



Københavns Universitet

Behavioral Public Administration

Grimmelikhuijsen, Stephan; Jilke, Sebastian; Olsen, Asmus Leth; Tummers, Lars

Published in:
Public Administration Review

DOI:
[10.1111/puar.12609](https://doi.org/10.1111/puar.12609)

Publication date:
2017

Document Version
Publisher's PDF, also known as Version of record

Citation for published version (APA):
Grimmelikhuijsen, S., Jilke, S., Olsen, A. L., & Tummers, L. (2017). Behavioral Public Administration: Combining Insights from Public Administration and Psychology. *Public Administration Review*, 77(1), 45-56.
<https://doi.org/10.1111/puar.12609>

Rosemary O’Leary, Editor

Stephan Grimmelikhuijsen

Utrecht University, The Netherlands

Sebastian Jilke

Rutgers University–Newark

Asmus Leth Olsen

University of Copenhagen, Denmark

Lars Tummers

Utrecht University, The Netherlands

Behavioral Public Administration: Combining Insights from Public Administration and Psychology

Public Administration and the Disciplines

Abstract: *Behavioral public administration is the analysis of public administration from the micro-level perspective of individual behavior and attitudes by drawing on insights from psychology on the behavior of individuals and groups. The authors discuss how scholars in public administration currently draw on theories and methods from psychology and related fields and point to research in public administration that could benefit from further integration. An analysis of public administration topics through a psychological lens can be useful to confirm, add nuance to, or extend classical public administration theories. As such, behavioral public administration complements traditional public administration. Furthermore, it could be a two-way street for psychologists who want to test the external validity of their theories in a political-administrative setting. Finally, four principles are proposed to narrow the gap between public administration and psychology.*

Practitioner Points

- The aim of this article is to deepen the dialogue between public administration and psychology by outlining a distinct approach in public administration that integrates the two fields of study: *behavioral public administration*.
- Behavioral public administration can be beneficial for practitioners as it aims to bring psychological insights into the practice of public administration.
- In addition, behavioral public administration can be beneficial for practitioners as it brings public administration insights into debates dominated by psychologists or behavioral scientists. For instance, scholars have used public administration theories to critique the nudge movement in government. Such endeavors are valuable as these do not take psychology at face value but explicitly connect it with theory and practice within public administration.

Eminent public administration scholars, such as Herbert Simon and Dwight Waldo, have repeatedly stressed the importance of psychological research for the study of public administration (Simon 1947a, 1965, 1979; Waldo 1948, 1965). Simon even stated that “[f]or the man who wishes to explore the pure science of administration, it will dictate at least a thorough grounding in social psychology” (1947b, 202). Despite these early calls to integrate the two fields of study and the inherent interdisciplinary nature of public administration (Raadschelders 2011), public administration scholars have partly neglected theories and methods from psychology (Jones 2003). If we look at neighboring disciplines such as economics, political science, and management studies, psychological research has had a much more profound impact within those fields of inquiry. This is reflected in the emergence of psychology-informed subfields such as political psychology (e.g., McDermott 2004), behavioral economics (e.g., Mullainathan and Thaler

2000), and industrial and organizational psychology (e.g., Cascio 1995).

Public administration scholars have recently begun borrowing and extending theories from the field of psychology. This includes studies on core public administration topics such as public leadership and motivation (Bellé 2015), transparency (de Fine Licht 2014; Grimmelikhuijsen and Meijer 2014), public service competition and choice (Jilke 2015), performance information (Baekgaard and Serritzlew 2016; James 2011; Olsen 2015a), and trust of civil servants (Van Ryzin 2011). At the same time, the methodological toolkit of public administration scholars is becoming more informed by developments within psychology, for instance, by using experimental methods (Bouwman and Grimmelikhuijsen 2016; Margetts 2011) and measurement techniques (e.g., Kim et al. 2013; Perry 1996; Tummers 2012). But this is not a one-way street. Some psychologists are explicitly connecting their theories to the

Stephan Grimmelikhuijsen is assistant professor at the Utrecht School of Governance of Utrecht University, The Netherlands. He is interested in public sector transparency, citizen attitudes, legitimacy, behavioral public administration, and experimental methodology. His work has appeared in *Public Administration*, *Public Administration Review*, and the *Journal of Public Administration, Research and Theory*.

E-mail: s.g.grimmelikhuijsen@uu.nl

Sebastian Jilke is assistant professor in the School of Public Affairs and Administration at Rutgers University–Newark, where he co-directs the Center for Experimental and Behavioral Public Administration. He also co-chairs the newly established European Group for Public Administration Permanent Study Group on Behavioral Public Administration. His interests include citizen–state interactions and equality in service provision, and his recent work examines how citizens and public officials respond to market-type mechanisms in public service delivery.

E-mail: sebastian.jilke@rutgers.edu

Asmus Leth Olsen is associate professor at the University of Copenhagen, Denmark. His research spans the areas of behavioral public administration, political-administrative psychology, and the application of experimental methods in public administration. His current research focuses on the effects of performance information on citizens and the role of dishonesty for selection into public sector employment. His work has appeared in *Political Behavior*, *Public Administration Review*, and *Judgment and Decision Making*.

E-mail: ajlo@ifs.ku.dk

Lars Tummers is associate professor at the Utrecht School of Governance of Utrecht University, The Netherlands, and a research fellow at Arizona State University Center for Organization Research and Design. He co-chairs the newly established European Group for Public Administration Permanent Study Group on Behavioral Public Administration. His research interests are public management, leadership, and citizen–state interactions. When researching such topics, he often combines insights from psychology and public administration.

E-mail: l.g.tummers@uu.nl

Public Administration Review, Vol. 77, Iss. 1, pp. 45–56. © 2016 by The Authors. *Public Administration Review* published by Wiley Periodicals, Inc. on behalf of The American Society for Public Administration.
DOI: 10.1111/puar.12609.

field of public administration, such as through articles in *Public Administration Review* (Tybur and Griskevicius 2013; Wright and Grant 2010). For instance, Bakker (2015) applied insights from organizational psychology to the topic of public service motivation by showing how it can be connected with the job demands–resources model. As we will show later in a content analysis of three highly ranked journals in public administration, between 3 percent and 11 percent of all published articles are informed by psychology, a share that has been increasing in recent years. There is potential for cross-fertilization between public administration and psychology.

Although this article is primarily aimed at the scholarly community, practitioners in public administration use and benefit from insights from psychology as well (e.g., Thaler and Sunstein 2008). In the United Kingdom, a Behavioral Insights Team was created by the Cabinet Office, and in the United States, President Barack Obama established a White House Social and Behavioral Sciences Team. The idea is that policy makers acknowledge the bounded rationality and cognitive limitations that citizens have and use psychological insights to encourage desired behavior.

These developments in science and policy may signal the emergence of a psychology-informed approach to public administration. Public administration scholars and practitioners can use theories and methods from psychology, and psychologists, in turn, can learn from political-administrative contexts to refine their theories and methods (Olsen 2015b). In this article, we aim to deepen the dialogue between public administration and psychology by outlining a distinct approach in public administration that integrates both fields of study: *behavioral public administration*.

We describe behavioral public administration as the interdisciplinary analysis of public administration from the micro-level perspective of individual behavior and attitudes by drawing on recent advances in our understanding of the underlying psychology and behavior of individuals and groups. This definition has three main components: (1) individuals and groups of citizens, employees, and managers within the public sector are the unit of analysis; (2) it emphasizes the behavior and attitudes of these people; and, most importantly, (3) it does so by integrating insights from psychology and the behavioral sciences into the study of public administration. By micro level, we mean that the unit of analysis focuses on psychological processes within or between individuals—what psychologists call intra- and intersubjectivity. The micro level is typically embedded within the meso (e.g., organizational) and macro (e.g., institutional roles) levels (Klein and Kozlowski 2000). In short, behavioral public administration studies the behavioral microfoundations of public administration through theories developed in psychology and the behavioral sciences more broadly (Jilke 2015).

One interesting example of such work related to behavioral public administration is a recent experimental study of the theory of representative bureaucracy by Riccucci, Van Ryzin, and Lavena (2014; see also Riccucci, Van Ryzin, and Li 2016). The idea is that a representative bureaucracy influences the motivations and

behaviors of individual clients or citizens who are more likely to view the bureaucracy as legitimate and trustworthy if they feel represented. Many theories in public administration rest on such microfoundations of individual attitudes and behavior (Jilke 2015). To test these assumptions, insights from the field of psychology are beneficial. We argue that the role of behavioral public administration would be to ensure that public administration research has an ongoing dialogue with psychology on the theories and methods relevant to administrative-political settings.

An example of such a dialogue is the use of the concept of negativity bias in public administration to develop theories about blame avoidance among policy makers (Weaver 1986). Theories on blame avoidance are widely used today outside of public administration, including in political psychology (Soroka 2014). This highlights the two-way street that we envision behavioral public administration to be: public administration scholars should not just uncritically and passively adopt psychological theories but also should push theoretical ideas to other fields.

To further this line of research, this article outlines a behavioral approach to public administration by presenting and connecting four analyses. First, we review the historical background on a closer bond between public administration and psychology and conduct a quantitative analysis of the application of psychology-informed research published in three public administration journals: *Public Administration Review* (PAR), the *Journal of Public Administration Research and Theory* (JPART), and *Public Administration* (PA). Second, we draw lessons from neighboring fields, specifically, political psychology and behavioral economics, which have witnessed a similar development in the recent past. Third, we show, using recent examples of the application of psychological theories and methods in public administration, how a behavioral approach might help add nuance to, support, or criticize theories in our field (de Fine Licht 2014; Riccucci, Van Ryzin, and Lavena 2014; see also Smith 2016). Fourth and finally, we conclude with an agenda comprising four guiding principles to further develop a behavioral approach to public administration.

The overall aim of this article is not to offer a definitive template for a behavioral public administration. Rather, we envision this article as a starting point for a dialogue about the role of a behavioral approach within public administration scholarship. How could, or should, a behavioral public administration look? How does it relate to and complement traditional public administration scholarship? We call on fellow scholars to join the debate.

A Reemerging Call for Integrating Public Administration and Psychology

Before outlining how public administration research may benefit from psychology, it is worth showing how this idea is rooted in the concepts of early public administration scholarship. We do not have to search long or in obscure corners of our field: discussions about the cross-fertilization of the two disciplines were central to many seminal figures in public administration scholarship.

We aim to deepen the dialogue between public administration and psychology by outlining a distinct approach in public administration that integrates both fields of study: *behavioral public administration*.

The most obvious early attempt can be found in Herbert Simon's seminal work *Administrative Behavior* (Simon 1947a). Today, Simon's scholarship is mostly credited with introducing the concepts of bounded rationality and satisficing into the study of public administration (e.g., Meier 2015). While these concepts clearly draw on insights from cognitive and social psychology, they are just examples of how Simon envisioned a much more general and tight integration between the two fields. In his Nobel Prize speech of 1978, he cited how his 1947 book grew out of the conviction "that decision making is the heart of administration, and that the vocabulary of administrative theory must be derived from the logic and psychology of human choice" (Simon 1978, 353).

Simon reiterated this view in an exchange with Robert Dahl (1947) in *Public Administration Review* over the fundamentals of public administration as a science (Simon 1947b). While Simon and Dahl disagreed on a range of issues, they both acknowledged the importance of understanding human behavior in public administration. For instance, Dahl noted that a science of public administration must be based on an "understanding of man's behavior in the area marked off by the boundaries of public administration" (1947, 7). He therefore argued that public administration must work together closely with fields that focus on human behavior in other areas, including psychology and sociology (see also Wright 2015, 797).

Simon's sentiment reflects the idea that public administration is subordinate to psychology, as administrative decision making must be studied as a special case of the many forms of decision making studied by psychologists. Thus, one of the founding fathers of contemporary public administration saw the field as, ideally, an applied subfield within social psychology. However, Simon also noted that public administration cannot merely be a passive user of psychology but must aim to also contribute to it (Simon 1947b, 203). A decade later, Simon still saw a great distance between public administration and psychology, and he recognized that psychology also could learn something from public administration and thus a "a marking stone placed halfway between might help travelers from both directions to keep to their courses" (Simon 1955, 100). In other words, Simon envisioned a two-way street between the two fields.

Simon and Dahl were not the only prominent public administration scholars interested in psychology. In *The Administrative State*, published in 1948, Dwight Waldo, who in the 1960s spearheaded the "behavioral revolution" in political science, discussed the connection between public administration and psychology. He noted how psychologists see "that man is in small part rational" (Waldo 1948, 25) but rather is motivated by emotional drives and urges. Despite this, he also notes that public administration has been "little touched" by ideas from psychology (Waldo 1948, 25). Waldo (1965) subsequently evaluated the extent to which psychological insights had penetrated public administration and came to a similar conclusion.

Calls for integrating insights from psychology into public administration extend beyond Simon and Waldo. Some argued early

on for adopting psychological public opinion research in public administration (Truman 1945, 69). Frederick Mosher (1956, 178), for instance, discussed the role of public administration in relation to other social sciences and pointed out that there should be more interaction between them, in particular public administration and the field of psychology. Along the same lines, scholars in the 1950s and 1960s argued for a tighter integration of the fields (e.g., Honey 1957; Verba 1961). Yet, until recently, these calls have been largely unheard.

Recent Developments in the Use of Psychology in Public Administration

The aforementioned calls illustrate how ideas about the connection between public administration and psychology were part of early discussions about the foundations of public administration.

In order to systematically assess the extent of recent psychology-informed public administration research, we conducted a systematic analysis of all articles published in three top-tier journals in the field of public administration—*Public Administration Review*, *Journal of Public Administration Research and Theory*, and *Public Administration*—from 1996 to 2015. We chose to analyze 20 years given that this is a substantial time frame that is sufficient to identify potential trends in public administration research.

Furthermore, there was also a more pragmatic reason, as the Scopus database only allows word searching within the body text and references from 1996 and onward.

Furthermore, even for some years after 1996, the Scopus database seems incomplete, and therefore the total number of articles reported here may not completely reflect the total number of articles published in each journal. However, for our purpose, the data are suitable to provide an overview of the development in psychology informed public administration research over time.

While Simon and Dahl disagreed on a range of issues, they both acknowledged the importance of understanding human behavior in public administration.

A total of 1,807 articles were published in *PAR*. Among these articles, we identified 216 articles containing the word "psychology" in either the title, abstract, body text, or references. This amounts to about 12 percent of all articles. Based on our reading of the articles, we identified which ones made substantial use of psychology (e.g., by using various psychological theories). The coding identified 63 psychology-informed articles, which amounts to 3.5 percent of the full body of articles in the 20-year period. As shown in figure 1, the share of psychology-informed articles is mostly driven by an increase over the last six years. Fitting a trend line to the data reveals about a 0.4 percentage point increase in the share of psychology-informed articles for each additional year ($p < .01$). The mean share of articles for the last six years has more than quadrupled compared with the mean in the period from 1996 to 2009 ($p < .01$).

The manual coding also included the area of research in public administration. We categorized the articles based on the public administration categories developed by Groeneveld et al. (2015). Most of the articles (52/63 = 83 percent) focused on the broad category of public management, for instance, articles on public service motivation and leadership. A smaller share analyzed topics related to policy and politics (11 percent) or looked at networks and

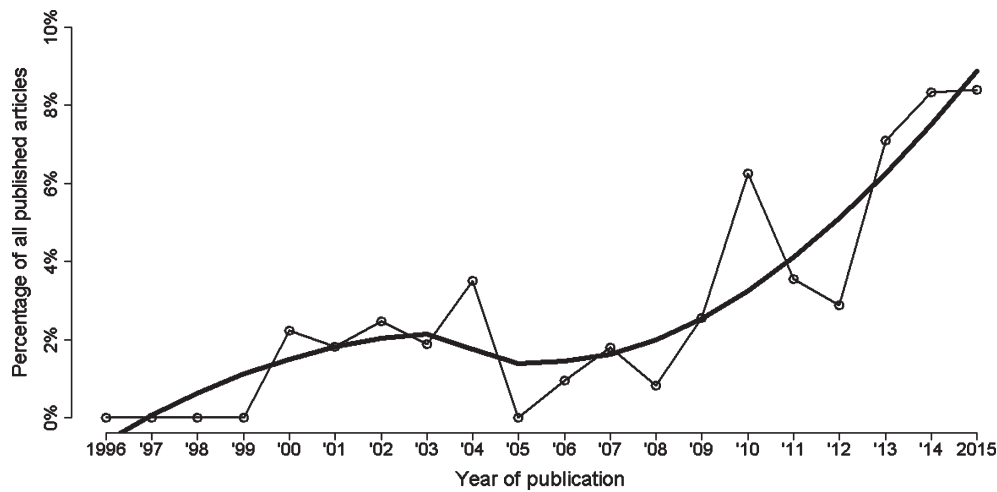


Figure 1 “Behavioral Public Administration” in *Public Administration Review*, 1996–2015

Note: Psychologically informed articles (n=63) as a share of all articles published during the time frame (n=1,807).

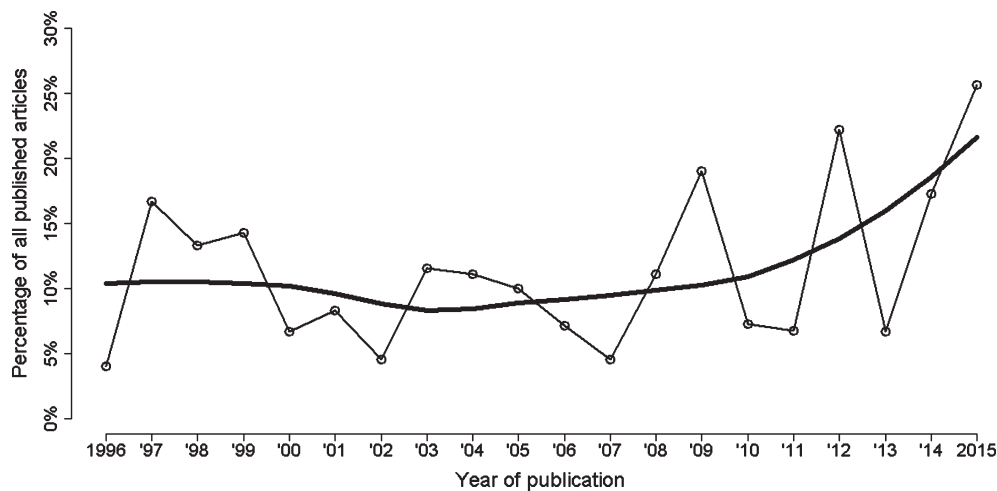


Figure 2 “Behavioral Public Administration” in *Journal of Public Administration Research and Theory*, 1996–2015

Note: Psychology-informed articles (n=74) as a share of all articles published during the time frame (n=650).

complex governance (6 percent), which is quite remarkable given the large share of such studies in general public administration.

In addition, we found that a substantial share drew on industrial and organizational psychology (38 percent), social psychology (35 percent), or a combination of industrial, organizational, and social psychology (19 percent). A far smaller share used insights from cognitive psychology (6 percent). Only one study (2 percent), written by the psychologists Tybur and Griskevicius (2013), drew substantially on evolutionary psychology.

In *JPART*, a total of 650 articles were published from 1996 to 2015, among which we identified 74 as psychologically informed (see Tummers et al. 2016). This amounts to 11.4 percent of all published articles, which is about three times the rate we identified in *PAR*. However, it should be noted that these percentages do not tell the whole story. Although the percentage of *PAR* articles is

lower, the absolute number of psychology-informed articles is about the same because *PAR* is published more frequently: every two months instead of every three months.

Figure 2 shows the share of psychology-informed articles in *JPART* over time. While the trend is upward sloping, a simple fit line does not show a significant increase in the share ($p = .12$).

We identified 836 published articles in *PA*, of which 5 percent were categorized as psychology-informed. The development is shown in figure 3. Fitting a trend line across time, we observe a significant increase in the share of psychology-informed articles ($p < .01$).

Using psychological insights
can be beneficial to our
understanding of various
important phenomena in public
administration research and
practice.

In sum, we find that psychology-informed research constitutes a rather small but increasing share of published research. We also find notable variation in the extent of this research across the three journals. The research is focused on a few areas of public

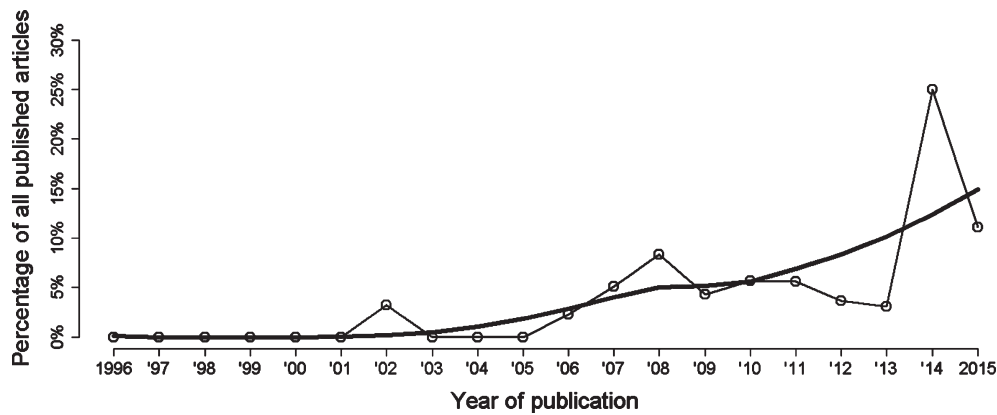


Figure 3 “Behavioral Public Administration” in *Public Administration*, 1996–2015

Note: Psychologically informed articles ($n=42$) as a share of all articles published during the time frame ($n=836$).

administration (especially public personnel). This means that a psychology-informed approach of public administration is on the rise, but there may be room for extension. This is not to say there should be more psychology in public administration research just for the sake of it. Yet, as we aim to demonstrate in this article, using psychological insights can be beneficial to our understanding of various important phenomena in public administration research and practice.

The Role of Psychology in Neighboring Disciplines

We next describe how two neighboring disciplines, political science and economics, have integrated psychology into their disciplines and developed psychology-informed subfields. Political psychology and behavioral economics have used psychology in very distinct ways. It is valuable to observe these differences to see how a behavioral approach to public administration can learn from this and avoid potential pitfalls.

Political Psychology

The study of individual-level political behavior is one of the key topics in contemporary political science and developed gradually during the twentieth century. Seminal work in this area can be traced to the 1930s, such as Harold Lasswell’s *Psychopathology and Politics* (1930) (see also Ascher and Hirschfelder-Ascher 2005). Subsequently, the “behavioral turn” in political science during the 1950s and 1960s (see Dahl 1961) shifted the focus of political researchers to the empirical analysis of political phenomena at the individual level; the integration of psychological theories into the study of political behavior only happened decades after. The emergence of the interdisciplinary subfield of political psychology has gained prominence in the period since the 1980s (Lavine 2010). Contemporary political psychology emphasizes the intertwined nature of politics and psychology, whereby the study of political psychology can be regarded as an interdisciplinary field that considers political behavior from a psychological perspective (e.g., Lau and Redlawsk 2006; Sniderman, Brody, and Tetlock 1993).

The field of political psychology has grown tremendously in past years, reflected in the establishment of its own journal (*Political Psychology*) and a great share of political psychological studies appearing in the flagship journals of the discipline (e.g., Kuklinski, Luskin, and Bolland 1991; Petersen and Aarøe 2013). The two

editions of the *Oxford Handbook of Political Psychology* (Huddy, Sears, and Levy 2013; Sears, Huddy, and Jervis 2003) neatly illustrate this trend.

An example of the application of psychological research to political behavior is the study of the theory of motivated reasoning (Taber and Lodge 2006). Motivated reasoning is a type of cognitive dissonance reduction: people try to conform to their prior held values and beliefs when making decisions (see Festinger 1957). Sloothuus and de Vreese (2010) studied political sponsorship of issue frames—for example, party statements about certain policy areas in newspaper articles—using two population-based survey experiments. They found that citizens tend to vary their support of the very same issue frame in accordance with its political sponsorship, all other things being equal. In other words, people respond differently to information about policy issues when it is presented by the party they voted for than if the frame were sponsored by another party. These findings are explained by arguing that people try to ensure conformity with their prior vote choices by adjusting their support for policies.

Political psychology has also employed insights from social psychology to explain topics such as leadership behavior and group processes in decision making (e.g., Golembiewski and Miller 1980). For instance, Erisen and Erisen (2012) found that close-knit social networks could create “social bubbles.” These bubbles limit how one communicates with others and reasons about politics, eventually declining the quality and breadth of policy-relevant thinking. Another example involves the concept of “groupthink,” which builds on psychological theories about how individuals make decisions in groups (Janis 1972): a strong desire for harmony and consensus, group insulation, and lack of impartial leadership can cause a group of talented and experienced political decision makers to make disastrous collective political judgments (‘t Hart 1994).

In sum, in the neighboring field of political science, the integration of psychological insights has led to theoretical advances in the areas of, for instance, political decision making and motivated reasoning. This subfield is characterized by a plurality of theories and methods borrowed from psychology.

Behavioral Economics

Psychological research now has a prominent place within behavioral economics. A good example of this integration is the work of psychologist Daniel Kahneman, who received the 2002 Nobel Prize in Economic Sciences. As a psychologist by training and highly regarded in both fields, he and his longtime collaborator Amos Tversky became founding fathers of behavioral economics by integrating insights from psychological decision-making theory into individual market decisions and judgments. Their body of work displays the limitations of neoclassical economics (e.g., Kahneman 2003; Kahneman and Tversky 1979; Tversky and Kahneman 1974, 1981) by highlighting limited selfishness, cognitive biases, and bounded rationality of individuals in their decision making. In other words, behavioral economists study individual market behaviors by emphasizing how agents deviate from the neoclassical conception of the rational man. Mullainathan and Thaler (2000) put forward three categories for agents' deviations: (1) bounded rationality and limited cognitive abilities, (2) bounded willpower, and (3) limited self-interest and reciprocity.

An interesting example can be drawn from the area of charitable giving. Ariely, Bracha, and Meier (2009) studied people's responses to monetary incentives using psychological motivation theory. Neoclassical economic theory would assume that monetary incentives steer agents to behave more prosocially. Building on motivation-crowding theory (Frey 1997; Titmuss 1970), Ariely, Bracha, and Meier hypothesized that increasing extrinsic types of motivation can undermine individuals' intrinsic motivation and image motivations (the degree to which individuals are motivated by others' social approval). They found that private monetary rewards indeed crowd out image motivation to behave prosocially. When receiving financial rewards, the effect of "doing good" because of social approval diminishes. This study highlights the fruitful application of psychological theories in the realm of economic behavior and beyond.

More generally, behavioral economics seems to have developed differently from political psychology. Whereas behavioral economics has a strong focus on theories from cognitive psychology and cognitive biases to explain the nonrational decision making of individual market agents, the political psychology subfield has adopted a more pluralistic approach to integrating psychology into political science.

Utilizing Experiences of Political Psychology and Behavioral Economics

What can we learn from how these neighboring disciplines deal with insights from psychology? Behavioral economics predominantly shows that individual behavior in markets deviates from the assumption of *homo economicus*, while political psychology uses psychology to explain individuals' political behavior instead of solely examining institutions at the macro level. But both fields are similar in that they show that there is much to learn from psychological theories and have integrated this into their own field of study.

Both models of political psychology and behavioral economics are useful for inspiring behavioral public administration. However, we envision political science as more akin to the discipline of public administration. Behavioral economics has focused on providing

an alternative to the dominance of rational choice theory in economics. Although the banner *behavioral public administration* may suggest otherwise, the pluralistic way political psychology has developed may fit public administration scholarship better as it embraces a broader range of psychological theories and methods. This pluralistic approach reflects current research practice in public administration, as we will describe in the remainder of this article.

Behavioral Public Administration: Theory and Methods

We now shift our focus from how other fields have integrated psychological theories into new subfields toward our own field. We will show how behavioral public administration can be beneficial for the theory and practice of public administration and how it can be further developed theoretically and methodologically.

Theories for Behavioral Public Administration

A behavioral approach to public administration can be beneficial, first, to connect grand macro-level theories with their micro-level foundations. In this way, a behavioral public administration can verify, falsify, or add nuance to claims made at the macro level and thus refine institutional theories through the systematic testing of their microfoundations (Jilke 2015; Stoker and Moseley 2010). We will exemplify this by using examples to show how studies that we would classify as belonging in the realm of a behavioral public administration verify and add nuance to macro-level theories on transparency and representative bureaucracy.

Transparency. The first example regards a micro-level test of institutional theories of government transparency. Government transparency is said to strengthen citizen trust and legitimacy (Hood and Heald 2006). Being transparent shows that governments have "nothing to hide" and provides citizens with information that helps them better understand public processes of decision and policy making. However, the positive impact of transparency on trust might not be as straightforward as claimed, and recent research suggests that the effects of transparency on citizen attitudes depend on contextual and cultural factors (e.g., Grimmelikhuijsen and Meijer 2014).

This is highlighted by a recent experimental study by de Fine Licht (2014) that tested the micro-level underpinnings of the relationship between government transparency and trust. De Fine Licht used the psychological concept of "taboo trade-offs" (Tetlock et al. 2000) to show how citizens respond more skeptically to government decision-making transparency in areas that relate to human life and death compared with less controversial areas. According to this theory, human life and well-being are considered "sacred" and cannot be traded off against "secular" values, such as money. Government transparency can expose the decision making of these trade-offs.

Participants who were exposed to decision making about a taboo trade-off, such as traffic security, perceived the decision maker as less legitimate than nontaboo decisions (such as those having to do with parks and recreation). This illustrates that government decisions about such trade-offs will encounter much more resistance than trade-offs that do not violate this taboo (de Fine Licht 2014). This example from transparency research exemplifies how the

integration of psychological theories can explain individual behavior in a public administration context, and more importantly how it can add nuance to macro-level theories. It shows that transparency does not automatically lead to higher levels of trust, as assumed by institutional theory, but is conditional on whether the decisions concern controversial areas.

Representative Bureaucracy. A second example tests some of the microfoundations of the theory of representative bureaucracy. The idea behind this theory is that a representative composition of the workforce of a bureaucracy in terms of gender and racial and ethnic diversity can promote democracy in various ways. For instance, Theobald and Haider-Markel (2009) highlighted that representation makes bureaucracies more responsive and increases government accountability. One of the key assumptions underlying representative bureaucracy is symbolic representation. According to Theobald and Haider-Markel, “with symbolic representation, then, attitudes and outcomes can change without any purposeful actions taken by the representatives other than holding a government office or position” (2009, 410). This means that having a more representative workforce should have direct beneficial effects on how an audience perceives it.

To test this foundation of representative bureaucracy theory, Riccucci, Van Ryzin, and Lavena (2014; see also Riccucci, Van Ryzin, and Li 2016) designed an online survey experiment. In this experiment, hypothetical scenarios of police units were randomly assigned to four experimental groups. The scenarios varied in their levels of displayed performance and representativeness (i.e., gender composition). For instance, in one scenario, the organizational unit consisted of a representative workforce of four males and six females, whereas in another scenario this was very unequally distributed (nine males and one female). After the experiment, participants were asked about the trustworthiness, fairness, and performance of the police unit. Findings show that a representative workforce is evaluated more positively on trust, fairness, and performance. This effect was even stronger for female participants. It confirms one of the key micro-level assumptions of representative bureaucracy theory, namely, that symbolic representation causes the audience to feel that they are being represented, in this case women.

In sum, these two examples show how a behavioral approach to public administration can add nuance to (transparency case) and support (representative bureaucracy case) the microfoundations of macro-level theories. It also shows that a behavioral public administration cannot, and should not, replace “conventional” public administration research, but it is complementary to it.

A Behavioral Approach to Public Administration and Research Methods

Besides its theories, psychological research can also contribute to the methodological development of public administration. We emphasize two methodological contributions that research in psychology can make to the conduct of behaviorally informed

public administration research. While our primary focus is on experimentation and measurement techniques, we acknowledge that the behavioral sciences draw on a much richer set of qualitative and quantitative methods, including qualitative interviews, critical incident analysis, and functional magnetic reasoning imaging. Obviously, all of these methods are valuable.

Here we focus on the use of experiments and measurement for two reasons. First, experimentation and, to a lesser extent, measurement constitute the mainstream research methods in psychology, behavioral economics, and other behavioral sciences. Second, they are still relatively novel to the field of public administration. While we believe that behavioral public administration can draw upon a variety of research methods, here we provide an overview of these mainstream methods used in the behavioral sciences, which could be beneficial in the pursuit of a behavioral approach to public administration.

Experimentation. Public administration scholars have recently started using experiments more frequently (Anderson and Edwards 2015; Bouwman and Grimmelikhuijsen 2016; Jilke, Van de Walle, and Kim 2016). That being said, public administration today is far from an experimental science on the same scale as psychology, where thousands of experiments are published each year. While we are not favoring a replacement of other social science techniques by an experimental logic, we argue that it would constitute a very useful addition in the methodological toolbox of scholars conducting behaviorally informed public administration research. Indeed, methodological choices depend on the research problem at hand but also partly on the philosophical or paradigmatic preferences of the researcher (Haverland and Yanow 2012). Yet a behavioral public administration with its explicit focus on individuals is particularly well suited to applying an experimental approach.

While we are not favoring a replacement of other social science techniques by an experimental logic, we argue that it would constitute a very useful addition in the methodological toolbox of scholars conducting behaviorally informed public administration research.

The benefits of an experimental approach can be shown using a core public administration topic: red tape. Red tape can be defined as “rules, regulations and procedures that entail a compliance burden without advancing the legitimate purposes they were intended to serve” (Bozeman 2000, 12). In other words, these rules are burdensome and have no added value. However, to investigate the causal negative effects of red tape more precisely, an experimental approach could be helpful (see also Pandey, Pandey, and Van Ryzin, forthcoming). Comparisons between control and treatment groups can determine what would have happened in the absence of red tape (or lower degrees thereof), while the process of randomization ensures the statistical equivalence of experimental subjects. An interesting example here is the work of Scott and Pandey (2000). They used an experimental design to address the impact of red tape on bureaucratic behavior, such as recommending financial assistance for a client. Their findings show that increasing levels of red tape produce a reduction in benefits recommended for clients. A possible implication is that comparable clients may be treated differentially based on the level of red tape involved in the benefit determination process. This illustrates how public administration scholars can develop important practical and scientific insights using experiments.

Despite its benefits, experimentation has its own potential pitfalls. Without discussing them in great detail, one pitfall that public administration scholars may want to avoid is experimentation without replication (Bouwman and Grimmelikhuisen 2016). This would result in many “one-shot” experiments that are not (yet) confirmed in other populations or contexts. This risk is currently heavily debated extensively in the field of psychology (e.g., Nosek et al. 2015), and it would be important to have these debates about experiments in public administration as well. Here, potential problems such as cross-replication nonequivalence (Jilke et al. 2016), or what empirically constitutes a (un)successful replication (Gilbert et al. 2016), however, should be kept in mind.

Measurement. Paying attention to measurement bias in quantitative research is an additional methodological opportunity that arises when working toward a greater integration of psychology with public administration. Measurement issues have been taken up by various public administration scholars. For instance, articles have been published regarding priming or order effects within scales (Van de Walle and Van Ryzin 2011), cross-national measurement equivalence (Jilke, Meuleman, and Van de Walle 2014; Kim et al. 2013), social desirability bias (Kim and Kim 2016), common source bias (Favero and Bullock 2015), and the use of language in item wording (Feeney 2012). However, it seems that the measurement quality of public administration research can be strengthened further. For instance, a recent review of the major public administration journals using the total error framework by Lee, Benoit-Bryan, and Johnson (2012) showed that many public administration studies are prone to various measurement errors, such as questionnaire wording, social desirability bias, overly complicated questions, data coding, and estimation.

Although public administration scholars employ scales frequently, these are often scales developed in other fields, such as organization studies (e.g., Mowday, Steers, and Porter 1979; Van Dyne, Graham, and Dienesch 1994; Wanous, Reichers, and Hudy 1997). They infrequently develop scales themselves, leaving some important public administration concepts without thoroughly tested measurement scales. Of course, there are exceptions, such as policy alienation (Tummers 2012), administrators’ trust in citizens (Yang 2005), public service motivation (Kim et al. 2013; Perry 1996), collaboration (Thomson, Perry, and Miller 2009), red tape (Van Loon et al. 2016), and individual level of globalism (Adres, Vashdi, and Zalmanovitch 2016). Hence, next to incorporating an experimental logic, a greater emphasis on measurement can help a behavioral public administration in making inferences that are also comparable across studies and contexts.

An Agenda for Developing a Behavioral Public Administration

In this article, we have argued for a tighter integration of psychology and public administration. We defined behavioral public administration as an approach that is characterized by the interdisciplinary analysis of public administration from the perspective of individual behavior and attitudes by drawing on insights and theories about the underlying psychology

and behavior of individuals. It is important to stress that behavioral public administration is an approach that could function as a transportation belt between some specialized topic of research and a broader discipline. A behavioral approach could be useful to make sure that public administration research has an ongoing dialogue with psychology on the theories and methods relevant to administrative settings. Our plea is therefore one of pluralism and greater cooperation between public administration and psychology.

We envision the following four principles to further develop the infusion and cross-fertilization of psychology and public administration: (1) extending behavioral public administration to more public administration topics, (2) methodological advancement, (3) strengthening behavioral public administration as a mature subfield, and (4) increasing value for public administration practice.

Extending Behavioral Public Administration to More Public Administration Topics

Some areas of public administration research have already witnessed an increase in research that could be placed under the banner of behavioral public administration, mostly in public management-related topics such as public service motivation and leadership. Other areas could also benefit from a stronger connection with psychology. For instance, topics related to policy and politics had a much smaller share of psychology-informed articles in our review, only 11 percent, and only 6 percent of the psychology-informed articles in *PAR* were about networks and complex governance.

We envision a broad variety of other research questions in public administration that can be addressed in the spirit of behavioral public administration. Areas of investigation that currently consider insights from psychology to a much lesser extent are, for instance, e-government, network governance, street-level bureaucracy, the relationship between elected officials and public administrators, and accountability.

A major research question in e-government research, for instance, concerns the effect of e-service delivery on citizen behavior and attitudes (West 2004). This can be suited for behavioral public administration as it directly concerns individual citizens’ attitudes and behaviors in a public sector context. This also applies to studies on network effectiveness research, which generally identify three levels of analysis: community, network, and organization/participant levels (Provan and Milward 2001). Especially for research questions at the participant level, psychological theories about collaboration and competition could help to better understand how and why people in networks collaborate or why collaboration fails. Here,

one might think of psychological theories on groupthink in decision making (Janis 1972; ‘t Hart 1994) and group conflict (Curseu and Schruijer 2010).

In addition, research questions in the study of accountability that regard the effects of the political environment on how accountability operates could also benefit from insights from the behavioral sciences (e.g., Schillemans 2015). For instance, psychologist Philip Tetlock (1983) carried out experiments and showed

Especially for research questions at the participant level, psychological theories about collaboration and competition could help to better understand how and why people in networks collaborate or why collaboration fails.

how individuals engage in more complex information processing and elaborate justifying behavior if there is a hostile audience. The application of these theories could be very useful for public organizations who often operate in a hostile media environment.

Methodological Development

Next to using behavioral approaches in more areas of public administration, behavioral public administration can also help in the development of other research methods, such as functional magnetic reasoning imaging, scale development, diary studies, field experiments, laboratory experiments, and methods focused on causal inference more widely. It could integrate methods and research standards from psychology and psychology-informed fields such as political psychology and behavioral economics.

But how can we foster this methodological broadening? One possibility could be through increased training on methods within graduate schools. Here, collaborations with psychology departments or interdisciplinary method schools are interesting possibilities. Moreover, interdisciplinary collaborations between scholars may result in further learning about the use of other research techniques. Another interesting option would be to expand the possibilities for doctoral minors between public administration degrees and psychology departments. Some schools already have such options in place, but the offering of such option could be increased with relative ease.

Reinforcing a Two-Way Street between Psychology and Public Administration

We argued that public administration scholars could benefit from integrating psychology-informed theories into their projects. What does this imply for our research practice? First of all, it implies an open attitude toward theories and methods that are not initially developed for studying research questions that arise in an administrative setting. Specifically, this entails that a research project in behavioral public administration not only draws on the best available knowledge within public administration but also from state-of-the-art knowledge from psychology. By studying concepts derived from psychology in public administration settings, behavioral public administration will also be better positioned to provide constructive and critical contributions to psychology.

Yet “it takes two to tango,” and therefore behavioral public administration should be a two-way street for scientific discovery (Perry 2016; Simon 1955). Theories in psychology are often backed by experiments conducted with a student sample in a highly controlled environment such as the laboratory. A political-administrative setting provides a real-life laboratory to study human judgment and decision making in which the ecological validity and practical implications of psychological theories can be tested.

Certain concepts from public administration, such as public service motivation (Perry and Vandenabeele 2015) and red tape, can further inform thinking in psychology.

Public administration can actively contribute to psychology by highlighting the interplay between psychological processes among citizens and political actors. For instance,

psychologists have identified a “left-most digit bias” in humans’ processing of numbers, which posits that humans are overly influenced by the digits they first encounter when relying on a multidigit number (Hinrichs, Berie, and Mosell 1982). Public administration research has also shown that politicians can actively draw on citizens’ left-most digit bias in order to provide a more favorable view of performance to the public (Olsen 2013). That is, public administration provides psychology with novel ways of linking micro-level processes to macro-level variation in how politicians, managers, or organizations behave.

Increasing Value for Public Administration Practice

Finally, behavioral public administration can be beneficial for practitioners, such as policy makers, public managers, and public professionals. The gap between research and practice in public administration has been intensively debated and commenters have been rather critical about the value of public administration theory and research for practice (Bogason and Brans 2008, 92). According to O’Toole, “The theory–practice nexus is not a simple link in some translation belt from thought to action” (2004, 312). Although O’Toole is not as pessimistic as some other scholars on the theory–practice relationship, he does acknowledge that the theory–practice relationship needs to be improved. Here behavioral public administration can help by developing usable knowledge. Perry (2012, 479) has argued that usable knowledge should meet the priorities of users and flow from high-quality research. Hence, behavioral public administration should develop usable knowledge by conducting high-quality research on topics that are valuable for practitioners.

Some topics might be very suitable for this, such as the performance of public institutions. A behavioral approach can provide evidence about what should—or should not—be done to improve perceived performance. For instance, psychology-informed research has shown that perceived performance can only be mollified to a limited extent. For instance, negative attitudes of citizens toward government are not merely a product of bad performance but are, to a great extent, determined by unconscious negative biases (Marvel 2016). In addition, Hvidman and Andersen (2016) found that public organizations are perceived as less efficient yet more benevolent than similar private organizations simply because they are public.

Second, scholars can become involved in practice themselves. For instance, behavioral economist Richard Thaler (Thaler and Sunstein 2008) became actively involved in the Behavioral Insights Team, a unit set up to apply behavioral economics and psychology to improve government policy in the United Kingdom. Such endeavors may be fruitful to connect behavioral public administration and society. Related to this particular movement, public administration scholars can critically discuss the notions

Public administration can actively contribute to psychology by highlighting the interplay between psychological processes among citizens and political actors.

put forward by psychologists by entering the public debate through working articles. For instance, public administration scholars Lodge and Wegrich (2014) developed a working article criticizing the nudge movement in government, with the provocative title “Rational Tools of Government in a World of Bounded Rationality.” The authors used key public administration studies such as

Lindblom's "The Science of 'Muddling Through'" (1959) to criticize nudging as a policy tool. Such endeavors are valuable as these do not take psychology at face value but explicitly connect it with public administration knowledge (see also Bendor 2015).

How Can We Foster a Behavioral Approach to Public Administration?

Now that we have discussed *what* can be done to foster a behavioral public administration, the next question is *how* this can be done. First of all, it is important to highlight various activities under the banner of behavioral public administration that are already ongoing, such as panels at various major conferences for public management scholars (e.g., European Group of Public Administration, Public Management Research Association, International Research Society for Public Management).

First, to make behavioral public administration a sustainable endeavor, these activities can be extended to PhD and graduate students. To broaden the substantive scope of behavioral public administration, colloquia aimed at PhD students could help young scholars become acquainted with peers and senior researchers using the same approach. Second, to reinforce the two-way street on a longer term, courses could be developed that bring together students of both public administration and psychology. Another way to bring the disciplines together may be to develop special issues, symposia, or edited books for which both psychologists and public administration scholars are invited.

As we highlighted in the introduction, this article is meant to start a dialogue about a behavioral approach to public administration. It is not meant to offer a definitive template of this approach but rather as a description of what—according to us—is an important development in the field. Therefore, we hope this article will be the start of a fruitful conversation that will eventually lead to an inclusive, multidisciplinary approach, in which scholars from both psychology and public administration are keen on learning from each other.

Acknowledgments

We would like to thank Jim Perry, Rosemary O'Leary, Paul 't Hart, Oliver James, and the three anonymous reviewers. They all provided us with very constructive and insightful comments, significantly improving the article.

Funding

Stephan Grimmelikhuijsen and Lars Tummers acknowledge funding of NWO grants, which both use a combination of psychology and public administration (VENI-451-15-024 and VENI-451-14-004, respectively). Sebastian Jilke acknowledges funding from the 2016–17 Chancellor's Seed Grant Program at Rutgers University–Newark. Asmus Leth Olsen acknowledges funding from the Danish Council for Independent Research (Grant no. 0602-02577B) and a grant from the master of public governance program at the University of Copenhagen (project, "The Psychology of the Public Sector").

References

Adres, Eitan, Dana R. Vashdi, and Yair Zalmanovitch. 2016. Globalization and the Retreat of Citizen Participation in Collective Action: A Challenge for Public Administration. *Public Administration Review* 76(1): 142–52.

- Anderson, Derrick M., and Barry C. Edwards. 2015. Unfulfilled Promise: Laboratory Experiments in Public Management Research. *Public Management Review* 17(1): 1518–42.
- Ariely, Dan, Anat Bracha, and Stephen Meier. 2009. Doing Good or Doing Well? Image Motivation and Monetary Incentives in Behaving Prosocially. *American Economic Review* 99(1): 544–55.
- Ascher, William, and Barbara Hirschfelder-Ascher. 2005. *Revitalizing Political Psychology: The Legacy of Harold D. Lasswell*. Mahwah, NJ: Lawrence Erlbaum.
- Baekgaard, Martin, and Søren Serritzlew. 2016. Interpreting Performance Information: Motivated Reasoning or Unbiased Comprehension. *Public Administration Review* 76(1): 73–82.
- Bakker, Arnold B. 2015. A Job Demands–Resources Approach to Public Service Motivation. *Public Administration Review* 75(5): 723–32.
- Bellé, Nicola. 2015. Performance-Related Pay and the Crowding Out of Motivation in the Public Sector: A Randomized Field Experiment. *Public Administration Review* 75(2): 230–41.
- Bendor, Jonathan. 2015. Incrementalism: Dead yet Flourishing. *Public Administration Review* 75(2): 194–205.
- Bogason, Peter, and Marleen Brans. 2008. Making Public Administration Teaching and Theory Relevant. *European Political Science* 7(1): 84–97.
- Bouwman, Robin, and Stephan Grimmelikhuijsen. 2016. Experimental Public Administration from 1992 to 2014: A Systematic Literature Review and Ways Forward. *International Journal of Public Sector Management* 29(2): 110–31.
- Bozeman, Barry. 2000. *Bureaucracy and Red Tape*. Upper Saddle River, NJ: Prentice Hall.
- Cascio, Wayne F. 1995. Whither Industrial and Organizational Psychology in a Changing World of Work? *American Psychologist* 50(11): 928–39.
- Curseu, Petru L., and Sandra G.L. Schrujfer. 2010. Does Conflict Shatter Trust or Does Trust Obliterate Conflict? Revisiting the Relationships between Team Diversity, Conflict, and Trust. *Group Dynamics: Theory, Research, and Practice* 14(1): 66–79.
- Dahl, Robert A. 1947. The Science of Public Administration: Three Problems. *Public Administration Review* 7(1): 1–11.
- . 1961. The Behavioral Approach in Political Science: Epitaph for a Monument to a Successful Protest. *American Political Science Review* 55(4): 763–72.
- de Fine Licht, Jenny. 2014. Policy Area as a Potential Moderator of Transparency Effects: An Experiment. *Public Administration Review* 74(3): 361–71.
- DeVellis, Robert F. 2012. *Scale Development: Theory and Applications*, 3rd ed. London: Sage Publications.
- Erisen, Alif, and Cengiz Erisen. 2012. The Effect of Social Networks on the Quality of Political Thinking. *Political Psychology* 33(6): 839–65.
- Favero, Nathan, and Justin B. Bullock. 2015. How (Not) to Solve the Problem: An Evaluation of Scholarly Responses to Common Source Bias. *Journal of Public Administration Research and Theory* 25(1): 285–308.
- Feeney, Mary K. 2012. Organizational Red Tape: A Measurement Experiment. *Journal of Public Administration Research and Theory* 22(3): 427–44.
- Festinger, Leon. 1957. *A Theory of Cognitive Dissonance*. Stanford, CA: Stanford University Press.
- Frey, Bruno S. 1997. *Not Just for the Money: An Economic Theory of Personal Motivation*. Cheltenham, UK: Edward Elgar.
- Gilbert, Daniel, Gary King, Stephen Pettigrew, and Timothy Wilson. 2016. Comment on "Estimating the Reproducibility of Psychological Science." *Science* 351(6277): 1037.
- Golembiewski, Robert T., and Gerald J. Miller. 1980. Small Groups in Political Science. In *The Handbook of Political Behavior*, Vol 2, edited by Samuel L. Long, 1–71. New York: Plenum Press.
- Grimmelikhuijsen, Stephan G., and Albert J. Meijer. 2014. The Effects of Transparency on the Perceived Trustworthiness of a Government Organization:

- Evidence from an Online Experiment. *Journal of Public Administration Research and Theory* 24(1): 137–57.
- Groeneveld, Sandra, Lars Tummers, Babette Bronkhorst, Tanachia Ashikali, and Sandra van Thiel. 2015. Quantitative Methods in Public Administration: Their Use and Development through Time. *International Public Management Journal* 18(1): 61–86.
- Haverland, Marcus, and Dvora Yanow. 2012. A Hitchhiker's Guide to the Public Administration Research Universe: Surviving Conversations on Methodologies and Methods. *Public Administration Review* 72(3): 401–8.
- Honey, John C. 1957. Research in Public Administration: A Further Note. *Public Administration Review* 17(4): 238–43.
- Christopher, Hood, and David Heald, eds. 2006. *Transparency: The Key to Better Government?* Oxford, UK: Oxford University Press.
- Hinrichs, James V., Janis L. Berie, and Molaan K. Mosel. 1982. Place Information in Multidigit Number Comparison. *Memory and Cognition* 10(5): 487–95.
- Huddy, Leonie, David O. Sears, and Jack S. Levy. 2013. *The Oxford Handbook of Political Psychology*, 2nd ed. Oxford, UK: Oxford University Press.
- Hvidman, Ulrik, and Simon C. Andersen. 2016. Perceptions of Public and Private Performance: Evidence from a Survey Experiment. *Public Administration Review* 76(1): 111–20.
- James, Oliver. 2011. Performance Measures and Democracy: Information Effects on Citizens in Field and Laboratory Experiments. *Journal of Public Administration Research and Theory* 21(3): 399–418.
- Janis, Irving L. 1972. *Victims of Groupthink: A Psychological Study of Foreign-Policy Decisions and Fiascoes*. Boston: Houghton Mifflin.
- Jilke, Sebastian. 2015. Essays on the Microfoundation of Competition and Choice in Public Service Delivery. PhD diss.: Erasmus University Rotterdam.
- Jilke, Sebastian, Bart Meuleman, and Steven Van de Walle. 2014. We Need to Compare, but How? Measurement Equivalence in Comparative Public Administration. *Public Administration Review* 75(1): 36–48.
- Jilke, Sebastian, Nicolai Petrovsky, Bart Meuleman, and Oliver James. 2016. Measurement Equivalence in Replications of Experiments: When and Why It Matters and Guidance on How to Determine Equivalence. Paper presented at the Southern Political Science Association Conference, Puerto Rico, January 7–9.
- Jilke, Sebastian, Steven Van de Walle, and Soonhee Kim. 2016. Generating Usable Knowledge through an Experimental Approach to Public Administration. *Public Administration Review* 76(1): 69–72.
- Jones, Brian D. 2003. Bounded Rationality and Political Science: Lessons From Public Administration and Public Policy. *Journal of Public Administration Research and Theory* 13(4): 395–412.
- Kahneman, Daniel. 2003. A Perspective on Judgment and Choice: Mapping Bounded Rationality. *American Psychologist* 58(9): 697–720.
- Kahneman, Daniel, and Amos Tversky. 1979. Prospect Theory: An Analysis of Decision under Risk. *Econometrica* 47(2): 263–91.
- Kim, Sangmook, et al. 2013. Investigating the Structure and Meaning of Public Service Motivation across Populations: Developing an International Instrument and Addressing Issues of Measurement Invariance. *Journal of Public Administration Research and Theory* 23(1): 79–102.
- Kim, Seung Hyun, and Sangmook Kim. 2016. National Culture and Social Desirability in Public Service Motivation. *Administration & Society* 48(4): 444–76.
- Klein, Katherine J., and Steve W.J. Kozlowski. 2000. From Micro to Meso: Critical Steps in Conceptualizing and Conducting Multilevel Research. *Organizational Research Methods* 3(3): 211–36.
- Kuklinski, James H., Robert C. Luskin, and John Bolland. 1991. Where Is the Schema? Going beyond the “S” Word in Political Psychology. *American Political Science Review* 85(4): 1341–80.
- Lasswell, Harold D. 1930. *Psychopathology and Politics*. Chicago: University of Chicago.
- Lau, Richard R., and David P. Redlawsk. 2006. *How Voters Decide: Information Processing in Election Campaigns*. New York: Cambridge University Press.
- Lavine, Howard. 2010. A Sketch of Political Psychology. In *Political Psychology*, edited by Howard Lavine, xviii–ivi. London: Sage Publications.
- Lee, Geon, Jennifer Benoit-Bryan, and Timothy P. Johnson. 2012. Survey Research in Public Administration: Assessing Mainstream Journals with a Total Survey Error Framework. *Public Administration Review* 72(1): 87–97.
- Lodge, Martin, and Kai Wegrich. 2014. Rational Tools of Government in a World of Bounded Rationality. Discussion Paper no. 75, Centre for Analysis of Risk and Regulation, London School of Economics. <http://www.lse.ac.uk/accounting/CARR/pdf/dps/dp75-lodge-wegrich.pdf> [accessed June 8, 2016].
- Lindblom, Charles E. 1959. The Science of “Muddling Through.” *Public Administration Review* 19(2): 79–88.
- Margetts, Helen. 2011. Experiments in Public Management Research. *Public Management Review* 13(2): 189–208.
- Marvel, John D. 2016. Unconscious Bias in Citizens' Evaluations of Public Sector Performance. *Journal of Public Administration Research and Theory* 26(1): 143–58.
- McDermott, Rose. 2004. Prospect Theory in Political Science: Gains and Losses from the First Decade. *Political Psychology* 25(2): 289–312.
- Meier, Kenneth J. 2015. Proverbs and the Evolution of Public Administration. *Public Administration Review* 75(1): 15–24.
- Mosher, Frederick C. 1956. Research in Public Administration: Some Notes and Suggestions. *Public Administration Review* 16(3): 169–78.
- Mowday, Richard T., Richard M. Steers, and Lyman W. Porter. 1979. The Measurement of Organizational Commitment. *Journal of Vocational Behavior* 14(2): 224–47.
- Mullainathan, Sendhil, and Richard H. Thaler. 2000. Behavioral Economics. Working Paper no. 7948, National Bureau for Economic Research.
- Nosek, B.A., et al. 2015. Promoting an Open Research Culture. *Science* 348(6242): 1422–25.
- Olsen, Asmus Leth. 2013. The Politics of Digits: Evidence of Odd Taxation. *Public Choice* 154(1): 59–73.
- . 2015a. Citizen (Dis)Satisfaction: An Equivalence Framing Study. *Public Administration Review* 75(3): 469–78.
- . 2015b. “Simon Said,” We Didn't Jump. *Public Administration Review* 75(2): 325–26.
- O'Toole, Laurence J., Jr. 2004. The Theory–Practice Issue in Policy Implementation Research. *Public Administration* 82(2): 309–29.
- Pandey, Sanjay K., Sheela Pandey, and Gregg G. Van Ryzin. Forthcoming. Prospects for Experimental Approaches to Research on Bureaucratic Red Tape. In *Experiments in Public Management Research: Challenges and Contributions*, edited by James Oliver, Jilke Sebastian, and Gregg G. Van Ryzin. Cambridge, UK: Cambridge University Press.
- Perry, James L. 1996. Measuring Public Service Motivation: An Assessment of Construct Reliability and Validity. *Journal of Public Administration Research and Theory* 6(1): 5–22.
- . 2012. How Can We Improve Our Science to Generate More Usable Knowledge for Public Professionals? *Public Administration Review* 72(4): 479–82.
- . 2016. Is Public Administration Vanishing? *Public Administration Review* 76(2): 211–12.
- Perry, James L., and Wouter Vandenabeele. 2015. Public Service Motivation Research: Achievements, Challenges, and Future Directions. *Public Administration Review* 75(5): 692–99.
- Petersen, Michael B., and Lene Aarøe. 2013. Politics in the Mind's Eye: Imagination as a Link between Social and Political Cognition. *American Political Science Review* 107(2): 275–93.
- Provan, Keith, and H. Brinton Milward. 2001. Do Networks Really Work? A Framework for Evaluating Public-Sector Organizational Networks. *Public Administration Review* 61(4): 414–23.

- Raadschelders, Jos C.N. 2011. *Public Administration: The Interdisciplinary Study of Government*. Oxford, UK: Oxford University Press.
- Riccucci, Norma M., Gregg G. Van Ryzin, and Cecilia F. Lavena. 2014. Representative Bureaucracy in Policing: Does It Increase Perceived Legitimacy? *Journal of Public Administration Research and Theory* 24(3): 537–51.
- Riccucci, Norma M., Gregg G. Van Ryzin, and Huafang Li. 2016. Representative Bureaucracy and the Willingness to Coproduce: An Experimental Study. *Public Administration Review* 76(1): 121–30.
- Schillemans, Thomas. 2015. Calibrating Public Sector Accountability: Translating Experimental Findings to Public Sector Accountability. *Public Management Review*. Published electronically on December 8. doi:10.1080/14719037.2015.1112423.
- Scott, Patrick G., and Sanjay K. Pandey. 2000. The Influence of Red Tape on Bureaucratic Behavior: An Experimental Simulation. *Journal of Policy Analysis and Management* 19(4): 615–33.
- Sears, David O., Leonie Huddy, and Robert L. Jervis. 2003. *The Oxford Handbook of Political Psychology*. Oxford, UK: Oxford University Press.
- Simon, Herbert A. 1947a. *Administrative Behavior: A Study of Decision-Making Processes in Administrative Organization*. New York: Macmillan.
- . 1947b. A Comment on “The Science of Public Administration.” *Public Administration Review* 7(3): 200–203.
- . 1955. A Behavioral Model of Rational Choice. *Quarterly Journal of Economics* 69(1): 99–118.
- . 1965. Administrative Decision Making. *Public Administration Review* 25(1): 31–37.
- . 1978. Rational Decision-Making in Business Organizations. Nobel Prize lecture, December 8. http://www.nobelprize.org/nobel_prizes/economic-sciences/laureates/1978/simon-lecture.pdf [accessed June 12, 2016].
- . 1979. Rational Decision Making in Business Organizations. *American Economic Review* 69(4): 493–513.
- Sloothuus, Rune, and Claes H. de Vreese. 2010. Political Parties, Motivated Reasoning, and Issue Framing Effects. *Journal of Politics* 72(3): 630–45.
- Smith, Jason. 2016. The Motivational Effects of Mission Matching: A Lab-Experimental Test of a Moderated Mediation Model. *Public Administration Review* 76(4): 626–37.
- Sniderman, Paul M., Richard A. Brody, and Phillip E. Tetlock. 1993. *Reasoning and Choice: Explorations in Political Psychology*. Cambridge, UK: Cambridge University Press.
- Soroka, Stuart N. 2014. *Negativity in Democratic Politics: Causes and Consequences*. Cambridge, UK: Cambridge University Press.
- Stoker, Gerry, and Alice Moseley. 2010. *Motivation, Behaviour and the Microfoundations of Public Services*. London: Public Service Trust.
- Taber, Charles S., and Milton Lodge. 2006. Motivated Skepticism in the Evaluation of Political Beliefs. *American Journal of Political Science* 50(3): 755–69.
- Tetlock, Philip E. 1983. Accountability and Complexity of Thought. *Journal of Personality and Social Psychology* 45(1): 74–83.
- Tetlock, Philip E., Ori V. Kristel, S. Beth Elson, Melanie C. Green, and Jennifer S. Lerner. 2000. The Psychology of the Unthinkable: Taboo Trade-Offs, Forbidden Base Rates, and Heretical Counterfactuals. *Journal of Personality and Social Psychology* 78(5): 853–70.
- Thaler, Richard H., and Cass R. Sunstein. 2008. *Nudge: Improving Decisions about Health, Wealth, and Happiness*. New Haven, CT: Yale University Press.
- ‘t Hart, Paul. 1994. *Groupthink in Government: A Study of Small Groups and Policy Failure*. Baltimore: Johns Hopkins University Press.
- Theobald, Nick A., and Donald P. Haider-Markel. 2009. Race, Bureaucracy, and Symbolic Representation: Interactions between Citizens and Police. *Journal of Public Administration Research and Theory* 19(2): 409–26.
- Thomson, Ann Marie, James L. Perry, and Theodore K. Miller. 2009. Conceptualizing and Measuring Collaboration. *Journal of Public Administration Research and Theory* 19(1): 23–56.
- Titmuss, Richard M. 1970. *The Gift Relationship: From Human Blood to Social Policy*. New York: New Press.
- Truman, David B. 1945. Public Opinion Research as a Tool of Public Administration. *Public Administration Review* 5(1): 62–72.
- Tummers, Lars. 2012. Policy Alienation of Public Professionals: The Construct and Its Measurement. *Public Administration Review* 72(4): 516–25.
- Tummers, Lars, Asmus Leth Olsen, Sebastian Jilke, and Stephan G. Grimmelikhuisen. 2016. Introduction to the Virtual Issue on Behavioral Public Administration. *Journal of Public Administration Research and Theory*. https://www.oxfordjournals.org/our_journals/jopart/vi_behavioralpublicadministration.pdf [accessed June 8, 2016].
- Tversky, Amos, and Daniel Kahneman. 1974. Judgment under Uncertainty: Heuristics and Biases. *Science* 185(4157): 1124–31.
- . 1981. The Framing of Decisions and the Psychology of Choice. *Science* 211(4481): 453–58.
- Tybur, Joshua M., and Vidas Griskevicius. 2013. Evolutionary Psychology: A Fresh Perspective for Understanding and Changing Problematic Behaviors. *Public Administration Review* 73(1): 12–22.
- Van de Walle, Steven, and Gregg G. Van Ryzin. 2011. The Order of Questions in a Survey on Citizen Satisfaction with Public Services: Lessons from a Split-Ballot Experiment. *Public Administration* 89(4): 1436–50.
- Van Dyne, Linn, Jill W. Graham, and Richard M. Dienesch. 1994. Organizational Citizenship Behavior: Construct Redefinition, Measurement, and Validation. *Academy of Management Journal* 37(4): 765–802.
- Van Loon, Nina M., Peter M. Leisink, Eva Knies, and Gene A. Brewer. 2016. Red Tape: Developing and Validating a New Job-Centered Measure. *Public Administration Review* 76(4): 662–73.
- Van Ryzin, Gregg G. 2011. Outcomes, Process, and Trust of Civil Servants. *Journal of Public Administration Research and Theory* 21(4): 745–60.
- Verba, Sidney. 1961. Assumptions of Rationality and Non-Rationality in Models of the International System. *World Politics* 14(1): 93–117.
- Waldo, Dwight. 1948. *The Administrative State: A Study of the Political Theory of American Public Administration*. New York: Ronald Press.
- . 1965. The Administrative State Revisited. *Public Administration Review* 25(1): 15–30.
- Wanous, John P., Arnon E. Reichers, and Michael Hudy. 1997. Overall Job Satisfaction: How Good Are Single-Item Measures? *Journal of Applied Psychology* 82(2): 247–52.
- Weaver, R. Kent. 1986. The Politics of Blame Avoidance. *Journal of Public Policy* 6(4): 371–98.
- West, Darrell M. 2004. E-Government and the Transformation of Service Delivery and Citizen Attitudes. *Public Administration Review* 64(1): 15–27.
- Wright, Bradley E. 2015. The Science of Public Administration: Problems, Presumptions, Progress, and Possibilities. *Public Administration Review* 75(6): 795–805.
- Wright, Bradley E., and Adam M. Grant. 2010. Unanswered Questions about Public Service Motivation: Designing Research to Address Key Issues of Emergence and Effects. *Public Administration Review* 70(5): 691–700.
- Yang, Kaifeng. 2005. Public Administrators’ Trust in Citizens: A Missing Link in Citizen Involvement Efforts. *Public Administration Review* 65(3): 273–85.

Authors’ Note

Author order is alphabetical. The authors contributed equally to this article.