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Behavioural Approaches to Public Management and Governance

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Introduction

"For the man who wishes to explore the pure science of administration, it will dictate at least a thorough grounding in social psychology" (Herbert Simon, 1947: 202).

This chapter will explore the distinctive features of the behavioural approach to public administration scholarship, an approach which has become increasingly popular in the past decade and which provides new insights into the behaviour and motivation of stakeholders involved in public administration.

Learning objectives

1. Students will understand the distinctive features of the behavioral approach to public administration.
2. Students will be able identify advantages and disadvantages of behavioral research designs.
3. Students will have a basic understanding of experimental methods in public administration research to test administrative behaviors in a controlled environment.
4. Students will be able to reflect on behavioral perspectives and theories that inform public administration.
5. Students will be able to identify administrative behaviors and behavioral assumptions underlying public policies and service delivery in public administration contexts.

What is behavioural science?

As the term suggests, behavioural science is concerned with human behaviour. While we can ask big questions about the overarching connection of complex issues at the macro level of government or society at large, a behavioural scientist would argue that in the end it all boils down to human decision-making, interpersonal interaction, and individual behaviour. Public administration scholars have always been interested in the individual interacting with administrative structures, both from the 'inside' perspective of public employees, and from the 'outside' perspective of citizens. However, the explicit term 'Behavioural Public Administration' (BPA) has only recently been coined and it encompasses advances in experimentation and measurement in research of public management and governance based on the principles of psychological research.

So, what does this fancy term mean in practice? It suggests that researchers are able to answer classic questions and puzzles about behaviour through the use of research methods for studying individual behaviour and its determinants, which are established within the study of psychology, but are new(er) to the study of other disciplines and much newer to public administration – see Box 1. As psychology is a field that is largely concerned with quantitative methods, this approach emphasises experimental methods, in particular, as a methodological approach to studying public management and governance.

Some of the most common themes in BPA research are how citizens use performance information to evaluate public administrations, the impact of transparency on decision-making, and what influences trust (Li and van Ryzin, 2017). Within this chapter, we will give several specific examples of research within BPA, to demonstrate the range of experimental studies from the research lab to the real world and from the individual human being to the organizational context.

Box 1: Behavioural approaches to society and organisations

What other disciplines have behavioural subfields and are concerned with behaviour in public administration contexts? There are well-established literatures on behaviour in economics, organizational behaviour, political psychology, and organization and work psychology. They all have in common that they focus on the analysis of micro-level motivation, intentions and behaviour of individuals and combine it with the organizational and societal level. The role of the individual can vary greatly between and within these subfields - from a citizen in general, or a voter or user of a public service in particular, to an employee in general or a politician or civil servant in particular. While psychology, for example, starts from its core – the individual level – and opens up to include environmental measures, political science or organization studies tend to start from the analysis of the meso level (organization, groups, parties) or the macro level (whole political system, society) and then incorporate individual level analyses later on. Within behavioural public administration scholarship, we find multiple starting levels of analysis, all recognizing the importance of individual behaviour.

Methodological advancements in experimentation and measurement

The increase in the interest in and use of experimental methods is not by chance. Experiments allow researchers to test causal relationships. Their strength lies in the opportunity to strategically manipulate some contextual factors, while keeping others constant and then observe how the changes influence individual behaviour. We will look at two key aspects of experimental methods in more detail in this chapter: establishing counterfactuals and testing validity.

In our day-to-day life we might ask ourselves from time to time “What if I had made a different decision? How might my life have looked like if things had turned out differently?” However, because time moves linearly for us, we do not know. We can only observe one possible outcome. In experiments, behavioural scientists aim to model several possible trajectories of events starting at the same point of departure by changing small details and analysing the effects these changes produce. Researchers are able to compare two or more scenarios by using a control group and one or more experimental groups. Individuals in the control group experience the ‘normal’ trajectory of time, in which no change happens. The experimental group experiences the ‘counterfactual’ trajectory of time in which the researchers introduce a new or different stimulus as compared to individuals in the control group. Afterwards, researchers can do what we cannot do in our daily life, see whether things turned out differently in the varying scenarios and whether this was due to their meddling or because of other influencing factors.

To make sure changes in the outcome can be attributed to their intervention, behavioural scientists use different features of experiments such as randomization, within or between subject designs, and the level of artificiality. Randomization can be used in allocating participants to their treatment groups or when deciding the order stimuli are presented in. This should ensure that characteristics of the individuals like previous experience or personality do not impact the results of the experiment systematically. When designing experiments, researchers usually need to decide whether they want to compare different groups to each other (‘between person design’) or compare the state of the same person before and after an intervention (‘within person design’). While a within person design allows us to observe the direct impact of an intervention on a person’s attitudes or behaviours, measuring the variables we are interested in before confronting the individual with an intervention might give away our intention to change the variable and create a demand-effect in which the individual behaves differently after the intervention because they think they are expected to do so in the experimental environment. In a between person design we do not have this issue as we compare different people in different scenarios. However, when we find a difference in individual behaviour in the different scenarios, it might also be because we the people in our different groups differ in important characteristics that are more relevant than our intervention in explaining the difference in behaviours. In the decision about which design approach to take, behavioural scientists need to weigh these advantages and disadvantages in relation to their research question.

In the end, a lot of the magic of experiments boils down to control and the question, whether it was really the researcher’s intervention that changed the trajectory of outcomes or some other factor coming into play. This is where the ‘wobble room’ that researchers have in the manipulation of the level of artificiality comes in and leads us to the question of validity. Validity, like objectivity and reliability, is a quality criterion of (quantitative) research

methods. It concerns whether a researcher has really measured, or manipulated, what they aimed to measure or manipulate. In experimentation, the balance of external and internal validity is one central criterion for deciding on the context the experiment will be based in. When behavioural scientists want to favour internal validity, to ensure it is their stimulus, and nothing else that causes a change, they have to perform their experiment in a lab. There, they have a lot of control, but also a high level of artificiality. This trade-off also works the other way around. When researchers are willing to give up some control, they can move their experiment to the field and decrease artificiality, while increasing the external validity of their research and the applicability of the findings for practice. In the next section, we will present three examples of experiments along this range of artificiality: lab experiments, survey experiments and field experiments.

First, however, let's talk about the advancements in measurement which behavioural public administration scholars have contributed to public administration scholarship. While measuring attitudes with explicit questions is already common in surveys in public administration research, BPA has introduced the measurement of implicit attitudes, cognition, and emotions. Implicit attitudes, in comparison to explicit ones, are what we do not necessarily know about ourselves consciously, for example, they might be based on societal or cultural stereotypes we do not want to hold explicitly, but that our brain jumps to, when we are forced to make very fast judgements. Behavioural scientists try to measure these implicit attitudes and cognition by using tools such as the Implicit Association Test, in which participants are asked to pair words of categories such as gender and career intention. Based on their reaction time, researchers can estimate how closely participants associate certain categories with each other. An even newer territory of methodological advancement is the use of emotional measurement in research of public management and governance. While it is possible to ask participants about their feelings explicitly, we as humans are not always in tune with our emotions and might not realise how small changes in our mood influence our behaviour. The selection of research we will present in more detail in the following sections also encompasses some examples of these advancements in measurement.

Taken together, BPA can contribute valuably to the classic debate in public administration scholarship on methodological rigour vs. practical relevance through the use of its key elements, showing that it is possible to combine rigorous methodological analysis with impact for the field (Zhu et al., 2019). However, we need to consider the so-called replication crisis in the field of psychology in which a lot of classic (experimental) findings could not be replicated to prove them valid outside their original research design settings. Clearly, single experimental results are not sufficient to build robust evidence, and continuous replication and publication of null-results (studies not supporting the suggested hypotheses) are needed. In this connection, BPA scholarship especially benefits from an 'open science' approach. For example, pre-registration of research designs is becoming more common for experimental research in BPA and more scholars are publishing their datasets and the accompanying code for statistical analysis. Simultaneously, journals increasingly ask for this level of openness. Pre-registrations are useful to deter researchers from just working with their data, without having any theoretical idea beforehand about which specific relationships they are looking for and then writing a story about the data after they have found something interesting (so-called HARKing – hypothesizing after results are known). Preregistration also helps to avoid researchers changing their data analysis approach until they find a statistically significant

result (so-called p-hacking), as researchers making use of preregistrations usually have to publish their hypotheses and data analysis plan before collecting the data. Open data and code, alongside journal publications, are useful in reviewing analyses and discovering mistakes, and open the possibility of replicating studies with new datasets, to produce more robust results, as well as aiding both qualitative and quantitative forms of research synthesis, such as literature reviews and meta-analyses. Recent research, based on the meta analysis of statistically significant findings in BPA research published in top public administration journals found little or no significant bias towards the publication of statistically significant results supporting the hypotheses being researched in the different studies, so the findings are not solely the result of selective reporting of significant results (Vogel and Xu, 2021). This makes it more likely that the findings of BPA studies are indeed reliable.

Diverse methods: lab, survey, field

As described earlier, experiments can take many forms. All these forms – be it a lab experiment, a survey experiment, a field experiment or even quasi or natural experiments – come with different advantages and disadvantages. This section showcases in more detail methodological features of three types of ‘real experiments’ (meaning using randomized treatment and control groups, in contrast to quasi-experiments) – namely, collecting data in the lab, by using surveys and in the field and then in Box 2 we discuss the difficulties of using experiments to understand likely future behaviour.

According to a recent systematic review (Li and van Ryzin, 2017), survey experiments are the most often used types of experiments in public administration research - they are conducted and published about twice as often as lab and field experiments. A majority of survey experiments focus on the perspective of citizens and use them as participants, whereas lab experiments mostly build on student samples, and field experiments more often focus on public servants or other professionals. Putting these three types of experiments on a continuum of strong manipulation control (high internal validity) to a more naturalistic setting (high external validity), lab experiments are best able to isolate and test causal effects of a set of variables (high internal validity), whereas field experiments tend to offer more external validity, while survey experiment often constitute a compromise between these two extremes, partly explaining their popularity among BPA researchers.

Lab experiments: the case of emotion measurement

The strength of lab experiments is that they offer a controlled environment that enables high internal validity. However, the majority of public administration research for a long time preferred external over internal validity, obtained for example through the representativeness of an analysed sample (Tepe and Prokop, 2017). The advantage of collecting data in the lab is the opportunity to measure reactions to a treatment that can barely be observed or self-reported, for example through physiological measurements of implicit attitudes and cognition. One stream of BPA research, building on that advantage, studies emotional responses of citizens and public servants to certain situations, such as stress at work or an unpleasant encounter with the administration. Emotions are mental states that trigger physiological, behavioural and cognitive reactions.

For example, Hattke et al. (2020) analysed citizens’ emotional reactions to bureaucratic red tape. ‘Red tape’ describes dysfunctional rules that might cause administrative delay and

burden to those caught by those rules. The researchers measured emotions relying on physiological measures such as facial reactions, electrodermal activity and heart rate. They found that individuals show negative emotional responses when confronted with bureaucratic red tape - for example, confusion, frustration and anger. They showed that red tape is an affective rather than a cognitive phenomenon.

Survey experiments: the case of measuring motivation and behavioural intentions

Some authors argue that surveys have become the *modus operandi* in public administration research, since they are 'quick and cheap' and can easily be administered to a large and realistic population. Therefore, self-reported behaviour in surveys and survey experiments is an often-used efficient alternative to lab or field experiments. Technologies utilized in survey sampling, the rise of online access panels (e.g. YouGov) and platform labour markets (e.g. Amazon's Mechanical Turk) have certainly fuelled that development.

One stream of BPA research, building on these opportunities and the advantages of survey experiments, focuses on the work motivation of public servants. Work motivation is a psychological process that determines and directs the intended and actual behaviour of workers. As such, it is not directly observable, which makes it ideal to study through self-reporting by the study population.

For example, Fischer (2022) analysed the motivation to perform a specific type of work behaviour in public organizations, namely the sharing of knowledge. In a survey experiment she found that two tested incentives, building on *achievement motivation* (when an individual is motivated by getting a reward for high performance - in this case, a positive performance appraisal) and *appreciation motivation* (when an individual is motivated by the appreciation of co-workers), both positively affected workers' intention to share their own knowledge with co-workers for specific types of knowledge that were easy to codify ('explicit knowledge'). However, she could not prove such an effect on the sharing of more implicit types of knowledge, concluding that motivation is not the most important driver to change the behaviour of public servants towards sharing implicit knowledge (where ability and opportunity to share knowledge might be more important).

Field experiments: the case of implementing nudges in the real world

Field experiments involve participants from the relevant study population (e.g. public servants instead of students), use authentic treatments in a natural setting, and lead to real-world outcomes. Although it is harder to control contextual influences in field experiments, they are closer to the actual situation in which the behaviour will occur and can better capture real-world complexity. They also often capture real behaviour instead of behavioural intentions or the artificial behaviour of a participant in the lab. Examples of treatments in field experiments could be training delivered to a specific group of people (e.g. transformational leadership training to supervisors in public organizations), pieces of information or data (e.g. explaining the advantages of recycling waste to citizens), or the introduction of a new process (e.g. automated decision making).

One very topical stream of research that builds on the idea of testing real-world interventions is the literature on the effect of 'nudges' to change behaviour to an intended behaviour, for example to get citizens to act 'in the public interest' (usually as defined by the government). Nudges are subtle cues that aim to change the choice architecture of an individual, by making

a certain behaviour more attractive, faster, easier or the default (Thaler and Sunstein, 2009). However, in contrast to classic strategies of the public administration to achieve citizens' compliance to policies, such as legislation and law enforcement, nudges do not rely on forbidding an unwanted behaviour or changing economic incentives, e.g. by offering rewards. Due to the Covid-19 pandemic, studies on vaccination uptake have become popular again. For example, Keppeler et al. (2022) tested the effect of an official mailing campaign inviting citizens to get their jab, in a large scale field experiment with 27,000 participants. Building on the idea of psychological ownership to reduce the free-riding behaviour in the production of a public good - in this case, herd immunity against the virus - they changed the wording of the vaccination offer by adding possessive pronouns, e.g. "your vaccination", "your personal contribution", and "your personal protection". This psychological ownership-based nudge increased vaccination uptake significantly (by 39 per cent).

Box 2: The difficulties of measuring real behaviour in a fictitious context

Experiments aim to capture the real-world impact of a treatment. However, while they are usually able to deliver high internal validity, they are often criticized for a lacking external validity, especially because they measure a rather artificial behaviour (lab experiments) or just intentions or self-reported behaviour (survey experiments). Hence, the *authenticity and level of abstraction* of a treatment are an issue that is often discussed.

Think back to our example of collecting physiological measures to determine emotions. Participants might just be nervous from being in a lab. Therefore, it is important to collect baseline measures for every individual in such a situation and to compare changes within one individual. However, in other cases it is harder to control for the influence of the lab setting, e.g. when risk aversion is tested in dice games. These kinds of tests often try to mimic a real-world situation by implementing real-world consequences for the participants, such as the opportunity really to win money. However, due to ethical reasons, there is not much room to incentivize participants differently, aside from ensuring, of course, that participants should never face negative consequences from participating in the research.

Survey experiments by definition have to rely on capturing the self-reported perceptions of respondents rather than their real behaviour. Clearly there is a need to make 'vignette settings' (the descriptions of the experimental situation to which the participant is asked to respond) as concrete and realistic as possible. It is important, too, to deal with the criticism that participants may easily state their intentions to behave in a way that they would never actually demonstrate in reality. One way to overcome this is to use the effort which participants put into giving an answer as a sign of the honesty and therefore validity of the answer they give. So-called 'real-effort tasks' involve cognitive, creative, or physical effort from participants. For example, participants may be asked to count errors, they may have to write an essay or sort out values in a table. The basic idea is that the greater the effort that one puts into such a task, the likelier it is that one would actually perform the behaviour one has stated in the survey.

Although field experiments are closer to an authentic setting, the awareness of the participants that they are part of an experiment might bias their decisions and reactions anyway. Moreover, in field research there are ethical implications arising from manipulating real-world behaviour. Is it, for example, acceptable to give a certain training programme, or reward or opportunity to only some participants and not to others, in order to test their effect? Is it acceptable to influence the decisions of citizens on how to vote, in order to test the impact of a certain campaign instrument? Is it acceptable to add to the burden of public servants, for example by sending in fake job applications to a real job opening in order to test for potential discriminatory candidate selection behaviour? There can never be universally applicable answers to these questions - the specific potential contribution to our knowledge base of a certain study has to be weighed against the costs and burden that it entails. These ethical considerations might therefore entail stepwise approaches in BPA, as, for example, in clinical trials of new drugs, which start with a small sample of volunteers, proceed with increasing sample sizes if early results are encouraging, and only at the end are tested through a randomized control trial with a large sample, as the final determinant of whether or not they are safe and effective.

Case example: Behavioural insight teams around the world

Behavioral public administration research produces knowledge for public administration as a design science, helping policy makers to develop evidence-based policies. Much of this evidence is produced not only in universities or other research organizations but also in the public sector itself – in so-called policy labs, Nudge Units or similar teams existing at federal or local levels or provided by a non-profit organization. The British Behavioral Insights team (<https://www.bi.team/>) was founded in the heart of the British government in 2010 and has meanwhile grown into a global nonprofit organization with branches in, among others, Latin America, the Caribbean and Singapore, and in 2012 it supported the foundation of the Behavioral Insights Unit of New South Wales in Australia (<https://www.nsw.gov.au/behavioural-insights-unit>). The US nudge unit was the Social and Behavioural Sciences Team (<https://sbst.gov/>), formed as a subgroup of the National Science and Technology Council in 2015 but inactive from 2017 to 2022 during the Trump administration). An organization that was founded as a non-governmental and nonprofit organization from the beginning, is the Swiss *staatslabor* (<https://www.staatslabor.ch/en>), launched in 2017. The *staatslabor* understands its role as a platform to connect experts, civil society and the government and to be a lab for policy innovations. For example, it experiments with public health related campaigns, such as ‘Dry January’ to prevent excessive alcohol consumption, or participation processes like ‘Innovation Champions’, not only consulting youth citizens in the political process but enabling actual co-production by them in public service delivery. It has worked with several public sector entities to introduce 'intrapreneurship' programmes, which aim to enable civil servants to use methods such as user-centered design to improve their services.

"Our work at *staatslabor* aims to make the public sector bolder, more collaborative, and more open. In our experience there are scores of pioneering

civil servants everywhere who share those aims. We work with them to help them bring the best ideas and methods to bear on their challenges so they can better serve the public." – Danny Buerkli, Co-Director of *staatslabor*.

Diverse focus points of research: the individual, the organizations, society

One of the most pertinent critiques of the BPA stream is its focus on the micro level. Moynihan (2018) warns that public administration as a field might lose its identity and relevance for practice when neglecting macro and meso level questions and focusing just on the research questions that can most easily be answered using experimental research. However, since this warning, the BPA research field has developed and nowadays incorporates more research projects that fruitfully combine these different analytical levels (Jilke et al., 2019). This section showcases behavioural research at these different analytical levels and in different empirical contexts.

Micro-interventions on the individual level

Vogel and Willems (2020) focused on the idea that knowing about the social impact of one's work can raise a person's motivation for that job, because one feels needed and can do something good for society. They built on that assumption to tackle the problem of public employees who are frustrated with their jobs and might have forgotten about their initial motivation to enter their profession. They argue that micro-interventions to remind these employees about the difference that they make to society or to a specific groups of citizens, could refuel their motivation and job satisfaction. Participants in their study were asked to reflect on how their work contributes to a community or to society in general. They found that these reminders about the value of their work enhanced employees' willingness to recommend their jobs to others, decreased their intention to leave, increased their positive attitude to their jobs and decreased their negative perceptions. By using an intervention that referred to an outcome at the macro-level (societal impact) to influence micro-level perceptions and behavioural intentions, the authors combined two different analytical levels in a fruitful way. Moreover, these micro-interventions are small and easy to implement managerial measures that can easily be translated into concrete recommendations for practice. Hence, the study also shows that a fruitful combination of methodological rigour and practical relevance is possible.

How national culture influences the perception of meso-level behavior

Research at the 'meso-level' –the group or organizational level - is central to public administration research, since all governance activities rely at least partly on collective decision making. Meso-level topics often studied through a behavioural approach include the transparency of governmental decision making and of the service delivery process. Transparency is here understood as the openness of the state in making information about public organizations and their behaviour available, so that external actors can monitor them. Governmental transparency is often seen as a determinant of better governance (see chapter XX). Behavioural research on this topic is characterized by diverse foci. Research looks both at impacts on the micro-level (e.g. how individuals use government information) and the

macro-level (e.g. how transparency can reduce corruption), as well as determinants on the micro-level (e.g. journalists requesting information) and the macro-level (e.g. the existence of freedom of information laws, national culture). For example, Grimmelikhuijsen et al. (2013) study the effect of transparency on trust in government in a cross-country comparison between the Netherlands and South Korea. Experiments suggest that in both countries transparency has a slightly negative effect on trust in government and that this negative effect is stronger in South Korea. The national culture of South Korea is assumed to be characterised by higher power distance (the extent to which the less powerful members of a country accept that power is distributed unequally) and stronger long-term orientation, so these results are claimed to show that cultural values influence how citizens perceive government transparency and whether they appreciate it. In this way, the authors suggest how a macro-level variable (national culture) influences a meso-level behaviour (transparency) and impacts a micro-level outcome (trust).

Summary

Behavioural Public Administration combines psychological research methods with core research themes within public management and governance. It has advanced the field, not only by diversifying the methodological toolbox of researchers, but also by introducing a sharp and unapologetic focus on the individual as a level of analysis, influencing what research questions can be posed and answered. Research within BPA has flourished since its relatively recent introduction, promoting the use of open science principles, and opening the discipline for interdisciplinary endeavours with other micro-level disciplines, such as behavioural economics in the research on nudging. Field experiments promise direct practical impact, since results are often closer to practical application than in macro level research. However, BPA as a field also needs critical discussion both about the size of the impacts (both explicit and implicit) achieved through experimental research and about the ethical dimension of influencing individuals both in the lab and in real world. In future, BPA can benefit from integrating more critical and theory-based approaches into the currently largely method-driven research endeavours and developing a framework for much needed mixed-methods designs, integrating qualitative and quantitative research methods.

Questions for review and discussion

1. What are the particular contributions which make BPA distinctive from other approaches to public management and governance?
2. What has been the impact of the 'experimental turn' in public administration for the field? List at least two positive developments and two drawbacks, then consider how it might be possible to mitigate the negative consequences of the experimental turn.

Reader exercises

1. What is 'behaviour'? Please distinguish in your definition the individual, organizational and societal level. Study the newspapers from your home town or country and find examples that mention individual level behaviours of public servants or citizens, organizational behaviours of public agencies and macro-level behaviours at the societal level.
2. Describe two key characteristics of BPA research. Search within the recent publications of a public administration journal of your own choice (e.g. JPART, PAR or PMR), for a BPA study and identify whether they exhibit these two characteristics.

Class exercises

1. The practical relevance of BPA research often stems from showing how to achieve an intended behaviour change which will result in better outcomes. For example, behavioural research finds that citizens are more likely to separate their trash accurately into recycling trashcans, when these are easy to reach, designed in an attractive way and when they are informed about the consequences of their behaviour, such as negative effects on the environment or waste disposal workers. In groups, think about the public trash cans in the home towns of different group members. How are they designed and positioned? Identify potential ways of making waste disposal easier and more attractive for local people? In the plenary session, vote on which group has come up with the ideas most likely to be successful.
2. Individually, go to <https://implicit.harvard.edu/implicit/> and take a IAT of your choice. As a group, discuss how you evaluate such measurements of implicit associations in terms of experimental design characteristics such as the level of artificiality. Additionally, if you are comfortable to share your results, reflect on how the results you obtained reflect your explicit views on the same topic and why they might be different.

Further reading

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