Power of the Inside Activist: Understanding Policy Change by Empowering the Advocacy Coalition Framework (ACF)." *Planning Theory and Practice* 10 (2): 167–87.
- Parrish, Richard. 2008. "Access to Major Events on Television under European Law." *Journal of Consumer Policy* 31 (1): 79–98.
- Parsell, Cameron, Suzanne Fitzpatrick, and Volker Busch-Geertsema. 2014. "Common Ground in Australia: An Object Lesson in Evidence Hierarchies and Policy Transfer." *Housing Studies* 29 (1): 69–87.
- Parsons, Wayne. 1995. *Public Policy*. Cheltenham, UK: Edward Elgar.
- Penning-Rowsell, Edmund C., Sally Priest, and Clare Johnson. 2014. "The Evolution of UK Flood Insurance: Incremental Change over Six Decades." *International Journal of Water Resources Development* 30 (4): 694–713.

- Pierce, Jonathan J. 2011. "Coalition Stability and Belief Change: Advocacy Coalitions in US Foreign Policy and the Creation of Israel, 1922-44." *Policy Studies Journal* 39 (3): 411-34.
- Pierce, Jonathan J., Saba Siddiki, Michael D. Jones, Kristin Schumacher, Andrew Pattison, and Holly L. Peterson. 2014. "Social Construction and Policy Design: A Review of Past Applications." *Policy Studies Journal* 42 (1): 1-29.
- Pierce, Jonathan J., and Christopher M. Weible. 2016. "Advocacy Coalition Framework." In *American Governance*, eds. Stephen Schechter, Thomas S. Vontz, Thomas A. Birkland, Mark A. Graber, and John J. Patrick. Farmington Hills, MI: Cengage Learning: 22-23.
- Poulsen, Camilla Aavang. 2014. "Introducing Out-of-Pocket Payment for General Practice in Denmark: Feasibility and Support." *Health Policy* 117 (1): 64-71.
- Princen, Sebastiaan. 2007. "Advocacy Coalitions and the Internationalization of Public Health Policies." *Journal of Public Policy* 27: (1): 13-33.
- Quaglia, Lucia. 2010. "Completing the Single Market in Financial Services: The Politics of Competing Advocacy Coalitions." *Journal of European Public Policy* 17 (7): 1007-23.
- . 2012. "The 'Old' and 'New' Politics of Financial Services Regulation in the European Union." *New Political Economy* 17 (4): 515-35.
- Quattrone, George A., and Amos Tversky. 1988. "Contrasting Rational and Psychological Analyses of Political Choice." *The American Political Science Review* 82 (3): 719-36.
- Rastogi, Archi, Gordon M. Hickey, Ruchi Badola, and Syed Ainul Hussain. 2013. "Diverging Viewpoints on Tiger Conservation: A Q-Method Study and Survey of Conservation Professionals in India." *Biological Conservation* 161: 182-92.
- Riffe, Daniel, Stephen Lacy, and Frederick Fico. 2005. *Analyzing Media Messages: Using Quantitative Content Analysis in Research*. New York: Routledge.
- Ripberger, Joseph T., Kuhika Gupta, Carol L. Silva, and Hank C. Jenkins-Smith. 2014. "Cultural Theory and the Measurement of Deep Core Beliefs Within the Advocacy Coalition Framework." *Policy Studies Journal* 42 (4): 509-27.
- Roßegger, Ulf, and Ralf Ramin. 2013. "Explaining the Ending of Sweden's Nuclear Phase-Out Policy: A New Approach by Referring to the Advocacy Coalition Framework Theory." *Innovation—The European Journal of Social Science Research* 26 (4): 323-43.
- Runkle, Ken, Sharron LaFollette, Josiah Alamu. 2013. "Public Health Policy Options for Improving Well-Water Quality in West Point, Liberia." *World Medical & Health Policy* 5 (4): 304-23.
- Sabatier, Paul A. 1986. "Top-Down and Bottom-up Approaches to Implementation Research: A Critical Analysis and Suggested Synthesis." *Journal of Public Policy* 6 (1): 21-48.
- . 1988. "An Advocacy Coalition Framework of Policy Change and the Role of Policy-oriented Learning Therein." *Policy Sciences* 21 (2-3): 129-68.
- . 1993. "Policy Change over a Decade or More." In *Policy Change and Learning*, ed. Paul A. Sabatier and Hank Jenkins-Smith. Boulder, CO: Westview Press, 13-39.
- . 1998. "The Advocacy Coalition Framework: Revisions and Relevance for Europe". *Journal of European Public Policy* 5 (1): 98-130.
- . 1999. "The Need for Better Theories." In *Theories of the Policy Process*, ed. Paul A. Sabatier. Boulder, CO: Westview Press, 3-17.
- . 2007. "The Need for Better Theories." In *Theories of the Policy Process*, 2nd ed., Paul A. Sabatier. Boulder, CO: Westview Press, 3-17.
- Sabatier, Paul A., and Hank C. Jenkins-Smith. 1993. *Policy Change and Learning: An Advocacy Coalition Framework*. Boulder, CO: Westview Press.
- . 1999. "The Advocacy Coalition Framework: An Assessment." In *Theories of the Policy Process*, ed. Paul A. Sabatier. Boulder, CO: Westview Press, 117-66.
- Sabatier, Paul A., and Christopher M. Weible. 2007. "The Advocacy Coalition Framework: Innovations and Clarifications." In *Theories of the Policy Process*, ed. Paul A. Sabatier. Boulder, CO: Westview Press, 189-222.

- Sandström, Annica. 2010. "Institutional and Substantial Uncertainty-Explaining the Lack of Adaptability in Fish Stocking Policy." *Marine Policy* 34 (6): 1357–65.
- Sarvašová, Zuzana, Jaroslav Šálka, and Zuzana Dobsinská. 2013. "Mechanism of Cross-sectoral Coordination between Nature Protection and Forestry in the Natura 2000 Formulation Process in Slovakia." *Journal of Environmental Management* 127: S65–72.
- Sato, Hajime. 1999. "The Advocacy Coalition Framework and the Policy Process Analysis: The Case of Smoking Control in Japan." *Policy Studies Journal* 27 (1): 28–44.
- Schilling, Joseph, and Sheila D. Keyes. 2008. "The Promise of Wisconsin's 1999 Comprehensive Planning Law: Land-Use Policy Reforms to Support Active Living." *Journal Politics, Policy and Law* 33 (3): 455–96.
- Schlager, Edella. 1995. "Policy Making and Collective Action: Defining Coalitions within the Advocacy Coalition Framework." *Policy Sciences* 28: 252–70.
- Schröer, Arne. 2014. "Lessons Learned? German Security Policy and the War in Afghanistan." *German Politics* 23 (1-2): 78–102.
- Shakespeare, Christine. 2008. "Uncovering Information's Role in the State Higher Education Policy-Making Process." *Educational Policy* 22 (6): 875–99.
- Shanahan, Elizabeth A., Mark K. McBeth, Paul L. Hathaway, and Ruth J. Arnell. 2008. "Conduit or Contributor? The Role of Media in Policy Change Theory." *Policy Sciences* 41 (2): 115–38.
- Sistrom, Maria Gilson. 2010. "Oregon's Senate Bill 560: Practical Policy Lessons for Nurse Advocates." *Policy Politics Nursing Practice* 11: 29–35.
- Sloboda, Marián, Eszter Szabó-Gilinger, Dick Vigers, and Lucija Šimičić. 2010. "Carrying Out a Language Policy Change: Advocacy Coalitions and the Management of the Linguistic Landscape." *Current Issues in Language Planning* 11 (2): 95–113.
- Smith, Katherine E. 2013. "Understanding the Influence of Evidence in Public Health Policy: What Can We Learn from the 'Tobacco Wars'?" *Social Policy & Administration* 47 (4): 382–98.
- Smith, Mark P. 2009. "Finding Common Ground: How Advocacy Coalitions Succeed in Protecting Environmental Flows." *Journal of the American Water Resources Association* 45 (5): 1100–15.
- Sotirov, Metodi, and Michael Memmler. 2012. "The Advocacy Coalition Framework in Natural Resource Policy Studies—Recent Experiences and Further Prospects." *Forest Policy and Economics* 16: 51–64.
- Stamelos, George and Aggelos Kavasakalis. 2013. "European Higher Education Area and the Introduction of a Quality Assurance Program in Greek Universities: Is Policy-Oriented Learning Present?" *CEPS Journal* 3 (3): 105–24.
- Stensdal, Iselin. 2014. "Chinese Climate-Change Policy, 1988-2013: Moving On Up." *Asian Perspective* 38 (1): 111–35.
- Stich, Bethany, and Chad R. Miller. 2008. "Using the Advocacy Coalition Framework to Understand Freight Transportation Policy Change." *Public Works Management & Policy* 13 (1): 62–74.
- Svihula, Judie, and Carroll L. Estes. 2007. "Social Security Politics: Ideology and Reform." *Journals of Gerontology Series B-Psychological Sciences and Social Sciences* 62 (2): S79–89.
- Szarka, Joseph. 2010. "Bringing Interests Back In: Using Coalition Theories to Explain European Wind Power Policies." *Journal of European Public Policy* 17 (6): 836–53.
- Van den Bulck, Hilde, and Karen Donders. 2014. "Of Discourses, Stakeholders and Advocacy Coalitions in Media Policy: Tracing Negotiations Towards the New Management Contract of Flemish Public Broadcaster VRT." *European Journal of Communication* 29 (1): 83–99.
- Van Gossum, Peter, Liselot Ledene, Bas Arts, Rik De Vreese, and Kris Verheyen. 2008. "Implementation Failure of the Forest Expansion Policy in Flanders (Northern Belgium) and the Policy Learning Potential." *Forest Policy and Economics* 10 (7–8): 515–22.
- Van Overveld, Perry J. M., Leon M. Hermans, and Arne R. D. Verliefde. 2010. "The Use of Technical Knowledge in European Water Policy-Making." *Environmental Policy and Governance* 20 (5): 322–35.
- Vergari, Sandra. 2007. "The Politics of Charter Schools." *Educational Policy* 21 (1): 15–39.

- Weber, Miriam, Peter P. J. Driessen, Ben J. Schueler, and Hens A. C. Runhaar. 2013. "Variation and Stability in Dutch Noise Policy: An Analysis of Dominant Advocacy Coalitions." *Journal of Environmental Planning and Management* 56 (7): 953–81.
- Weible, Christopher M. 2005. "Beliefs and Policy Influence: An Advocacy Coalition Approach to Policy Networks." *Political Research Quarterly* 58 (3): 461–77.
- . 2007. "An Advocacy Coalition Framework Approach to Stakeholder Analysis: Understanding the Political Context of California Marine Protected Area Policy." *Journal of Public Administration Research and Theory* 17: 95–117.
- . 2008. "Caught in a Maelstrom: Implementing California Marine Protected Areas." *Coastal Management Journal* 36: 350–73.
- . 2014. "Introducing the Scope and Focus of Policy Process Research and Theory." In *Theories of the Policy Process*, ed. Paul A. Sabatier and Christopher M. Weible. Boulder, CO: Westview Press, 3–24.
- Weible, Christopher M., and Daniel Nohrstedt. 2012. "The Advocacy Coalition Framework: Coalitions, Learning, and Policy Change." In *Handbook of Public Policy*, ed. Eduardo Araral, Scott Fritzen, Michael Howlett, M. Ramesh, and Xun Wu. New York: Routledge, 125–37.
- Weible, Christopher M., Andrew Pattison, and Paul A. Sabatier. 2010. "Harnessing Expert-based Information for Learning and the Sustainable Management of Complex Socio-ecological Systems." *Environmental Science & Policy* 13 (6): 522–34.
- Weible, Christopher M., and Paul A. Sabatier. 2005. "Comparing Policy Networks: Marine Protected Areas in California." *Policy Studies Journal* 33 (2): 181–204.
- Weible, Christopher M., Paul A. Sabatier, and Jim Flowers. 2008. "Advocacy Coalition Framework." In *Encyclopedia of Public Administration and Public Policy*, ed. Domonic A. Bearfield and Melvin J. Dubnick. New York: Routledge, 1–10.
- Weible, Christopher W., Paul A. Sabatier, Hank C. Jenkins-Smith, Daniel Nohrstedt, Adam Douglas Henry, and Peter deLeon. 2011. "A Quarter Century of the Advocacy Coalition Framework: An Introduction to the Special Issue." *The Policy Studies Journal* 39 (3): 349–60.
- Weible, Christopher M., Paul A. Sabatier, and Kelly McQueen. 2009. "Themes and Variations: Taking Stock of the Advocacy Coalition Framework." *Policy Studies Journal* 37 (1): 121–40.
- Weible, Christopher M., Saba N. Siddiki, and Jonathan J. Pierce. 2011. "Foes to Friends: Changing Contexts and Changing Intergroup Perceptions." *Journal of Comparative Policy Analysis* 13 (5): 499–525.
- Wilson, Kumanan, Meredith Barakat, Sunita Vohra, Paul Ritvo, and Heather Boon. 2008. "Parental Views on Pediatric Vaccination: The Impact of Competing Advocacy Coalitions." *Public Understanding of Science* 17 (2): 231–43.
- Winkel, Georg, and Metodi Sotirov. 2011. "An Obituary for National Forest Programmes? Analyzing and Learning from the Strategic Use of 'New Modes of Governance' in Germany and Bulgaria." *Forest Policy and Economics* 13 (2): 143–54.

Supporting Information

Additional supporting information may be found online in the supporting information tab for this article.

Comparative Public Policy: Origins, Themes, New Directions

Matt Wilder

Comparative public policy combines theories of the policy process with the study of political systems and specific issue areas. Yet, some ambiguity surrounds what distinguishes the comparative approach from other perspectives on public policy. This review brings greater clarity to the comparative policy project by emphasizing the need to be attentive to similarities and differences regarding the institutional contexts in which policymaking takes place. This attention is necessary to avoid “forcing a fit” between the empirical reality and theories and frameworks designed with specific institutional configurations in mind. While forced fit posed problems for past research, recent theoretical advancements have been devised to facilitate comparison across dissimilar institutional settings. The following discussion highlights amendments to established approaches intended to deal with problems of comparison and identifies promising new perspectives from which comparative analysis may be conducted. The latest wave of comparative policy scholarship, having accounted for institutional variation, looks beyond institutions to policy discourses in order to explain how ideas, norms, and political culture affect how policy actors maneuver within, maintain, or change the institutional environment in which they operate.

KEY WORDS: comparative public policy, institutions, policy discourse, political culture

比较公共政策：起源, 主题, 新方向

比较公共政策结合了政治过程理论和政治系统研究及具体问题。然而，在区别比较方法和其他公共政策观点时存在一定的模糊性。本文通过强调产生决策的不同制度环境的相似点和不同点，对比较政策进行了更清晰地说明。留意制度环境的相似点和不同点十分必要，因为要避免将经验现实和有关特定制度结构的理论及框架进行“强制拟合”。尽管这样的拟合在以往出现过问题，近期的理论进步成果促进了不同制度结构之间的比较。本文紧接着重点讨论了修订用于处理比较问题的现有方法，并识别了可能会采用比较分析的新观点。最近一批有关比较政策的学术研究在不局限于讲述体制变化的同时，还研究了政策话语—用以解释观点，准则和政治文化是如何影响政策参与者操纵、维持或改变其所处的制度环境。

关键词: 比较公共政策, 制度, 政策话语, 政治文化

Introduction

The idea that the study of public policy both *is* and *should be* comparative is well established in the literature (Dodds, 2012; Heidenheimer, Hecl, & Adams, 1975).

Yet, to the extent that comparative public policy is a unified body of knowledge, its origins were not explicitly comparative. While few would deny that there have been exemplary comparative studies over the years, they tended to be “one-off” projects (e.g., Hall, 1986; Hecl, 1974; Wilks & Wright, 1987). In contrast to comparative political economy,¹ the most popular approaches for studying public policy were for the most part not designed with comparison in mind; rather, many were conceived to explain policy processes in most-similar policy environments, namely those found in the United States (Sabatier, 2007a, p. 11). Many leading theories were thus originally intended to explain policy variation with institutional variables held constant. As a consequence, studies that sought to apply certain perspectives to cases outside the institutional milieu for which they were intended risked erring as a result of “forced fit,” which occurs when empirical findings are tailored to suit theoretical assumptions. Forced fit is a problem because it runs afoul of the standard procedures of scientific inquiry, specifically that theory be updated to more accurately reflect empirical realities.

Fortunately, core perspectives on public policy have since been amended to account for institutional variation (Baumgartner et al., 2009; Cairney & Jones, 2016; Weible & Jenkins-Smith, 2016). This push to make the study of public policy more comparative has coincided with the proliferation of new approaches, many of which are not *sui generis* but rather novel offshoots of established theories and frameworks (Schlager & Weible, 2013). Having developed means to account for institutional variation, comparative policy scholars have recently begun to look beyond institutions to explain how policy discourses and political culture affect policy outcomes (Jenkins-Smith, Silva, Gupta, & Ripberger, 2014; Schmidt, 2008; Trouset, Gupta, Jenkins-Smith, Silva, & Herron, 2015; Weare, Lichterman, & Esparza, 2014). This shift of emphasis from rules to context has involved significant efforts to bring together positivist, post-positivist, and constructivist-interpretivist themes and methods (M. D. Jones & Radaelli, 2015). By building on established literatures, new lenses on public policy seek to improve upon, rather than compete with or replace, existing perspectives (Breunig, Koski, & Workman, 2016; Cairney & Heikkila, 2014, p. 383; Howlett, McConnell, & Perl, 2016). More than ever before, the comparative project is characterized by a desire to expand the frontiers of conventional wisdom, eschewing the parsimony of most-similar comparison in the interest of getting a more systemic understanding of how variables nested at different levels of abstraction come together to affect the policy process and policy outcomes.

The Basis of Comparative Public Policy: Origins and Themes

The foundation of any science, from the most elementary to the most complex, is a system of classification based on thoughtful comparisons (Mill, 1868). While the process of classification may be inductive in its initial stages, the epistemology of comparison is deductive: it involves determining whether two or more phenomena are alike or dissimilar according to some established criteria. As these criteria become more elaborate, the line separating facts from theory blurs (Lévi-Strauss, 1966).

Classification comes to rely progressively on data not directly observed but rather inferred by means of hypothesis testing (Popper, 1959, p. 76).

This practice, known as the hypothetico-deductive method, relies on replication for the purpose of falsification.² The intention of the “research program”—as opposed to experiments in the singular—is to avoid error by performing more sophisticated tests than single experiments permit. Science is said to progress according to a “logic of discovery” premised on the systematic amendment or elimination of existing theories (Lakatos, 1976; cf. Popper, 1959). Since social scientists lack means of experimental control, comparison across multiple cases is the best available alternative for assessing the strength of hypotheses. Beyond replication, an advantage of comparative research is that biased estimation may be gradually reduced as more cases are analyzed.³

What we call cases in policy research range from the very general to the highly specific. Policy generalists typically focus on the process by which policy is made. They seek to explain not the substance of policy *per se* but rather the procedures and processes that produce policy outcomes (Sabatier, 2007a). By contrast, policy specialists focus on the substance of specific policies. These scholars are interested in why policy outcomes vary across jurisdictions, which involves making substantive comparisons by studying the same policy in a variety of settings (e.g., Bonoli, 2003).

Although specialist studies have led to many valuable insights, the emergence of comparative public policy as something resembling a unified field is rather recent and follows from the generalist literature (Baumgartner, Jones, & Wilkerson, 2011; Sabatier, 2007b). Insofar as there is a community of researchers engaged in continuous dialogue and the collective pursuit of theory building, the origins of this research tradition were not all that comparative. Rather, given that they stemmed principally from the study of American politics, the roots of comparative public policy were comparative primarily in the most-similar case sense (Blomquist, 2007; Sabatier, 2007a, p. 11).

Consequently, comparative policy scholars outside of the United States were until recently confronted with a dilemma. They could attempt to avoid forced fit by cautiously applying a given approach to cases it was not necessarily well suited to explain, taking care to critically assess the results and amend the theory if necessary (as per the hypothetico-deductive method). Alternatively, international comparative policy scholars could devise their own approaches better suited to comparative analysis. While the latter option is perhaps the more obvious choice, the extent to which it is more conducive to knowledge-building in a global community of scholars hinges upon whether alternative perspectives are successful in both challenging and supplanting dominant approaches (a process akin to Kuhnian notions of paradigmatic overthrow).

What has been dubbed the “network approach” is by far the most well-known alternative to core perspectives on public policy (Adam & Kriesi, 2007). Inspired by Hugh Hecho, the network approach is premised on the idea that concepts historically used to describe policy settings in the United States were “disastrously incomplete” (Hecho, 1978, p. 88). The takeaway from this literature is that policy networks are characterized by different dynamics in different political systems because of different institutional configurations (Scharpf, 1997). Following from this observation,

variation in decision rules has been used to construct elaborate typologies of policy networks (Van Waarden, 1992).

Limitations of space preclude a thorough discussion of the networks literature and its contribution to comparative public policy (see, e.g., Knoke, Pappi, Broadbent, & Tsujinaka, 1996; Wilks & Wright, 1987). Suffice it to say, discussion of policy networks has waned in recent years, likely because its advocates failed to produce a widely accepted typology of networks, much less a unified theory (but see Marsh, 1998). The effort was not for nothing, however. On the issue of forced fit, policy network scholars were instrumental in challenging the assumption, popular in American political science, that institutions limit debate on complex policy issues to a single (often left-right) dimension that permits the formation of stable policy monopolies (Hecl, 1978, p. 119; cf. Baumgartner & Jones, 1993, p. 5; Shepsle & Weingast, 1981, pp. 510–11). A close analysis of this argument reveals that tendencies toward stable policy monopolies are a consequence of agenda-setting roles and majoritarian decision rules (Scharpf, 1997; Tsebelis, 2002). The implication is that alternative decision rules and policymaking processes, which are common in political systems outside the United States, do not produce such “winner-take-all” outcomes.

In sum, a desire to avoid forced fit provoked a reaction from policy scholars outside of the United States that, for better or worse, hindered the advancement of comparative public policy. Nonetheless, regardless of whether the major debates of previous decades were based primarily on genuine controversy or mere confusion, the smoke appears to have cleared (see, e.g., Börzel, 1998; Dowding, 2001). As it stands, although the concept of policy networks was coined as a reaction to the American conceptualization of policy subsystems, these two terms are now used more or less interchangeably (Cairney & Heikkila, 2014, p. 365).

The remainder of this essay chronicles the comparative turn in the policy literature. I first detail how established lenses have dealt with issues of comparison and emphasize that, notwithstanding the institutional analysis and development (IAD) approach (which was designed with comparison across institutional contexts in mind), the most popular perspectives used to study public policy have had to be consciously reconfigured in order to account more satisfactorily for institutional variation. I then discuss recent lines of theoretical inquiry, which stand out from earlier research in two main respects. First, they avoid a national-level orientation; second, they offer a more sophisticated account of policy discourse than was typical of past research. The latter trend may prove useful for not making too much of formal institutions.

Core Perspectives and the Comparative Approach

As Ostrom (2011, pp. 8–9) reminds us, analytical models are too precise in their predictions to be of much use beyond most-similar comparisons. Theories and frameworks devised to explain phenomena in a general class of cases, however, can be amended or extended to explain phenomena in a still larger class.⁴ The four most prominent perspectives on public policy are theories and frameworks. They are the Advocacy Coalition Framework (ACF), Institutional Analysis and Development

(IAD), Punctuated Equilibrium Theory (PET), and the Multiple Streams Approach (MSA). With the exception of IAD, which has been geared toward explaining the effect of institutional logics on policy outcomes since its inception, the other three approaches were developed to explain political behavior in the American institutional environment. Consequently, many time-honored perspectives for studying public policy were not designed with institutional variation in mind. Rather, in contrast to the “metatheoretical” orientation of IAD, their intent was by and large to demonstrate how common institutions—namely, those of American government—produced similar outcomes regardless of variation with respect to the policy issue under analysis (Baumgartner & Jones, 1993). Despite their origins, recent efforts to make core perspectives amenable to comparative analysis have made forced fit less and less of an issue as more precision and qualification has been built in to each approach.

Institutional Analysis and Development

In contrast to other perspectives on public policy, IAD has been both explicitly comparative and explicitly institutionalist from the outset. Since its beginnings in the early 1980s, IAD scholars have emphasized the usefulness of game-theoretic analogies to explain policy outcomes wherein institutions—which are understood as the rules of the game—are considered the most important explanatory variable (Kiser & Ostrom, 1982). As in board games, rules in political games have wide-ranging, deterministic effects on player strategies, the distribution of resources, series of moves and, ultimately, outcomes (Scharpf, 1997).

The wisdom imparted by IAD—and institutional rational choice more generally—is that causal variables are not entirely independent but rather activated by institutional rules (Immergut, 1998). Institutions often take the form of necessary but insufficient conditions for a particular outcome. Determining the precise combination of causal variables in a given situation demands that researchers assess how institutions “fit” within the explanation they wish to employ (Young, 2002).

Given that rules are neither agents nor resources but rather influence the causal process by imposing contingencies on agents’ behavior (Hurwicz, 1973), IAD relies on a complex, multilevel, seven-part typology of rules to explain how a variety of rules may combine to impact policy outcomes in a particular situation (Ostrom, Cox, & Schlager, 2014). Moreover, institutions are not the only variable of interest. Because the attributes of actors, environments, and communities also affect outcomes, policy action is seen as only “partially dependent” on rules (Ostrom, 2011, p. 17). As such, and although IAD scholars maintain that a systematic approach to the study of institutions is essential for informed comparisons, they acknowledge that a complete theory of institutions is likely beyond our reach (Kiser & Ostrom, 1982).

Considering IAD’s sophisticated account of institutions, several authors have suggested that IAD insights be imported into other perspectives on public policy for the end of improving comparative research (Basurto, Kingsley, McQueen, Smith, & Weible, 2010; Real-Dato, 2009; Schlager, 2007). While there is no obvious reason why alternative perspectives should be impervious to the tools of IAD (or other

institutionalist tools, such as game theory or veto players analysis, for that matter), most have confronted the issue of cross-institutional comparison in their own ways (but see Lubell, 2013).

The Multiple Streams Approach

An outgrowth of Cohen, March, and Olsen's (1972) "garbage can model of organizational choice," MSA appeared at a time when social scientists were particularly interested in the organizational labyrinth that is the state (Jessop, 1990; Meltsner, 1976; Skocpol, 1985). Looking both inside the state and beyond it, Kingdon's (1984) *Agendas, Alternatives, and Public Policies* accounted for the synergies between the various moving parts that interact to produce public policy.

Although the variables in MSA are many, they are collapsed into three independent "streams" representing politics, policies, and problems. Complementary conditions in the three streams are hypothesized to create temporary windows of opportunity during which "policy entrepreneurs" may effect change to the policy status quo. Although some subcomponents comprising the streams are institutional (e.g., network characteristics), MSA was not designed for cross-country comparisons but rather developed to explain variation within the macropolitical institutions of American government.

Not long after *Agendas, Alternatives, and Public Policies* was published, policy scholars began to amend MSA to make it more applicable to comparative analysis (Durant & Diehl, 1989). The latest MSA "meta-review," which limited its analysis to the period between 2000 and 2013, found studies spanning 65 countries, multiple levels of government, and 22 policy areas (M. D. Jones et al., 2016). The international appeal of MSA no doubt follows from efforts on the part of Nikolaos Zahariadis to expand the framework's range of application beyond agenda setting in the U.S. Congress to the larger policy process (Zahariadis, 2007). Chief among the amendments is an appreciation of cross-jurisdictional variability with respect to how institutionally structured the process of agenda setting is. Whereas Kingdon (1984) described the environment in which policy proposals are developed as a "policy primeval soup," Zahariadis and Allen (1995, p. 72) point out that, outside the United States, the environment is often more "stew-like"—that is, less fluid, more bureaucratic, and at times quite scripted (see also Durant & Diehl, 1989). Others have also pointed out that agenda setting is much more structured, and thus less fortuitous and more predictable, in systems in which executives control the legislative process than it is in the United States (Howlett, 1998; cf. Light, 1999).

In short, although a central premise of MSA is that policymaking takes place within an environment of "organized anarchy," comparative research using MSA has been careful to qualify the extent to which policy settings are organized or anarchic. It would be a mistake, however, to assume anarchy, or outcomes typically associated with it, follows from a lack of institutions. On the contrary, unpredictability in the American political system is largely due to a multiplicity of overlapping institutions and policymaking jurisdictions (i.e., checks and balances). Political

arrangements that disperse authority give rise to “institutional frictions” that increase policy stability while reducing predictability with respect to major policy change. Such is the crux of PET.

Punctuated Equilibrium Theory

PET was originally developed to explain episodic spikes in the otherwise incremental pattern of federal budget allocations in the United States (Baumgartner & Jones, 1993). PET surmises that day-to-day policymaking in the United States occurs within relatively closed, often monopolistic, policy subsystems. Owing to the institutions of American government, monopoly control over how policy is understood, formulated, and implemented is disrupted when issues rise to prominence on the legislative agenda. In contrast to subsystem politics, in which conflict is restricted by institutions limiting the number of policy-relevant issues considered at any time, the macropolitics of Congress allow the agenda space to expand. As a consequence, previously neglected issue dimensions elicit government attention. Subsystemic monopolies are challenged as the venues in which certain policy issues are handled increase in number or otherwise change. Owing to the status quo bias of American political institutions, subsystemic policymaking is characterized by stability while policymaking at the macropolitical level is periodically change oriented.

Given the American flavor of PET’s origins, it is not surprising that early observers doubted the applicability of its conclusions to nonpresidential systems (Howlett, 1997). In response, the architects of PET have since added empirical and theoretical precision to their studies, concluding that although “differences in the law’s basic parameters are country and institution specific,” PET constitutes both a “general empirical law of public budgets” and a “theory of government information processing” (B. D. Jones & Baumgartner, 2012; B. D. Jones et al., 2009, p. 856). For example, applying PET to budgetary allocations in France, Baumgartner, Foucault, and François (2006) discovered a pattern of punctuations “remarkably similar” to those found in the United States. Comparing several government activities in the United States, Belgium, and Denmark, Baumgartner and colleagues went on to demonstrate that since institutional costs escalate over the course of the policy process regardless of the political system, observable policy outputs are increasingly punctuated as the policy process progresses from agenda setting to decision making (Baumgartner et al., 2009).⁵ Controlling for institutional difference in these studies allowed the authors to conclude that limitations of human cognition, which are the same everywhere, must be more significant than institutional factors in determining shifts in government attention that ultimately lead to policy outcomes.

The fact that PET’s premises appear to be generalizable does not mean of course that researchers can afford to eschew consideration of institutions (M. D. Jones & Jenkins-Smith, 2009). PET, after all, posits that “frictions” leading to the punctuated pattern of policy outputs are a consequence of the circumscribing effects of institutions on government attention and information processing (B. D. Jones & Baumgartner, 2005). As stressed by Baumgartner, Jones, and Mortensen (2014, p. 88) “it is

critical in the future to begin to understand which aspects of policymaking are due to more general dynamics based in human cognition and organizational behavior and which are due to the particulars of the institutions under study.”

Thus, despite the apparent generality of outcomes, using PET for analysis of cases beyond the United States requires that researchers be well acquainted with institutional variation across countries. Although it may be true that policy is punctuated regardless of the policymaking system, the institutions governing the specific pattern of punctuations vary tremendously from system to system and must be accounted for (John & Jennings, 2010). Where (and by whom) the agenda is set determines how the policy process unfolds (Light, 1999). Beyond recognizing that whether a political system is presidential or parliamentary will determine if the agenda is set by the executive or legislative branch, researchers should be appreciative of subtler institutional idiosyncrasies as well (Tsebelis, 2002). At the subsystem level, two factors—executive capacity and procedures governing participant interactions—bear significantly on policy learning and, consequently, policy responsiveness to external stimuli (Breunig & Koski, 2009). Institutional variation at the subsystem level should explain differences in the amount of “bottom up” policy change observed across cases. Accurately accounting for institutional variation at the subsystem level requires that PET researchers reflect upon what rules and procedures lead policy subsystems toward monopolies in the U.S. context and consider whether the story is the same elsewhere (Scharpf, 1997). We should, for example, expect institutions designed to facilitate corporatist interest intermediation to produce subsystem coalitions completely different from those found in more adversarial policy settings (Knoke et al., 1996; Wilks & Wright, 1987). This brings the discussion to how tendencies toward policy monopoly have been treated in the explicitly subsystem-oriented ACF.

The Advocacy Coalition Framework

Developed in the 1980s, the ACF marked a significant departure from how public policy had previously been studied by extending the scope of analysis beyond what was conventional for political science. As Jenkins-Smith and colleagues explain, the ACF was radical in its program to (i) cast off the rigidities of the policy stages heuristic, (ii) provide means for analyzing the role of technical information in political debate, and (iii) explore policymaking dynamics as they played out away from public view in policy subsystems (Jenkins-Smith, Nohrstedt, Weible, & Sabatier, 2014, p. 184). The major theoretical challenge confronting ACF scholars was to differentiate between those aspects of policy that come about as a consequence of learning and those aspects that depend on “noncognitive factors” which establish “basic resource and normative constraints” (Sabatier, 1987, p. 651).

The ACF is not a theory but is rather an analytical framework (Jenkins-Smith, Nohrstedt, et al., 2014, p. 188). Nevertheless, Sabatier’s (1987) delineation of two general avenues by which policies remain stable or change constitutes a theoretical claim about actors’ propensity to alter their preferences in the face of evidence that

contradicts prior beliefs. It premises that policymaking will only reflect the dynamics of solutions-oriented learning when differences of opinion do not threaten actors' deeply held "core beliefs." When core beliefs are in conflict, solutions will depend on the resources held by advocacy coalitions, how well coalition strategies fit professional norms and standards of policy forums, intervention on the part of a policy broker, or some combination of these factors (Sabatier, 1987, p. 683). Explanation in the ACF is thus part universal and part institutional. It is universal in the sense that all actors are assumed to have belief systems that are organized according to core and peripheral aspects regardless of situational setting. It is institutional in that, on one hand, brokerage roles are institutionally determined while, on the other, opportunities to marshal and utilize coalition resources are governed by institutionalized opportunity structures and professional norms (Sabatier & Weible, 2007; Weible, Sabatier, & McQueen, 2009).

Attention to the distribution of coalition resources in pluralistic policy settings reflects the fact that the ACF—like MSA and PET—was designed not only with the institutions of American government in mind but also its adversarial political culture. Despite being U.S.-centric in its initial formulation, international applications of the ACF have since grown to exceed U.S.-based studies (Weible et al., 2011). The result has been the development of variations on the ACF intended to capture the nuances of particular institutional arrangements (Weible et al., 2009).⁶ However, rather than allowing the framework to be overwhelmed by ceaseless typological distinctions, beginning with Sabatier (1998), the ACF's architects have accommodated complexity while maintaining the framework's general applicability by incorporating a limited number of intervening variables to the standard depiction of the ACF (Sabatier & Weible, 2007).⁷

Yet, despite efforts to build nuance into the ACF, Jenkins-Smith, Nohrstedt, et al. (2014, p. 205) note that, while the ACF is "based on implicit comparison across political-institutional systems" they are "not aware of any empirical study based on the ACF that systematically compares policy subsystems, coalition behavior and policy processes across political systems." More recently, Weible and Jenkins-Smith (2016, p. 23) stated "one of the next steps is to document systematic differences in coalitions across different forms of governments." Thus, while proponents of the ACF long have been cognizant of the differential impacts of institutions on policy outcomes, a systematic comparative research program has been slow to materialize.

Determining whether and how institutional configuration matters requires that institution-specific hypotheses be advanced and tested across a number of cases (e. g., Gupta, 2014). Jenkins-Smith and colleagues explain:

frameworks [e.g., the ACF] are not directly testable but provide guidance toward specific areas of descriptive and explanatory inquiry ... a framework supports multiple theories which are narrower in scope and emphasize a smaller set of questions, variables, and relationships. Theories provide more precise conceptual and operational definitions of concepts and interrelate concepts in the form of testable and falsifiable hypotheses or propositions. The theories within the framework are where students and

researchers should attempt to test and develop descriptions and explanations. (Jenkins-Smith, Nohrstedt, et al., 2014, p. 189)

It should be no surprise, then, that emerging theory is not entirely *sui generis* but rather emblemizes offshoots and hybrids of the ACF and other established perspectives summarized here. As detailed in the discussion to follow, new perspectives advance hypotheses related to specific contingencies that the ACF in its basic formulation purposefully avoids. Seen in this light, the established literature offers, to greater and lesser degrees, context-free frameworks upon which more specific theories and models may be devised.

New Directions in an Explicitly Comparative Discipline

In contrast to the one-shot nature of many previous comparative policy studies, the latest wave largely consists of outgrowths of established theories and frameworks. The literature now comprising what could be considered comparative public policy is voluminous and growing (Schlager & Weible, 2013). Consequently, there is only space to mention a fraction of all the new and emerging perspectives currently being developed. A few themes stand out.

Scaling Up and Across

Whereas conventional approaches to studying public policy were premised on the study of formal, geographically situated institutions and organizations, contemporary governance demands that researchers be attentive to transboundary policy dynamics (Eisner, 1993; Jochim & May, 2010). The main insight gained from recent literature on transboundary policymaking is that patterns of collaboration and conflict have both scaled up to regional and international levels as well as scaled across individual policy subsystems, each of which may have unique procedures of its own (Martinsen & Wessel, 2014).

In contrast to earlier musings on the expected effects of globalization on public policy (e.g., Strange, 1996), recent literature on “transboundary subsystems” and “policy regimes” explains why the degree of policy convergence varies from one policy area to the next. Building on both the ACF and PET, a key finding of this research is that policymakers are just as often capable of preventing the adoption of a particular policy—or of tailoring it to their own ends—as they are powerless to resist it (M. D. Jones & Jenkins-Smith, 2009; Worsham & Stores, 2012). Properly anticipating how complex, multilevel interactions play out demands that researchers be mindful of how nested institutions combine to determine the arrangement of veto players in multilevel actor constellations. While political science is equipped with tools to do this (Scharpf, 1997; Tsebelis, 2002), branching off IAD, recent works using Norton Long’s concept of the “ecology of games” advance a framework specifically suited to the analysis of such “complex adaptive systems” (Lubell, 2013).

Capitalizing on recent advances in network science, the ecology of games approach uses exponential random graph models to explain why some elements in

complex systems of actors and institutions thrive while others decay. Importantly, this evolutionary theory looks beyond mere institutional effects (“capacity constraints”) to include variables related to norms, narratives, and discourses (a “reputation institution”), the latter of which have been shown to allow higher relative payoffs for cooperators but only when information about reputations flows quickly and only when systems are characterized by a cooperative ethos (i.e., relatively more cooperators than defectors) (Smaldino & Lubell, 2014).

The ecology of games approach thus marks a very sophisticated return to systems analysis, but one that does not neglect lower order processes taking place at the policy subsystem level. Contrary to conventional systems-theoretic approaches to the study of public policy—which were critiqued for paying inadequate attention to the deliberative and decisional processes involved in policymaking (Blomquist, 2007, p. 272; Hofferbert, 1990, p. 147; Schlager, 2007, p. 313)—the ecology of games framework, policy regime theory, and other work on transboundary subsystems are attentive to how processes occurring within and across subsystemic units bring about stability or change in the larger policy system. Such a return to big picture considerations, which follows in no small part from advances in data collection and analytical methods, constitutes a major trend in the policy literature. Another major trend, related to the return to system-level analysis but not obviously so, is a phenomenological orientation that emphasizes the role of ideas, norms, and narratives as manifested in policy discourses.

Discourse and Narrative Analysis

Phenomenology and hermeneutics are by no means new to political social science (Dryzek, 1982; Giddens, 1984). Policy studies have particularly benefited from the influence of constructivist lenses on public policy as well as from their proponents’ critiques of conventional approaches (Durnová, Fischer, & Zittoun, 2016; Hay & Wincott, 1998; A. Schneider & Ingram, 1993). Yet, in recent years, owing in large part to advances in research methods, degrees of separation between positivist and constructivist poles of policy research have narrowed (M. D. Jones & Radaelli, 2015).

Although it has been maintained for some time that institutional discourses have “constitutive effects” (e.g., on actors’ interpretations of the action situation, institutional rules, payoff matrixes, opponents’ intentions, as well as their own interests [Blyth, 2003; Schmidt, 2008; Snyder & Mahoney, 1999]), it is only recently that research has shown, using statistical methods, whether and how discourse matters (Wueest & Fosati, 2015). Bringing discourse analytic techniques to the ACF, Leifeld (2013) demonstrates in the case of German pension policy how belief change among early adopters triggered a diffusion process whereby the balance of coalition membership shifted as a consequence of learning. In a similar vein, honing in on the concept of narratives, M. D. Jones, McBeth, and Shanahan (2014) extend the ACF to develop the Narrative Policy Framework (NPF), the purpose of which is to deduce how stories—namely as they relate to assigning roles to “heroes and villains”—are used politically by coalitions to gain support for their policy positions (cf. Stone, 1989). In this sense, NPF

shares affinities with the literature on the Social Construction of Target Populations (SCTP), which similarly focuses on the persuasive power of discourse in the determination of which groups are deserving (and which are undeserving) of the benefits of redistributive policies (A. Schneider & Ingram, 1993). Although constructivist approaches have been criticized in the past for their lack of scientific rigor (Dowding, 2001), both the NPF and SCTP are noteworthy for their efforts in advancing specific, falsifiable hypotheses (Sabatier, 2007a, p. 11; Weible, 2014, p. 12).

The trend toward discourse analysis can be attributed to the post-positivist orientation of the mainstream approaches outlined earlier. For example, framing has always been central to PET because of its role in shifting actors' limited attention toward certain information. Yet, consistent with the general trend of "taking discourse seriously" (Schmidt, 2008), the importance of framing has grown over time as PET scholars have increasingly emphasized the politics of information (Eissler, Russell, & Jones, 2016). Similarly, while IAD has always been attentive to the attributes of actors, environments, and communities, the ecology of games offshoot of IAD goes further to adopt a "realistic model of human decision making drawn from biological and cultural evolution, which recognizes how behavioral, social, and cognitive processes constrain rational choice" (Lubell, 2013, p. 539).

Not all such developments are recent, of course. Branching off of MSA, M. Schneider, Teske, and Mintrom (1995) emphasized the importance of seeing old things in new ways in their discussion of how policy entrepreneurs effect change through policy innovation, adaptation, and "arbitrage." Likewise, learning and the communication of beliefs have always been central to ACF. But, as with PET and IAD, the role of discourse in the ACF has drawn more and more emphasis and attention over time as evidenced by Leifeld's (2013) work and the development of NPF as an accompaniment to ACF.

Not wanting to give the impression that all constructs are liberating, it is important to stress that discourse can also be constraining. This happens when ideas are attenuated by pre-existing norms or attitudes. Coming to grips with the variables at play in such situations has led some policy researchers to (re)engage with political culture.

Accounting for Culture

The sort of systemism that colors studies that take seriously discourse and narratives is also apparent in recent research that makes comparisons across political cultures. Given its emphasis on belief structures, those working within the ACF have shown a particular interest in discerning the effects of political culture on policy processes and outcomes. Borrowing insights from Douglas and Wildavsky (1982), Jenkins-Smith and colleagues build a four-part typology of cultural worldviews with the aim of bringing greater precision to the treatment of belief systems in the ACF. Whether one is biased toward an individualistic, egalitarian, hierarchical, or fatalistic worldview is hypothesized to affect how groups construct or otherwise navigate

institutional structures (e.g., by entering into coalitions with culturally proximate groups) (Jenkins-Smith, Silva, et al., 2014, pp. 491–92).

Weare et al. (2014) find support for the notion that cultural biases influence whether policymaking is cooperative or adversarial. Importantly, these authors demonstrate that the impact of culture is independent from both actors' material interests and institutional decision rules: two pillars of explanation in rational choice theory (Scharpf, 1997; Titmuss, 1972). Evidence that preferences are affected by culture is also found in recent survey-based research investigating whether cultural belief systems influence individuals' readiness to participate in public engagement on the issue of nuclear facility siting. Using the four-part typology of cultural world views outlined above, researchers found that egalitarians and hierarchs are more likely to express a desire to participate in public engagement than fatalists and individualists (Trousset et al., 2015).

As comparative policy scholars continue to extend their gaze beyond political systems in North America and Europe, an appreciation of political culture will be all the more necessary. Although the majority of political systems worldwide are modeled on Western institutions, we should not assume that like-institutions function the same way in different cultural contexts. In game theoretic terms, player strategies are often influenced by cultural norms, both when the payoff matrix is affected by culture and when it is not (Scharpf, 1997, pp. 88, 162–68). Furthermore, as pointed out by Wong (2014), since heuristics used by actors to arrive at policy decisions vary cross-culturally, understanding local idiosyncrasies is a prerequisite to properly employing attention-based approaches (such as PET) in unfamiliar policy environments.

Although an appreciation of cultural norms has long been standard fare for IAD (Ostrom, 1990), comparison beyond North America and Europe came later for other foundational approaches (Henry, Ingold, Nohrstedt, & Weible, 2014). While limitations of space prevent a detailed discussion of the insights gleaned from empirical studies of policymaking in the developing world, it suffices to say that analytical sensitivity to variables beyond institutional rules will be integral to avoiding forced fit as it pertains to the Western cultural biases some suspect underlie contemporary approaches to the study of public policy (Wong, 2014).

Taking Stock of the New Wave

Arguably, the three trends discussed above amount to a sea change in the discipline. This shift is most evident with respect to recent efforts to draw together positivist, post-positivist, and constructivist-interpretivist approaches, which have resulted in significant theoretical and methodological synergies (M. D. Jones & Radaelli, 2015; Wueest & Fossati, 2015). Not only have discourse and frame analysis been central to NPF, these concepts and methods have also been increasingly emphasized in the ACF and PET (Eissler et al., 2016; Leifeld, 2013).

Needless to say, inquiry into how institutions are sustained or subverted through cultural practices, narratives, and discourse has drawn policy studies,

political economy, and political sociology much closer to one another (Streeck & Thelen, 2005). Moreover, taken together, recent developments in comparative public policy signal a return to more “systemic” explanation that is in some ways reminiscent of classic approaches to public policy (e.g., Dye, 1966; Easton, 1953). However, contrary to the state of policy studies half a century ago, attitudes and behavior of policy actors can now often be observed directly.⁸ Although much remains to be done, discourse-oriented multilevel models of the sort that characterize the latest research avoid many of the pitfalls that frustrated previous attempts at comprehensive theory-building and rigorous comparative analysis.

Conclusion

Why study comparative public policy? More specifically, what is so important about comparison and why, as I have argued, is it prudent to take stock of institutional variation and, beyond that, policy discourse and political culture? Although the detail and specificity of the case studies that populate policy research make it easy to lose sight of the larger purpose of the social sciences, the development of theories and frameworks for understanding and explaining social phenomena is a prerequisite to improving peoples’ lives.

As per the themes discussed in this essay, attentiveness to institutional context is integral to assessing which institutional configurations produce what policy results and how (Ostrom et al., 2014). Yet, institutions are not everything (Young, 2002). Rather, even when institutions do not leave “gaps” or “contingencies” that permit the exercise of agency (Ostrom, 1990; Streeck & Thelen, 2005), institutions rarely prohibit discourse outright. Consequently, institutions may be discursively navigated in order to subvert or sustain the policy status quo (Schmidt, 2008). However, just as actor constellations are nested within institutional contexts, institutions and actors are nested within still larger cultural structures which may maintain or undermine institutional authority by virtue of the relationship between culture and norms of appropriate discourse (Titmuss, 1972).

The above argument was succinctly captured in the title of a 2003 article by Mark Blyth called “Structures do not come with an instruction sheet” (Blyth, 2003). The trouble with stylized facts of the sort conveyed in Blyth’s title is that stylized facts require qualification. Some structures do in fact come with an instruction sheet, as is the case when institutional rules are codified or otherwise stated. When rules are followed, the job of the social scientist is easy. Blyth’s point, however, is that rules, if they exist, are contestable if not openly contested. When rules are contested, understanding public policy requires that researchers be attentive to the vagaries of the policy discourse. As most forcefully argued by Schmidt (2008), but equally recognized by practitioners in the field of comparative political economy, policy discourse is the primary medium through which institutions are maintained or subverted (Streeck & Thelen, 2005). To this I add, although discourse may be exogenously driven, it is always endogenously mediated by culture.

Returning to the question of purpose, in the very least, a proper appreciation of the nuances highlighted above should prevent comparative policy scholars from concluding that like-institutions will produce similar policy outcomes when transplanted from one context to another (Przeworski, 2004; Weaver & Rockman, 1993). Indeed, research on policy diffusion and transfer has often found that transplanted institutions fail to produce convergence (Steinmo, 2010; Weyland, 2005). While policy scholars may have some explanations for why policy transfer does not always go hand in hand with policy convergence, as noted by Wong (2014), the extent to which theories and frameworks developed to explain public policy in North America and Europe carry overseas remains a rather open question.

Although vexing—and at times frustrating for those hopeful for crisp, straightforward, or “parsimonious” explanations—the complexity of the world in which we live gives rise to tough, but by no means intractable, questions. As evidenced by the empirical research and analytical perspectives summarized in this essay, students of comparative public policy are well equipped with an expanding set of tools designed with the intricacies of modern policymaking in mind.

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Notes

1. For example, Esping-Andersen (1990), Hall and Soskice (2001), Steinmo (2010), and Streeck and Thelen (2005).
2. A review of recent major works in public policy suggests that the field—at least in its main stream—has stayed true to the hypothetico-deductive approach (Sabatier, 2007b, p. 327). Several contributors to the latest edition of *Theories of the Policy Process*, for example, reflect critically on the extent to which certain hypotheses have stood up to empirical scrutiny (Weible, 2014, p. 398). Far from espousing covering laws, however, social scientists have long recognized that many of their claims are at best probabilistic. Thus, having embraced “sophisticated falsificationism” (Lakatos, 1976), policy scholars are well aware that hypotheses are not easily rebuffed (Meier, 2009).
3. Paradoxically, comparative research may realize the benefits of experimental control by avoiding it altogether. The logic here is that, although a diversity of cases adds confounding variables, consequential variables do not remain unobserved in the long run; rather, they are either recognized by researchers as deterministic and built into models or they are identified as “noise” and treated as such (see Gerring, 2007).
4. The difference among models, frameworks, and theories hinges on the specificity of each and, correspondingly, the degree of predictive precision. Models are reserved for the study of specific phenomena (e.g., community irrigation management in the Philippines [Ostrom, 1990]); theories make assumptions about the behavior of general classes of actors under given conditions (e.g., elite information processing at times of crisis [Jones & Baumgartner, 2005]); frameworks relax assumptions about actors’ specific motivations and instead map out the relationships between relevant variables (e.g., a framework for understanding coalition formation at the policy subsystem level [Sabatier, 1987]).
5. More specifically, Baumgartner et al. (2009) demonstrate that the kurtosis of distributions measuring policy inputs and outputs increases as the analysis moves from the public agenda (i.e., public opinion, election results, media coverage) to the policy process (hearings and the introduction of bills) to budgetary allocations (the passage of money bills) (see also B. S. Jones & Baumgartner, 2005).

6. One particularly illustrative example is Gupta's (2014) comparison of forest management and nuclear energy policy in India in which she found the level of subsystem centralization to affect whether coalitions adopt confrontational or assimilative strategies.
7. Three of these intervening variables fall under the category of "coalition opportunity structures"—including "degree of consensus required for major change," "openness of the political system," and "overlapping societal cleavages"—whereas one other—"institutional rules"—falls under the heading of "subsystem characteristics" (Weible & Jenkins-Smith, 2016, p. 18).
8. As lamented by Richard Hofferbert, a key proponent of earlier systems-theoretic approaches to the study of public policy, "because of the difficulties of measurement and the poverty of appropriate theory, attitudes or behavior of elites (those whose choice should be greatest) were rarely measured directly, but rather equated with the residual once other elements of the model had been correlated with a particular set of policy indicators. . . Theory was and still is light. Induction, guided by previous insights of less technically rigorous scholarship, has driven the inquiry" (Hofferbert, 1990, pp. 146–47).

References

- Adam, Silke, and Hanspeter Kriesi. 2007. "The Network Approach." In *Theories of the Policy Process*, 2nd ed., ed. Paul A. Sabatier. Boulder, CO: Westview, 129–54.
- Basurto, Xavier, Gordon Kingsley, Kelly McQueen, Mshadoni Smith, and Christopher Weible. 2010. "A Systematic Approach to Institutional Analysis: Applying Crawford and Ostrom's Grammar." *Political Research Quarterly* 63 (3): 523–37.
- Baumgartner, Frank R., Martial Foucault, and Abel François. 2006. "Punctuated Equilibrium in French Budgeting Processes." *Journal of European Public Policy* 13 (7): 1086–103.
- Baumgartner, Frank R., Christoffer Green-Pedersen, Bryan D. Jones, Christian Breunig, Stefaan Walgrave, Michiel Nuytemans, and Peter B. Mortensen. 2009. "Punctuated Equilibrium in Comparative Perspective." *American Journal of Political Science* 53 (3): 603–20.
- Baumgartner, Frank R., and Bryan D. Jones. 1993. *Agendas and Instability in American Politics*. Chicago: University of Chicago Press.
- Baumgartner, Frank R., Bryan D. Jones, and Peter B. Mortensen. 2014. "Punctuated Equilibrium Theory: Explaining Stability and Change in Public Policymaking." In *Theories of the Policy Process*, 3rd ed., ed. Paul A. Sabatier, and Christopher Weible. Boulder, CO: Westview, 59–103.
- Baumgartner, Frank R., Bryan D. Jones, and John Wilkerson. 2011. "Comparative Studies of Policy Dynamics." *Comparative Political Studies* 44 (8): 947–72.
- Blomquist, William. 2007. "The Policy Process and Large-N Comparative Studies." In *Theories of the Policy Process*, 2nd ed., ed. Paul A. Sabatier. Boulder, CO: Westview Press, 261–95.
- Blyth, Mark. 2003. "Structures Do Not Come with an Instruction Sheet: Interests, Ideas, and Progress in Political Science." *Perspectives on Politics* 1 (4): 695–706.
- Bonoli, Giuliano. 2003. "Two Worlds of Pension Reform in Western Europe." *Comparative Politics* 35 (4): 399–416.
- Börzel, Tanja A. 1998. "Organizing Babylon: On the Different Conceptions of Policy Networks." *Public Administration* 76 (2): 253–73.
- Breunig, Christian, and Chris Koski. 2009. "Punctuated Budgets and Governors' Institutional Powers." *American Politics Research* 37 (6): 1116–38.
- Breunig, Christian, Chris Koski, and Samuel Workman. 2016. "Knot Policy Theory." *Policy Studies Journal* 44 (S1): S123–32.
- Cairney, Paul, and Tanya Heikkila. 2014. "A Comparison of Theories of the Policy Process." In *Theories of the Policy Process*, 3rd ed., ed. Paul A. Sabatier, and Christopher Weible. Boulder, CO: Westview, 363–90.
- Cairney, Paul, and Michael D. Jones. 2016. "Kingdon's Multiple Streams Approach: What Is the Empirical Impact of This Universal Theory?" *Policy Studies Journal* 44 (1): 37–58.

- Cohen, Michael, Johan March, and James Olsen. 1972. "A Garbage Can Model of Organizational Choice." *Administrative Science Quarterly* 17 (1): 1–25.
- Dodds, Anneliese. 2012. *Comparative Public Policy*. New York: Palgrave Macmillan.
- Douglas, Mary, and Aaron Wildavsky. 1982. *Risk and Culture: An Essay on the Selection of Technical and Environmental Dangers*. Berkeley: University of California Press.
- Dowding, Keith. 2001. "There Must Be End to Confusion: Policy Networks, Intellectual Fatigue, and the Need for Political Science Methods Courses in British Universities." *Political Studies* 49 (1): 89–105.
- Dryzek, John. 1982. "Policy Analysis as a Hermeneutic Activity." *Policy Sciences* 14 (4): 309.
- Durant, Robert F., and Paul F. Diehl. 1989. "Agendas, Alternatives, and Public Policy: Lessons from the U.S. Foreign Policy Arena." *Journal of Public Policy* 9 (2): 179–205.
- Durnová, Anna, Frank Fischer, and Philippe Zittoun. 2016. "Discursive Approaches to Public Policy: Politics, Argumentation, and Deliberation." In *Contemporary Approaches to Public Policy*, ed. B. Guy Peters, and Philippe Zittoun. London: Palgrave Macmillan, 35–56.
- Dye, Thomas. 1966. *Politics, Economics, and the Public*. Chicago: Rand McNally.
- Easton, David. 1953. *A Systems Analysis of Political Life*. New York: Alfred Knopf Co.
- Eisner, Marc Allen. 1993. *Regulatory Politics in Transition*. Baltimore, MD: Johns Hopkins University Press.
- Eissler, Rebecca, Annelise Russell, and Bryan D. Jones. 2016. "The Transformation of Ideas: The Origin and Evolution of Punctuated Equilibrium Theory." In *Contemporary Approaches to Public Policy*, ed. B. Guy Peters, and Philippe Zittoun. London: Palgrave, 95–112.
- Esping-Andersen, Gøsta. 1990. *The Three Worlds of Welfare Capitalism*. Cambridge, UK: Polity Press.
- Gerring, John. 2007. *Case Study Research: Principles and Practices*. New York: Cambridge University Press.
- Giddens, Anthony. 1984. *The Constitution of Society*. Cambridge, UK: Polity Press.
- Gupta, Kuhika. 2014. "A Comparative Policy Analysis of Coalition Strategies: Case Studies of Nuclear Energy and Forest Management in India." *Journal of Comparative Policy Analysis: Research and Practice* 16 (4): 356–72.
- Hall, Peter A. 1986. *Governing the Economy: The Politics of State Intervention in Britain and France*. Cambridge, UK: Polity Press.
- Hall, Peter A., and David W. Soskice, eds. 2001. *Varieties of Capitalism*. Oxford: Oxford University Press.
- Hay, Colin, and Daniel Wincott. 1998. "Structure, Agency and Historical Institutionalism." *Political Studies* 46 (5): 951–57.
- Hecló, Hugh. 1974. *Modern Social Politics in Britain and Sweden*. New Haven, CT: Yale University Press.
- . 1978. "Issue Networks and the Executive Establishment." In *The New Political System*, ed. Anthony King. Washington, DC: The American Enterprise Institute, 415–22.
- Heidenheimer, Arnold J., Hugh Hecló, and Carolyn Teich Adams. 1975. *Comparative Public Policy: The Politics of Social Choice in America, Europe, and Japan*. New York: St. Martin's Press.
- Henry, Adam Douglas, Karin Ingold, Daniel Nohrstedt, and Christopher M. Weible. 2014. "Policy Change in Comparative Contexts: Applying the Advocacy Coalition Framework Outside of Western Europe and North America." *Journal of Comparative Policy Analysis: Research and Practice* 16 (4): 299–312.
- Hofferbert, Richard. 1990. *The Reach and Grasp of Policy Analysis*. Tuscaloosa: University of Alabama Press.
- Howlett, Michael. 1997. "Issue-Attention and Punctuated Equilibria Models Reconsidered: An Empirical Examination of the Dynamics of Agenda-Setting in Canada." *Canadian Journal of Political Science* 30 (1): 3–29.
- . 1998. "Predictable and Unpredictable Policy Windows: Institutional and Exogenous Correlates of Canadian Federal Agenda-Setting." *Canadian Journal of Political Science* 31 (3): 495–524.
- Howlett, Michael, Allan McConnell, and Anthony Perl. 2016. "Weaving the Fabric of Public Policies: Comparing and Integrating Contemporary Frameworks for the Study of Policy Processes." *Journal of Comparative Policy Analysis: Research and Practice* 18 (2): 273–89.
- Hurwicz, Leonid. 1973. "The Design of Mechanisms for Resource Allocation." *The American Economic Review* 63 (2): 1–30.

- Immergut, Ellen. 1998. "The Theoretical Core of the New Institutionalism." *Politics and Society* 26 (1): 5–34.
- Jenkins-Smith, Hank, Daniel Nohrstedt, Christopher Weible, and Paul A. Sabatier. 2014. "The Advocacy Coalition Framework: Foundations, Evolution, and Ongoing Research." In *Theories of the Policy Process*, 3rd ed., ed. Paul A. Sabatier, and Christopher M. Weible. Boulder, CO: Westview, 183–224.
- Jenkins-Smith, Hank, Carol L. Silva, Kuhika Gupta, and Joseph T. Ripberger. 2014. "Belief System Continuity and Change in Policy Advocacy Coalitions: Using Cultural Theory to Specify Belief Systems, Coalitions, and Sources of Change." *Policy Studies Journal* 42 (4): 484–508.
- Jessop, Bob. 1990. *State Theory*. Cambridge, UK: Polity Press.
- Jochim, Ashley E., and Peter J. May. 2010. "Beyond Subsystems: Policy Regimes and Governance." *Policy Studies Journal* 38 (2): 303–27.
- John, Peter, and Will Jennings. 2010. "Punctuations and Turning Points in British Politics: The Policy Agenda of the Queen's Speech, 1940–2005." *British Journal of Political Science* 40 (3): 561–86.
- Jones, Bryan D., and Frank R. Baumgartner. 2005. *The Politics of Attention*. Chicago: University of Chicago Press.
- . 2012. "From There to Here: Punctuated Equilibrium to the General Punctuation Thesis to a Theory of Government Information Processing." *Policy Studies Journal* 40 (1): 1–20.
- Jones, Bryan D., Christopher Wlezien, Christoffer Green-Pedersen, Stefaan Walgrave, Chris Koski, Abel François, Christian Breunig et al. 2009. "A General Empirical Law of Public Budgets: A Comparative Analysis." *American Journal of Political Science* 53 (4): 855–73.
- Jones, Michael D., and Hank C. Jenkins-Smith. 2009. "Trans-Subsystem Dynamics: Policy Topography, Mass Opinion, and Policy Change." *Policy Studies Journal* 37 (1): 37–58.
- Jones, Michael D., Mark K. McBeth, and Elizabeth A. Shanahan. 2014. "Introducing the Narrative Policy Framework." In *The Science of Stories*, ed. Michael D. Jones, Elizabeth A. Shanahan, and Mark K. McBeth. New York: Palgrave Macmillan, 1–26.
- Jones, Michael D., Holly L. Peterson, Jonathan J. Pierce, Nicole Herweg, Amiel Bernal, Holly Lamberta Raney, and Nikolaos Zahariadis. 2016. "A River Runs Through It: A Multiple Streams Meta-Review." *Policy Studies Journal* 44 (1): 13–36.
- Jones, Michael D., and Claudio M. Radaelli. 2015. "The Narrative Policy Framework: Child or Monster?" *Critical Policy Studies* 9 (3): 339–55.
- Kingdon, John. 1984. *Agendas, Alternatives and Public Policies*. Boston: Little, Brown.
- Kiser, Larry, and Elinor Ostrom. 1982. "Three Worlds of Action: A Metatheoretical Synthesis of Institutional Approaches." In *Strategies of Political Inquiry*, ed. Elinor Ostrom. Beverly Hills, CA: Sage, 179–222.
- Knoke, David, Franz Urban Pappi, Jeffrey Broadbent, and Yutaka Tsujinaka. 1996. *Comparing Policy Networks: Labor Politics in U.S., Germany, and Japan*. New York: Cambridge University Press.
- Lakatos, Imre. 1976. *Proofs and Refutations*. Cambridge: Cambridge University Press.
- Leifeld, Philip. 2013. "Reconceptualizing Major Policy Change in the Advocacy Coalition Framework: A Discourse Network Analysis of German Pension Politics." *Policy Studies Journal* 41 (1): 169–98.
- Lévi-Strauss, Claude. 1966. *The Savage Mind*. Chicago: University of Chicago Press.
- Light, Paul Charles. 1999. *The President's Agenda*, 3rd ed. Baltimore, MD: Johns Hopkins University Press.
- Lubell, Mark. 2013. "Governing Institutional Complexity: The Ecology of Games Framework." *Policy Studies Journal* 41 (3): 537–59.
- Marsh, David, ed. 1998. *Comparing Policy Networks*. Buckingham, UK: Open University Press.
- Martinsen, Dorte Sindbjerg, and Ayca Uygur Wessel. 2014. "On the Path to Differentiation, UK: Upward Transfer, Logic of Variation and Sub-Optimality in EU Social Policy." *Journal of European Public Policy* 21 (9): 1255–72.
- Meier, Kenneth J. 2009. "Policy Theory, Policy Theory Everywhere: Ravings of a Deranged Policy Scholar." *Policy Studies Journal* 37 (1): 5–11.
- Meltsner, Arnold J. 1976. *Policy Analysts in the Bureaucracy*. Berkeley: University of California Press.

- Mill, John Stuart. 1868. *A System of Logic*. London: Longmans.
- Ostrom, Elinor. 1990. *Governing the Commons*. Cambridge: Cambridge University Press.
- . 2011. "Background on the Institutional Analysis and Development Framework." *Policy Studies Journal* 39 (1): 7–27.
- Ostrom, Elinor, Michael Cox, and Edella Schlager. 2014. "An Assessment of the Institutional Analysis and Development Framework." In *Theories of the Policy Process*, 3rd ed., ed. Paul A. Sabatier, and Christopher Weible. Boulder, CO: Westview, 267–306.
- Popper, Karl R. 1959. *The Logic of Scientific Discovery*. London: Hutchinson and Co.
- Przeworski, Adam. 2004. "Institutions Matter?" *Government and Opposition* 39 (4): 527–40.
- Real-Dato, José. 2009. "Mechanisms of Policy Change: A Proposal for a Synthetic Explanatory Framework." *Journal of Comparative Policy Analysis* 11 (1): 117–41.
- Sabatier, Paul A. 1987. "Knowledge, Policy-Oriented Learning, and Policy Change." *Science Communication* 8 (4): 649–92.
- . 1998. "The Advocacy Coalition Framework: Revisions and Relevance for Europe." *Journal of European Public Policy* 5 (1): 98–130.
- . 2007a. "Introduction: The Need for Better Theories." In *Theories of the Policy Process*, 2nd ed., ed. Paul A. Sabatier. Boulder, CO: Westview Press, 3–21.
- . 2007b. "Fostering the Development of Policy Theory." In *Theories of the Policy Process*, 2nd ed., ed. Paul A. Sabatier. Boulder, CO: Westview, 321–36.
- Sabatier, Paul A., and Christopher Weible. 2007. "The Advocacy Coalition Framework: Innovations and Clarifications." In *Theories of the Policy Process*, 2nd ed., ed. Paul A. Sabatier. Boulder, CO: Westview Press, 189–220.
- Scharpf, Fritz. 1997. *Games Real Actors Play*. Boulder, CO: Westview Press.
- Schlager, Edella. 2007. "A Comparison of Frameworks, Theories, and Models of Policy Processes." In *Theories of the Policy Process*, 2nd ed., ed. Paul A. Sabatier. Boulder, CO: Westview Press, 293–320.
- Schlager, Edella, and Christopher Weible. 2013. "New Theories of the Policy Process." *Policy Studies Journal* 41 (3): 389–96.
- Schmidt, Vivien A. 2008. "Discursive Institutionalism: The Explanatory Power of Ideas and Discourse." *Annual Review of Political Science* 11 (1): 303–26.
- Schneider, Anne, and Helen Ingram. 1993. "Social Construction of Target Populations: Implications for Politics and Policy." *American Political Science Review* 87 (2): 334–47.
- Schneider, Mark, Paul Teske, and Michael Mintrom. 1995. *Public Entrepreneurs: Agents for Change in American Government*. Princeton, NJ: Princeton University Press.
- Shepsle, Kenneth A., and Barry R. Weingast. 1981. "Structure-Induced Equilibrium and Legislative Choice." *Public Choice* 37 (3): 503–19.
- Skocpol, Theda. 1985. "Bringing the State Back in: Strategies of Analysis in Current Research." In *Bringing the State Back In*, ed. P. Evans, D. Rueschemeyer, and Theda Skocpol. Cambridge: Cambridge University Press, 3–37.
- Smaldino, Paul E., and Mark Lubell. 2014. "Institutions and Cooperation in an Ecology of Games." *Artificial Life* 20 (2): 207–21.
- Snyder, Richard, and James Mahoney. 1999. "The Missing Variable: Institutions and the Study of Regime Change." *Comparative Politics* 32 (1): 103–22.
- Steinmo, Sven. 2010. *The Evolution of Modern States: Sweden, Japan and the United States*. Cambridge: Cambridge University Press.
- Stone, Deborah A. 1989. "Causal Stories and the Formation of Policy Agendas." *Political Science Quarterly* 104 (2): 281–300.
- Strange, Susan. 1996. *The Retreat of the State*. Cambridge: Cambridge University Press.
- Streeck, Wolfgang, and Kathleen Thelen, eds. 2005. *Beyond Continuity: Institutional Change in Advanced Political Economies*. Oxford: Oxford University Press.
- Titmuss, Richard. 1972. *The Gift Relationship: From Human Blood to Social Policy*. New York: Vintage Books.

- Trousset, Sarah, Kuhika Gupta, Hank Jenkins-Smith, Carol L. Silva, and Kerry Herron. 2015. "Degrees of Engagement: Using Cultural Worldviews to Explain Variations in Public Preferences for Engagement in the Policy Process." *Policy Studies Journal* 43 (1): 44–69.
- Tsebelis, George. 2002. *Veto Players: How Political Institutions Work*. Princeton, NJ: Princeton University Press.
- Van Waarden, Frans. 1992. "Dimensions and Types of Policy Networks." *European Journal of Political Research* 21 (1–2): 29–52.
- Weare, Christopher, Paul Lichterman, and Nicole Esparza. 2014. "Collaboration and Culture: Organizational Culture and the Dynamics of Collaborative Policy Networks." *Policy Studies Journal* 42 (4): 590–619.
- Weaver, R. Kent, and Bert A. Rockman. 1993. "Assessing the Effects of Institutions." In *Do Institutions Matter? Government Capabilities in the United States and Abroad*, ed. R. Kent Weaver, and Bert A. Rockman. Washington, DC: The Brookings Institution, 1–41.
- Weible, Christopher M. 2014. "Advancing Policy Process Research." In *Theories of the Policy Process*, 3rd ed., ed. Paul A. Sabatier, and Christopher M. Weible. Boulder, CO: Westview, 391–407.
- Weible, Christopher M., and Hank C. Jenkins-Smith. 2016. "The Advocacy Coalition Framework: An Approach for the Comparative Analysis of Contentious Policy Issues." In *Contemporary Approaches to Public Policy*, ed. B. Guy Peters, and Philippe Zittoun. International Series on Public Policy. London: Palgrave Macmillan, 15–34.
- Weible, Christopher M., Hank Jenkins-Smith, Daniel Nohrstedt, Adam Henry, Peter deLeon, and Paul Sabatier. 2011. "A Quarter Century of the Advocacy Coalition Framework: An Introduction to the Special Issue." *Policy Studies Journal* 39 (3): 349–60.
- Weible, Christopher M., Paul A. Sabatier, and Kelly McQueen. 2009. "Themes and Variations: Taking Stock of the Advocacy Coalition Framework." *Policy Studies Journal* 37 (1): 121–40.
- Weyland, Kurt. 2005. "Theories of Policy Diffusion: Lessons from Latin American Pension Reform." *World Politics* 57 (2): 262–95.
- Wilks, Stephen, and Maurice Wright, eds. 1987. *Comparative Government-Industry Relations: Western Europe, United States, and Japan*. New York: Clarendon Press.
- Wong, Joseph. 2014. "Comparing Beyond Europe and North America." In *Comparative Policy Studies: Conceptual and Methodological Challenges*, ed. Isabelle Engeli, and Christine Rothmayr Allison. London: Palgrave, 163–94.
- Worsham, Jeff, and Chaun Stores. 2012. "Pet Sounds: Subsystems, Regimes, Policy Punctuations, and the Neglect of African American Farmers, 1935–2006." *Policy Studies Journal* 40 (1): 169–90.
- Wueest, Bruno, and Flavia Fossati. 2015. "Quantitative Discursive Institutionalism: A Comparison of Labour Market Policy Discourse across Western Europe." *Journal of European Public Policy* 22 (5): 708–30.
- Young, Oran R. 2002. *The Institutional Dimensions of Environmental Change: Fit, Interplay, and Scale*. Cambridge, MA: MIT Press.
- Zahariadis, Nikolaos. 2007. "The Multiple Streams Framework: Structure, Limitations, Prospects." In *Theories of the Policy Process*, Vol. 2., 2nd ed., ed. Paul A. Sabatier. Boulder, CO: Westview, 65–92.
- Zahariadis, Nikolaos, and Christopher Allen. 1995. "Ideas, Networks, and Policy Streams: Privatization in Britain and Germany." *Review of Policy Research* 14 (1): 71–98.

The Dynamic Role of State and Nonstate Actors: Governance after Global Financial Crisis

Nick H. K. Or and Ana C. Aranda-Jan

In this article, we review the dynamic role of state and nonstate actors in governance. We first discuss the main arguments for and against the state being the main actor in governance in recent literature. Then, we review some of the literature about the changing role of state and nonstate actors in response to the 2007–08 global financial crisis from 2011 to 2015. The two themes under examination are, first, more control over financial markets and second, austerity measures. They illustrate different trajectories of governance that go beyond the now well-established New Public Management paradigm of public sector reforms. Our review shows that no single actor provides the best mode of governance for all circumstances. Instead, governance is hybrid and dynamic. The mode of governance is dependent on the circumstances under which an actor is more capable of interacting with other actors to provide public services.

KEY WORDS: governance, delivery of public services, policy provision, financial crisis, austerity

国家行为体和非国家行为体的能动作用：全球金融危机后的治理

本文检测了国家和非国家行为体在治理中的能动作用。首先讨论了近期文献中关于国家作为治理的主要参与者的正反论点。其次检查了某些文献关于2011至2015年国家和非国家行为体应对2007年8月份金融危机影响所产生的角色变化。本文分别对“更多控制金融市场”和紧缩措施这两项主题进行了检查。两项主题都解释了不同的治理轨迹，这些轨迹超过了当下公共部门改革中典型的新公共管理（简称NPM）范围。研究结果表明：没有任何一个参与者能在所有情况下提供最佳治理模式。相反，治理是处于动态之中的混合物。治理模式取决于不同情况，在这些情况下单个参与者更能与其他参与者一起相互影响，从而提供公共服务。

关键词: 治理, 公共服务提供, 政策规定, 金融危机, 紧缩

Introduction

Who delivers better governance, state or nonstate actors? What is the role of the state and other private and societal actors in the delivery of public services? These questions have always been at the center of scholarly debates. By definition governance is inherently hybrid and dynamic, meaning that it involves more than one actor at a time—state, markets, and civil society (Capano, Howlett, & Ramesh, 2015;

Colebatch, 2014; Torfing, Peters, Pierre, & Sørensen, 2012). This means governance is a function of the context in which it is located or situated. However, there is disagreement on the role of state and nonstate actors in good governance. State-centric theorists argue that the state is indispensable in maintaining good governance (Fukuyama, 2013; Lodge & Wegrich, 2014; Peters, 2014; Peters & Pierre, 1998; Torfing et al., 2012). On the contrary, others conclude that good government is not a necessary condition for good governance (Rothstein, 2015). Others even suggest the state is irrelevant in governance (Krasner & Risse, 2014; Lee, Walter-Drop, & Wiesel, 2014; Rhodes, 1996). These scholars offer distinct perspectives on the state of governance deserving of reflection.

In an earlier issue of *Policy Studies Journal*, Robichau's (2011) "mosaic of governance" highlighted how the high volume of theorizing on governance has led to much contention over applicable concepts and definitions. These include questions such as how different schools of thought elaborate the meanings of governance, what the role of the state is and its responsibility in governance, whether governance is conceptually different from, or in fact equivalent to, government and networks, whether governance can be typologized, and how to integrate democracy and governance. In addition to these points of debate, Robichau also identifies the three most commonly discussed mechanisms of governance, namely, networks, hierarchy, and markets, and outlines the research challenges in the study of governance such as how to develop measures of the concept of good governance and how to test tangible governance practices through empirical research.

Since Robichau has already provided an overview of the growth and diversity of the studies of governance, our discussion focuses on how recent literature on governance discusses the changing role of the state and nonstate actors involved in governance and the delivery of public services after the 2007–08 global financial crisis. The bailout of big banks and the austerity measures in Europe provide important lessons about the changing dynamic role between state and nonstate actors. To draw insights from that, this article first reviews recent theoretical developments in relation to governance and the actors involved in the delivery of public services. This article then illustrates different trajectories of governance informed by empirical evidence in two themes—financial sector regulation and austerity measures—that contradicts and goes beyond the now well-established New Public Management (NPM) paradigm of public sector reforms. Our review shows that no single actor provides the best mode of governance for all circumstances. Instead, governance is hybrid and dynamic. The mode of governance is dependent on the circumstances under which an actor is more capable of interacting with other actors to provide public services.

Study of Governance

In the last three decades, literatures on public management and public services have blossomed. Pollitt and Bouckaert (2011) identified at least two waves of public management reforms before the idea of governance became prevalent (pp. 5–9). The first wave

came with modernization and rapid scientific and technological advancement, and was spearheaded by the United Kingdom, the United States, and France in the 1960s. These reforms later became popular in the late 1970s and early 1980s with an emphasis on rational and strategic policymaking, evaluation, and institutional arrangement within the machinery of government. The second wave was driven by pressures on public finances amidst global economic shocks and crises in the 1970s (King, 1975). This was particularly prominent in welfare states in Western democracies. This latter global trend became known as NPM and was characterized by a call for market-like practices that aimed to raise efficiency, effectiveness, and accountability to public service users in the 1980s. This trend evolved into movements of public sector reform centering upon “governance” and adopted various strategies like “partnerships,” “joined-up government,” and so forth from the 1990s and onward.

Favoring the Market

The literature on governance has been characterized by a constant search for better forms of governmental and public management (Andrews, 2010; Rotberg, 2014). States have enthusiastically moved to include markets in governmental activities and public services either as the service providers or partners (e.g., privatization and fiscal austerity) since the implementation of economically liberal policies (Hacker & Pierson, 2010). Partnership with the business sector is now a popular instrument for the delivery of public services.

Pollitt and Bouckaert (2011) argue that it is not difficult to see the influence of economic liberalism behind public management reforms. Public sector reforms and governance have heavily favored market-based principles and ideas of organization. The contagion of business-like practices in public services was prominent and is still deeply influential in public administration research and practice. Politicians and public managers around the world, either intentionally or unintentionally, support deregulation and marketization. For example, Rothstein (2011) criticizes *Worldwide Governance Indicators* for assuming that neoliberal policies and reforms are a better and normatively positive form of governance. Similarly, Fukuyama (2013) calls for a better measurement of governance beyond the limits and constraints of neoliberalism (also see Holt & Manning, 2014). Such a narrow form of governance also limited its applicability in developing countries (Fukuyama, 2013, p. 349).

For some, liberalization in the last few decades has led to weakened and dismantled government, and has also contradicted democratic values with the rise of depoliticization and technocracy (Jessop, 2007; Roberts, 2010). In response, others argue that facilitating democratic participation and citizens’ inclusion in policymaking can improve the delivery of public services (Fenwick, Miller, & McTavish, 2012), and that governance and public services should be delivered by networks (Rhodes, 1996, 2012). As a result, these discussions have moved governance literature away from the NPM approach (Levi-Faur, 2012; Needham, 2007; Osborne, 2009). As more governance literature takes back the state and adds civil society as one of the main actors, an understanding of governance beyond liberalism becomes evident.

Metagovernance

Liberalism and market triumphalism in public management reforms have been challenged by the rise of governmental intervention (Pollitt & Bouckaert, 2011; Sandel, 2012). This has signaled not just a reconsideration of the Weberian state, but also points to a new interactive relationship between the state and other private and societal actors in the delivery of public services. The concept of “metagovernance” and its study has been introduced to characterize this relationship and reconcile the theoretical tensions between state-centric theorists and network theorists (Sørensen, 2006; Sørensen & Torfing, 2007; Torfing et al., 2012).

Metagovernance can be defined as “governance of governance” or “regulated self-regulation,” and “involves deliberate attempts to facilitate, manage, and direct more or less self-regulating processes of interactive governance without reverting to traditional statist styles of government in terms of bureaucratic rule making and imperative command” (Torfing et al., 2012, pp. 122–23). The idea asserts that the bureaucratic state remains a significant governing actor, but would also facilitate the collaboration of private and societal actors and provide policy solutions (Lodge & Wegrich, 2014). In this sense, the state is not necessarily the sole actor in providing direct public services and can also be the regulator of service providers (Fenwick et al., 2012). Metagovernance can be thought of as ruling sets of organizations clustered around government functions (Jessop, 2007) or coordination of fragmented political systems with plural and highly autonomous self-governing networks and institutions (Sørensen, 2006). Rhodes (2012) specifies metagovernance as the “use of negotiation, diplomacy, and more informal modes of steering” (p. 37). All in all, both state-centric and network theorists recognize and reaffirm the role of the state in governance and delivery of public services.

Hybrid Modes of Governance and Governing in the Shadows

Recent literature has identified three modes of governance, namely, hierarchy, markets, and networks as the mechanism of delivery of public services (for more discussion, see Torfing, 2012). It challenges the assertion that a certain form of governance is a better form of governance in all circumstances. For example, Peters (2014) argues that “governance is inherently a hybrid activity, with public and private sector actors involved in varying degrees and in different ways” (p. 303). Policy solutions and delivery of public services can either be provided through hierarchy, markets, or networks, but which one is preferred depends on the circumstances or contexts. Governance, in reality and in practice, is hybrid. It involves the collaboration between different actors depending on political regimes and policy areas.

In addition to its hybridity, governance can also be seen as the overlapping of different actors, which represents the interaction and collaboration of different stakeholders in governance and the delivery of public service, whereas nonoverlapping parts represent the presence of a single actor as the sole and independent service provider. Following the same logic, Lynn (2012) lists some possible forms of

governance, such as Traditional Governance as Government, Governance as Government with Civil Society, and Governance Centered in Civil Society. This echoes Peters's (2011a) idea of "governing in the shadows," which suggests that hierarchy, markets, and societies have direct or indirect effects on each of the three modes of governance.

Methodology

To examine literature that addresses how the role of state and nonstate actors change after the global financial crisis, we surveyed articles from top-tier journals and books from 2011 to 2015 that are related to our point of interest. For journals, we used the search engine in the websites of a number of top-tier journals in the areas of governance, public management, and public policy¹ with keywords *governance*, *public management*, *crisis*, *financial regulation*, and *austerity*. For books, we used the same set of keywords to search the books from the Web of Science and Google Scholar. The authors reviewed each of them and selected those that fit our two themes under examination, namely, more controls over the financial markets and austerity measures.

Governance Beyond Liberalism: Two Different Trajectories

This article addresses how governance has changed since the financial crisis, and also reviews empirical evidence from the relevant literature to understand the change in modes of governance. With this aim, we offer critical reflection on different trajectories in governance beyond liberalism after the financial crisis. In the following, we briefly outline the significant lessons of global financial crisis to states and governance. Then, we provide two distinct trajectories of governance to illustrate the changing and more dynamic role of state and nonstate actors after global financial crisis. The mode of governance is diverse rather than solely pointing toward neoliberalism in the NPM era since the 1960s. To illustrate these ideas, first, we review how states imposed more stringent regulations and controls during the event of the financial crisis. This is a manifestation of greater state intervention in market affairs. Second, in contrast, we look at austerity measures on public services with public budget cuts that demonstrate the trajectories of reduced state involvement, more market-like practices, and more self-governance in civil society. These two themes under examination outline very different trajectories of governing processes in different circumstances. It also highlights the diverse yet viable modes of public service reforms after the crisis across advanced democracies.

The Global Financial Crisis and Its Significance to States and Governance

The global financial crisis posed tremendous challenges to the state and governance (Lodge & Wegrich, 2012), and highlighted serious failures of governance in the regulation of financial markets in advanced democracies (Rothstein, 2012). However, many national governments initiated dramatic and coordinated responses to

enforce market stabilization policies (Mügge, 2014) and subsequently prevented another Great Depression (Hardiman, 2012). These measures included the implementation of the Troubled Asset Relief Program in the United States, the bailout of giant banks (e.g., Goldman Sachs, Citigroup HSBC, and Royal Bank of Scotland), insurers (e.g., AIG), secondary mortgage agencies (e.g., Fannie Mae and Freddie Mac), and other nonfinancial institutions (e.g., General Motors and Chrysler) in the United States and United Kingdom, as well as restrictions on remuneration in financial services. These interventions deviated from, and contradicted, several decades of public administration reforms. Since the Reagan and Thatcher eras, these had seen a shift from the Weberian state to NPM, which is inspired by and resulted from the affirmation of liberalism and market triumphalism (Pollitt & Bouckaert, 2011; Sandel, 2012). Governmental interventions in these eras restated and reaffirmed the importance of the state in the maintenance of good governance amidst crisis, and led for calls for academics and practitioners to reconsider the effectiveness of “neoliberal policies that had either failed to prevent or arguably caused the crisis” (Wilson & Grant, 2012, p. vi), and to rethink “market fundamentalism” since the *Washington Consensus*, a belief that “markets solve most, if not all, economic problems by themselves” (Serra & Stiglitz, 2008, p. 3). Therefore, the global financial crisis was a watershed for the study of governance, as the financial market turmoil manifested the decline of the markets and the rise of the governments in the midst of crisis (e.g., see Mügge, 2014). Under this dynamic, it is timely to assess how this critical event has reshaped or redirected the discussion and development of the modes of governance. Hence, we traced some distinct trajectories of governance in the following to see the more dynamic role of state and nonstate actors that moved beyond neoliberalism.

More Control over Markets

Governments have hailed markets as a primary and favorable mechanism in public management reforms for years. However, in recent years, this argument has been subject to much criticism in the literature, and the role of state has become important again. Fukuyama (2013) criticizes the “architecture” of good governance as blindly based on the normative assumption of liberalism. In the context of finance, for example, deregulation is assumed to be more favorable for financial governance or related policies (Holt & Manning, 2014; Rothstein, 2011). However, markets do not always operate efficiently and rarely follow the underlying assumption of perfect competitive markets in classical economics. Therefore, Serra and Stiglitz (2008) contend that state involvement and intervention are legitimate and have important roles when the market fails to perform.

Finance, as a sector, is the perfect manifestation of “market fundamentalism” that advocates the market as the best solution to economic problems. The *Washington Consensus*, initiated in the 1990s, marked a milestone of economic liberalism and popularizes privatization and deregulation in state and economic developments (Serra & Stiglitz, 2008). Financial practitioners such as stock brokers and derivative traders

tend to dislike regulation, as it hinders innovation and the speed of issuance of financial products, and consequently slows their business growth and profits (Morgan, 2012). Overall, “market fundamentalism” drove a number of market reforms in the direction of fewer regulations and lessened state involvement in the post-*Washington Consensus* years.

However, the global financial crisis served as a tipping point of reviving a state-led and nonliberal way of governance and problem-solving mentality in finance. The role of the state was magnified at both national and international levels. For example, multigovernments worked together to enforce market stabilization measures. These state-led measures proved to be effective and avoided an even greater crisis like the Great Depression (Roberts, 2010; Wilson & Grant, 2012). Governance trajectories after the global financial crisis challenged the logic and tradition of decentralization for good governance, and at the same time revived and supported the significance of centralization in solving public issues and problems (Gerring & Thacker, 2008).

After the global financial crisis, there was a sentiment that more control over the markets and more fine-grained financial regulations were essential. The global financial crisis introduced an impulse for more top-down regulation, and less self-regulation and collaborative regulation. For instance, there was a diffusion of international nontreaty-based “soft law”² in the global financial governance framework in a time of hefty financial risk and uncertainty (Hennessy, 2013). Moreover, more soft laws in accounting standards and over-the-counter derivatives in Europe became formalized as part of the national legislation (Newman & Bach, 2014). At the macro level, the crisis prompted a series of new measures such as more stringent requirements to account for better safety in the international financial systems (Mügge, 2011; Young, 2014). These include tougher control over bank capital, liquidity ratios, and leverage activities. In monetary policy, there was also an expansion of central banks’ powers in pursuing financial stability in various parts of the world (Burnham, 2014; Roberts, 2010). Coordination among states after the financial crisis started to take a multilateral focus. For example, the International Monetary Fund (IMF) has moved to assess whether domestic policies can have implications beyond one country and have impacts on international stability (Gallagher, 2014). Moschella (2015) also notes that the IMF has reversed the practice of voluntary compliance in global capital flow regulation back to a “command-and-control” mode of governance. Conversely, in terms of micro-level management, there were revamps in individual conduct and guidelines, as well as supervision and managerial oversight in hierarchy (Moschella, 2011). Staff members “justified their proposal to make the [IMF] a systemic supervisor in light of past reforms, which had given the Fund the theoretical and organizational resources to carry out the new type of surveillance” (Moschella, 2011, p. 124).

In sum, before the global financial crisis, there was a perception that market actors were well positioned to look after market affairs and maintain stable and efficient markets. Regulation compliance was voluntary and less stringent whereas after the crisis, financial governance moved to the premise that markets were unable to restore confidence without the backbone of effective and authoritative state regulation and support. The lesson of financial market failure and state intervention

Table 1. Various Governing Actors and Responses in Relations to Austerity

Modes of Governances	Causes of Response
Bureaucratic collaboration	<ul style="list-style-type: none"> • Cuts in public sector staffing to achieve cost savings in the short term • Problems with liquidity by privately financed projects • Reduction in bank borrowing to finance operations by the private sector
Community and voluntary organizations involvement	<ul style="list-style-type: none"> • Decline in the quality of public services • Service withdrawals because of the insupportable costs
Beyond traditional public administration	<ul style="list-style-type: none"> • Cuts in public spending • Procurement of profits to private sector • Bureaucratic openness • Networked environments

demonstrated the trajectory of a new mode of governance that moved beyond the liberalism and “market fundamentalism.” In the following, lessons of austerity measures will show a different trajectory of governance.

Austerity and Fiscal Crisis: Has There Been an Adaptation of Modes of Governance?

In austerity measures, we see very different trajectories compared to regulating the financial market after the crisis. Governmental tools of fiscal management such as spending cuts and increased taxation diffused after the global financial crisis. These policies challenged the governments to govern with fewer resources while pursuing or maintaining economic and democratic development. As a result, it triggered changes in government culture, altered the organization and politics of the states (Hood, Heald, & Himaz, 2014), and of course, various modes of governance (Capano et al., 2015).

The change in modes of governance is not limited to the recent global financial crisis. Indeed, previous crises have always coerced governments to adapt less bureaucratic hierarchies and corporatist approaches to managerial and business-like forms of organization and management (Lodge & Hood, 2012). However, after the financial crisis, empirical evidence shows that these acts of fiscal consolidation directed public management and governance to follow new trajectories that are different from NPM (Kickert & Randma-Liiv, 2015). Governments are experimenting with innovative ways of delivering their services. New forms of bureaucratic collaboration, involvement from more community and voluntary organizations, and pluralist modes of organization are seen as responses to the problems generated by the global financial crisis. Governance sharing among different stakeholders will be characterized by the responses to the implementation of policies to constrain resources (Table 1).

One of the strategies to tackle the fiscal crisis was the delegation of decision making by the state (Peters, 2011b), while maintaining the financial control at the state level. The solution was to grant more decision-making powers to local bureaucratic actors but without more resource allocation or financial autonomy. At local bureaucratic levels, “authorities are facing pressure and demands on their service at a time

when central government support is being scaled back” (Kennett, Jones, Meegan, & Croft, 2015, p. 640). To stabilize the budgets in the national accounts, central governments have reduced resources allocated to lower- and local-level governments. However, it limited the state capacity in solving policy problems and delivering services. The response becomes a new style of bureaucratic collaboration with the rise of partnerships between departments at local governments in the United Kingdom (Lowndes & McCaughie, 2013). Similarly, Bel and Warner (2014) find evidence that the spending cuts resulted in more intermunicipality cooperation between local governments.

As a result, bureaucracies with limited resources addressed social needs through the redesigning of service delivery processes (Hastings, Bailey, Gannon, Besemer, & Bramley, 2015; Kennett et al., 2015; Shaw, 2012). Lowndes and McCaughie (2013) label it as “institutional bricolage”—governments that overcome the fiscal crisis with a creative approach of service redesign. To handle the fiscal challenge, some governments promote the idea of “resilient government.” Shaw (2012) argues that a resilient government should take the role of a risk manager by systematically assessing the uncertainty ahead and enabling the communities to develop their own resilience with a greater degree of participation. He is optimistic that the promotion of these actions can extend the adaptive capabilities to respond and deliver policy under harsh environments. Similarly, Hastings et al. (2015) find that local governments in the United Kingdom use narratives to help the community to adapt and survive under austerity. However, they are more skeptical about these narratives. Local governments might change and adapt in the long run, but it requires the states to adapt under fiscal constraints and be more responsible for attending to problems and implementing policy than before.

Apart from restructuring this hierarchical relationship, another trajectory in the mode of governance is coproduction in the delivery of public services. The provision of public services through a third sector distinctively demonstrates an interactive relationship between state and nonstate actors in governance (Verschuere, Brandsen, & Pestoff, 2012). Dalziel and Willis (2013) argue that under austerity measures, communities have to build capacities and partnerships to find creative solutions in public services. Greece’s solidarity movement is an example of coproduction (Henley, 2015). It was initiated by civil society organizations to respond to social problems that resulted from the Euro debt crisis and wider recession. Because of austerity measures as well as the high unemployment rate, many people were in poverty and could not afford medical services and a basic amount of food. Initially, the solidarity movements protested against austerity measures and later called for citizens to join by volunteering and addressing the social and livelihood problems. Food banks and soup kitchens were founded to serve those in need. There were even citizen-run clinics and legal aid hubs to fill the gap of these expensive but essential services.

However, not all academics are strong supporters of delivering public services through nonstate actors. Some critics question the effectiveness of the collaboration among the community members and the government (Chapman, Brown, Ford, & Baxter, 2010; Maguire, 2012; Milbourne & Cushman, 2013; Mythen, Walklate, & Kemshall, 2013). In this debate, the third sector’s involvement raises questions in

relation to understanding the type of skills that are required by community members for delivering effective public services.

Market actors or influences are not inactive under fiscal challenge. Public services were increasingly handed over to business firms as a response to austerity measures (Lodge & Hood, 2012). For example, Smith and O'Leary (2013) show evidence of an increase of managerial practices in education policies in England. Likewise, Whitworth and Carter (2014) identify trends toward NPM principles of marketization in welfare-to-work policy provision under the coalition government in the United Kingdom. In an analysis focused in central and eastern Europe, Dan and Pollitt (2015) examine the implementation of NPM reforms in these countries. They show that contracting out and privatization were not the only managerial practices. The policy solutions also included tightening expenditures in the public sector, the modernization of bureaucracies through private-style practices, and the marketization of the bureaucracies (Pollitt & Bouckaert, 2011). The direction of these reforms varied across countries (for south European countries see Di Mascio & Natalini, 2015).

However, the implementation of NPM also shows its limitations in times of austerity on some occasions. Managerialism reduces the capacity of public actors to understand the social context as it involves collating "deproblematized and decontextualized data" and "the presentation of this in the form of the achievement of specific policy objectives that legitimizes further policy intervention" (Smith & O'Leary, 2013, p. 254). The business-like management techniques (e.g., "performance management" and "evidence-based policy") make public actors look away from local or regional concerns and prioritize the operation of their organizations by meeting certain policy goals. This shows that bureaucracies do not straightforwardly modify policy solutions according to the changing contexts they operate in. In this sense, for example, Hood and Dixon (2015) show evidence that reforms in the United Kingdom have been inefficient (more costly) and ineffective (reduced performance) particularly after the financial crisis. As a result, scholars and public managers are starting to promote governance movements that go beyond promoting efficiency and effectiveness of bureaucracies and that encourage the involvement of other actors as the solvers of public problems (Bryson & Crosby, 2014).

All these illustrations show that governance under austerity is not converging to one dominant mode of governance—be it state, market, or community. The fiscal crisis stimulated new dynamics of state–society relations, with more input from the community. From the literature, there is more emphasis on the interaction between the state and citizens. Discussions of the emerging role of the organized civil society in tackling social needs are found in a number of articles as well.

In sum, looking at the use of austerity to understand the trajectories of governance facilitated the discussion and deepened our understanding of the dynamics of governance. There are diverse forms of implementation in the modes of governance after the 2007–08 global financial crisis. The economic slowdown facilitated the emergence of new governance models (Nunes Silva & Buček, 2014). Taking the impacts of austerity measures on governance as an example, we recognize that scholars have started to question whether and how governing structures can flexibly adapt to crises (Fitzgerald & Lupton, 2015). Moreover, detached from a reformist discourse, we

observe that governance trajectories tend to originate in one school of thought and find complementary solutions from the other schools. It does not simply follow the NPM style of public administration reform. In this sense, the empirical evidence presented in the literature demonstrates that the provision of public services is becoming a process that requires a higher level of cooperation and coordination between state and nonstate actors.

Conclusion

No single mode of governance has dominated after the 2007–08 global financial crisis. By reviewing the literature, this article seeks to understand what is happening to the interaction between government, market, and society in governance after the crisis. Governance can be theorized through the understanding of centralization and decentralization (Christensen, Lie, & Lægreid, 2008), through networks of different actors (Rhodes, 1996; Stoker, 2006), or through integration and coordination with the use of technology (Dunleavy, Margetts, Bastow, & Tinkler, 2006). This article examines how the global financial crisis changed the modes of governance, and how the changes incorporate newer schools of governance, such as network governance and regulatory governance, without replacing traditional public administration models and NPM. This enhances our understanding and helps us appreciate the fuller picture of the hybrid nature of governance in practice.

From the literature, the role of governments in governance and the delivery of public services has not declined as dictated by neoliberalism, but has evolved and integrated into various modes of governance. As shown in various distinct trajectories of governance in this article, the emergence of a new crisis posed new challenges to governance, not just for the state, but also for various private and societal actors. The lessons from the global financial crisis highlighted the need and urgency to search for innovative policy solutions. Different modes of governance thus emerged after the global financial crisis. It showed that “market fundamentalism” and other liberal reforms are not always the preferred mode of governance. In this article, we examined two themes after the global financial crisis—more control over financial markets and austerity measures. To restore market and public confidence, cases of more control over markets show how the state intervened with more stringent financial regulations and moved away from the neoliberal pathway of public management reforms in the last few decades. In our discussion of austerity measures, the rich varieties of policy instruments reveal how more diverse and hybrid modes of governance functioned. The pressure of austerity urged state and nonstate actors to deal with problems with more interactive and creative solutions (Torfing et al., 2012). Governance can include very diverse modes of governing, be it “hierarchical,” “non-hierarchical,” “alternative,” or “market” (Howlett & Ramesh, 2014), or as Lynn (2012) theorized, it can possess many faces (possibilities) such as Governance as Government with Civil Society and Governance Centered in Civil Society. This article reaffirms these views and concludes that governance, in response to the global financial crisis, is changeable and dynamic rather than static and singular.

While the 2007–08 global financial crisis induced a decline in confidence in private actors, interestingly, Brexit in the United Kingdom and Trump’s presidential victory in the United States are recent examples that lowered people’s confidence in governments. The economic and social impact of these events are yet to be seen. But it is certain that state and nonstate actors need to search for a new interactive relationship that could work better and restore confidence. Governance scholars could pay closer attention to this in the future.

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Notes

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1. The list of journals includes *Administration and Society*, *American Journal of Political Science*, *American Review of Public Administration*, *Governance*, *International Public Management Journal*, *Journal of Comparative Politics*, *Journal of European Public Policy*, *Journal of Policy Analysis and Management*, *Journal of Politics*, *Journal of Public Administration Research and Theory*, *Journal of Public Policy*, *Policy and Politics*, *Policy and Society*, *Policy Science*, *Policy Studies Journal*, *Political Research Quarterly*, *Public Administration*, *Public Administration Review*, *Public Management Review*, *Regulation & Governance*.
2. Soft law can be defined as nonbinding and open-ended guidelines that cannot be simply enforced to all violated issues. Each violation has to be judged on a case-by-case basis. In contrast, hard laws are precise and enforceable legal binding obligations.

References

- Andrews, Matt. 2010. “Good Government Means Different Things in Different Countries.” *Governance* 23 (1): 7–35.
- Bel, Germà, and Mildred E. Warner. 2014. “Inter-Municipal Cooperation and Costs: Expectations and Evidence.” *Public Administration* 93 (1): 52–67.
- Bryson, John M., and Barbara C. Crosby. 2014. “Public Value Governance: Moving Beyond Traditional Public Administration and the New Public Management.” *Public Administration Review* 74: 445–56.
- Burnham, Peter. 2014. “Depoliticisation: Economic Crisis and Political Management.” *Policy and Politics* 42 (2): 189–206.
- Capano, Giliberto, Michael Howlett, and M. Ramesh. 2015. *Varieties of Governance: Dynamics, Strategies, Capacities*. London: Palgrave Macmillan.
- Chapman, Tony, Judith Brown, Chris Ford, and Beth Baxter. 2010. “Trouble with Champions: Local Public Sector–Third Sector Partnerships and the Future Prospects for Collaborative Governance in the UK.” *Policy Studies* 31 (6): 613–30.

- Christensen, Tom, Amund Lie, and Per Læg Reid. 2008. "Beyond New Public Management: Agencification and Regulatory Reform in Norway." *Financial Accountability & Management* 24: 15–30.
- Colebatch, H. K. 2014. "Making Sense of Governance." *Policy and Society* 33 (4): 307–16.
- Dalziel, Robert, and Martin Willis. 2013. "Capacity Building with Older People through Local Authority and Third-Sector Partnerships." *Ageing and Society* 35 (2): 428–49.
- Dan, Sorin, and Christopher Pollitt. 2015. "NPM Can Work: An Optimistic Review of the Impact of New Public Management Reforms in Central and Eastern Europe." *Public Management Review* 17 (9): 1305–32.
- Di Mascio, Fabrizio, and Alessandro Natalini. 2015. "Fiscal Retrenchment in Southern Europe Changing Patterns of Public Management in Greece, Italy, Portugal and Spain." *Public Management Review* 17 (1): 129–48.
- Dunleavy, Patrick, Helen Margetts, Simon Bastow, and Jane Tinkler. 2006. "New Public Management Is Dead—Long Live Digital-Era Governance." *Journal of Public Administration Research and Theory* 16 (3): 467–94.
- Fenwick, John, Karen Johnston Miller, and Duncan McTavish. 2012. "Co-Governance or Meta-Bureaucracy? Perspectives of Local Governance 'Partnership' in England and Scotland." *Policy and Politics* 40 (3): 405–22.
- Fitzgerald, A., and R. Lupton. 2015. "The Limits to Resilience? The Impact of Local Government Spending Cuts in London." *Local Government Studies* 41 (4): 582–600.
- Fukuyama, Francis. 2013. "What Is Governance?" *Governance* 26 (3): 347–68.
- Gallagher, Kevin P. 2014. "Contesting the Governance of Capital Flows at the IMF." *Governance* 28 (2): 185–98.
- Gerring, John, and Strom Cronan Thacker. 2008. *A Centripetal Theory of Democratic Governance*. Oxford: Oxford University Press.
- Hacker, Jacob S., and Paul Pierson. 2010. *Winner-Take-All Politics: How Washington Made the Rich Richer—and Turned Its Back on the Middle Class*. New York: Simon and Schuster.
- Hardiman, Niamh. 2012. "Governance and State Structures." In *Oxford Handbook of Governance*, ed. David Levi-Faur. Oxford: Oxford University Press, 228–41.
- Hastings, Annette, Nick Bailey, Maria Gannon, Kirsten Besemer, and Glen Bramley. 2015. "Coping with the Cuts? The Management of the Worst Financial Settlement in Living Memory." *Local Government Studies* 41 (4): 601–21.
- Henley, Jon. 2015. "Greece's Solidarity Movement: 'It's a Whole New Model—and It's Working'." *The Guardian* (January 23).
- Hennessy, Alexandra. 2013. "Redesigning Financial Supervision in the European Union (2009–2013)." *Journal of European Public Policy* 21 (2): 151–68.
- Holt, Jordan, and Nick Manning. 2014. "Fukuyama Is Right about Measuring State Quality: Now What?" *Governance* 27 (4): 717–28.
- Hood, Christopher, and Ruth Dixon. 2015. *A Government that Worked Better and Cost Less? Evaluating Three Decades of Reform and Change in UK Central Government*. Oxford: Oxford University Press.
- Hood, Christopher, David Heald, and Rozana Himaz. 2014. *When the Party's Over: The Politics of Fiscal Squeeze in Perspective*, ed. Christopher Hood, David Heald, and Rozana Himaz. Oxford: Oxford University Press for the British Academy.
- Howlett, M., and M. Ramesh. 2014. "The Two Orders of Governance Failure: Design Mismatches and Policy Capacity Issues in Modern Governance." *Policy and Society* 33 (4): 317–27.
- Jessop, Bob. 2007. *State Power*. Cambridge, UK: Polity Press.
- Kennett, Patricia, Gerwyn Jones, Richard Meegan, and Jacqui Croft. 2015. "Recession, Austerity and the 'Great Risk Shift': Local Government and Household Impacts and Responses in Bristol and Liverpool." *Local Government Studies* 41 (4): 622–44.
- Kickert, Walter J. M., and Tiina Randma-Liiv. 2015. *Europe Managing the Crisis the Politics of Fiscal Consolidation*. Oxford: Routledge.

- King, Anthony. 1975. "Overload: Problems of Governing in the 1970s." *Political Studies* 23 (2–3): 284–96.
- Krasner, Stephen D., and Thomas Risse. 2014. "External Actors, State-Building, and Service Provision in Areas of Limited Statehood: Introduction." *Governance* 27 (4): 545–67.
- Lee, Melissa M., Gregor Walter-Drop, and John Wiesel. 2014. "Taking the State (Back) Out? Statehood and the Delivery of Collective Goods." *Governance* 27 (4): 635–54.
- Levi-Faur, David. 2012. *The Oxford Handbook of Governance*. Oxford: Oxford University Press.
- Lodge, Martin, and Christopher Hood. 2012. "Into an Age of Multiple Austerities? Public Management and Public Service Bargains across OECD Countries." *Governance* 25 (1): 79–101.
- Lodge, Martin, and Kai Wegrich. 2012. *Executive Politics in Times of Crisis*. London: Palgrave Macmillan.
- . 2014. *The Problem-Solving Capacity of the Modern State: Governance Challenges and Administrative Capacities*. Oxford: Oxford University Press.
- Lowndes, Vivien, and Kerry McCaughie. 2013. "Weathering the Perfect Storm: Austerity and Institutional Resilience in Local Government." *Policy and Politics* 41 (4): 533–49.
- Lynn, Laurence E. Jr. 2012. "The Many Faces of Governance: Adaptation? Transformation? Both? Neither?" In *The Oxford Handbook of Governance*, ed. David Levi-Faur. Oxford: Oxford University Press, 49–69.
- Maguire, Mike. 2012. "Response 1: Big Society, the Voluntary Sector and the Marketization of Criminal Justice." *Criminology and Criminal Justice* 12 (5): 482–94.
- Milbourne, Linda, and Mike Cushman. 2013. "From the Third Sector to the Big Society: How Changing UK Government Policies Have Eroded Third Sector Trust." *Voluntas* 24 (2): 485–508.
- Morgan, Glenn. 2012. "Constructing Financial Markets: Reforming Over-the-Counter Derivatives Markets in the Aftermath of the Financial Crisis." In *The Consequences of the Global Financial Crisis: The Rhetoric of Reform and Regulation*, ed. Graham K. Wilson, and Wyn Grant. Oxford: Oxford University Press, 67–87.
- Moschella, Manuela. 2011. "Lagged Learning and the Response to Equilibrium Shock: The Global Financial Crisis and IMF Surveillance." *Journal of Public Policy* 31 (2): 121–41.
- . 2015. "Governing Cross-Border Capital Flows: The Dynamics of Capital Account Policies." In *Varieties of Governance*, ed. Giliberto Capano, Michael Howlett, and M. Ramesh. London: Palgrave Macmillan, 27–50.
- Mügge, Daniel. 2011. "The European Presence in Global Financial Governance: A Principal–Agent Perspective." *Journal of European Public Policy* 18 (3): 383–402.
- . 2014. "Europe's Regulatory Role in Post-Crisis Global Finance." *Journal of European Public Policy* 21 (3): 316–26.
- Mythen, Gabe, Sandra Walklate, and Hazel Kemshall. 2013. "Decentralizing Risk: The Role of the Voluntary and Community Sector in the Management of Offenders." *Criminology and Criminal Justice* 13 (4): 363–79.
- Needham, C. 2007. "Realising the Potential of Co-Production: Negotiating Improvements in Public Services." *Social Policy and Society* 7 (2): 221–31.
- Newman, Abraham, and David Bach. 2014. "The European Union as Hardening Agent: Soft Law and the Diffusion of Global Financial Regulation." *Journal of European Public Policy* 21 (3): 430–52.
- Nunes Silva, Carlos, and Ján Buček. 2014. *Fiscal Austerity and Innovation in Local Governance in Europe*. London: Routledge.
- Osborne, S. P. 2009. "Delivering Public Services: Are We Asking the Right Questions?" *Public Money and Management* 29 (1): 5–7.
- Peters, Guy B. 2011a. "Governing in the Shadows." *Asia Pacific Journal of Public Administration* 33 (1): 1–16.
- . 2011b. "Governance Responses to the Fiscal Crisis: Comparative Perspectives." *Public Money & Management* 31 (1): 75–80.
- . 2014. "Is Governance for Everybody?" *Policy and Society* 33 (4): 301–6.
- Peters, Guy B., and John Pierre. 1998. "Governance without Government? Rethinking Public Administration." *Journal of Public Administration Research and Theory* 8 (2): 223–43.

- Pollitt, Christopher, and Geert Bouckaert. 2011. *Public Management Reform*, 3rd ed. Oxford: Oxford University Press.
- Rhodes, R. A. W. 1996. "The New Governance: Governing without Government." *Political Studies* 44 (4): 652–67.
- . 2012. "Waves of Governance." In *Oxford Handbook of Governance*, ed. David Levi-Faur. Oxford: Oxford University Press.
- Roberts, Alasdair S. 2010. *The Logic of Discipline: Global Capitalism and the Architecture of Government*. Oxford: Oxford University Press.
- Robichau, Robbie Waters. 2011. "The Mosaic of Governance: Creating a Picture with Definitions, Theories, and Debates." *Policy Studies Journal* 39 (S1): 113–31. doi:10.1111/j.1541-0072.2010.00389_8.x.
- Rotberg, Robert I. 2014. "Good Governance Means Performance and Results." *Governance* 27 (3): 511–18.
- Rothstein, Bo. 2011. *The Quality of Government: Corruption, Social Trust, and Inequality in International Perspective*. Chicago: University of Chicago Press.
- . 2012. "Good Governance." In *Oxford Handbook of Governance*, ed. David Levi-Faur. Oxford: Oxford University Press, 143–54.
- . 2015. "The Chinese Paradox of High Growth and Low Quality of Government: The Cadre Organization Meets Max Weber." *Governance* 28 (4): 533–48.
- Sandel, Michael J. 2012. *What Money Can't Buy: The Moral Limits of Markets*. London: Allen Lane.
- Serra, Narcis, and Joseph E. Stiglitz. 2008. *The Washington Consensus Reconsidered. Towards a New Global Governance*. Oxford: Oxford University Press.
- Shaw, Keith. 2012. "The Rise of the Resilient Local Authority?" *Local Government Studies* 38 (3): 281–300.
- Smith, Rob, and Matt O'Leary. 2013. "New Public Management in an Age of Austerity: Knowledge and Experience in Further Education." *Journal of Educational Administration and History* 45 (3): 244–66.
- Sørensen, Eva. 2006. "Metagovernance: The Changing Role of Politicians in Processes of Democratic Governance." *American Review of Public Administration* 36 (1): 98–114.
- Sørensen, Eva, and Jacob Torfing. 2007. *Theories of Democratic Network Governance*. London: Palgrave Macmillan.
- Stoker, Gerry. 2006. "Public Value Management." *American Review of Public Administration* 36 (1): 41–57.
- Torfing, Jacob. 2012. "Governance Networks." In *Oxford Handbook of Governance*, ed. David Levi-Faur. Oxford: Oxford University Press, 99–112.
- Torfing, Jacob, B. Guy Peters, Jon Pierre, and Eva Sørensen. 2012. *Interactive Governance: Advancing the Paradigm*. Oxford: Oxford University Press.
- Verschuere, Bram, Taco Brandsen, and Victor Pestoff. 2012. "Co-Production: The State of the Art in Research and the Future Agenda." *Voluntas* 23 (4): 1083–101.
- Whitworth, Adam, and Elle Carter. 2014. "Welfare-to-Work Reform, Power and Inequality: From Governance to Governmentalities." *Journal of Contemporary European Studies* 22 (2): 104–17.
- Wilson, Graham K., and Wyn Grant. 2012. *The Consequences of the Global Financial Crisis: The Rhetoric of Reform and Regulation*. Oxford: Oxford University Press.
- Young, Kevin. 2014. "Losing Abroad but Winning at Home: European Financial Industry Groups in Global Financial Governance since the Crisis." *Journal of European Public Policy* 21 (3): 367–88.

Applying Behavioral Insights in Policy Analysis: Recent Trends in the United States

Maithreyi Gopalan and Maureen A. Pirog

An understanding of human nature and of the motivations that drive human behavior have always informed public policies. The use of behavioral research in public policy analysis, which flows largely from social and cognitive psychology, behavioral economics, and other behavioral sciences, came into sharp focus in the last decade. Since then, policy initiatives incorporating behavioral insights have flourished, and thousands of research articles have been published on that topic. A lot of this research has focused on how behavioral insights used by governments at all levels can improve the delivery of governmental services and improve compliance and use of government services by the public. We review recent trends in policy initiatives that specifically incorporate behavioral insights in the United States and outline a framework for further integrating behavioral insights into the various stages of policy analysis and policy design.

KEY WORDS: policy analysis, behavioral economics, nudges, policy evaluation

政策分析中行为研究的应用—近期美国趋势

对人类本性和促使人类行为发生的动机的理解一直影响着公共政策。最近十年里，行为研究在公共政策分析中的使用十分明显。这些政策分析大致包括社会和认知心理学，行为经济学，以及其他行为科学。从那时起，包含行为研究的政策措施就开始兴起，成千上万的相关文章也对其进行了发表。许多这方面的研究聚焦于各级政府使用的行为研究如何能提高政府服务的提供，提高公众对该服务的认同和使用。本文检查了近期具体包含美国行为研究的政策措施走向，勾勒了一项框架，用于将行为研究进一步整合到政策分析和政策设计的不同阶段。

关键词: 政策分析, 行为经济学, 轻推, 政策评估

Introduction

An e-mail informed by behavioral insights, encouraging the U.S. Department of Defense (DOD) service members to participate in a thrift savings plan, led to roughly 4,930 new enrollments and \$1.3 million in savings in just one month (Social and Behavioral Sciences Team [SBST], 2015). A series of eight personalized text messages sent to low-income high school students reminding them to complete required pre-matriculation tasks, led to a 5.7-percentage-point increase in college enrollment

(Castleman & Page, 2015). While the above examples sound like marketing campaigns executed by multinational corporations, they were in fact initiatives pilot-tested by the U.S. federal government over the last few years ushering in what just might be a new way by which a government engages with its citizens to improve social welfare.

Governments have always tried to improve social welfare by introducing policies that often entail bringing about a change in citizen's behavior. However, not until recently has the behavioral paradigm permeated public policy in a more pervasive way. We define the behavioral paradigm as the incorporation of findings from behavioral sciences—such as social and cognitive psychology, and behavioral economics—into public policy. We observe such a trend both across countries as well as in international organizations. For example, in 2015, the World Bank published its flagship World Development Report titled “Mind, Society, and Behavior,” which aimed to advance a new framework for development policy based on a “fuller consideration of psychological and social influences.” Similarly, the European Commission (EC) recently released a report reviewing the use of behavioral insights in policymaking across several different countries in Europe (Lourenço, Ciriolo, Almeida, & Xavier, 2016). Simultaneously, several national governments have begun to integrate the use of evidence-based research from the behavioral sciences in policymaking by establishing dedicated teams within the bureaucracy. The United Kingdom formed the Behavioral Insights Team (BIT) in 2010, a first-of-its-kind government entity dedicated to the application of insights from the behavioral sciences to public policy issues. Since then, countries such as Denmark, Sweden, Canada, Australia, and the United States, have formed dedicated departments or “nudge units” to develop and apply such behavioral insights to policymaking.

In September 2015, President Obama issued an executive order titled “Using Behavioral Science Insights to Better Serve the American People,” and formally established the SBST. This team, established under the National Science and Technology Council in the United States, consists of behavioral scientists tasked with incorporating behavioral insights into federal policies and programs. In its first year, SBST executed several proof-of-concept projects. These projects ranged from text-messaging campaigns designed to increase college enrollment of low-income students to projects intended to increase retirement savings among federal employees. The growing influence of behavioral insights on public policy is thus undeniable. In this article, following Chetty (2015), we argue that the incorporation of behavioral factors should be seen as a “natural progression of (rather than a challenge to) neo-classical economic tools.”

This article makes three contributions. First, we summarize the recent trends in the U.S. policy initiatives that have begun to incorporate behavioral insights. We will primarily focus our review on research of U.S. policy initiatives within two substantive policy fields—social policy and education policy—defined broadly, because they are at the forefront of testing and evaluating initiatives embedded with a behavioral component. We include research published in peer-reviewed academic journals, working papers, and reports from research think tanks and government agencies (at the federal, state, and local level) between

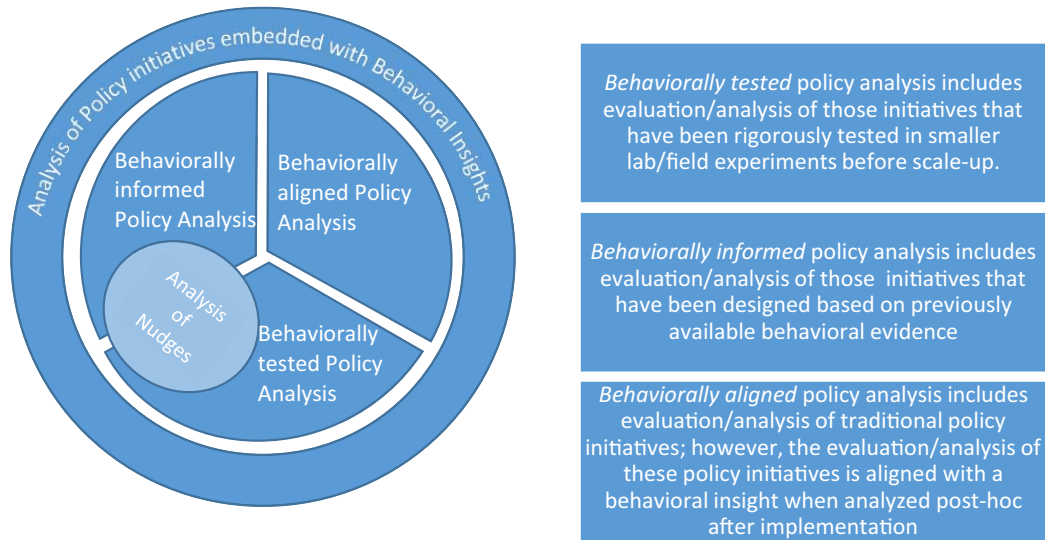


Figure 1. Classification of Policy Analysis of Initiatives Embedded with Behavioral Insights.

2010 and 2015 in our review. Second, we organize the research into a conceptual framework by adapting the taxonomy used by the EC in its report (Lourenço et al., 2016). Our article reviews research on policy initiatives embedded with a behavioral component in the United States and should be viewed as a complement to the recent EC report. Finally, we identify emerging themes from these policy initiatives with the specific aim of providing insights for policy design as well as *ex-ante* and *ex-post* policy analyses.¹

Our thematic review of research on policy initiatives that have incorporated insights from behavioral sciences showcase the tremendous promise of this approach to public policy analysis and policy design. Furthermore, we outline a framework for incorporating such behavioral insights into all stages of policy analysis and effective policy design.

Conceptual Framework

We adapt the taxonomy recently used by the EC in this article to classify research on policy initiatives into three broad categories: *behaviorally tested*, *behaviorally informed*, and *behaviorally aligned*. Figure 1 illustrates our framework for classifying the research on various behaviorally embedded policy initiatives in this review.

Behaviorally tested policy analysis includes evaluation/analysis of those policy initiatives that have been rigorously tested in smaller experiments before scale-up or large-scale implementation. For example, educational interventions aimed at improving students' noncognitive outcomes, such as grit and growth mindset (the belief that intelligence is not innate but can be developed with deliberate practice), were tested in social psychology labs in universities before being scaled to several schools (Paunesku et al., 2015). *Behaviorally informed* policy analysis includes evaluation/analysis of policy initiatives that have been designed based on previously available

behavioral evidence; however, these initiatives are often not tested as rigorously as the behaviorally tested initiatives before implementation. For example, based on past evidence on reminder notices that improved people's adherence to payment schedules in domains such as savings and child support payments, SBST designed an e-mail campaign reminding federal student loan borrowers about their repayments. This policy initiative was not piloted before implementation, given the robust evidence on other similarly tested initiatives. Last, *behaviorally aligned* policy analysis includes evaluation/analysis of policy initiatives that are most often traditional policy tools such as taxes or subsidies that do not explicitly rely on any existing behavioral evidence; however, the evaluation/analysis of these policy initiatives is aligned with a behavioral insight when analyzed post hoc after implementation. For example, Chetty, Friedman, and Saez (2013) observed that people in different states responded differently to the variation in Earned Income Tax Credit (EITC) policies. They then used behavioral insights to explore those differences and found that differences in people's knowledge about the EITC's incentive structure explained such spatial variation. They showed how the neoclassical model that typically assumes perfect information or knowledge about tax codes needed to be updated to understand the complexities of human behavioral responses to even traditional policy interventions, such as tax credits.

The subtle distinction we draw here in our classification of behaviorally embedded policy analysis can help unpack the similarities and differences between *how* various behavioral insights are embedded in policy analysis and help identify emerging themes for more effective policy analysis and design. Finally, behavioral insights have largely been synonymous with *nudges*. However, our framework recognizes that policy initiatives that incorporate behavioral insights go well beyond *nudging* (Bhargava & Loewenstein, 2015; Lourenço et al., 2016).

For example, Thaler and Sunstein (2003) define a *nudge* as "any aspect of the choice architecture that alters people's behavior in a predictable way without forbidding any options or significantly changing their economic incentives" (Thaler & Sunstein, 2008, p. 6). One of the nudge-type initiatives that they highlight relates to the use of automatic defaults to increase retirement savings. The underlying behavioral insight was that more people would enroll in a savings plan and likely save more if the default option in a savings plan was to enroll everybody automatically and let people "opt out" if they wanted to, rather than enrolling people only when they "opt in." Increases of as much as 50 percentage points in savings participation rates were observed in some studies (Madrian & Shea, 2001). These results have also been replicated in many subsequent studies on savings plan participation (Beshears, Choi, Laibson, & Madrian, 2008) as well as in other domains such as organ donations that have similar opt-in/opt-out structures (Johnson & Goldstein, 2003).

However, nudges are just a subset of the policy initiatives that embed an underlying behavioral insight about peoples' response to a choice architecture. Behavioral insights often go beyond merely altering choice architecture. For example, monetary incentives that are tied to specific savings commitments that encourage savings among low-income individuals have been tested recently and show great promise (Jones & Mahajan, 2015). These interventions are also designed to encourage savings

just like the automatic savings enrollment default nudges. However, they do so by providing a new policy tool—commitment devices—that go beyond just changing the choice architecture for potential savers. Similarly, reminder letters that prompt action or the reframing of the content of the message in a reminder letter in terms of gains rather than losses based on insights from loss aversion (Tversky & Kahneman, 1991) to encourage or discourage a behavior are somewhat different from just nuanced design changes advocated specifically by nudges. We support the perspective of Lourenço et al. (2016) and review the literature using this broader view of behavioral insights as applied to policy analyses and research. Thus, we include the analysis/evaluation of nudge-type policy initiatives within our broader framework depending on how a nudge-type policy initiative was evaluated. As illustrated in Figure 1, we observe that most nudge-type policy initiatives were analyzed using behaviorally tested or behaviorally informed approaches.

A systematic review of research on all policy initiatives that have incorporated a behavioral insight in the United States is beyond the scope of this article; however, we employed multiple search strategies to provide a snapshot of such research. First, we identified appropriate studies in Google Scholar and Thomson Reuters Web of Science using relevant keyword searches.² Close to 80,000 published articles, books, and book chapters emerged in that search within relevant Web of Science categories between 2010 and 2015. We also conducted manual searches in a variety of relevant peer-reviewed academic journals, working papers, and reports to sharpen the focus of our search to include research on initiatives in the United States within the substantive fields of social and education policy, broadly. From these short-listed studies (50), we identify key examples in each category (behaviorally tested, informed, aligned) and use these to illustrate the application of behavioral insights for policy analysis in the main text of this review. In the Appendix, we include Table A1 summarizing results from the more extensive list of short-listed studies to provide an easily accessible reference for scholarship in this burgeoning field of study.

Behaviorally Tested Policy Analysis

Behaviorally tested policy analysis includes the evaluation/analysis of policy initiatives that are piloted in labs or smaller field experiments before being scaled up. These examples showcase how insights from basic research in the behavioral sciences can be harnessed to inform policy.

Behavioral Insight: Provide Timely Information and Increase Saliency of Information

Evidence from behavioral sciences shows that the provision of timely information and an increase in the salience of information presented can improve the take-up of government services. The e-mail campaigns carried out by the SBST, in collaboration with the DOD (mentioned in the introduction of this article) are great examples of behaviorally tested policy analyses. While past evidence exists on how timely, informational messages sent about the benefits of a program to

potential beneficiaries result in higher uptake of the savings in other countries (Karlan, McConnell, Mullainathan, & Zinman, 2016), the SBST wanted to ensure that such informational messages would also work within the context of retirement savings for military service members in the United States. In one of the most successful pilot-tests conducted by SBST, the DOD sent approximately 720,000 not-enrolled service members one of nine e-mails, with messages incorporating various behavioral insights—framing the decision to enroll as a “Yes/No” choice, making the benefits of enrollment more salient, clarifying the next steps needed to enroll in the plan, and/or providing information about the projected financial benefits of retirement security (SBST, 2015). The positive results (\$1.3 million in savings increase in just a month) from the most effective e-mail message have prompted the DOD to scale up this intervention. The DOD will be sending periodic e-mails with embedded behavioral framing of messages to service members going forward.

MDRC, a nonprofit education and social policy research organization, has led several behaviorally tested policy analyses in collaboration with the U.S. Department of Health and Human Services (U.S. DHHS). They have conducted about 15 randomized controlled trials that incorporated behavioral evidence on information provision as well as information salience. One of MDRC’s most successful policy initiatives, carried out in collaboration with the Texas Office of the Attorney General’s Child Support Division, provides an example. Several states, including Texas, allow child support payments to be lowered for an incarcerated parent during his/her prison term. However, the incarcerated parent has to apply for such an order modification. Many prisoners fail to apply for a child support modification and accrue very high child support arrears. To reduce the complexity in the process, MDRC sent a postcard to a random set of incarcerated parents informing them about the order modification program and a prefilled (with available personal information) application form. Those who received the reminders and the simplified application were 11 percent more likely to apply for the child support modification option (Richburg-Hayes et al., 2014).

Interventions that provided timely information have also shown positive effects on students’ post-secondary outcomes. For example, text messaging campaigns that reminded students to complete tasks needed for matriculation (Castleman & Page, 2015) improved college enrollment particularly among low-income students by 5.7 percentage points (as compared to the control group of low-income students who did not receive text messages). Castleman and Page (2015) also evaluated the impact of a peer mentoring intervention in which college student mentors reached out to a randomized group of high school students via text messages to help them navigate their transition to college. Peer mentoring increased college enrollment by 4.5 percentage points. Similarly, randomized control trials conducted by researchers in collaboration with a nonprofit research think tank, ideas42, included a text messaging campaign that provided information about student loan borrowing costs to students in a community college. Those students who received the text messages borrowed less compared to the students who did not receive text messages, \$2,218 compared to \$2,401 (ideas42, 2016). Online campaigns using smartphone apps that reminded students about the priority deadline for applying for the Free Application for Federal Student Aid (FAFSA) at a large public university also had a significant impact on

FAFSA application completion rates as well as receipt of financial aid awards (ideas42, 2016). Lavecchia, Liu, and Oreopoulos, (2014) review several other educational interventions that have incorporated insights from behavioral sciences, many of which are behaviorally tested.

Interventions designed to provide effective information to aid decision making have also been used in other social policy domains. The U.S. Department of Agriculture Food and Nutrition Service (USDA FNS) pilot-tested four initiatives under the Supplemental Nutrition Assistance Program-Education (SNAP-Ed) project that provided information to low income children and women about the benefits of healthy eating (USDA FNS, 2012). These initiatives that included direct and online education (with substantial variations in program design and levels of exposure) were all rigorously evaluated using randomized control trials and/or quasi-experimental methods. However, only one of those four educational interventions showed a statistically significant positive effect on children's eating behaviors and caregivers' purchase and offering of healthy food items such as fruits and vegetables.

Interventions that go beyond just providing information or increasing the salience of information have also been analyzed by several behaviorally tested policy analyses. A central insight from behavioral sciences is that the framing of a message and the affective response invoked by the message matters as much as, if not more than, the specific contents of the message. We review a few behaviorally tested policy analyses that use such behavioral insights.

Behavioral Insight: Reframe the Information Content to Change the Emotional Affective Response of Recipient

The DOD collaborated with the SBST to increase re-enrollment of service members to the thrift savings plan after pilot-testing the use of another behaviorally informed e-mail campaign. The e-mail included three behavioral components—a personalized greeting that included the service member's name, message emphasizing the timing (a new year) as an opportunity for service members to make a renewed commitment with their finances, and clear information about the steps needed to complete the re-enrollment process. The redesigned e-mail embedded with behavioral insights led to a 5.2-percentage point increase (from 23.5 to 28.7 percent) in re-enrollments in the first week (SBST, 2015). Based on this result, the DOD scaled up the effective behavioral messaging for encouraging re-enrollment.

In another similar initiative, MDRC, in collaboration with Franklin County Child Support Enforcement Agency in Ohio, carried out a randomized control trial to increase overall collections of child support from noncustodial parents. The team designed reminder notices that incorporated several behavioral insights that were sent to a random group of noncustodial parents. The control group received no reminder notice. The number of noncustodial parents who made a payment when sent a reminder was statistically significantly larger (by 3 percentage points) than the number of noncustodial parents in the control group. However, the reminder notice did not result in a statistically significant increase in total collections per person (Richburg-Hayes et al., 2014).

Several other interventions implemented by MDRC resulted in treatment effect sizes that ranged between 2 and 3 percentage points in comparison with the control group.

In another behaviorally tested policy analysis, MDRC evaluated a policy initiative to increase the number of Temporary Assistance for Needy Families (TANF) recipients in Los Angeles County to sign up for services such as job search assistance, community service, employment, education, and/or other specialized services as part of their new welfare-to-work participation rules. MDRC used two different messaging strategies that were embedded with behavioral insights regarding loss aversion (Tversky & Kahneman, 1991). The message that highlighted the losses participants might experience by not attending a required activity increased the likelihood of participation initially by 4 percentage points, although these results were not sustained over time (Farrell, Smith, Reardon, & Obara, 2016).

Behavioral Insight: Reduce Complexity of Task

Low take-up of government support programs cannot always be improved by informational messages or reframing of the messages, especially in certain educational domains for vulnerable populations such as low-income students. This insight became apparent as a result of another clever behaviorally tested policy analysis. The FAFSA that students have to fill out to access government aid and other need-based institutional aid is infamous for its length and complexity. Research shows that such complexity acts as a significant barrier to many students accessing higher education and thereby exacerbates the enrollment gap between high- and low-income students (Dynarski & Scott-Clayton, 2006). Researchers, in collaboration with a tax-preparation software company, conducted a randomized field experiment that went beyond informational nudges to students and parents. Low-income families who were receiving tax preparation help were offered personal assistance to complete the FAFSA. Due to the large duplication of information between tax forms and FAFSA, the treated participants received largely prepopulated FAFSA forms in addition to extra guidance for completing the rest of the application and automatic online submission. Treated participants were also provided with personalized aid estimates and comparisons with tuition costs for nearby colleges. The effects of the personal assistance were large. High school seniors whose parents received the treatment were 8 percentage points more likely to have completed two years of college (going from 28 to 36 percent), during the first three years following the experiment. Families who received aid information but no assistance with the FAFSA did not experience improved outcomes (Bettinger, Terry Long, Oreopoulos, & Sanbonmatsu, 2012).

Such heterogeneous, context-dependent effects of several educational interventions highlight the need for designing, implementing, and evaluating several proof-of-concept projects before scaling up a behaviorally inspired intervention. Social-psychological interventions that have begun to show tremendous promise in education in the United States recently follow such an approach (Yeager & Walton, 2011).

Behavioral Insight: Target Students' Subjective Experiences and Beliefs

These interventions use subtle reading and writing exercises to influence students' subjective experiences and beliefs to promote their educational and psychological well-being. Social psychologists have traditionally used lab experiments as a first step, where the independent variables of interest are manipulated in a controlled experimental set-up, before implementing tweaked experiments in the field. For example, Paunesku et al. (2015) show that interventions that target students' beliefs about their ability and motivation in school have significant effects on students' academic outcomes. Such interventions were implemented to scale (1,500 students in 13 high schools in the United States) after rigorous testing in smaller lab and field experiments (Aronson, Fried, & Good, 2002; Blackwell, Trzesniewski, & Dweck, 2007). Social-psychological interventions that target students' feelings of belonging on campus, especially during their transition to college, are tested in a variety of university settings—such as large public universities and smaller selective universities (Yeager et al., 2016) before being scaled to a variety of colleges. These interventions were also tested in smaller lab settings (Walton & Cohen, 2011) before being pilot-tested in the field. The central behavioral insight of such social psychological interventions is that by precisely targeting students' subjective experiences in school, educators can positively impact students' academic outcomes. Such precise psychological mechanisms, however, need to be drawn from basic laboratory research on attitude change and persuasion, and customized to the different contexts in smaller proof-of-concept studies before large-scale implementation (Yeager & Walton, 2011).

Behavioral Insight: Invoke Social Norms to Promote Desired Behavior

Finally, the above examples seem like most pilot-tested policy initiatives had the intended effect; however, not all behaviorally tested policy analyses reveal such positive effects. We argue that reporting and understanding the causes of such null findings are extremely important to move this research forward. For example, behavioral insights from social psychology have shown that individuals are very sensitive to social pressure and social norms. Smaller lab and field experiments on charitable giving have shown that social pressure—an individual's fundamental dislike to say "no"—can be used to increase an individual's charitable giving (Dellavigna, List, & Malmendier, 2012). Similarly, invoking social norms, that is, description of an individual's peer behavior to encourage/discourage one's behavior, revealed positive impacts in some settings; however, such insights might not translate to an alternative policy domain as the below behaviorally tested policy analysis example reveals.

The SBST, in collaboration with the US DHHS's Centers for Medicare and Medicaid Services (CMS), sent letters informed by behavioral insights to a randomized group of medical providers with high prescription rates of controlled substances. Based on past evidence that medical providers respond to normative messages that provided feedback about the providers' own vaccination rates compared to those of their peers (Kiefe et al., 2001), the SBST letter included details about the medical

providers' prescription rates compared to that of their peers' rates of controlled-substance prescription. The control group did not receive any letter. In this case, no significant impact was seen in the subsequent year (Sacarny, Yokum, Finkelstein, & Agrawal, 2016). The null results spurred more analysis into the mechanisms of behavior change. Subsequent randomized control trials using letters with revised language based on more recent psychological evidence are currently under way.

Behaviorally Informed Policy Analysis

In contrast to behaviorally tested policy analyses, behaviorally informed policy analyses include the evaluation/analysis of initiatives that are not explicitly tested either as lab or field experiments before being implemented to scale. These initiatives, in most cases, are based on past behavioral evidence that has been rigorously tested in another (often related) policy domain. For example, information provision strategies that have been proven to work based on several other pilot tests in related policy domains, have often been implemented to scale without additional tests. We review a few behaviorally informed analyses of initiatives that were adapted to new policy issues based on robust past evidence.

Behavioral Insight: Provide Timely Information and Increase Saliency of Information

Providing reminders to encourage people to follow through on a desired course of action has shown huge promise in many domains such as personal savings (Karlan et al., 2016) and child support payments (Richburg-Hayes et al., 2014). Based on such evidence, the SBST designed an e-mail campaign reminding federal student loan borrowers about their repayments. The SBST and the Department of Education's Office of Federal Student Aid (FSA) sent a reminder e-mail to over 100,000 borrowers who had missed their first payment. The e-mail specified that the borrower had missed a payment, and included additional salient information about the steps needed for the borrower to complete payment including an easily accessible link to the service provider's payment system. The above policy initiative was evaluated using a quasi-experimental pre-post design (i.e., the overall payment rates were compared before and after the e-mail campaign). Although the SBST team did not use the more rigorous experimental approach to this evaluation, their pre-post comparison suggests that the reminder e-mail led to a 29.6 percent increase in the fraction of borrowers making a payment by the end of the first week after delivery of e-mail. Overall, by the end of the first week after the e-mail reminder, student payment amounts went up by 0.8 percentage points (SBST, 2015).

Similarly, based on past evidence on how timely notices increased the use of tax credits, the SBST, in collaboration with the FSA, sent informational e-mails about income-driven repayment (IDR) plans to approximately three million student borrowers. The e-mail included information about the eligibility criteria for IDR plans, the benefits of IDR, costs of not enrolling in IDR, and easily accessible online links to reach the service provider. To evaluate the impact of this initiative, SBST varied the

timing of sending these e-mails—e-mails were sent in two waves three weeks apart from each other. The informational e-mail led to a substantial increase in applications for IDR plans within 20 days of the e-mail being sent. Among the group that received the e-mail, 4,327 applied for IDR as opposed to the 982 IDR applications received from the comparison group who had not yet received the informational e-mail. The SBST and the FSA were most concerned about the impact of the e-mail campaign on the seriously delinquent (90–180 days), approximately 800,000 student loan borrowers. Based on the positive results of these initiatives, the FSA has continued to collaborate with the SBST on initiatives designed to simplify the use of IDR. The ongoing efforts range from revising the IDR application form to innovative communication campaigns targeting struggling student borrowers based on scientific evidence from other domains such as take-up of tax credits postinformational notices (SBST, 2015). However, it is important to note that rigorous behaviorally informed policy evaluations of such initiatives described above are exceptions rather than the rule.

Behavioral Insight: Increase Salience of Information to Mitigate Effects of Limited Attention

The U.S. federal government has also implemented certain regulations in the financial sector that have been evaluated in behaviorally informed policy analyses. For example, the Credit Card Accountability Responsibility and Disclosure (CARD) Act of 2009 mandated changes to credit card statements to protect consumers from financial institutions that previously had taken advantage of consumers' limited attention by obfuscating the true costs of certain financial instruments. These legislated changes were based on past research on people's cognitive biases such as *limited attention*. The new law required financial institutions to disclose the length of time it would take to pay off a credit card balance in full if borrowers only pay the minimum monthly amount. This new law increased the salience of fees, and other costs to consumers to mitigate the effects of limited attention. Additionally, credit card companies had to disclose the minimum monthly payment needed to pay off the balance in three years. Agarwal, Chomsisengphet, Mahoney, and Stroebel (2015) evaluate the effectiveness of the CARD act using a quasi-experimental research design and find that the information disclosure requirements only had a negligible (but statistically significant) effect on borrowers' repayment behavior. Account holders who paid at a rate that would repay the balance within three years increased by less than a percentage point (0.4 percentage points on a base of 5.3 percent). However, other evaluations that tested the mechanism of information disclosure reducing consumer indebtedness related to payday loans lends some support to such regulations. A Jamal Poverty Action Lab led-study by Bertrand and Morse (2011) showed that interventions that provided in-depth information regarding the cost of payday loans to a randomized group of low-income consumers significantly reduced their borrowing frequency, and overall borrowing amounts.

Behavioral Insight: Reduce Choice Overload

Similarly, psychological research has shown that many individuals suffer from *choice overload*—the inability to meaningfully compare choices when too many choices are provided at once. For example, in a series of classic experiments, Iyengar and Lepper (2000) showed that an extensive-choice context not only increased the burden on mental resources and the time and energy required to make a choice, but also reduced their overall satisfaction. In some cases, the overwhelming number of choices even paralyzed some individuals, preventing them from being able to make any decision at all. A regulatory approach undertaken by the U.S. government to facilitate better decision making that has been informed by research on choice overload is a mandate to standardize product attributes. For example, the federal government mandated that the Medicare supplemental insurance plans (Medigap) for senior citizens must conform to one of 10 standardized plan options (Medicare Improvements for Patients and Providers Act 2008). These plans, denoted with letters of the alphabet (as delineated by the CMS), are standardized across 47 states. For example, the level of coverage (or benefits) under Plan A in Florida is the same as that of Plan A in Indiana.

The number of product choices, or the outcomes of senior citizens who chose these designated products were not explicitly tested using lab or field experiments; however, such behaviorally informed regulatory approaches seem to provide a promising avenue for incorporating insights based on evidence from basic psychological (and other behavioral sciences) research. However, we highlight the need to evaluate such initiatives using behaviorally informed empirical analysis to understand both the impact of the initiative on the outcome of interest and the mediating mechanisms that the underlying behavioral insights presume. Such an evaluation is particularly pertinent in light of a recent review of the literature on the impacts of laws and regulations that require public information disclosure (Loewenstein, Sunstein, & Golman, 2014). The above review finds that while information disclosure, in many cases, does not affect the behavior of the recipients of the information, it seems to significantly affect the behavior of the providers of information.

Behaviorally Aligned Policy Analysis

Last, behaviorally aligned policy analysis includes evaluation/analysis of policy initiatives that are most often traditional policy tools such as taxes or subsidies that do not explicitly rely on any existing behavioral evidence; however, the evaluation/analysis of these policy initiatives is aligned with a behavioral insight when analyzed post hoc after implementation.

Behavioral Insight: Differential Awareness of Programmatic Components Affect Take-Up

For example, Chetty et al. (2013) show that the EITC, the largest anti-poverty program in the United States, affects labor supply decisions of people differentially

based on their knowledge of the tax code. They demonstrate how the neoclassical model of labor supply that typically assumes perfect information about tax codes needs to be updated to incorporate the effects of imperfect information on traditional policy instruments such as tax credits.

Past research on the EITC had demonstrated the effect of the tax credit in increasing the labor force participation of low-income workers. However, the evidence on the intensive margin, that is, hours of work and earnings (conditional on increased labor force participation) was mixed (Eissa & Hoynes, 2006). Chetty et al. (2013) exploited the variation in the tax-credit top-up levels across states to identify the effects of EITC on wage earning using detailed tax-return data, not previously available. One of the researchers' primary insights was that the claimants differed in their responses to EITC (measured using the distribution of EITC claimants' levels of reported incomes right around the EITC refund-maximizing amounts) both within and across the states. The researchers hypothesized that the differential response might be driven by differences in peoples' knowledge about the EITC's incentive structure and used empirical techniques to unpack those differences. This insight helped explain the spatial variation in responses to EITC. The researchers also help explain how information diffusion might drive such differential response across the intensive and extensive margins uncovered by earlier research.

Behavioral Insight: Reframing the Timing and Mode of Delivery of Programmatic Components Affect Take-Up

Another example of a behaviorally aligned policy analysis is conducted by Richards and Sindelar (2013). They evaluate existing proposals to encourage healthy food choices in the Supplemental Nutrition Assistance Program (SNAP), one of the largest food assistance programs in the United States, using behavioral principles. For example, they evaluate the proposal of subsidizing purchases of healthy foods in the SNAP using a behavioral lens. They recommend changes to the timing and mode of delivery of subsidy that would increase the salience of the subsidy thereby promoting healthy eating behavior. They also make innovative recommendations to changes in the SNAP to promote healthy eating that includes the use of default options to encourage healthy food choices and commitment devices that can be harnessed in addition to traditional price subsidies. We classify the above analysis as behaviorally aligned policy analysis because the proposals evaluated by the authors have not been implemented to date. However, the *ex-ante* evaluation of the proposed reforms to SNAP using behavioral insights is an excellent example of how behavioral insights can drive policy reforms. We also hope that such reforms are pilot tested and evaluated using behaviorally tested/informed policy analyses in the future.

Behavioral Insight: Can Default Options Result in Crowd-Out Effects?

Another excellent example of a behaviorally aligned policy analysis is the use of innovative empirical strategies and the use of "big data" to explicate the behavioral

lever underlying a policy initiative, and/or the mechanisms of behavioral change. For example, a primary concern regarding initiatives that boost savings using automatic enrollment options (described earlier) has been that increases one observes in savings produced by automatic enrollment in savings plans might in fact be offset by reductions in savings (or increases in borrowing) in other savings accounts. Chetty, Friedman, Leth-Petersen, Nielsen, and Olsen, (2014) explore such a hypothesis empirically. They study the impacts of defaults on *total* savings of individuals by exploiting variation in employers' contributions to retirement savings accounts (i.e., for all practical purposes similar to an automatic enrollment default option) using a rich panel data from Denmark. They analyze the savings behavior of employees who switch jobs and experience variations in employer contributions to their retirement savings account and find limited evidence for crowd-out effects. Specifically, they find that employees who move to a firm with a more generous pension contribution (at least 3 percentage points higher than the prior employer) on average reduce their own savings contribution by just 0.56 percentage points with no change in their savings in any other taxable account.

In the same study, Chetty et al. (2014) also compare the effectiveness of tax subsidies for pension contributions with the effects of automatic enrollment defaults into employer pension program. The automated enrollment into pension savings has huge impacts relative to tax subsidies. Essentially, a dollar of government expenditure on tax subsidies for pensions increases total savings by only 1 cent whereas the effect of an automatic enrollment default into pension savings is approximately 80 cents. The authors estimate that approximately 85 percent of individuals are "passive savers" who are unresponsive to subsidies (and also unresponsive to changes in any employer contribution amounts); 15 percent of individuals are "active savers" who respond to tax subsidies and reallocate their savings to other tax-saving instruments. Thus, automated defaults appear to work better than tax subsidies that require actions on the part of savers. This study is consistent with others that lends increasing confidence to the notion that automated defaults embedded in policy instruments seem to work well. While the above studies are carried out using data from Denmark, we include this example in our review to showcase the importance of such behaviorally aligned policy analyses.

Behavioral Insight: Reduce Complexity of Task

Finally, behavioral insights that reveal that individuals suffer from choice overload can be used to inform behaviorally aligned policy analyses as well. Specifically, the impacts of poverty on cognitive capacity (Mani, Mullainathan, Shafir, & Zhao, 2013), raises several concerns about the design and impact of several policy initiatives. For example, Bhargava, Loewenstein, and Sydnor, (2015) find that, while everyone struggles when choosing from a complex choice set, low-income households particularly struggle more when making complex choices. They analyze the health plan choices of employees at a large U.S. firm to examine the effects of choosing from a complex choice set. As a consequence, when the government offers numerous and

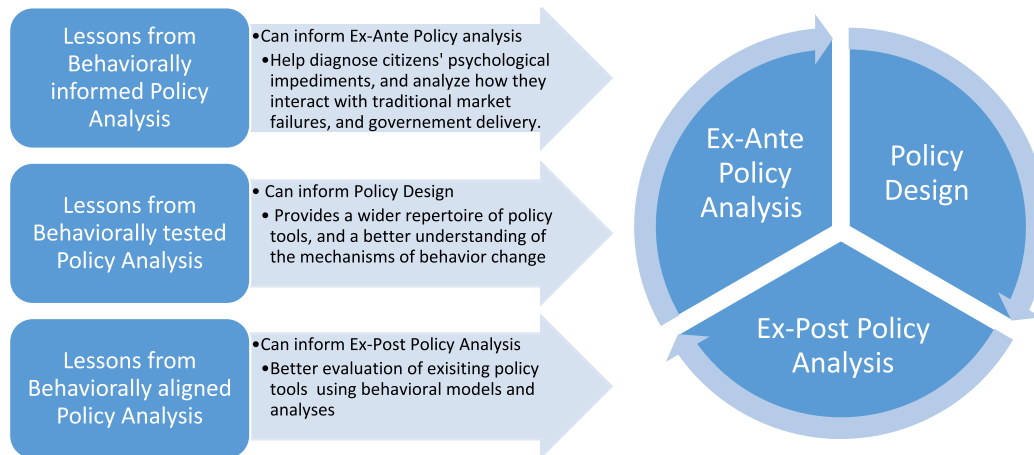


Figure 2. Framework for Applying Behavioral Insights in Policy Analysis and Policy Design.

complex options to citizens, it can result in lower average welfare and also have adverse distributional consequences. From a policy perspective, this is salient when offering health insurance plans under health care exchanges as these plans vary across parameters such as deductibles, copay rates, and out-of-pocket maximums.

Lessons for Policy Analysis and Design

As the above review demonstrates, behavioral insights have informed public policy and continue to do so increasingly across several policy domains. While there has been an overwhelming agreement about the usefulness of incorporating behavioral insights into policy analysis, the exact approach for *how* to do so remains unclear (Congdon, 2013). In this section, we provide some thoughts on how to apply behavioral insights into the various stages of policy analysis—*ex-ante* policy analysis, *ex-post* policy analysis, and future policy design. We distinguish between *ex-post* policy analysis—that occurs upon or after the policy has been implemented—and *ex-ante* policy analysis—that occurs before the policy is implemented—to better delineate the specific insights that can be gained from the incorporation of the behavioral perspective in each of those domains.

As Figure 2 illustrates, the thematic organization of the analyses of policy initiatives embedded with a behavioral element (i.e., behaviorally tested, behaviorally informed, and behaviorally aligned initiatives) can be used to inform the various stages of policy analysis and policy design. First, we illustrate how lessons from *behaviorally informed* and *behaviorally tested* policy analysis can inform *ex-ante* policy analysis. For example, evidence from behavioral sciences can be used to enhance our understanding of the underlying policy problem that a policy initiative is trying to solve. Specifically, we describe how a diagnosis of the policy problem can reveal how peoples' psychological impediments may interact with traditionally defined policy problems such as market failures and government delivery of services.

Second, we describe how lessons from the *behaviorally tested* policy analysis can be effectively applied to future *policy design*. We show how behavioral insights can provide a wider repertoire of policy tools at a government's disposal to intervene and influence behavior change. Furthermore, behavioral testing of policy initiatives can also be used to study and understand the mechanisms of behavior change that can act as building blocks for designing more effective future policies. We also highlight how the government can combine traditional policy tools with newer behaviorally enhanced policy tools to intervene cost-effectively.

Third, we discuss how lessons from *behaviorally aligned* policy analysis can inform *ex-post* policy analysis. We show how one can better evaluate the impact of existing policies (that may use traditional policy tools such as taxes/subsidies) if we incorporate the rich evidence available from behavioral sciences.

Finally, we show how a fuller incorporation of behavioral insights into the various stages of policy analysis entails the need to view the policy process itself as cyclical. Lessons from *ex-post* policy analysis should indeed inform *ex-ante* policy analysis and future policy design. We describe such examples in the last section where past behaviorally aligned *ex-post* policy analysis have provided new insights that have driven the implementation and evaluation of new policy initiatives.

Lessons for Ex-Ante Policy Analysis

One of the primary steps in any *ex-ante* policy analysis is to understand the underlying policy problem that a policy initiative is intending to solve, that is, a rationale for government intervention in the first place. Traditional *ex-ante* policy analysis, based primarily within the neoclassical welfare economics framework, has focused broadly on two categories of situations that demand government intervention—efficiency and equity. *Inefficiency* within the neoclassical framework has been explored primarily in the form of various market failures and *equity* demands that the government intervene to alleviate poverty and/or redistribute resources within a society even in situations that do not necessarily promote efficiency.

The incorporation of behavioral insights into *ex-ante* policy analysis demands that we reframe how we think about the underlying policy problem that the policy initiative is trying to solve (Congdon, 2013). The primary taxonomy of market failures—public goods, externalities, natural monopolies (or other inefficient market structures), and information asymmetry—can be enhanced with another category that includes peoples' psychological impediments such as *imperfect optimization*, *bounded self-control*, and *nonstandard preferences*³ (Congdon, Kling, & Mullainathan, 2011, p. 20; Madrian, 2014). Psychological impediments can also be explored as an underlying factor that may exacerbate or attenuate any of the existing categories of market failure or effective delivery of government programs (Congdon et al., 2011). We believe that a diagnosis of the policy problem that analyzes the interaction between psychological impediments and the existing sources of market failure, and the delivery of other governmental programs can be used to integrate behavioral insights more comprehensively into policy analysis. Using a case study of a policy

initiative that we reviewed earlier, we illustrate how a behavioral diagnosis of the underlying policy problem can be incorporated into an *ex-ante* policy analysis.

Nonprofit research organizations such as ideas42 and MDRC have developed systematic approaches to diagnose a policy problem in the delivery of government programs by applying behavioral principles. This approach, referred to as “behavioral diagnosis and design” (Richburg-Hayes et al., 2014), or “behavioral mapping” (Hall, Galvez, & Sederbaum, 2014), includes a series of steps that aims to methodically diagnose the psychological impediments that result in the deviation of programmatic outcomes from a policy’s intended effects. Before MDRC sent out reminder postcards to incarcerated parents in Texas, they carried out a diagnosis of the decision-making environment of an incarcerated parent in the child support order modification policy context in Texas. Researchers identified several psychological impediments in the existing decision-making environment that an incarcerated parent faced. For example, many parents avoided even opening the letter notifying their eligibility for order modification due to a *negative emotional response* they had to any communication from the child support office. Neither the content of the letter nor the process of application for child support order modification was simple, adding to the *cognitive load* that the parents already faced. The interventions that MDRC designed included reminder postcards and effective reframing of the order modification message to address each of these psychological impediments.

Such a diagnosis should also be carried out to understand how psychological impediments may interact with market failures. For example, education provision in the United States is a classic example of a public good (with some features of a positive externality). Traditional *ex-ante* policy analysis advocates government intervention in education provision to mitigate the potential market failure that might result in underconsumption of education. College education in the United States is thus heavily subsidized by the government. However, college enrollment and completion rates, especially for racial minority and first-generation students, are lower than that of white and continuing-generation students (Ifill, Radford, Cataldi, Wilson, & Hill, 2016). Evidence from social psychology has shown how students’ sense of belonging, particularly for racial minority students and first-generation students on campus, can affect their engagement and performance in college (Walton & Cohen, 2011). Such impediments to the psychological processes that affect students’ persistence and performance in college further exacerbates the market failure of underconsumption of education. Social psychological interventions that target and promote students’ sense of belonging are being behaviorally tested across college campuses in the United States (collegetransitioncollaborative.org) to mitigate such externalities. Such policy initiatives can often complement the traditional policy tools that address the public good/positive externality nature of education provision using subsidized loans.

Lessons for Policy Design

Having diagnosed the policy problem, behavioral insights can (and should) be applied to effective *policy design*. First, behavioral insights can be used to enhance the

policy toolkit—default options, e-mail reminders, and text campaigns are examples of new policy tools that have been ushered in by evidence from behavioral sciences research. Traditional policy design has predominantly focused on the use of price incentives and regulations to change behavior—provide subsidies or tax credits to encourage a particular behavior, tax those behaviors that need to be curtailed, or regulate markets to encourage/discourage behaviors. While price incentives are incredibly powerful in many instances in changing behavior, there are limits to the impact price incentives alone can have. The size of incentives, the structure of incentives, the framing of the incentive message, and the salience of the message strongly influence behavior change (Kamenica, 2012). Fryer, Levitt, List, and Sadoff (2012) analyze the impact of reframing a teacher incentive program using principles of loss aversion in nine schools in Chicago. They find that reframing the incentive structure using loss aversion (i.e., teachers are paid in advance and asked to give back the money if their students do not improve) had significant effects on students' math test scores—students whose teachers received the reframed incentive structure showed between 0.2 and 0.4 standard deviation gains in math test scores.

Second, behavioral insights can (and should) be applied to tweak the traditional policy tools such as taxes and subsidies. For example, text/e-mail reminders can enhance the effectiveness of existing policy tools such as the subsidized FAFSA student loans.

Third, well-designed pilot studies can be used as a first stage before rolling out policy initiatives across the state/country. The UK BIT team uses a “test, learn, adapt” approach for policy design (Lourenço et al., 2016). The approach is based on three key principles: “Test,” that is, the identification of various policy interventions that can be evaluated and analyzed for their effectiveness; “learn” by measuring the results and identifying “what works”; and “adapt” using findings from the above initiatives and their effectiveness to adjust and design future policy intervention accordingly. We propose that an additional consideration about “how” it works is also crucial in the design of new policies. The mediating mechanisms through which behavior change can be influenced as well as the contexts with which these mediating mechanisms interact and covary demands as much attention as “what works” to move this research forward.

The main advantage of testing an intervention in a controlled experiment (in a lab or in smaller field experiments) is that the underlying theory and mechanism of change can be better understood (Mortensen & Cialdini, 2010). Recently, economists have also argued for the use of such *mechanism experiments* as a precursor to larger policy evaluations using randomized control trials (Ludwig, Kling, & Mullainathan, 2011). They argue that if a hypothesized causal mechanism is not effective in a controlled experimental set-up, a policy evaluation using a larger randomized control trial might be wasteful. Conversely, if the causal mechanism proves effective, especially under multiple contexts, a policy evaluation using a well-designed randomized control trial targeting the causal mechanism of change is not only more cost-effective but will also provide more insights into the efficacy of the intervention. Meta-analysis of experimental studies and policy evaluations must also strive to understand and review the candidate mediating mechanisms along with providing

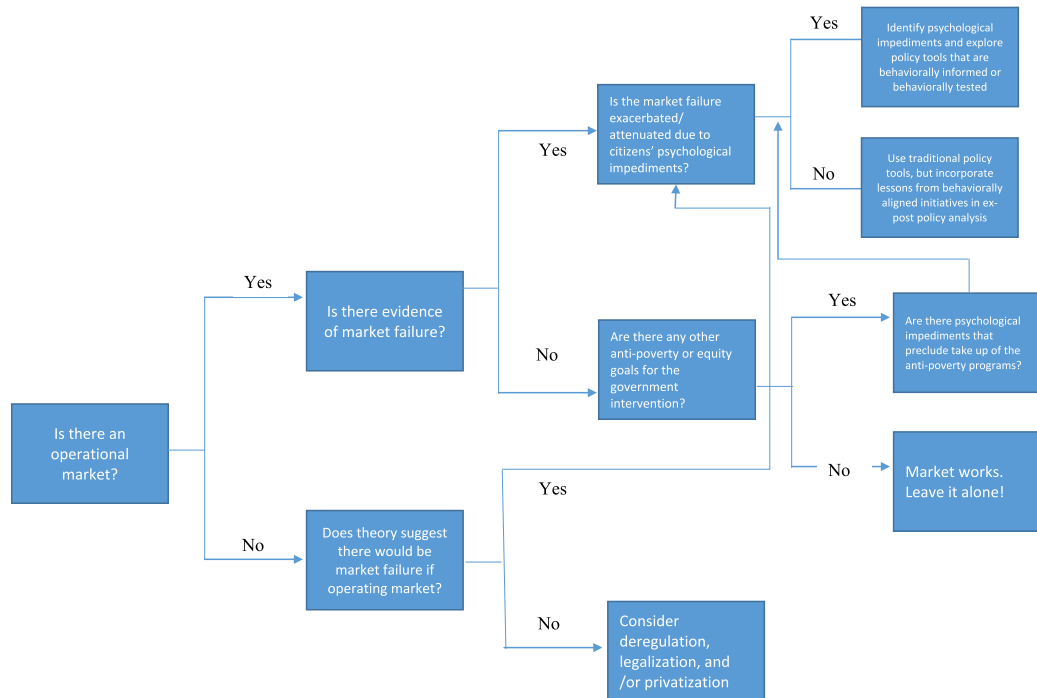


Figure 3. Stylistic Example of a Behaviorally Enhanced Policy Analysis.

Note: The above figure is adapted from the figure 9.1 included in Weimer and Vining (2015, p. 205).

estimates of effect sizes across multiple trials and contexts as was the case with the growth mindset studies (Burnette, Boyle, Vanepps, Pollack, & Finkel, 2013).

Lessons for Ex-Post Policy Analysis

Behavioral insights often enhance the evaluation of existing policy impacts when incorporated meaningfully in an *ex-post* policy analysis. As discussed earlier, Chetty et al. (2013) incorporate several behavioral insights to estimate the precise impacts of the EITC on both the number of hours worked and wage earnings of individuals across states.

A final lesson from behavioral sciences-inspired approach to public policy is an appreciation for the cyclical nature of the policy process. For example, lessons from behaviorally tested policy analyses—both positive and null findings—have been subsequently used to design other policy initiatives. Chetty et al. (2013) found that peoples' differential knowledge about EITC across the different states resulted in differential EITC take-up rates. That insight provided the input for other pilot-tests that directly evaluated the mediating mechanism—knowledge about tax codes (Bhargava & Manoli, 2015; Chetty & Saez, 2013). Chetty and Saez (2013) conducted an experiment with 43,000 EITC clients of tax-preparation software company H&R Block. Half of the tax filers were randomly selected to receive information from their tax preparer about the marginal incentive structure of the EITC, while the other half did not. They found that this informational intervention had no effect on individuals' earnings in the subsequent year on average. However, in another experiment,

Bhargava and Manoli (2015) mailed eligible individuals simplified information about the EITC to 35,000 individuals who were eligible for the EITC but did not file the tax forms needed to claim it. They found that such an informational mailing intervention raised EITC filing rates significantly.

It is interesting to note that a potential reason why providing information about EITC eligibility might have increased EITC take-up rates, but information about the EITC tax code structure did not appear to have much impact on earnings, could indeed be another behavioral lever—cognitive overload (Chetty, 2015). For example, individuals might have paid more attention to information that they have unclaimed benefits, that is, money on the table, as compared to information that their marginal wage is different from what they mistakenly calculate it to be in the absence of EITC. The second information needs additional mental processing and steps to realize immediate gains. Such behavioral insights that can uncover heterogeneous treatment effects of the EITC deserve much more attention and are fruitful lines of future research.

In all, we summarize the steps involved in a behaviorally enhanced policy analysis using a stylistic example. Figure 3, an example adapted from Weimer and Vining (2015),⁴ illustrates how a diagnosis of the policy problem that identifies psychological impediments can enrich the standard neoclassical framework of linking the policy problem (i.e., the rationale of government intervention) to various policy alternatives.

As Figure 3 illustrates, the first step in any policy analysis within the neoclassical framework is the examination of the presence or potential for market failure that provides a rationale for government intervention. Our example starts with a similar premise. However, if there is evidence, or if theory suggests that there is a potential for market failure, we further recommend that the policy analyst carry out a diagnosis to identify the psychological impediments that might exacerbate or attenuate the market failure. Such a diagnosis can result in the design and implementation of initiatives that can be evaluated using *behaviorally informed and tested* policy analyses. In the absence of any source of psychological impediment, we recommend the use of traditional policy tools such as taxes, subsidies, and/or regulations. However, we suggest that the policy analyst explore an *ex-post* policy analysis of these traditional policy tools using relevant behavioral levers, as evidenced from *behaviorally aligned* policy analyses we reviewed earlier.

Similarly, even in the absence of a market failure, government intervention can be justified on the grounds of equity, especially in the context of antipoverty programs. A diagnosis of the decision-making environment faced by the targets of such policies will help shed light onto the policy alternatives that might be effective. The take-up rates of such policy interventions and the effect on the outcome of interest can (and should) be evaluated using the behavioral paradigm as shown in the stylistic example of a behaviorally enhanced policy analysis.

Criticisms

The proliferation of behavioral sciences-inspired research for designing public policies is not without its share of critics. Some critics contend that such an over-reliance on low-cost interventions has distracted governments from implementing

more ambitious policies that rely on traditional policy instruments. They argue that while traditional policy instruments such as taxes and/or subsidies might be costlier to implement and harder to receive bipartisan support, taxes and subsidies may have a much larger potential to change behavior. For example, in a provocative editorial article titled "Economics Behaving Badly," George Loewenstein and Peter Ubel (2010) argued that informational e-mails encouraging lower energy use show just a modest impact on driving/household energy consuming behavior. However, a traditional price-based solution such as a well-calibrated carbon tax policy could unleash a much larger impact by aligning energy prices that internalize the externality; however, such an effort lacks political will. Similarly, studies shows that information provision interventions such as laws mandating calorie labeling in restaurant menus have shown just a modest impact on the provision and selection of healthy food options (Elbel, Kersh, Brescoll, & Beth Dixon, 2009; Namba, Auchincloss, Leonberg, & Wootan, 2013), thereby doing very little to combat a public health issue such as obesity. Instead, Loewenstein and Ubel (2010) argue that the lack of political will to end the corn subsidies that result in lower costs of high-fructose corn syrup and low-priced unhealthy processed foods continue to exacerbate the obesity epidemic.

The small effect sizes of many behaviorally enhanced policy interventions have been endlessly debated by both vehement critics and ardent defenders. Critics argue that some of the problems that behaviorally embedded policy initiatives are trying to solve are systemic, and can thus not be solved through just small and simplistic tweaks to policy design features (Bhargava & Loewenstein, 2015). However, defenders maintain that such small interventions resulting in marginal changes have the potential to add up to more than the sum of its parts. Indeed, the famous social psychologist that many consider to be the pioneer of this line of applied behavioral science, Professor Daniel Kahneman, has repeatedly communicated his optimism for incorporating behavioral insights into the public policy process. He emphasizes that these initiatives have the potential to achieve "medium-sized gains by nanosized investments" (Kahneman, 2013). By analyzing and explicating the relative costs and benefits of behaviorally embedded policy initiatives, we hope that public policy researchers can move past such polarized reactions. We believe that behavioral insights complement—and do not replace—the need for traditional policy tools such as taxes and subsidies.

Finally, some critics have questioned the ethics behind nudge-type policy initiatives. The criticism rests on the claim that these policy initiatives might result in policymakers manipulating citizens' choices by relying on certain automatic psychological processes of citizens (Bovens, 2009). While Hansen and Jespersen (2013) contend that not all nudges rely on automatic psychological processes, Thaler and Sunstein (2008) have argued that most nudges are liberty preserving because they do not alter the overall availability of choices to an individual. Hansen and Jespersen (2013) also emphasize that it is important to distinguish between transparent and nontransparent nudges when evaluating the ethicality of using such behaviorally enhanced policy initiatives. Most recently, Steffel, Williams, and Pogacar (2016) show how most nudges can be made completely transparent without reducing their benefits. We encourage more research to explore the ethics and the ultimate welfare implications of the use of this behavioral paradigm to policymaking. However, we

argue that such research should be conducted within the larger context of evaluating relative trade-offs and benefits to cost comparisons of alternative policy initiatives.

Conclusion

Insights from behavioral sciences hold tremendous promise for applied policy analytic work. In less than a decade since the publication of *Nudge* (Thaler & Sunstein, 2008)—viewed by many as the beginning of behavioral insights permeating the policy process—several key advances have been made to fully incorporate such insights into policy. However, there is not much consensus about *how* these insights can be fully incorporated into policy analysis. Our review aims to contribute toward building such a coherent approach for applying behavioral insights into the various stages of policy analysis and policy design.

First, behavioral insights should be integrated into *ex-ante* policy analysis more thoroughly by incorporating a diagnosis of the underlying policy problem—be it an analysis of a market failure or an antipoverty/equity concern that demands government intervention. Specifically, the interaction of peoples' psychological impediments that might exacerbate or attenuate the policy problem(s) needs to be explored before policy tools are designed and implemented to resolve the policy problem.

Second, behavioral insights should be incorporated into policy design and implementation. Automatic defaults, reminder e-mails, and text campaigns that enhance take up of governmental programs and social psychological interventions that help smooth psychological frictions for vulnerable populations such as students and low-income households, enhance the policy toolkit at the disposal of the government. Such behaviorally informed policy tools can also be used in combination with existing tools such as taxes and subsidies to enhance the intended consequences of government intervention. The behavioral revolution in public policy not only encourages the use of rigorous pilot-testing of policy initiatives using randomized control trials to increase the internal validity of causal impacts, but also to understand the mechanism of change underlying the policy initiative.

Last, behavioral insights enhance *ex-post* policy analysis by providing better models for peoples' behavioral responses to policy changes. By incorporating various behavioral levers in empirical models that evaluate policy impacts, we gain a better understanding of the expected and unexpected consequences of policies. Furthermore, such an integration of behavioral insights highlights the need to view the various stages of the policy process as a cyclical and reinforcing process. The lessons from one stage of the policy process such as *ex-post* policy analysis should inform the design of the new policy tools and the evaluation of policy alternatives in an *ex-ante* policy analysis.

As the field matures, and our understanding of human behavior continues to improve, we see that some problems can be improved through minor tweaks to policy design features. However, some other policy problems need a fundamental rethinking of the underlying assumptions of human nature. Classic social psychology research of behavior change carried out by Kurt Lewin entailed the study of a tension system consisting of conflicting forces in the environment that simultaneously push and pull an individual's behavior. Lewin distinguished between two kinds of

conflicting forces—restraining forces and driving forces—that form the basis for behavior change. “Driving forces” are those that help promote behavior change. In contrast, “restraining forces” are those that preclude behavior change. Kahneman (2013) explains how the Lewinian approach for identifying the restraining forces entails answering the question: “Why don’t people already do what I wish they do?”

Just as Lewin favored reducing the “restraining forces” over increasing the “driving forces” for behavior change, the first decade of the nudges approach to policy making has followed a similar trend of targeting the “restraining forces.” Behaviorally informed and tested policy analyses of initiatives that involve changes in framing, or tweaks to choice architecture can essentially be classified as the government/change agent reducing the “restraining forces” that precludes human beings from making choices that are in their best interest. However, we recommend that an over-reliance on eliminating the “restraining forces” should not preclude a deeper exploration of other “driving forces” that can be harnessed for behavior change. For example, in a recent Huffington Post article, Lamberton and Castleman (2016) call for *Nudge 2.0*—an expanded nudge toolkit especially in education that can go beyond simplifying information or providing reminders that enable students to follow through on their commitments. They call for additional interventions that provide professional assistance that can aid students’ decision making by specifically incorporating their identity, beliefs, psychological biases, and emotions. We call for further research to explore the impact of educational interventions based on basic social psychological theory that can support rather than merely nudge students into making decisions that enable them to achieve a high-quality educational experience.

Finally, we recommend the “pragmatic approach” advocated by economist Raj Chetty (2015) for the incorporation of behavioral elements and factors in the policy process. Rather than debating the validity of a behavioral approach as being in contrast to the neoclassical framework/assumptions, behavioral insights should be judged by the usefulness of its predictions and empirical validity. Scholars and practitioners carrying out policy analysis work must strive to incorporate behavioral insights into policy design and all the stages of policy analysis.

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Notes

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1. We adopt a broad definition of policy analysis in this article that includes Weimer and Vining's (2015) description of "policy analysis," "policy research," and "academic research." Weimer and Vining define "policy analysis" as a systematic assessment of alternative policy choices for policy problems that is largely carried out by analysts in a variety of public organizational settings such as federal, state, and local agencies. In contrast, they define "policy research" as pertaining to policy evaluations that aim at predicting the impact of changes driven by policies or the impact of changes in outcomes that can be "altered by public policy" (p. 26). Finally, they define "academic research" as empirical and theoretical analysis of public policy issues that aims to "contribute to a better understanding of society" (p. 25) that are not always relevant to specific public policies. This includes analyses published more traditionally in peer-reviewed academic journals. Given the blurring distinction between these categories, and how the empirical orientation and practice of policy analysts in governmental agencies have also begun to resemble academic and policy research, we adopt a broad definition of policy analysis in this review.
2. Key words used: nudges, behavioral economics, behavioral science, behavioral insights, interventions, behavioral insights for social policy, behavioral insights for education policy, behavioral foundation of public policy.
3. *Imperfect optimization*: category of psychological impediments that refers to errors people make when choosing among alternatives; *bounded self-control*: category of psychological impediments that reflects peoples' general tendency to not take action that has future benefits even when they recognize such benefits and would like to take action; *nonstandard preferences*: category of psychological impediments that pertains to people having preferences that are different from standard model. In this case, people are not making errors in choosing, or are not struck with the inability to take action even when they intend to. Their preferences (accurately identified and executed) are usually assumed away in the standard economic models.
4. Weimer and Vining (2015) include an additional category—government failure—that explores situations in which government intervention might fail. In those cases, they advocate policy solutions such as deregulation, legalization, and privatization. A burgeoning literature in political science and public administration is incorporating behavioral insights to understand and solve some sources of government failure. These problems most often pertain to problems of direct democracy and representative government that essentially explore the cognitive biases in electoral processes as well as in bureaucracy; however, a review and analysis of the insights from those studies to the policy process is beyond the scope of this review. We thus focus just on how behavioral insights can enhance our understanding of the sources of market failure and promote government delivery of antipoverty programs in the context of policy analysis and evaluation.

References

- Agarwal, Sumit, Souphala Chomsisengphet, Neale Mahoney, and Johannes Stroebel. 2015. "Regulating Consumer Financial Products: Evidence from Credit Cards." *The Quarterly Journal of Economics* 130 (1): 111–64.
- Aronson, Joshua, Carrie B. Fried, and Catherine Good. 2002. "Reducing the Effects of Stereotype Threat on African American College Students by Shaping Theories of Intelligence." *Journal of Experimental Social Psychology* 38: 113–25.
- Avery, Christopher. 2013. *Evaluation of the College Possible Program*. National Bureau of Economic Research Working Paper 19562. <http://www.nber.org/papers/w19562>. Accessed December 31, 2016.
- Bergman, Peter. n.d. *Parent-Child Information Frictions and Human Capital Investment: Evidence from a Field Experiment*. Working Paper. <http://www.columbia.edu/~psb2101/BergmanSubmission.pdf>. Accessed December 31, 2016.
- Bertrand, Marianne, and Adair Morse. 2011. "Information Disclosure, Cognitive Biases, and Payday Borrowing." *The Journal of Finance* 66 (6): 1865–93.
- Beshears, John, James J. Choi, David Laibson, and Brigitte C. Madrian. 2008. "The Importance of Default Options for Retirement Savings Outcomes: Evidence from the United States." In *Lessons from Pension Reform in the Americas*, ed. Stephen J. Kay, and Tapen Sinha. New York: Oxford University Press, 59–87.

- Bettinger, Eric, Bridget Terry Long, Philip Oreopoulos, and Lisa Sanbonmatsu. 2012. "The Role of Application Assistance and Information in College Decisions: Results from the H&R Block FAFSA Experiment." *The Quarterly Journal of Economics* 127 (3): 1205–42.
- Bhargava, Saurabh, and George Loewenstein. 2015. "Behavioral Economics and Public Policy 102: Beyond Nudging." *American Economic Review: Papers & Proceedings* 105 (5): 396–401.
- Bhargava, Saurabh, George Loewenstein, and Justin Sydnor. 2015. *Do Individuals Make Sensible Health Insurance Decisions?* National Bureau of Economic Research Working Paper No. 21160. <http://www.nber.org/papers/w21160>. Accessed December 31, 2016.
- Bhargava, Saurabh, and Dayanand Manoli. 2015. "Psychological Frictions and the Incomplete Take-Up of Social Benefits: Evidence from an IRS Field Experiment." *American Economic Review* 105 (11): 3489–529.
- Blackwell, Lisa S., Kali H. Trzesniewski, and Carol S. Dweck. 2007. "Implicit Theories of Intelligence Predict Achievement Across an Adolescent Transition: A Longitudinal Study and an Intervention." *Child Development* 78 (1): 246–63.
- Bovens, Luc. 2009. "The Ethics of Nudge." In *Preference Change: Approaches from Philosophy, Economics and Psychology*, ed. Till Grüne-Yanoff, and Sven Ove Hansson. Amsterdam: Springer, 207–19.
- Burnette, Jeni L., Ernest H. O. Boyle, Eric M. Vaneppe, Jeffrey M. Pollack, and Eli J. Finkel. 2013. "Mind-Sets Matter: A Meta-Analytic Review of Implicit Theories and Self-Regulation." *Psychological Bulletin* 139 (3): 655–701.
- Castleman, Benjamin L., and Lindsay C. Page. 2015. "Can Personalized Text Messages and Peer Mentor Outreach Increase College Going Among Low-Income High School Graduates?" *Journal of Economic Behavior & Organization* 115: 144–60.
- Chetty, Raj. 2015. "Behavioral Economics and Public Policy: A Pragmatic Perspective." *American Economic Review: Papers & Proceedings* 105 (5): 1–33.
- Chetty, Raj, John N. Friedman, Soren Leth-Petersen, Torben Nielsen, and Tore Olsen. 2014. "Active vs. Passive Decisions and Crowd-Out in Retirement Savings Accounts: Evidence from Denmark." *The Quarterly Journal of Economics* 129 (3): 1141–219.
- Chetty, Raj, John N. Friedman, and Emmanuel Saez. 2013. "Using Differences in Knowledge across Neighborhoods to Uncover the Impacts of the EITC on Earnings." *American Economic Review* 103 (7): 2683–721.
- Chetty, Raj, and Emmanuel Saez. 2013. "Teaching the Tax Code: Earnings Responses to an Experiment with EITC Recipients." *American Economic Journal: Applied Economics* 5 (1): 1–31.
- Congdon, William J. 2013. "Psychology and Economic Policy." In *Behavioral Foundations of Public Policy*, ed. Eldar Shafir. Princeton, NJ: Princeton University Press, 465.
- Congdon, William J., Jeffrey R. Kling, and Sendhil Mullainathan. 2011. *Policy and Choice: Public Finance through the Lens of Behavioral Economics*. Washington, DC: Brookings Institution Press.
- Cook, Philip J., Kenneth Dodge, Roland G. Fryer, Jonathan Guryan, Jens Ludwig, Susan Mayer, Harold Pollack, and Steinberg Laurence. 2014. *The (Surprising) Efficacy of Academic and Behavioral Intervention with Disadvantaged Youth: Results from a Randomized Experiment in Chicago*. National Bureau of Economic Research Working Paper No. 19862. <http://www.nber.org/papers/w19862>. Accessed December 31, 2016.
- Dechausay, Nadine, and Caitlin Anzelone. 2016. *Cutting Through Complexity: Using Behavioral Science to Improve Indiana's Child Care Subsidy Program*. OPRE Report No. 2016-03. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.
- Dechausay, Nadine, Caitlin Anzelone, and Leigh Reardon. 2015. *The Power of Prompts Using Behavioral Insights to Encourage People to Participate*. OPRE Report No. 2015-75. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.
- Dellavigna, Stefano, John A. List, and Ulrike Malmendier. 2012. "Testing for Altruism and Social Pressure in Charitable Giving." *The Quarterly Journal of Economics* 127 (1): 1–56.
- Dynarski, Susan M., and Judith E. Scott-Clayton. 2006. *The Cost of Complexity in Federal Student Aid: Lessons from Optimal Tax Theory and Behavioral Economics*. National Bureau of Economic Research Working Paper No. 12227. <http://www.nber.org/papers/w12227.pdf>. Accessed December 31, 2016.

- Eissa, Nada, and Hilary W. Hoynes. 2006. "Behavioral Responses to Taxes: Lessons from the EITC and Labor Supply." *Tax Policy and the Economy* 20: 73–110.
- Elbel, Brian, Rogan Kersh, Victoria L. Brescoll, and L. Beth Dixon. 2009. "Calorie Labeling and Food Choices: A First Look at the Effects on Low-Income People in New York City." *Health Affairs* 28 (6): w1110–21.
- Farrell, Mary, Jared Smith, Leigh Reardon, and Emmi Obara. 2016. *Framing the Message: Using Behavioral Economics to Engage TANF Recipients*. OPRE Report No 2015-02. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.
- Farrell, Mary, Peter Baird, Bret Barden, Mike Fishman, and Rachel Pardoe. 2013. "The TANF/SSI Disability Transition Project: Innovative Strategies for Serving TANF Recipients with Disabilities." OPRE Report 2013-51. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services. http://www.mdrc.org/sites/default/files/tanf_ssi_disability_transition_project_fr.pdf. Accessed December 31, 2016.
- Fryer, Roland G. 2013. *Information and Student Achievement: Evidence from a Cellular Phone Experiment*. http://scholar.harvard.edu/files/fryer/files/million_manuscriptjune2013_0.pdf. Accessed December 31, 2016.
- Fryer, Roland G., Steven D. Levitt, John List, and Sally Sadoff. 2012. *Enhancing the Efficacy of Teacher Incentives through Loss Aversion: A Field Experiment*. National Bureau of Economic Research Working Paper No. 18237. <http://www.nber.org/papers/w18237>. Accessed December 31, 2016.
- Hall, Crystal C., Martha M. Galvez, and Isaac M. Sederbaum. 2014. "Assumptions About Behavior and Choice in Response to Public Assistance: A Behavioral Decision Analysis." *Policy Insights from the Behavioral and Brain Sciences* 1 (1): 137–43.
- Hansen, Pelle Guldborg, and Andreas Maaløe Jespersen. 2013. "Nudge and the Manipulation of Choice: A Framework for the Responsible Use of the Nudge Approach to Behaviour Change in Public Policy." *European Journal of Risk and Regulation* 1: 3–28.
- Harackiewicz, Judith M., Christopher S. Rozek, Chris S. Hulleman, and Janet S. Hyde. 2012. "Helping Parents to Motivate Adolescents in Mathematics and Science: An Experimental Test of a Utility-Value Intervention." *Psychological Science* 23 (8): 899–906.
- ideas42. 2016. *Using Behavioral Economics for Postsecondary Success*. <http://www.ideas42.org/wp-content/uploads/2016/09/Nudging-For-Success-FINAL.pdf>. Accessed December 31, 2016.
- Ifill, Nicole, Alexandria Walton Radford, Forrest Emily Cataldi, David Wilson, and Jason Hill. 2016. "Persistence and Attainment of 2011–12 First-Time Postsecondary Students After 3 Years (BPS:12/14)." NCES 2016-401. U.S. Department of Education. Washington, DC: National Center for Education Statistics. <https://nces.ed.gov/pubs2016/2016401.pdf>. Accessed February 8, 2017.
- Iyengar, Sheena S., and Mark R. Lepper. 2000. "When Choice Is Demotivating: Can One Desire Too Much of a Good Thing?" *Journal of Personality and Social Psychology* 79 (6): 995–1006.
- Johnson, Eric J., and Daniel Goldstein. 2003. "Do Defaults Save Lives?" *Science* 302 (5649): 1338–39.
- Jones, Damon, and Aparajit Mahajan. 2015. *Time-Inconsistency and Saving: Experimental Evidence from Low-Income Tax Filers*. National Bureau of Economic Research Working Paper No. 21272. <http://www.nber.org/papers/w21272>. Accessed December 31, 2016.
- Kahneman, Daniel. 2013. "Foreword." In *Behavioral Foundations of Public Policy*, ed. Eldar Shafir. Princeton, NJ: Princeton University Press.
- Kamenica, Emir. 2012. "Behavioral Economics and Psychology of Incentives." *Annual Review of Economics* 4: 13.1–13.26.
- Karlan, Dean, Margaret McConnell, Sendhil Mullainathan, and Jonathan Zinman. 2016. "Getting to the Top of Mind: How Reminders Increase Saving." *Management Science* 62 (12): 3393–411.
- Karlan, Dean, and Jonathan Zinman. 2012. *Borrow Less Tomorrow: Behavioral Approaches to Debt Reduction*. <http://crr.bc.edu/wp-content/uploads/2012/05/FSP-WP-2012-1.pdf>. Accessed February 7, 2017.
- Kiefe, Catarina, Jeroan Allison, Dale Williams, Sharina Person, Michael Weaver, and Norman Weissman. 2001. "Improving Quality Improvement Using Achievable Benchmarks for Physician Feedback: A Randomized Control Trial." *Journal of American Medical Association* 285 (22): 2871–79.

- Kling, Jeffrey R., Sendhil Mullainathan, Eldar Shafir, Lee Vermeulen, and Marian Wrobel. 2012. "Comparison Friction: Experimental Evidence from Medicare Drug Plans." *The Quarterly Journal of Economics* 127: 199–235.
- Lamberton, Cait, and Benjamin Castleman. 2016. "Nudge 2.0: A Broader Toolkit for Lasting Behavior Change." *The Huffington Post*. http://www.huffingtonpost.com/cait-lamberton/nudge-20-a-broader-toolki_b_10108728.html. Accessed January 17, 2017.
- Lavecchia, Adam M., Heidi Liu, and Philip Oreopoulos. 2014. *Behavioral Economics of Education: Progress and Possibilities*. National Bureau of Economic Research Working Paper No. 20609. <http://www.nber.org/papers/w20609>. Accessed December 31, 2016.
- Liebman, Jeffrey B., and Erzo F. P. Luttmer. 2011. *Would People Behave Differently If They Better Understood Social Security? Evidence from a Field Experiment*. National Bureau of Economic Research Working Paper No. 17287. <http://www.nber.org/papers/w17287>. Accessed December 31, 2016.
- Loewenstein, George, Cass R. Sunstein, and Russell Golman. 2014. "Disclosure: Psychology Changes Everything." *Annual Review of Economics* 6: 391–419.
- Loewenstein, George, and Peter Ubel. 2010. "Economics Behaving Badly." *The New York Times* (July 14).
- Lourenço, Joana Sousa, Emanuele Ciriolo, Sara Rafael Almeida, and Troussard Xavier. 2016. *Behavioural Insights Applied to Policy European Report 2016*. EUR 27726 EN. European Commission. doi:10.2760/903938.
- Luca, Michael, and Jonathan Smith. 2013. "Salience in Quality Disclosure: Evidence from the U.S. News College Rankings." *Journal of Economics & Management Strategy* 22 (1): 58–77.
- Ludwig, Jens, Jeffrey R. Kling, and Sendhil Mullainathan. 2011. "Mechanism Experiments and Policy Evaluation." *Journal of Economic Perspectives* 25 (3): 17–38.
- Madrian, Brigitte C. 2014. "Applying Insights from Behavioral Economics to Policy Design." *Annual Review of Economics* 6: 663–88.
- Madrian, Brigitte C., and Dennis F. Shea. 2001. "The Power of Suggestion: Inertia in 401(k) Participation and Savings Behavior." *The Quarterly Journal of Economics* 116 (4): 1149–87.
- Mani, Anandi, Sendhil Mullainathan, Eldar Shafir, and Jiaying Zhao. 2013. "Poverty Impedes Cognitive Function." *Science* 341 (6149): 976–80.
- Manoli, Day, and Nick Turner. 2016. *Nudges and Learning: Evidence from Informational Interventions for Low-Income Taxpayers*. National Bureau of Economic Research Working Paper No. 20718. <http://www.nber.org/papers/w20718.pdf>. Accessed December 31, 2016.
- Mayer, Susan E., Ariel Kalil, Philip Oreopoulos, and Sebastian Gallegos. 2015. *Using Behavioral Insights to Increase Parental Engagement: The Parents and Children Together (PACT) Intervention*. National Bureau of Economic Research Working Paper No. 21602. <http://www.nber.org/papers/w21602>.
- Mortensen, Chad R., and Robert B. Cialdini. 2010. "Full-Cycle Social Psychology for Theory and Application." *Social and Personality Psychology Compass* 4 (1): 53–63.
- Namba, Alexa, Amy Auchincloss, Beth L. Leonberg, and Margo G. Wootan. 2013. "Exploratory Analysis of Fast-Food Chain Restaurant Menus Before and After Implementation of Local Calorie-Labeling Policies." *Prevention of Chronic Disorders* 10: 120224.
- Oreopoulos, Philip, Robert S. Brown, and Adam M. Lavecchia. 2014. *Pathways to Education: An Integrated Approach to Helping At-Risk High School Students*. National Bureau of Economic Research Working Paper No. 20430. <http://www.nber.org/papers/w20430>. Accessed December 31, 2016.
- Patterson, Mark, Saurabh Bhargava, and George Loewenstein. 2017. "An Unhealthy Attitude? New Insight into the Modest Effects of the NLEA." Working Paper. http://dd42c9be-a-62cb3a1a-sites.googlegroups.com/site/sbargav/NLEA_Patterson_Bhargava_Loewenstein.pdf?attachauth=ANoY7cruyLyrfHnbRQjFridCWG-KAzqohiCpxrNWePQBeTUjZKoTNRPLowi1I0NHEbZmSQQSBeFwnMaI7cmOVXquxTkEWqJ6nHynL8wtS9SyP2OaNA1wbXV2N_IgRGd-C8lM7kpMMq_j4t3FBaGh94LTodi hb9EK-c6o1Fw06WuZTusNHUv1hrnUiVqy8eZb9dCQ1VY47Sq1REyhRgUMXpK62wwfNKrn1JuCjt rvEODyWnEOjMD8rX0%3D&attredirects=0. Accessed February 7, 2017.
- Paunesku, David, Gregory M. Walton, Carissa Romero, Eric N. Smith, David S. Yeager, and Carol S. Dweck. 2015. "Mind-Set Interventions Are a Scalable Treatment for Academic Underachievement." *Psychological Science* 26 (6): 784–93.

- Richards, Michael R., and Jody Sindelar. 2013. "Rewarding Healthy Food Choices in SNAP: Behavioral Economic Applications." *The Milbank Quarterly* 91 (2): 395–412.
- Richburg-Hayes, Lashawn, Caitlin Anzelone, Nadine Dechausay, Saugato Datta, Alexandra Fiorillo, Louis Potok, Matthew Darling, and John Balz. 2014. *Behavioral Economics and Social Policy: Designing Innovative Solutions for Programs Supported by the Administration for Children and Families*. OPRE Report No. 2014-16a. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.
- Rosinger, Kelly. 2016. *Can Simplifying Financial Aid Information Impact College Enrollment and Borrowing? Experimental and Quasi-Experimental Evidence*. EdPolicyWorks Working Paper Series No. 49. <http://sbst.gov/download/2015%20SBST%20Annual%20Report.pdf>. Accessed February 7, 2017.
- Sacarny, Adam, David Yokum, Amy Finkelstein, and Shantanu Agrawal. 2016. "Medicare Letters to Curb Overprescribing of Controlled Substances Had No Detectable Effect on Providers." *Health Affairs* 35 (3): 471–79.
- Social and Behavioral Sciences Team (SBST). 2015. *Annual Report*. <https://sbst.gov/assets/files/2015-annual-report.pdf>. Accessed December 31, 2016.
- Starc Amanda. 2014. "Insurer Pricing and Consumer Welfare: Evidence from Medigap." *The RAND Journal of Economics* 45 (1): 198–220.
- Steffel, Mary, Elanor Williams, and Ruth Pogacar. 2016. "Ethically Deployed Defaults: Transparency and Consumer Protection Via Disclosure and Preference Articulation." *Journal of Marketing Research* 53 (5): 865–80.
- Thaler, Richard, and Cass Sunstein. 2003. "Libertarian Paternalism." *American Economic Review* 93 (2): 175–79.
- . 2008. *Nudge: Improving Decisions About Health, Wealth, and Happiness*. New Haven, CT: Yale University Press.
- Tversky, Amos, and Daniel Kahneman. 1991. "Loss Aversion in Riskless Choice: A Reference-Dependent Model." *The Quarterly Journal of Economics* 106: 1039–61.
- U.S. Department of Agriculture Food and Nutrition Service (USDA FNS). 2012. *Snap Education and Evaluation Study (Wave 1): Final Report*. http://www.fns.usda.gov/sites/default/files/SNAPEdWaveI_0.pdf. Accessed February 7, 2017.
- . 2014. *Evaluation of the Healthy Incentives Pilot (HIP) Final Report*. <http://www.fns.usda.gov/snap/healthy-incentives-pilot-final-evaluation-report>. Prepared by Abt Associates for the U.S. Department of Agriculture, Food and Nutrition Service. <http://www.fns.usda.gov/sites/default/files/HIP-Final.pdf>. Accessed February 7, 2017.
- U.S. Department of Education. 2013. Education Department Releases College Scorecard to Help Students Choose Best College for Them. Washington, DC: U.S. Government Printing Office.
- Walton, Gregory M., and Geoffrey Cohen. 2011. "A Brief Social-Belonging Intervention Improves Academic and Health Outcomes of Minority Students." *Science* 331: 1447–51.
- Weimer, David L., and Aidan R. Vining. 2015. *Policy Analysis: Concepts and Practice*. New York: Routledge.
- Yeager, David S., and Gregory M. Walton. 2011. "Social-Psychological Interventions in Education: They're Not Magic." *Review of Educational Research* 81 (2): 267–301.
- Yeager, David S., Gregory M. Walton, Shannon T. Brady, Ezgi N. Akcinar, David Paunesku, Laura Keane, Donald Kamentz et al. 2016. "Teaching a Lay Theory Before College Narrows Achievement Gaps at Scale." *Proceedings of National Academy of Sciences* 113 (24): E3341–48.

Appendix

Table A1. Overview of Short-Listed Policy Initiatives with Behavioral Insights

Study	Results	Citation
<i>Behaviorally Tested Policy Analysis Examples</i>		
Increasing number of incarcerated noncustodial parents (NCP) who complete an application for modification of their child support order	Compared to control group, treated NCPs were 11 percentage points more likely to complete the order modification.	Richburg-Hayes et al. (2014)
Increasing enrollment of service members into thrift savings plan	Compared with no message, e-mails informed by behavioral insights led to roughly 4,930 new enrollments and \$1.3 million in savings in a month.	SBST (2015)
Increasing collections of child support arrears from noncustodial parents through behaviorally informed reminders	Compared to no message, reminders increased number of NCPs making a payment by 2.9 percentage points.	Richburg-Hayes et al. (2014)
Increasing re-engagement of TANF in welfare-to-work initiatives	Compared to control group, members who took action and became positively engaged 30 days after their scheduled appointment increased by 3.6 percentage points, a 14 percent increase. However, after 60 days no sustained impact was found.	Farrell et al. (2016)
Educating SNAP recipients on benefits of healthy eating	In one out of four programs statistically significant effects found. Compared to control group, treated children increased consumption of fruits, vegetables, and low-fat milk.	USDA FNS (2012)
Reducing prescription rates of controlled-substances by invoking social comparisons	Intervention did not show any statistically significant effects on prescription rates of controlled substances.	Sacarny et al. (2016)
Increasing information disclosure about cost of payday loans	Modest, but statistically significant impacts of providing information about cost of payday loans (effects vary across treatment arms).	Bertrand and Morse (2011)
Increasing take up of EITCs through information provision	Compared to control group, decreasing complexity increased take up of EITC by 6 percentage points.	Bhargava and Manoli (2015)
Increasing earnings responses to EITC through intervention teaching the structure of tax code	Intervention did not show any statistically significant effects on wage earnings of treated individuals.	Chetty et al. (2013)
Aiding Federal Health Insurance marketplace enrollment through reminders	Compared to no message, those who were sent the most effective reminder were 0.53 percentage points more likely to enroll in health insurance plan.	SBST (2015)
Increase renewal of low-income households' child care subsidies	Parents in treated child care centers that reminded the parents to renew their child care subsidy, increased on-time renewal rate by 2.4 percentage points.	Dechausay, Anzelone, and Reardon (2015)
Increasing engagement of low-income single workers receiving EITC supplements	Compared to control group, treated EITC supplement recipients were 7.1 percentage points more likely to attend meetings. Compared to control group, social pressure of turning down door-to-door	Dechausay et al. (2015) Dellavigna et al. (2012)

Table A1. *cont.*

Study	Results	Citation
Increased charitable giving by invoking social norms (and social pressure)	charity raising campaign increases charitable giving among treated participants.	
Increasing Healthy Food Choices in the Supplemental Nutritional Assistance Program (SNAP)	Compared to control group, treated participants who received 30 cents for every SNAP dollar spent on targeted fruits and vegetables, increased their consumption of fruits and vegetables by 26 percent.	USDA FNS (2014)
Encouraging optimal choice in Medicare drug plan selection through information provision	Compared to no information provision, intervention caused an average decline in predicted consumer cost of about \$100 a year among letter recipients.	Kling, Mullainathan, Shafir, Vermeulen, and Wrobel (2012)
Increasing collections from individuals with outstanding nontax debt appealing to social norms	Compared to the standard collection letter, those who received showed no difference in payment rates.	SBST (2015)
Increasing labor force participation among older workers through provision of information about Social Security provisions	Compared to no information, intervention increased labor force participation one year later by 4 percentage points.	Liebman and Luttmer (2011)
Reducing debt among low-income consumers using reminder notices, peer support, and goal setting interventions	Intervention did not show any statistically significant effects on debt reduction.	Karlan and Zinman (2012)
Commitment devices and monetary incentives to reduce time-inconsistent preferences in savings among low-income tax filers	Effects vary across treatment arms. Compared to control group, treated low-income tax filers increase soft-commitment to save by 30–35 percentage points. Immediate incentive effect on savings is nearly twice as large as the delayed incentive effect.	Jones and Mahajan (2015)
Increasing college enrollment of low-income students using prefilled FAFSA forms	Compared to control group, high school seniors whose parents received the treatment were 8 percentage points more likely to have completed two years of college (going up from 28 to 36 percent).	Bettinger et al. (2012)
Increasing students' growth mindset (ability to view intelligence as malleable) and a sense of purpose in schools	Compared to control group, at-risk students who received the growth mindset intervention received higher GPA and were 6.4 percentage points more likely to perform satisfactorily in core courses.	Paunesku et al. (2015)
Increasing students' sense of belonging in college	Compared to control group, treated ethnic minority and first generation students received higher GPA and were less likely to drop out from college in the sophomore year (effects vary across three studies reported in the paper).	Yeager et al. (2016)
Text messaging campaign reminding students to complete pre-matriculation tasks	Compared to control group, students who received the text messages were 5.7 percentage points more likely to enroll in college.	Castleman and Page (2015)
Peer mentoring campaign to help high school seniors navigate transition to college	Effects vary across sites. In some sites, compared to control group, treated students were 4 percentage points more likely to enroll in colleges.	Castleman and Page (2015)
		ideas42 (2016)

Table A1. *cont.*

Study	Results	Citation
Text messaging campaign to reduce student loan borrowing costs in a community college	Compared to control group, those students who received the text messages borrowed less (\$2,218 compared to \$2,401).	
Online intervention using smartphone app to increase FAFSA application completion rates	Compared to control group, incoming freshmen who received the reminders were 22 percent more likely to complete FAFSA applications.	ideas42 (2016)
Increasing students' academic outcomes through parental engagement via calls and text	Compared to control group, students whose parents were eligible for treatment experienced a 0.23 standard deviation increase in GPA and improvement in classroom behavior by 6 percentage points. Treated parents were 7.9 percentage points more likely to attend parent-teacher conferences.	Bergman (n.d.)
Increasing students' enrollment in STEM courses through parental engagement	Compared to control group parents who received no brochures about value of STEM courses, students of treated parents enrolled in nearly one more semester of STEM courses.	Harackiewicz, Rozek, Hulleman, and Hyde (2012)
Increasing college enrollment of disadvantaged youth using counseling and tutoring services	Compared to control group students, treated students were 30 percentage points more likely to apply to four-year colleges, submitted more college applications to selective colleges, and were 15 percentage points more likely to enroll in college.	Avery (2013)
Increasing parental engagement in subsidized preschool programs through behavioral tools	Compared to the control group parents, treated parents who received text reminders, goal-setting, and social rewards increased usage of reading application by one standard deviation.	Mayer, Kalil, Oreopoulos, and Gallegos (2015)
Increasing efficacy of teacher incentives framing using loss aversion	Students whose teachers received the reframed incentive structure using loss aversion (teachers are paid in advance and asked to give back the money if their students do not improve) sufficiently showed between 0.201 and 0.398 standard deviation gains in math test scores	Fryer et al. (2012)
Providing cognitive behavioral therapy to disadvantaged youth in Chicago	Compared to control group, participation in treatment increased math test scores by 0.65 standard deviation and expected graduation rates by 14 percentage points.	Cook et al. (2014)
Increasing student performance using cell phone, texts, and other phone-based reading activities	Students that received cellular phones prompting reading activities/informational texts were 15 percentage points more likely to report feeling more focused or excited about doing well in school, but no detectable effect on attendance, suspensions, or test scores.	Fryer (2013)
<i>Behaviorally Informed Policy Analysis Examples</i>		
Impact of regulations mandating information disclosure—CARD Act of 2009	Information disclosure requirements only had a negligible (but statistically significant) effect on borrowers' repayment behavior. Account holders	Agarwal et al. (2015)

Table A1. *cont.*

Study	Results	Citation
	responding to information disclosed increased by less than a percentage point.	
Regulations mandating standardization of Medigap insurance plans across the United States	To the best of our knowledge, we are not aware of any rigorous evaluation of the specific standardization policy. However, there is some evidence that a restriction on insurance plan differentiations might result in suboptimal consumer welfare.	Starc (2014)
Exploring informational interventions to help TANF recipients with disabilities who were also eligible for Social Security Disability Insurance (SSDI) recipients	Results vary across sites. Integrated Placement and Support model used by SSDI program showed promise for use by TANF recipients with disabilities.	Farrell, Baird, Barden, Fishman, and Pardoe (2013)
Increasing student loan payments using reminders	Reminder e-mail led to a 29.6 percent increase in the fraction of borrowers making a payment by the end of the first week after delivery of e-mail.	SBST (2015)
Informing student borrowers about IDR plans	The informational e-mail led to a substantial increase in applications for IDR plans within 20 days of the e-mail being sent. Among the group that received the e-mail, 4,327 applied for IDR as opposed to the 982 IDR applications received from the comparison group who had not yet received the informational e-mail.	SBST (2015)
Simplifying information about IDR plans	Ongoing evaluation	SBST (2015)
College Scorecard: Provision of standardized information about colleges to improve postsecondary college choices	To the best of our knowledge, we are not aware of any rigorous evaluation of this initiative.	U.S. Department of Education (2013), hereafter USDOE
Financial Aid Shopping Sheet: Provision of standardized information about graduation rate, loan default rate across various colleges	Ongoing evaluation. Preliminary quasi-experimental results show a 2.6 percentage point decrease in the share of students borrowing federal loans in colleges that adopted the "shopping sheet"	USDOE (2013); Rosinger (2016)
<i>Behaviorally Aligned Policy Analysis Examples</i>		
Identifying spatial variation in EITCs take-up rates across states in the United States	Spatial variation in take-up rates of EITC across states identified using behavioral insights about knowledge diffusion.	Chetty et al. (2013)
Identifying behaviorally informed proposals to encourage healthy food choices in the SNAP	Identify behaviorally aligned proposal reforms in the SNAP to encourage healthy eating.	Richards and Sindelar (2013)
Identifying crowd-out effects of automatic enrollment default options on total savings	Identify negligible crowd-out effects on (total savings) of automatic enrollment default options.	Chetty et al. (2014)
Understanding individuals' choices of health insurance plans	Identify how low-income households make suboptimal health insurance plan choices when provided a complex choice set.	Bhargava et al. (2015)
Understanding the impact of Nutrition Labeling and Education	Limited impact of NLEA on attitudes and behavior of individuals, consistent with previous literature. Using	Patterson, Bhargava, and Loewenstein (2017)

Table A1. *cont.*

Study	Results	Citation
Act (NLEA)1990 on consumer attitudes and behaviors	behavioral models in their analysis, authors illuminate the mechanisms resulting in limited impact of NLEA.	
Identifying longer term effects of an EITC eligibility information provision intervention	Effects of information provision about EITC eligibility attenuates EITC take-up rates from 80 to 22 percent within a year.	Manoli and Turner (2016)
Understanding the impact of menu-labeling laws on availability of healthy food choices in low-income neighborhoods	Overall availability of healthy food choices remained low over the period. However, restaurants located in areas that implemented calorie labeling increased their healthier entrée options.	Namba et al. (2013)
Understanding the impact of increasing salience of university ranking system	Using a natural experiment, authors find that a one-rank improvement leads to a 1-percentage-point increase in the number of applications to that college.	Luca and Smith (2013)
Understanding the impact of free tutoring, group mentoring, and cash incentive to improve college choices	Eligibility to intervention components increases graduation rates from high school by 15 percentage points, college enrollments by 19 percentage points and test scores by 0.15 standard deviations.	Oreopoulos, Brown, and Lavecchia (2014)