


## ARTICLES

Submitted 04-06-2022. Approved 08-31-2022.

Evaluated through a double-blind review process. Associate Editor: Felipe Gonçalves Brasil

Reviewers: Marcos Arcaño de Assis , Fundação João Pinheiro, Escola De Governo Professor Paulo Neves de Carvalho, Belo Horizonte, MG, Brasil. One of the reviewers did not authorize the disclosure of their identity.

DOI: <https://doi.org/10.12660/cgpc.v28.85619>

# MAPPING THE POLICY DESIGN RESEARCH: A SYSTEMATIC LITERATURE REVIEW

*Mapeando a pesquisa de desenho de políticas públicas: uma revisão sistemática da literatura*  
*Mapeo de la investigación de diseño de políticas: una revisión sistemática de la literatura*

Rafael Barbosa de Aguiar<sup>1</sup> | rafaelba@yahoo.com.br | ORCID: 0000-0002-2418-6845

Fabiano Jorge Soares<sup>2</sup> | fabianojorgesrs@gmail.com | ORCID: 0000-0002-1988-9749

Luciana Leite Lima<sup>2</sup> | lucianaleitelima@gmail.com | ORCID: 0000-0002-8761-4114

\*Corresponding author

<sup>1</sup>Universidade Federal do Rio Grande do Sul, Programa de Pós-Graduação em Políticas Públicas, Porto Alegre, RS, Brasil

<sup>2</sup>Fundação Getúlio Vargas, Escola de Administração de Empresas de São Paulo, São Paulo, SP, Brasil

## ABSTRACT

This article explores and synthesizes the literature on policy design, a subfield of policy analysis that has received increasing attention over the last few decades. During this period, it contributed to expanding knowledge on the functioning of public policies, implementation instruments, the rationality of decision-making processes, governance systems, social effects, etc. Despite the policy design's importance, the current literature lacks a systematic analysis. Contributing to this agenda, this review aims to provide a field's networking linkage, summarizing and classifying existing research through bibliometric and systematic reviews. To do so, data were collected on the Web of Science database covering the period from 1945 to December 31, 2020, capturing 493 articles in the initial search, and publications' connectedness was analyzed by creating a network map with the frequency of assessments of a simultaneous citation using VOSViewer, and then each cluster was scrutinized applying qualitative methods to understand their relationship. As a result, 184 papers focused explicitly on policy design were selected and then clustered in nine different groups. It should be noticed that implementation instruments represent a very fruitful field of the design's perspective, influencing five clusters, and other relevant topics concerning governance, means of interaction and representation, institutional analysis, and the policy design theoretical construction also appeared. Regardless of developing countries' clusters, most studies empirically focused on China, evidencing that there is room for studies concerning Latin American and African contexts.

**Keywords:** policy design, systematic literature review, bibliometric clustering, policy analysis, public policy.

## RESUMO

Este artigo explora e sintetiza a literatura sobre desenho de políticas, um subcampo da análise de políticas que tem recebido atenção crescente nas últimas décadas. Nesse período, tal subcampo contribuiu para ampliar o conhecimento sobre o funcionamento das políticas públicas, dos instrumentos de implementação, da racionalidade dos processos decisórios, dos sistemas de governança, dos seus efeitos sociais etc. Apesar da importância do desenho de políticas, a literatura atual carece de uma análise sistemática. Colaborando para essa agenda, esta revisão teve como objetivo fornecer a ligação em rede do campo, resumindo e classificando as pesquisas existentes por meio de revisões bibliométricas e sistemáticas. Para isso, coletamos os dados na base de dados Web of Science de 1945 a 31 de dezembro de 2020, capturando 493 artigos por meio da busca inicial, e analisamos a conectividade das publicações criando um mapa de rede por meio de avaliações de frequência de uma citação simultânea usando o VOSViewer. Em seguida, examinamos cada cluster aplicando métodos qualitativos para entender seu relacionamento. Como resultado, selecionamos 184 artigos focados explicitamente no desenho de políticas, agrupados em nove grupos diferentes. Podemos notar que os instrumentos de implementação representam um campo muito frutífero da perspectiva do desenho, influenciando cinco clusters, e outros temas relevantes, como governança, meios de interação e representação, análise institucional e construção teórica do desenho de políticas, também apareceram. Apesar da existência do cluster de países em desenvolvimento, a maioria dos estudos concentrou-se empiricamente na China, evidenciando que há espaço para estudos sobre os contextos latino-americano e africano.

**Palavras-chave:** desenho de políticas públicas, revisão sistemática de literatura, agrupamento bibliométrico, análise de políticas públicas, políticas públicas.

## RESUMEN

Este artículo explora y sintetiza la literatura sobre el diseño de políticas, un subcampo del análisis de políticas que ha recibido una atención creciente en las últimas décadas. Durante este período contribuyó a ampliar el conocimiento sobre el funcionamiento de las políticas públicas, los instrumentos de implementación, la racionalidad de los procesos de toma de decisiones, los sistemas de gobernanza, los efectos sociales, etc. A pesar de la importancia de lo diseño de políticas, la literatura actual carece de un análisis sistemático, contribuyendo a esta agenda, esta revisión tiene como objetivo proporcionar un vínculo de red de campo, resumiendo y clasificando la investigación existente a través de revisiones bibliométricas y sistemáticas. Para ello, recopilamos los datos en la base de datos de Web of Science desde 1945 hasta el 31 de diciembre de 2020, capturando 493 artículos a través de la búsqueda inicial, y analizamos la conectividad de las publicaciones creando un mapa de red a través de evaluaciones de frecuencia de una cita simultánea usando VOSViewer, y luego examinamos cada grupo aplicando métodos cualitativos para comprender su relación. Como resultado, seleccionamos solo 184 artículos centrados explícitamente en el diseño de políticas, agrupados en nueve grupos diferentes. Podemos notar que los instrumentos de implementación representan un campo muy fructífero de la perspectiva del diseño, incidiendo en cinco clusters, y también aparecieron otros temas relevantes relacionados con la gobernanza, los medios de interacción y representación, el análisis institucional y la construcción teórica del diseño de políticas. A pesar de la existencia del cluster de países en desarrollo, la mayoría de los estudios se han centrado empíricamente en China, lo que demuestra que hay espacio para estudios sobre los contextos latinoamericano y africano.

**Palabras-chave:** diseño de políticas públicas, revisión sistemática de literatura, agrupamiento bibliométrico, análisis de políticas, políticas públicas.

## INTRODUCTION

Policy design has occupied policy sciences since its inception (Lima, Aguiar, & Lui, 2022). As a distinct topic of analysis, it emerged in the 1960s and 1970s (Howlett & Lejano, 2013; Howlett, 2014), and is “defined both as policy formulation and policy content” (Siddiki, 2020, p. 3). Nevertheless, greater theoretical, conceptual and methodological formalization only occurred in the 1980s (Howlett & Lejano, 2013; Caires, 2019; Peters, 2020a; Siddiki, 2020). In this context, Linder & Peters (1988) made an analytical proposition suggesting that the policy formulation process and the design concept should be treated as separate categories of analysis, taking an important step towards structuring policy design as a perspective for understanding the policy process (Lima, Aguiar, & Lui, 2022).

Hereupon, policy design is a specific form of policy formulation based on collecting and applying knowledge about tools for developing and implementing strategies to achieve political ambitions (Howlett & Lejano, 2013). Considering the current situation in which policymakers “are often tasked with developing innovative solutions to increasingly complex political problems, the need for intelligent design and a better understanding of the formulation processes they involve has never been greater” (Pluchinotta, Giordano, Zikos, Krueger, & Tsoukiàs, 2020, p. 492).

Although the existing dominant literature on policymaking seems to underestimate the potential of the design to solve problems (Ferretti, Pluchinotta, & Tsoukiàs, 2019), addressing it as part of the political process, something that happens in a ‘black box’ (Birkland, 2015), the public policy’s capacity “to respond effectively to complex contemporary social problems could be significantly enriched by a shift in policy analysis, away from methods emphasizing the assessment of pre-ordained and well-defined alternatives, and towards policy design” (Dryzek, 1983). In this regard, the design’s purpose would be to reduce the “randomness” of the policy formulation by structuring and giving rationality to the process. Thus, design analysis allows us to explore how it can improve formulation practice and assist policy analysts.

The field offers some congruent concepts: policy design involves a deliberate and conscious attempt to define objectives, connect them to instruments expected to achieve those objectives (Howlett, Mukherjee, & Woo, 2015); “involves recognizing the existence of a problem present within the economy and society, attempting to understand the dynamics operating within that problem, and then devising a putative solution” (Peters, 2020a, p. 131); “calls to mind both goal-direction and the intention of achieving that goal, along with rational planning of the means to reach it” (Turnbull, 2018, p. 2); it involves the conscious effort on the part of analysts and advisors to scrutinize, learn and apply lessons from best practices and past policy successes and failures to the crafting of policy alternatives which are expected to achieve government aims and ambitions efficiently and effectively (Howlett, 2020).

Even though the field of policy design has received increasing attention over the last few decades, the current literature lacks a systematic analysis. This systematization is important “to advance the understanding of both designs themselves and the processes which lead to their adoption, implementation, evaluation, and reform” (Howlett, 2014, p. 190). The lack of

this systematization in the field can compromise the identification of its main attributes, limit the disclosure of relevant issues and tensions in the literature, and obscure the motivation of further studies (Micheli, Wilner, Bhatti, Mura, & Beverland, 2019). Also, “this dearth of clarity risks hindering the process of scientific cumulation in public policy studies because the presence of so many conceptual options leads to persistent fragmentation of the field” (Acciai & Capano, 2021, p. 1). This article systematizes extant literature and, thus, contributes by grouping the scientific knowledge concerning policy design, and offering a rigorous examination of the policy design’s network linkage in order to achieve a broader and deeper conceptualization of the field.

Lastly, this article complements existing studies (Howlett & Lejano, 2013; Howlett, 2014; Howlett et al., 2015; Lima, Aguiar, & Lui, 2021; 2022) by providing systematic analysis through bibliometric clustering technique of the topic. This review traces the policy design networking linkage contributing to help advance the re-invigoration of a design orientation (Howlett et al., 2015). Following this rationale: how is the policy design research linked? The article aims to provide a field’s networking linkage, summarizing and classifying existing research through bibliometric and systematic reviews, and its main contributions are twofold: i) build a basis for further development of the theme at national level; and ii) present emerging venues for future research.

## METHODOLOGY

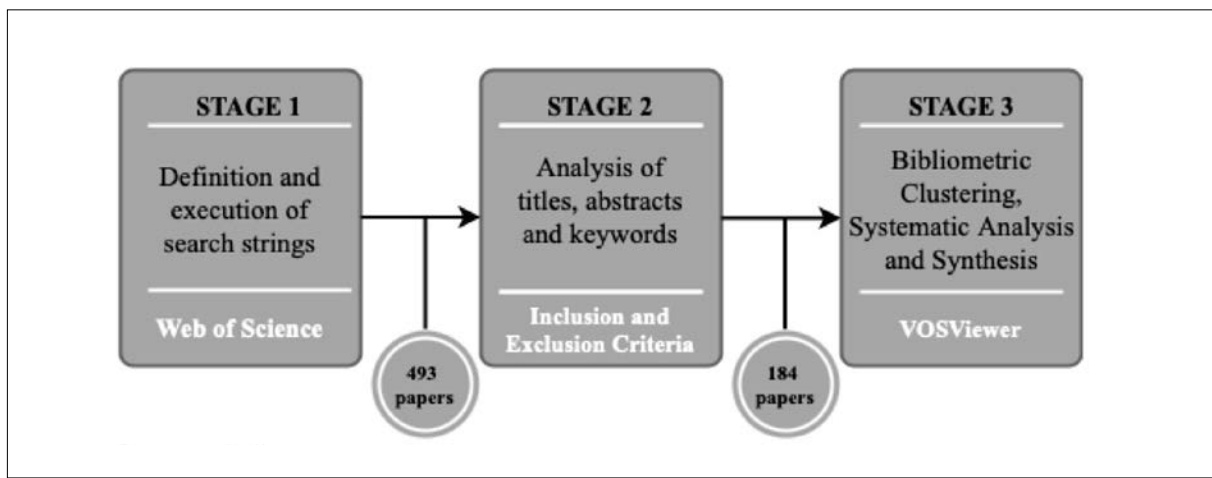
This exploratory and descriptive research aims to produce information about the policy design field. A qualitative systematic review approach was adopted (Grant & Booth, 2009) to advance the understanding of the policy design domain, integrating and analyzing findings from qualitative studies clustered by a bibliometric technique to further contribute to policy and research.

Systematic literature reviews (SLR) are “a method of mapping out areas of uncertainty, and identifying where little or no relevant research has been done, but where new studies are needed” (Petticrew & Roberts, 2006, p. 2). The researcher is “required to set prespecified relevance and qualify criteria for the selection/inclusion of studies to make such criteria transparent to readers” (Denyer & Tranfield, 2009, p. 671); and “might be expected to provide solid and dependable evidence that is robust and has potential for transfer across different contexts” (Denyer & Tranfield, 2009, pp. 671-672).

Considering that literature reviews generally adopt descriptive and narrative approaches, often criticized due to their lack of soundness concerning methodological rigor and inherent bias (Paré, Trudel, Jaana, & Kitsiou, 2015), scholars have turned to SLR (Tranfield, Denyer, & Smart, 2003; Silva, Ghezzi, Aguiar, Cortimiglia, & ten Caten, 2019), since SLR helps to minimize bias and has explicit, reproducible criteria and transparent process when compared to approaches like a survey or traditional general reviews (Petticrew & Roberts, 2006).

Thus, the “systematic review increasingly has become a standard method for locating, selecting, and appraising research and transferring the synthesized findings not only to researchers and academics but also to practitioners and policymakers in a digestible format to inform action” (Denyer & Tranfield, 2009, p. 673). Figure 1 illustrates the process flow of different stages in the review process and the methods used to search, screen, and select studies for inclusion in the synthesis.

Figure 1. Stages of the planning and selecting steps



Source: Authors.

## Stage 1 – Search strategy

Given the multidisciplinary nature of our inquiry, the need for uniform indices, and the technical challenges of multi-source comparative analyses, we limited our search to the Web of Science (WoS) database since it is considered a reliable source for citation data processing (Virani, Wellstead, & Howlett, 2020; Zha, Melewar, Foroudi, & Jin, 2020). The search was limited to Political Science and Public Administration disciplines to ensure our search would not be too broad and would still be focused on relevant research fields (Soto-Simeone, Sirén, & Antretter, 2020). Nonetheless, while our search is not all-inclusive, it provides a reasonably representative snapshot of the state of policy design research (Virani et al., 2020).

We included only journal articles in our analysis, as they constitute the standard format for scholarly publications (Klang, Wallnöfer, & Hacklin, 2014), and excluded reviews, books, book chapters, conference proceedings, editorial material, trade publications, and industry reports. While recognizing that books and book chapters significantly impact the field, we delimited our sample to allow a comparable and easily accessible dataset following similar research on the policy domain (Acciai & Capano, 2021). Focusing mainly on published journal articles allows for constructing a highly comparable sample of sources in terms of accuracy, length, and research content (Acciai & Capano, 2021). Only articles written in English were included.

Although we did not specifically add a time restriction, WoS only retrieves materials from 1945 on. The initial search employed the following Boolean string to identify publications that refer to policy design in their titles, abstracts, or keywords: (“policy design\*”).

## Stage 2 – Appraisal – Inclusion and Exclusion Criteria

After executing the search strings, we removed duplicate records (one document). Based on the appraisal of the publication titles, abstracts, and keywords, the search results of the shortlisted publications were refined according to the inclusive and exclusive criteria presented in Table 1. Full texts were scrutinized to check whether titles and abstracts were either ambiguous or insufficient for decision.

Table 1. Inclusive and exclusive criteria

INCLUSION CRITERIA	
Language	English
Timespan	From 1945 to 12/31/2020
Document types	Journal Article
Discipline-specific Databases	Political Science and Public Administration
Research Focus	Policy design explicitly Those that applied tools/theories/frameworks in policy design analysis (e.g., design thinking, institutional grammar tool, social construction, so on)
EXCLUSION CRITERIA	
Document types	Proceedings, books, book chapters, newspapers, magazines, and editorial materials
Research Focus	Concerning other areas of the policy process (e.g., agenda-setting, implementation, evaluation) and/or using theories to analyze them. Studies that superficially address policy design (e.g., policy design is only related as a result to the success or failure of the policy)

Source: Authors.

## Stage 3 – Data extraction, bibliometric clustering, and systematic analysis

Metrics were extracted from the papers using the inbuilt tools for citation analysis within WoS. The data file was later cleaned and imported into VOSviewer software to create and visualize network maps based on bibliographic data (van Eck & Waltman, 2010). The selected publications were clustered to identify policy design’s knowledge production patterns. We employed a citation

analysis based on the hypothesis that authors cite documents considered the most important in developing their research (Culnan, 1987).

Following van Eck and Waltman (2017), direct citation relations rather than bibliographic coupling relations (e.g., relations between publications that cite the same publication) or co-citation relations (e.g., relations between publications that are cited by the same publication) were used for two reasons: i) considering that bibliographic coupling and co-citation are indirect relations, they are expected to provide less accurate information on the relatedness of publications; and ii) the use of bibliographic coupling or co-citation may easily lead to computational problems once there are many more relations between publications.

VOSViewer software creates the direct citation relations cluster establishing a link between two items where one item cites the other. By default, it also assigns the nodes in a network to clusters. A cluster “is a set of closely related nodes. Each node in a network is assigned to exactly one cluster” (van Eck & Waltman, 2014, p. 10), and a resolution parameter determines the number of clusters.

A network map was created to analyze publications’ connectedness through frequency assessments of simultaneous citation. Then, each cluster was scrutinized by applying qualitative methods to understand their relationship. To do so, the policy design domain was outlined and synthesized; and the content analysis aimed at: i) spotting conceptual gaps: seeking to complete literature reviews in which gaps are identified, future research agendas are articulated within well-defined literature, and some observations regarding extant literature are made (Alvesson & Sandberg, 2013); and ii) organizing and categorizing literatures: seeking to review the body of literature according to the bibliometric clustering technique (Breslin & Gatrell, 2020).

## RESULTS AND DISCUSSION

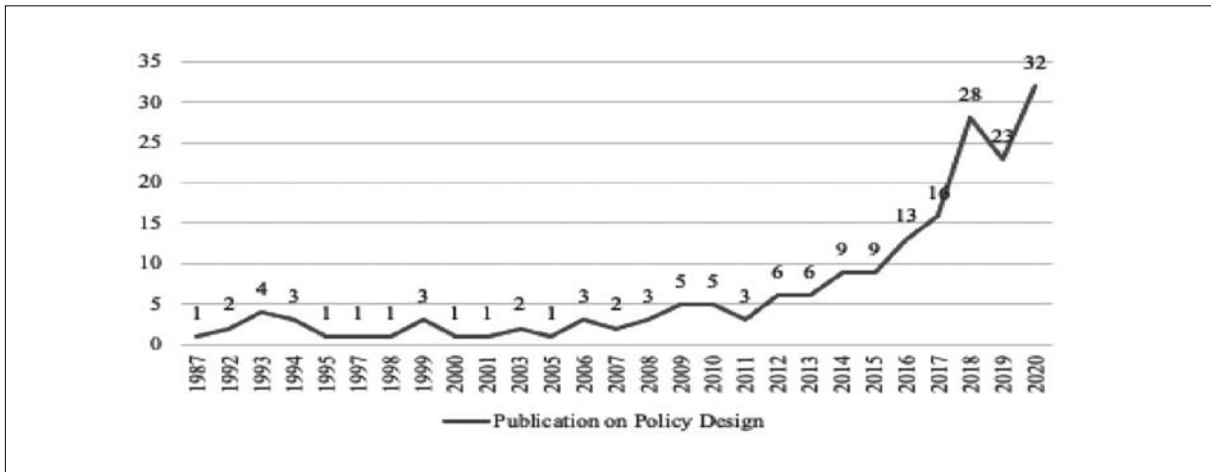
### Production trends in policy design research

Out of the 426 records captured through the initial search, we identified 184 papers focused explicitly on policy design and/or applying tools/theories/frameworks to its analyses. With approximately 40% of papers focusing on policy design, we noticed that most researchers use the term “policy design” but do not mobilize the approaches from the field.

The earliest known publication on policy design dates back to 1987 and examines the growing awareness of policy design as a significant shift from earlier emphases on implementation and evaluation (Ingraham, 1987). Since the late 1980s, research on policy design has been frequent, however, despite the recognition of growing interest regarding policy design, it is only after 2011 that we notice a substantial increase in publications (Figure 2).



Figure 2. Publication trends in policy design

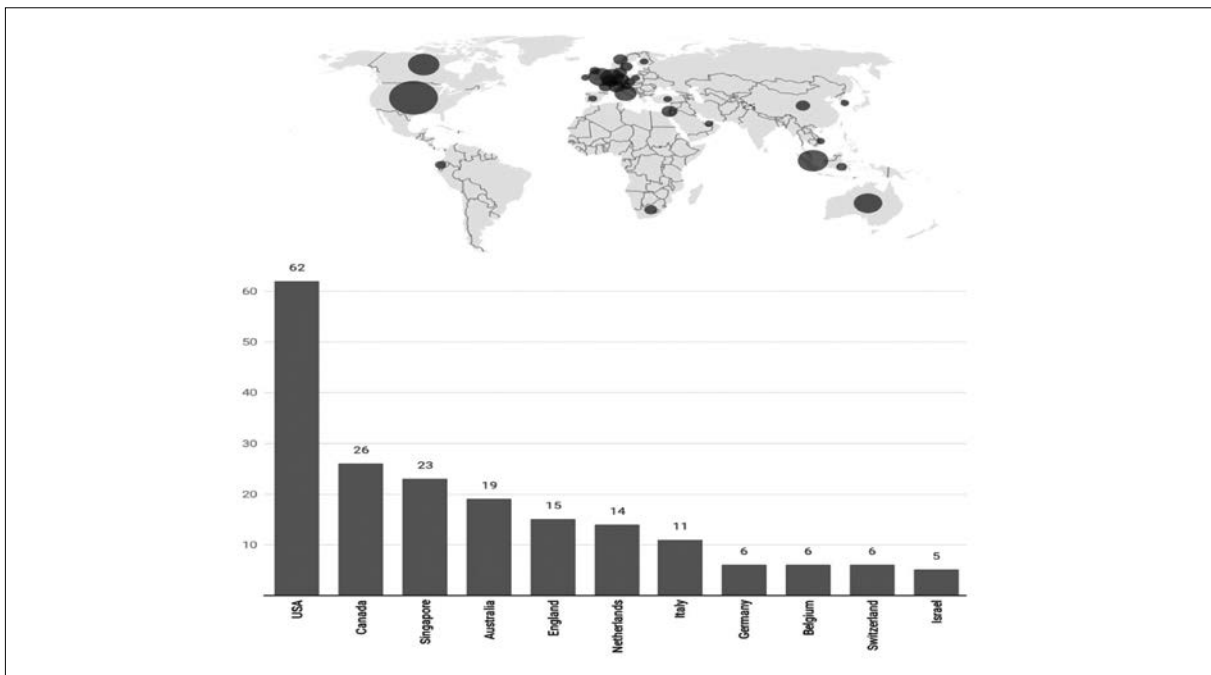


Source: Authors.

## Geographical distribution

The field of policy design production is geographically uneven, with much of the research originating in the western world. North America is particularly well represented, with nearly 48 percent of papers authored by researchers in the United States (USA) and Canada (Figure 3).

Figure 3. Country affiliation of authors publishing most policy design research



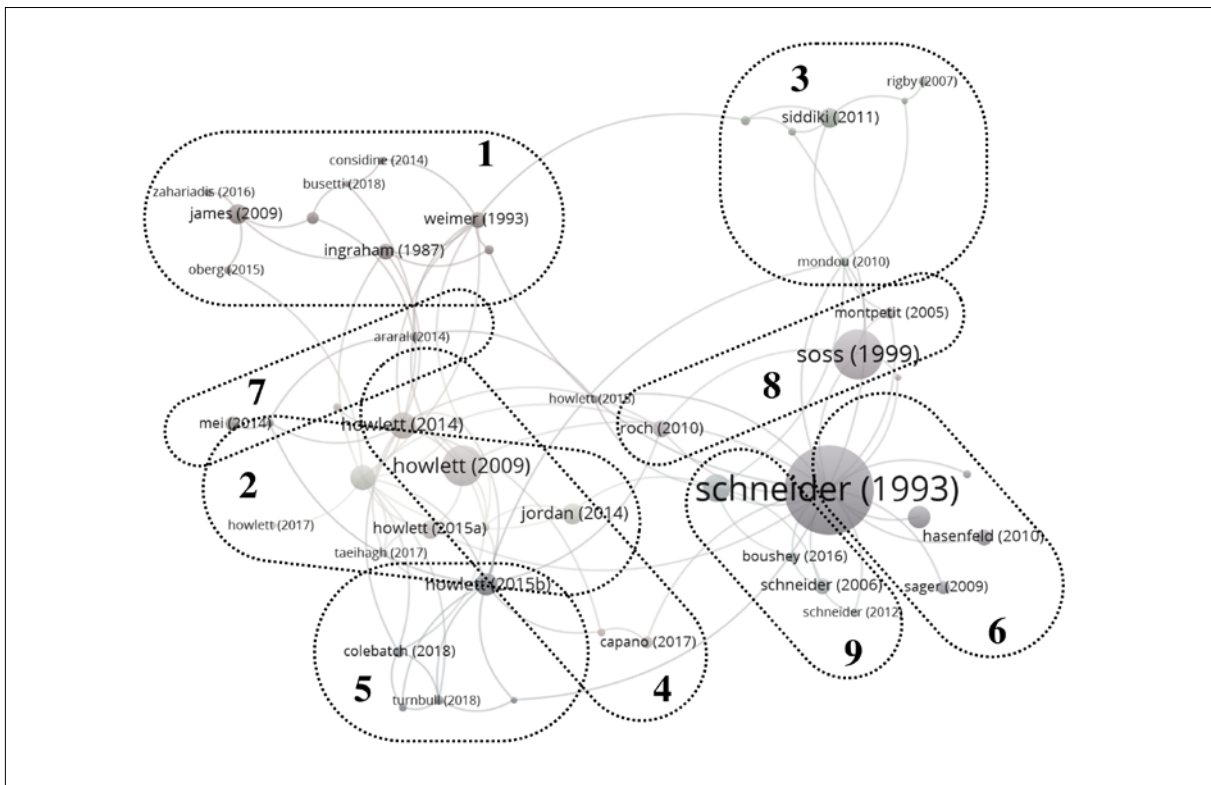
Source: Authors.

Outside of the west, researchers in the city-state of Singapore have been making significant contributions to the field; possibly reflecting “the strength of Singapore’s policy-focused departments, research centers and think-tanks, and its culture of research-driven governance and policymaking” (Virani et al., 2020, p. 5). Other regions are also represented, with authors from China, Denmark, and Norway contributing with four papers, researchers from France, South Africa, and Sweden producing three, researchers from Austria, Czech Republic, Ecuador, Indonesia, Poland, Scotland, and Turkey producing two, and one article coming from each researcher in Finland, Luxemburg, North Ireland, South Korea, Spain, United Arab Emirates, and Vietnam.

### Citation Linkage Map

According to Zha et al. (2020), examining author citations gives an overview of the intellectual structure, providing researchers with early insights into the nexus of influences underlying the research domain. In this regard, Figure 4 shows how frequently publications (with at least five citations) cite or get cited by others in the network. Nodes depict publication, and their linkages convey citation relationships. Larger nodes indicate publications with more citations. Publications with close citation relationships are clustered in the same color node.

Figure 4. Policy design citation network



Source: Authors.



The citation network comprises nine groups, as shown in Figure 4 and detailed in Appendix A. The Cluster 6 has the most cited publication (Schneider & Ingram, 1993), also cited by different groups. The following analysis describes the nine clusters.

### Cluster 1: Policy proces

The articles in this cluster focus on the issues related to the policy process. James and Jorgensen (2009) appealed to policy process theory: build upon a foundation of utilization that includes many different uses and emphasizes the content of policy knowledge and policy-relevant information at all levels of governmental decision-making. Moreover, using simple examples, Weimer (1993) explained how the problem definition and policy evaluation phases relate to design drawn mainly from municipal solid waste management in USA's cities.

Considine, Alexander and Lewis (2014) conducted interviews with Australian state and federal government ministers, sitting first-term backbenchers, early career state and federal policy officers and ex-senior government bureaucrats to rescue the figure of the individual political actor, which they claim is typically neglected in favor of analyzing other actors and phenomena in policy process studies. To the authors, these individual actors who design public policies performed a crucial job since their experiences, skills, and creativity are fundamental to policy design, and therefore they need to be an element of analysis considered as such.

### Cluster 2: Governance and policy measurement

The articles in this cluster focus on the issues related to governance. Howlett (2009) stated that policy instrument choices could be seen to result from a nested or embedded relationship within a larger framework of established governance modes and policy regime logics. Also, Howlett and Lejano (2013) traced the decline to two related hypotheses about the changing nature of society and policy responses — the “government to governance” and “globalization” narratives — which, it is argued, crowded out more nuanced analyses of state options in the policymaking process in favor of decentralized market and “third” or “fourth” sector collaborative network mechanisms.

Jordan and Matt (2014) focused their analysis on policy feedback, arguing that policymakers generally use policy design that intentionally generates positive feedback since negative policy feedback often puts these groups under pressure, especially in more regulatory areas, and to illustrate their hypothesis, the authors studied climate change policies in European Union — due to their highly disputed nature. Also discussing measurement in public policy, but starting from a network-centric policy design approach, Taeihagh (2017) brought two main challenges of policy design: better understanding of design space and consideration of temporal factors. As stated by the author, the network-centric policy design approach is used to analyze the relationships between policies, measuring and ranking them according to their properties and interactions — which claims to be directly related to policy design. The author employed computer simulations to test the approach by means of experimental testing.

### Cluster 3: Institutional analysis

The articles in this cluster focus on issues related to institutional analysis (e.g., Institutional Grammar Tool – IGT). Siddiki, Weible, Basurto, and Calanni (2011) applied the modified institutional grammar tool to the study of policy design in Colorado State Aquaculture, adding a component to the grammar named “object” to demonstrate its effectiveness and utility in illuminating institutional linkages across levels of analysis. Carter et al. (2016) have operationalized and integrated core concepts from the institutional analysis and development framework, including the institutional grammar, to provide a systematic approach for analyzing policy designs of the United States Department of Agriculture’s National Organic Program regulation.

Rigby (2007) used early childhood education as test case for explaining how and why the same policy area could end up with different results in 50 USA states. For that, the author looked beyond policy design to institutional and political-partisan settings of the places where educational policies were being implemented – as well as factors like economic context and ideological profile of management, using hierarchical linear models. Also, relationally, but this time connecting policy design with the social construction of target groups and verifying its consistency, Mondou and Montpetit (2010) stated – pessimistically, as they say – that underprivileged citizens are targets of public policies that do little to help them create what they claim is a vicious cycle of “degenerative policies” (though less common in consensual systems), using the poverty policy design cases in Newfoundland and Quebec.

### Cluster 4: Robustness, resilience, and state capacity

The articles in this cluster focus on issues related to policy design’s revitalization, robustness, resilience, and state capacity. Howlett (2014) discussed the temporal aspects of policy designs, the role of experimental designs, the question of policy mixes, the issue of design flexibility and resilience, and the criteria for assessing superior designs. Capano and Woo (2017) reviewed definitions of resilience and robustness concepts and the primary theoretical and empirical challenges presented as lenses for improving the understanding of policy process and policy design. As a result, the authors stated that despite resilience diffusion, the concept did not appear to be useful and may be misleading. In contrast, robustness exhibited great potential concerning both analysis and design.

Capano and Woo (2018) discussed how robustness, characterized as the ability of policies to maintain their functionality, can be projected into policy design, institutions, or systems. The authors concluded that robust policy design demands diversity, modularity and redundancy, whereas robust policy design processes require polycentric decisional process, political capacity and technical capacity.

Dialoguing with Howlett (2014), Chindarkar (2017) evaluated the policy design of the electrification process in Gujarat/India and stated that good policy design requires two conditions – a space that balances technical and political objectives, and political capacity (organizational and analytical) to implement policies. As the authors suggested, the policy design process and

implementation were proportionally problem-driven and politically motivated. A top-down approach favored the conception and implementation, effectively leveraging the state's financial, technical, and administrative capacity.

## Cluster 5: Theorizing policy design

The articles in this cluster focus on issues related to tracing the policy design history and evolution, mobilizing its concepts. [Howlett et al. \(2015\)](#), contributing to the re-invigoration of a design orientation in modern policy studies, traced the origins of the current policy design literature and assessed the state of the field of policy design thinking in recent years. The authors argued that the “new design orientation focuses on bundles or portfolios of tools and the interactive effects which occur when multiple tools are used over time in policy packages designed to address multiple goals, and upon more complex multi-policy and multi-level design contexts” ([Howlett et al., 2015, p. 291](#)).

[Turnbull \(2018\)](#), analyzing a particular issue, proposed investigating the assumptions of the policy design concept, questioning its theoretical coherence and relevance for practitioners. The author argued that the design idea should be reconsidered from the ground up, and an alternative orientation is put forward, which regards policy design as something that emerges from policymaking practice. In this issue, [Colebatch \(2018\)](#) asserted that policy design is an exercise in giving meaning – framing activity that makes practices and outcomes appropriate and valid – and developed a more comprehensive analysis of ‘policy design’ as a concept in use in both policy practice and the analysis of that practice. And [Hoppe \(2018\)](#) has demonstrated how policy design is an iterative process of problem sensing, problem categorization, problem decomposition, and problem definition, and for each of these stages, appropriate rules-of-thumb for questioning and answering can be suggested that induce thought habits and styles for responsive and solid policy designs.

## Cluster 6: Social construction theory

The articles in this cluster focus on issues related to social policies applying the social construction theory (SCT). [Schneider and Ingram \(1993\)](#) introduced the SCT, contending that social constructions influence the policy agenda, the selection of policy tools, and the rationales that legitimate policy choices. Constructions become embedded in policy as messages absorbed by citizens and affect their orientations and participation: democracy influencing new empirical studies. Making an analogy to the SCT, [Avelino \(2009\)](#) conducted ethnography, participant observation, action research, extensive document reviews, and interviews in three Dutch projects named National Networks, European Networks, and A15-project regarding transition management. The author theoretically and empirically explored the relationship between empowerment and long-term policy design and concluded that there are strong pressures for public officials to ‘provide beneficial policy’ (distributive policies) to groups that are powerful and positively constructed (e. g., business and scientists) ([Avelino, 2009](#)).

Hasenfeld (2010) analyzed welfare reform implementation, also known as Temporary Assistance for Needy Families (TANF), in which the US Federal government provides grants to States to run the program, assuming that social policies aim to change behavior as they socially construct the target population by attributing common values, images, and behavioral problems to it. Moreover, Sager (2009) investigated the relationship between the mode of governance and the proportion of coercion from a comparative perspective of Swiss states (cantons) in the field of alcohol control policy, asserting that the social construction of target populations influences the selection of policy instruments, and coercion is the result of authoritarian means and sanctions to those engaged in undesirable behavior, known as ‘deviants’.

## Cluster 7: Developing countries and calibrations of policy tools to target behavior

The articles in this cluster focus on issues related to developing countries, better understanding, and matching tool resources to the target behavior. Mei and Liu (2014) investigated the underlying logic of incremental policy changes, specifically the policymakers’ role in successive policy experimentation, through a case study of urban housing policy changes in China. They showed empirically how policymakers in the central government consciously chose the experimenters, defined the content of experimental programs, and chose the demonstration programs to be emulated by others. The authors stated that authoritative policymakers’ role in conscious policy design in China had been seriously underestimated.

Moreover, Araral (2014), using transaction cost and mechanism design, showed how regulations could be better designed in developing countries when institutions are weak, unaccountable, corrupted, or not credible. Under these conditions, the author indicated that efficient regulatory design minimizes transaction costs, particularly agency problems, by having incentive-compatible (self-enforcing) mechanisms. Wen (2017), using the intention-capacity analytic framework, compared Guangzhou’s project-based model and Shenzhen’s post-based model, and suggested that a pro-market ideology and incomplete analytical capacity in policy learning directed the design thinking toward market mechanism and purchase of services. As a result, both models, with substantial fiscal support, succeed in expanding the societal sectors. But the mix of market and hierarchy tools for the post-based model is an obstacle in further enabling the social organization and the social work profession.

## Cluster 8: Interaction, representation, and their influence on policy tool’s choice

The articles in this cluster focus on issues related to the interaction between institutions and social construction, social, racial, and ethnic representation, and their influence on public officials’ tools in designing policy. For example, Soss (1999) employed a comparative study, conducting fifty in-depth interviews in a USA mid-sized midwestern city, on the political effects of participation in a public assistance program (Aid to Families with Dependent Children [AFDC]) and a social

insurance program (Social Security Disability Insurance [SSDI]) to explore the links between welfare participation and broader forms of political involvement, evidencing that policy designs structure clients' program experiences in ways that teach alternative lessons about government nature. Roch, Pitts, and Navarro (2010) examined how racial and ethnic representation influences public officials' tools in designing policy in a sample of Georgia public schools. They found that schools with balanced racial and ethnic representation are more likely to adopt learning-oriented discipline policies, whereas those with imbalanced representation are more likely to implement sanction-oriented policies. As a result, the authors demonstrated that representation is an important lever in policy design, with broad social and political consequences that extend beyond the immediate organization.

Moreover, analyzing attitudes towards spending on five social benefits in Denmark, Hedegaard (2014) outlined and tested how being proximate to recipients of a social benefit affects attitudes towards the benefit; as a result, he stated that being proximate to recipients under selective policies has a significant impact on the individual, and public support, little or no impact from universal policies, and a pattern that falls in-between for the contribution-based policy. The author brought evidence for the different effects on attitudes depending on the design of a policy and a possible explanation for why the design impacts attitudes differently.

## Cluster 9: Criminal justice and punishment policies

Diverging the articles from Cluster 6 that discussed SCT in social policies, the articles in this cluster focus on issues related to policy design concerning criminal justice and punishment policies in the USA States. This group's research finds that governments are more likely to concede benefits to strong, popular, and powerful target populations and impose burdens on weak and politically marginalized groups, explaining the bias by pressure for responsive policymaking. To illustrate, Schneider (2006) analyzed changes in the use of incarceration by the American States, testing the proposition that providing benefits to advantaged populations (who have positive social constructions and considerable political power) will be characterized by increasing returns and will result in long path trajectories, beneficial to advantaged groups. Similarly, punishing groups (e.g., incarceration) with little or no power (who are socially constructed as dangerous or deviant) also will be characterized by increasing returns and long periods of increase in the use of imprisonment. In contrast, offering less severe punishment to deviants, such as alternatives to incarceration, will not be characterized by increasing returns but by considerable political risk—a form of declining marginal returns.

Concerning normative and empirical integration research and theory, Schneider and Sidney (2009) claimed for more research stating that the next generation of policy studies employing social construction theory to analyze the policy design can make significant empirical contributions to promoting social impacts. Responding to this call, Schneider (2012) examined whether the American States have adopted more similar incarceration levels over time (converged), whether they tend to change in the same direction at the same time (synchronous change), and whether they tend to stay in the same relative positions vis-à-vis one another, such that the historical policy

position has long-term implications for later policy positions (“feed-forward” effect,ts) positions (“feed-forward” effect,ts). Boushey (2016), while analyzing the American States, identified the image and power of target populations, testing whether electoral pressure leads governments to disproportionately emulate innovations that reinforce popular stereotypes regarding who is entitled to policy benefits or deserve policy burdens.

## CONCLUSION

In general, this research’s main contribution lies in a methodological order. Evidence-based theoretical contributions within reviews may involve making sense of past research, developing, extending, or refining existing theory, identifying emergent themes; or novel theorizing, making scholars think differently about a research field, and triggering new ideas and pathways (Breslin & Gatrell, 2020). Moreover, reviews offer a broad perspective on a topic and, in addition to discussing theory and context, can serve to provoke reflection and controversy (Slavin, 1995). Hence, the present study contributed to synthesizing a fragmented, recent, and effervescent field of research, presenting an overview, and a conceptual map, identifying central and peripheral themes and providing a basis for a future research agenda regarding policy design.

Considering the clusters’ analysis, we could notice that, as already verified in the literature, implementation instruments represent a fruitful field of the design’s perspective (Aguiar, Lima, & Lui, 2021a; Lima, Aguiar, & Lui, 2021). Subjacent to this theme is the relationship between the choice of tools/instruments (policy mixes) and their influence on target groups, induced by the seminal study of Schneider and Ingram (1993), impacting five clusters: Social Construction Theory, Criminal Justice and Punishment Policies, Interaction, Representation and its influence on policy tool’s choice, Developing Countries, and calibrations of policy tools to target behavior, and Robustness, Resilience, and State Capacity.

Although the Social Construction Theory significantly impacts on the research field, presenting the highest citation (see Figure 4), its application has declined recently (Aguiar, Lima, & Lui, 2021b). More recently, new research themes have emerged, reflecting changes in the domain, including a renewed focus on innovative instruments to improve policy design (e.g., design thinking, innovation labs), an “indicative of thematic evolution with the adoption of more contemporary approaches” (Aguiar, Lima, & Lui, 2021b, p. 14). Other relevant topics concerning governance, means of interaction and representation, institutional analysis, and the policy design theoretical construction also appeared. Despite the developing countries’ clusters, most studies empirically focused on China, evidencing that there is room for studies concerning Latin American and African contexts.

Thereby, clusters’ identification contributes to recognizing policy design’s knowledge production patterns, offering researchers and academics deciphered and mapped scientific knowledge, making sense of large volumes of unstructured data in rigorous ways (Donthu, Kumar, Mukherjee, Pandey, & Lim, 2021). Thus, it “enables and empowers scholars to i) gain a one-stop overview; ii) identify knowledge gaps; iii) derive novel ideas for investigation; and iv)



position their intended contributions to the field” (Donthu et al., 2021, p. 285). More specifically, clustering the data through citation analysis enables the most influential publications in a research field to be ascertained (Donthu et al., 2021) based on the assumption that authors cite documents they consider relevant for their work (Zupic & Cater, 2015). Therefore, researchers and practitioners can systematically access the main subtopics addressed in the policy design field, their authors and findings, proposing new and relevant contributions and complementing the existing studies.

Reflecting the Brazilian context, according to previous studies (Lima, Aguiar, & Lui, 2021; 2022), various points are worth emphasizing: i) the characteristics of the Brazilian federation, the concentration of technical and financial resources in the Union means that policies have traditionally been centrally designed and adapted to local contexts; ii) how the Executive has been dealing with the control bodies (e.g., TCU, TCE, participatory committees), considering that the criteria and forms of control generate expectations and operate by conducting attention and efforts towards data elements of the design or even valuing a specific form of logical structure; iii) the influence of global programs, like the 2030 Agenda, such agreements provide opportunities for studies on which designs have been valued to deal with complex contemporary social problems; iv) perspective of creating institutions aimed at designing public policies, such as innovation labs, v) the interrelation of state capacity concept with the design perspective, as well as the understanding of its influence on the effectiveness of policies; vi) the consideration of cognitive and emotional factors in the design process, which are often contradictory, unstable and changing over time; and vii) undertake a structured reflection about the analytical-methodological tools and what their implications are for the construction of knowledge about design (Lima, Aguiar, & Lui, 2021; 2022).

Regarding the criticism directed to the design perspective, although the generation of studies on policy design in the 1970s exhibited a technocratic bias, concerned with the rationalization of processes inspired by engineering and architecture (Peters, 2020b), the political dimension is intrinsic to activities aimed at addressing collective problems, as they involve a multiplicity of actors (Junjan, 2020). These distinctions unveil the debate around the place of political activity in design processes. Chindarkar, Howlett and Ramesh (2017) alert to the limitations of both populist and technocratic formulations. In the first, there is the pursuit of political objectives unaccompanied by the intention to face public problems; and, in the latter, measures try to face problems without considering the political implications. In this context, the designers should consider what is politically viable and technically possible, trying to balance both.

Despite this study’s comprehensiveness, it is not free of limitations. The main issues are threefold: i) the limitation of our findings’ validity lies in the inherent weaknesses of a keyword-based bibliometric analysis (Virani et al., 2020), also considering that a narrow base leaves analysis open to distortions in quantitative procedures, with the risk of computational anomalies (Zha et al., 2020); ii) focus on published academic research, which may have kept research outputs produced by, for instance, think tanks, non-organizational agencies, or non-profit organizations outside our reach; and iii) constraints posed by the decision to use the WoS database to obtain citation data.

Our results show an image of the present policy design characteristics, which are expected to change over time. Therefore, future research could replicate this study to reveal new behaviors and trends. Despite these limitations, this review identifies the most important and current trends in policy design, which should be useful for future authors and readers of the topic.

## REFERENCES

- Acciai, C., & Capano, G. (2021). Policy instruments at work: A meta-analysis of their applications. *Public Administration*, 99(1), 118-136. <https://doi.org/10.1111/padm.12673>
- Aguiar, R. B. de, Lima, L. L., & Lui, L. (2021a). Analyzing the Thematic Evolution of the Policy Design Research. *XLV Econtro da ANPAD*, 1-16.
- Aguiar, R. B. de, Lima, L. L., & Lui, L. (2021b). Mapeamento sistemático da literatura do campo de policy design: uma revisão bibliométrica. *20º Congresso Brasileiro de Sociologia*, 1-20.
- Alvesson, M., & Sandberg, J. (2013). Has management studies lost its way? Ideas for more imaginative and innovative research. *Journal of Management Studies*, 50(1), 128-152. <https://doi.org/10.1111/j.1467-6486.2012.01070.x>
- Araral, E. (2014). Policy and regulatory design for developing countries: A mechanism design and transaction cost approach. *Policy Sciences*, 47(3), 289-303. <https://doi.org/10.1007/s11077-013-9192-z>
- Avelino, F. (2009). Empowerment and the challenge of applying transition management to ongoing projects. *Policy Sciences*, 42, 369. <https://doi.org/10.1007/s11077-009-9102-6>
- Birkland, T.A. (2015). *An introduction to the policy process: theories, concepts, and models of public policy making* (4th ed.). M.E. Sharpe.
- Boushey, G. (2016). Targeted for diffusion? How the use and acceptance of stereotypes shape the diffusion of criminal justice policy innovations in the American States. *American Political Science Review*, 110(1), 198-214. <https://doi.org/10.1017/S0003055415000532>
- Breslin, D., & Gatrell, C. (2020). Theorizing through literature reviews: the miner-pro prospector continuum. *Organizational Research Methods*, 1-29. <https://doi.org/10.1177/1094428120943288>
- Caires, C. M. R. (2019). El diseño de políticas públicas en perspectiva histórica. *Cuadernos del Cendes*, 36(102), 13-45.
- Capano, G., & Woo, J. J. (2017). Resilience and robustness in policy design: a critical appraisal. *Policy Sciences*, 50(3), 399-426. <https://doi.org/10.1007/s11077-016-9273-x>
- Capano, G., & Woo, J. J. (2018). Designing policy robustness: outputs and processes. *Policy and Society*, 37(4), 422-440. <https://doi.org/10.1080/14494035.2018.1504494>

- Carter, D. P., Weible, C. M., Siddiki, S. N., & Basurto, X. (2016). Integrating core concepts from the institutional analysis and development framework for the systematic analysis of policy designs: An illustration from the US National Organic Program regulation. *Journal of Theoretical Politics*, 28(1), 159-185. <https://doi.org/10.1177/0951629815603494>
- Chindarkar, N. (2017). Beyond power politics: evaluating the policy design process of rural electrification in Gujarat, India. *Public Administration and Development*, 37(1), 28-39. <https://doi.org/10.1002/pad.1777>
- Chindarkar, N., Howlett, M., & Ramesh, M. (2017). Introduction to the Special Issue: "Conceptualizing Effective Social Policy Design: Design Spaces and Capacity Challenges." *Public Administration and Development*, 37(1), 3-14. <https://doi.org/10.1002/pad.1789>
- Colebatch, H. K. (2018). The idea of policy design: Intention, process, outcome, meaning and validity. *Public Policy and Administration*, 33(4), 365-383. <https://doi.org/10.1177/0952076717709525>
- Considine, M., Alexander, D., & Lewis, J. M. (2014). Policy design as craft: Teasing out policy design expertise using a semi-experimental approach. *Policy Sciences*, 47(3), 209-225. <https://doi.org/10.1007/s11077-013-9191-0>
- Culnan, M. J. (1987). Mapping the Intellectual Structure of MIS, 1980-1985: A Co-Citation Analysis. *MIS Quarterly*, 11(3), 341-353. <https://doi.org/10.2307/248680>
- Denyer, D., & Tranfield, D. (2009). Producing a Systematic Review. In D. A. Buchanan & A. Bryman (Eds.), *The SAGE Handbook of Organizational Research Methods* (pp. 671-689). Sage.
- Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research*, 133, 285-296. <https://doi.org/10.1016/j.jbusres.2021.04.070>
- Dryzek, J. S. (1983). Don't toss coins in garbage cans: a prologue to policy design. *Journal of Public Policy*, 3(4), 345-367. <https://doi.org/10.1017/S0143814X00007510>
- Ferretti, V., Pluchinotta, I., & Tsoukiàs, A. (2019). Studying the generation of alternatives in public policy making processes. *European Journal of Operational Research*, 273(1), 353-363. <https://doi.org/10.1016/j.ejor.2018.07.054>
- Grant, M. J., & Booth, A. (2009). A typology of reviews: an analysis of 14 review types and associated methodologies. *Health Information & Libraries Journal*, 26(2), 91-108. <https://doi.org/10.1111/j.1471-1842.2009.00848.x>
- Hasenfeld, Y. (2010). Organizational responses to social policy: The case of welfare reform. *Administration in Social Work*, 34(2), 148-167. <https://doi.org/10.1080/03643101003608976>
- Hedegaard, T. F. (2014). The policy design effect: Proximity as a micro-level explanation of the effect of policy designs on social benefit attitudes. *Scandinavian Political Studies*, 37(4), 366-384. <https://doi.org/10.1111/1467-9477.12022>

- Hoppe, R. (2018). Heuristics for practitioners of policy design: Rules-of-thumb for structuring unstructured problems. *Public Policy and Administration*, 33(4), 384-408. <https://doi.org/10.1177/0952076717709338>
- Howlett, M. (2009). Governance modes, policy regimes and operational plans: A multi-level nested model of policy instrument choice and policy design. *Policy Sciences*, 42(1), 73-89. <https://doi.org/10.1007/s11077-009-9079-1>
- Howlett, M. (2014). From the “old” to the “new” policy design: Design thinking beyond markets and collaborative governance. *Policy Sciences*, 47(3), 187-207. <https://doi.org/10.1007/s11077-014-9199-0>
- Howlett, M. (2020). Challenges in applying design thinking to public policy: Dealing with the varieties of policy formulation and their vicissitudes. *Policy and Politics*, 48(1), 49-65. <https://doi.org/10.1332/030557319X15613699681219>
- Howlett, M., & Lejano, R. P. (2013). Tales from the crypt: the rise and fall (and rebirth?) of policy design. *Administration and Society*, 45(3), 357-381. <https://doi.org/10.1177/0095399712459725>
- Howlett, M., Mukherjee, I., & Woo, J. J. (2015). From tools to toolkits in policy design studies: the new design orientation towards policy formulation. *Policy and Politics*, 43(2), 291-311. <https://doi.org/10.1332/147084414X13992869118596>
- Ingraham, P. W. (1987). Toward more systematic consideration of policy design. *Policy Studies Journal*, 15(4), 611-628. <https://doi.org/10.1111/j.1541-0072.1987.tb00750.x>
- James, T. E., & Jorgensen, P. D. (2009). Policy knowledge, policy formulation, and change: Revisiting a foundational question. *Policy Studies Journal*, 37(1), 141-162. <https://doi.org/10.1111/j.1541-0072.2008.00300.x>
- Jordan, A., & Matt, E. (2014). Designing policies that intentionally stick: Policy feedback in a changing climate. *Policy Sciences*, 47(3), 227-247. <https://doi.org/10.1007/s11077-014-9201-x>
- Junjan, V. (2020). Policy design: just a fad or a fundamental concept? (Or how to deal with policy design in interesting times). In M. S. De Vries, J. Nemec, & V. Junjan (Eds.), *The choice-architecture behind policy design: from policy design to policy practice in the European integration context* (pp. 21-31). NISPAcee.
- Klang, D., Wallnöfer, M., & Hacklin, F. (2014). The business model paradox: A systematic review and exploration of antecedents. *International Journal of Management Reviews*, 16(4), 454-478. <https://doi.org/10.1111/ijmr.12030>
- Lima, L. L., Aguiar, R. B. de, & Lui, L. (2021). Conectando problemas, soluções e expectativas: mapeando a literatura sobre análise do desenho de políticas públicas. *Revista Brasileira de Ciência Política*, 36. <https://doi.org/10.1590/0103-3352.2021.36.246779>
- Lima, L. L., Aguiar, R. B. de, & Lui, L. (2022). Desenho de políticas públicas e instrumentos de implementação. In A. C. N. Capella & F. G. Brasil (Eds.), *Abordagens Contemporâneas para a análise de Políticas Públicas* (1st ed., pp. 236-273). Editora da Universidade Estadual do Rio de Janeiro (EdUERJ).

- Linder, S. H., & Peters, B. G. (1988). The analysis of design or the design of analysis? *Review of Policy Research*, 7(4), 738-750. <https://doi.org/10.1111/j.1541-1338.1988.tb00892.x>
- Mei, C., & Liu, Z. (2014). Experiment-based policy making or conscious policy design? The case of urban housing reform in China. *Policy Sciences*, 47(3), 321-337. <https://doi.org/10.1007/s11077-013-9185-y>
- Micheli, P., Wilner, S. J. S., Bhatti, S. H., Mura, M., & Beverland, M. B. (2019). Doing design thinking: conceptual review, synthesis, and research agenda. *Journal of Product Innovation Management*, 36(2), 124-148. <https://doi.org/10.1111/jpim.12466>
- Mondou, M., & Montpetit, É. (2010). Policy styles and degenerative politics: Poverty policy designs in newfoundland and quebec. *Policy Studies Journal*, 38(4), 703-722. <https://doi.org/10.1111/j.1541-0072.2010.00380.x>
- Paré, G., Trudel, M. C., Jaana, M., & Kitsiou, S. (2015). Synthesizing information systems knowledge: A typology of literature reviews. *Information and Management*, 52(2), 183-199. <https://doi.org/10.1016/j.im.2014.08.008>
- Peters, B. G. (2020a). Designing institutions for designing policy. *Policy and Politics*, 48(1), 131-147. <https://doi.org/10.1332/030557319X15579230420090>
- Peters, B. G. (2020b). Policy design and its relevance for practice in public administration. In Bratislava: NISPAcee (Ed.), *The choice-architecture behind policy design: from policy design to policy practice in the European integration context* (pp. 35-46).
- Petticrew, M., & Roberts, H. (2006). *Systematic reviews in the social sciences: a practical guides*. Blackwell. Retrieved from: <https://econtent.hogrefe.com/doi/10.1027/1016-9040.11.3.244>
- Pluchinotta, I., Giordano, R., Zikos, D., Krueger, T., & Tsoukiàs, A. (2020). Integrating problem structuring methods and concept-knowledge theory for an advanced policy design: lessons from a case study In Cyprus. *Journal of Comparative Policy Analysis: Research and Practice*, 22(6), 626-647. <https://doi.org/10.1080/13876988.2020.1753512>
- Rigby, E. (2007). Same policy area, different politics: How characteristics of policy tools alter the determinants of early childhood education policy. *Policy Studies Journal*, 35(4), 653-669. <https://doi.org/10.1111/j.1541-0072.2007.00241.x>
- Roch, C. H., Pitts, D. W., & Navarro, I. (2010). Representative bureaucracy and policy tools: Ethnicity, student discipline, and representation in public schools. *Administration and Society*, 42(1), 38-65. <https://doi.org/10.1177/0095399709349695>
- Sager, F. (2009). Governance and coercion. *Political Studies*, 57(3), 537-558. <https://doi.org/10.1111/j.1467-9248.2008.00743.x>
- Schneider, A., & Ingram, H. (1993). Social construction of target populations: implications for politics and policy. *American Political Science Review*, 87(2), 334-347. <https://doi.org/10.2307/2939044>
- Schneider, A., & Sidney, M. (2009). What is next for policy design and social construction theory? *Policy Studies Journal*, 37(1), 103-119. <https://doi.org/10.1111/j.1541-0072.2008.00298.x>



- Schneider, A. L. (2006). Patterns of change in the use of imprisonment in the American States: An integration of path dependence, punctuated equilibrium and policy design approaches. *Political Research Quarterly*, 59(3), 457-470. <https://doi.org/10.1177/106591290605900313>
- Schneider, A. L. (2012). Punishment Policy in the American States from 1890 to 2008: convergence, divergence, synchronous change, and feed-forward effects. *Policy Studies Journal*, 40(2), 193-210. <https://doi.org/10.1111/j.1541-0072.2012.00449.x>
- Siddiki, S. (2020). *Understanding and analyzing public policy design*. Cambridge University Press. <https://doi.org/10.1017/9781108666985>
- Siddiki, S., Weible, C. M., Basurto, X., & Calanni, J. (2011). Dissecting policy designs: an application of the institutional grammar tool. *Policy Studies Journal*, 39(1), 79-103. <https://doi.org/10.1111/j.1541-0072.2010.00397.x>
- Silva, D. S., Ghezzi, A., Aguiar, R. B. de, Cortimiglia, M. N., & ten Caten, C. S. (2019). Lean startup, agile methodologies and customer development for business model innovation: a systematic review and research agenda. *International Journal of Entrepreneurial Behaviour and Research*, 26(4), 595-628. <https://doi.org/10.1108/IJEBR-07-2019-0425>
- Slavin, R. E. (1995). Best evidence synthesis: An intelligent alternative to meta-analysis. *Journal of Clinical Epidemiology*, 48(1), 9-18. [https://doi.org/10.1016/0895-4356\(94\)00097-A](https://doi.org/10.1016/0895-4356(94)00097-A)
- Soss, J. (1999). Lessons of welfare: policy design, political learning, and political action. *American Political Science Review*, 93(2), 363-380. <https://doi.org/10.2307/2585401>
- Soto-Simeone, A., Sirén, C., & Antretter, T. (2020). New venture survival: a review and extension. *International Journal Of Management Reviews*, 22(4), 378-407. <https://doi.org/10.1111/ijmr.12229>
- Taeihagh, A. (2017). Network-centric policy design. *Policy Sciences*, 50(2), 317-338. <https://doi.org/10.1007/s11077-016-9270-0>
- Tranfield, D., Denyer, D., & Smart, P. (2003). Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *British Journal of Management*, 14(3), 207-222. <https://doi.org/10.1111/1467-8551.00375>
- Turnbull, N. (2018). Policy design: Its enduring appeal in a complex world and how to think it differently. *Public Policy and Administration*, 33(4), 357-364. <https://doi.org/10.1177/0952076717709522>
- van Eck, N. J., & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics*, 84(2), 523-538. <https://doi.org/10.1007/s11192-009-0146-3>
- van Eck, N. J., & Waltman, L. (2014). Visualizing bibliometric networks. In Y. Ding, R. Rousseau, & D. Wolfram (Eds.), *Measuring Scholarly Impact* (pp. 285-320). Springer International Publishing. [https://doi.org/10.1007/978-3-319-10377-8\\_13](https://doi.org/10.1007/978-3-319-10377-8_13)
- van Eck, N. J., & Waltman, L. (2017). Citation-based clustering of publications using CitNetExplorer and VOSviewer. *Scientometrics*, 111(2), 1053-1070. <https://doi.org/10.1007/s11192-017-2300-7>



- Virani, A., Wellstead, A. M., & Howlett, M. (2020). Where is the policy? A bibliometric analysis of the state of policy research on medical tourism. *Global Health Research and Policy*, 5(1), 19. <https://doi.org/10.1186/s41256-020-00147-2>
- Weimer, David L. (1993). The Current State of Design Craft: Borrowing, Tinkering, and Problem Solving. *Public Administration Review*, 53(2), 110. <https://doi.org/10.2307/976703>
- Wen, Z. (2017). Government purchase of services in China: similar intentions, different policy designs. *Public Administration and Development*, 37(1), 65-78. <https://doi.org/10.1002/pad.1792>
- Zha, D., Melewar, T. C., Foroudi, P., & Jin, Z. (2020). An assessment of brand experience knowledge literature: using bibliometric data to identify future research direction. *International Journal of Management Reviews*, 22(3), 287-317. <https://doi.org/10.1111/ijmr.12226>
- Zupic, I., & Cater, T. (2015). Bibliometric methods in management and organization. *Organizational Research Methods*, 18(3), 429-472. <https://doi.org/10.1177/1094428114562629>

## CONTRIBUIÇÃO DE AUTORES

Rafael Barbosa de Aguiar: Administração do Projeto; Análise Formal; Conceituação; Curadoria de Dados; Escrita – Primeira Redação; Investigação; Metodologia; Software; Validação; Visualização.

Fabiano Jorge Soares: Análise Formal; Escrita – Revisão e Edição; Investigação; Validação; Visualização.

Luciana Leite Lima: Administração do Projeto; Análise Formal; Conceituação; Escrita – Revisão e Edição; Investigação; Metodologia; Obtenção de Financiamento; Recursos; Supervisão; Validação; Visualização