Routes to Influence: Academics' Methods of Influencing Practice in Public Affairs

by

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A Dissertation Presented in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy

Approved July 2024 by the
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ARIZONA STATE UNIVERSITY

August 2024

ABSTRACT

The longstanding concern that scholarly research remains underused by public administration and policy practitioners continues to loom over both communities despite the growing scholarly literature examining this divide. However, much of this research is characterized by a heavy emphasis on the contexts of practitioners instead of the authors, overly general measurements of 'use,' and a significant scarcity of this issue within the field of public administration and policy. This dissertation seeks to contribute to the smaller, though no less important, collection of knowledge-use literature focusing on the context of the authors of formal research. Specifically, it examines how authors of public affairs research can effectively influence practice through a variety of academic career motivations. A novel theoretical framework is constructed which organizes public affairs academics by their motivations to influence practice directly, and their motivation to be productive research authors. This framework is tested by surveying public affairs research authors regarding specific published articles they have written. Empirical analysis via factor analysis is conducted to assess each theoretical model's ability to influence practice. The results suggest that multiple different types of public affairs researchers can influence practice, including those who do not seek directly to do so.

ACKNOWLEDGEMENTS

I want to recognize the invaluable support of my wife Rachel. It is no exaggeration to say that without her this dissertation, and much of my education, would not have been possible. She has my love for as long as she wants it. I also want to thank my parents, Sean and Laurelei, for their constant support and for instilling in me the conviction that no amount of education is ever wasted. It has been an honor to study under the tutelage of Dr. Barry Bozeman. His counsel, advice, and encouragement throughout my degree means more to me than I can adequately say. I extend my deep appreciation to him for all he has done for me. I also want to thank my committee members, Dr. Stuart Bretschneider and Dr. Justin Stritch. Lastly, I want to acknowledge my family who preceded me in receiving the degree of Doctor of Philosophy, namely my grandfather, Dr. Rao Humpherys Lindsay (University of Michigan, Education, 1964) and my aunt, Dr. Suzanne Lindsay. (Washington University, Clinical Psychology, 1990)

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CHAPTER 1

INTRODUCTION

The application of scholarly research by public administration and policy practitioners is overwhelmingly viewed by both communities as an essential, even if sometimes an unwelcome pursuit. The value of new knowledge found in scholarly publications is predicated on its ability to change assumptions, to create new technologies, to open new streams of inquiry, and to displace less-effective behaviors founded on old understandings. (van de Goor, et al., 2017) Indeed, enormous amounts of money, including public funds, are used to support scholarly research specifically because of its potential to enhance human existence and relieve suffering. It is often tacitly accepted that public organizations should make liberal use of academic knowledge in formulating, implementing, and evaluating policy. [1] Yet, as Weiss (1979) noted at the earliest outset of this area of study, the use of social science research in public policy is an extraordinarily complex phenomenon.

Three Flaws of Research Use Literature

For the past 50 years, scholars have sought to describe and explain empirically the different dimensions of the purported gap between authors of scholarly research and the practitioners who are expected to use it. As valuable as this relatively recent library of literature has been in exploring this phenomenon, there are three major flaws with how

[1] Despite overwhelming consensus that greater application of published science in public affairs would improve policy and administration outcomes, it's worth noting that this assumption itself is highly understudied. This question is not addressed in this dissertation; but in Nelson et al.'s (2023) systematic literature review of the past 20 years of government utilization of social science, they found that only three articles attempted to investigate whether greater use correlated with positive governmental outcomes.

researchers generally approach this topic that limits its explanatory power. First, it is overly focused on the practitioner's context, including their constraints and what could help facilitate their uptake of scholarly research. Researchers tend to orient empirical inquiries into research use towards what practitioners can and should be doing to help alleviate this perceived gap rather than analyzing their own contexts. (Oliver et al., 2014)

The heavy emphasis placed on practitioners while ignoring the authors of research fails to adequately account for the diverse contexts in which research is produced. The contextual dimensions that influence the production of research can heavily determine whether it is ultimately used by public practitioners. While focus on this context is much less common, there has been important work done to incorporate a more holistic approach of research use. Prominent examples of these voices include Cherney et al. (2012) who surveys Australian education researchers; Weiss-Gal et al. (2015) who surveys of Israeli social work scholars; Walker et al.'s (2019) survey on researchers in the United Kingdom; and Etomaru et al.'s (2021) case study on researchers within Makerere University in Uganda. Despite these examples, close scrutiny of the researchers' context is vastly understudied, significantly hindering progress in understanding research use.

The researcher's context includes an array of factors that can determine the ultimate practical value of their published work. Some of these factors are entirely within an author's sphere of control and are more a matter of personal preference. As producers of research, authors have large discretion to control the content of their work, from the questions they examine, the methods they employ, and where and how it is distributed. Researchers with higher interest in having their work used in practice will engage in

actions to specifically increase the value of their work to practitioners. (O'Brien, 2005; Walker, et al., 2019) For example, authors may selectively choose research topics that are both practically relevant and timely (Andrews, 2017), or they may choose to consult directly with practitioners throughout the research process. (Cherney, et al., 2012)

But beyond discretionary choices researchers make, authors are also inseparably connected to the contexts in which they produce research. (Biggerstaff, 2012) These factors may influence authors in more subtle and nuanced ways, but they still can affect the practical value of their work. A common example are authors who currently or have previously worked as practitioners themselves. These researchers are imbued with experiences that undoubtedly shape their work as a researcher and possibly set them apart from their non-practitioner research colleagues. Additionally, inherent factors such as age, tenure status, race, or gender disparities are also likely factors which affect the use of their work by practitioners. (Aksnes, et al., 2011; van der Arend, 2014) The researcher's context is an essential element of knowledge use that is ripe for further inquiry. It is these contexts and their influences on practitioner use that this dissertation attempts to investigate.

The second major limitation of recent empirical studies of research use is the universal practice of measuring 'use' in general terms, instead of grounding measurements by investigating use of specific research articles. In much of the previous research oriented towards practitioners' contexts, the common method is to ask how frequently they use scholarly research in their work. Likewise, in the less abundant research oriented towards the authors' contexts, they are similarly asked about the use of

their published work, but without specific regard to specific examples from their portfolio.

The heavy emphasis on using these non-specific characterizations of use is not surprising. Considering that instances of research use are likely low to minimal in most circumstances to begin with, authors are motivated to try to collect any instances of research use from any time period. Additionally, the contexts in which different practitioners could reasonably employ research in their work is highly heterogenous, making the measurement of specific research often impractical, even amongst similarly situated practitioners. Finally, measuring use generally is an easy and low-cost method of gathering instances of research use.

However, this practice is problematic for several reasons. First, it leaves empirical inquiries of research use vulnerable to systematic forms of bias. The ambiguity among practitioners of what could constitute scholarly research threatens the measurement's construct validity. (Creswell & Creswell, 2022) This is especially true considering most professionals consume research from abridged collections of research by third parties, rather than from scientific journals directly. (Bozeman, et al., 2018) Additionally, generalized use measurements are heavily subject to recall bias. Neither practitioners nor authors should be depended upon to accurately recall instances of research use that could potentially span the length of their entire careers.

Similarly, respondents are more likely to be subject to selection bias, recalling the most recent instance of use and giving higher weight to that instance's specific contexts. (Hoyle, et al., 2002) Finally, asking about use in general rather than specific terms leaves self-report responses (the methodology of the vast majority of scholarly inquiries into

research use) more vulnerable to social desirability bias. Under these methods, practitioners can feel subtle or overt pressure to state they are utilizing research, and authors are likely to state their work is being used when, in fact, neither is true. (Gravetter and Forzano, 2018) While using specific research articles would not mitigate this issue entirely, queries for evidence that a specific publication has been used could significantly reduce such a threat. As of the publication of this dissertation, there are no existing empirical articles of research use by practitioners which the author is aware of that grounds measurements of 'use' in specific research articles.

The final issue with the current state of use literature is the scarcity of research within the context of public affairs. The discipline of public affairs, with its focus on management, and its historical roots in optimizing efficiency, seems naturally suited towards having its research used by public practitioners perhaps more than any other discipline. (Frederickson, et al., 2016) But empirical queries with a specific focus into research use among public affairs research is scant. (Bozeman, et al., 2023) Considering the strong normative tradition within public administration and policy, this lack of focus within the research use literature seems counterintuitive. While academic research as a whole has been criticized for offering conclusions that are too topically narrow for practitioners to glean any useful applications in their work, (Avey & Desch, 2014; Banks, et al., 2016) public affairs research should, theoretically, be better tailored to meet those needs.

There is debate within the research use literature about whether some disciplines are more effective at having their work used in practice than others. For example, Desmarais and Hird (2013) found large differences between social science disciplines

cited in regulatory impact analyses, with the field of economics being the most frequently referenced. Alternatively, in a survey of Canadian researchers, Laroche and Amara (2011) found no significant difference in use among social science disciplines. Considering that public affairs is a uniquely interdisciplinary field, incorporating elements from a variety of social sciences, the use of its research may be more contextually nuanced in ways that the existing use literature fails to account for. Therefore, this dissertation focuses within the context of the use of public affairs scholarship.

Considering these three limitations, this dissertation seeks to add to the empirical discussion of research use by reorienting the focus away from the context of practitioners and on to the producers of research within the domain of public affairs. This focus requires examining the different ways public affairs research authors seek to influence the field as academics.

There are a variety of different activities within academia that can influence practice. Some of these are direct; academics interact, collaborate, and influence practitioners through their work. Others can be more indirect, or even incidental. Many, if not most academics, are focused on having an impact on research instead of directly on practice. But contributions to basic research, even if not immediately applicable to practitioners, undoubtedly influences practice eventually. There are academics who take on less research-intensive roles either in teaching or administrative roles. It is likely that these too ultimately influence practice.

Purpose and Layout

These distinctions between academics and the influence they have on practice are discussed. The literature is critiqued, and a novel theoretical framework is presented which proffers that academics can influence practice differently based on how they build their academic career. This dissertation rejects the typical generalized measure of use by empirically measuring the use of specific research articles. Authors of published research articles between 2015-2019 in seven high quality public affairs journals are surveyed on a number of topics relating to practitioner use and influence on that specific research article and about their research career generally. A major emphasis of this survey is how these authors aim to have an impact on the field of public affairs. Descriptive results and empirical analyses are used to test the different theoretical models.

Specifically, I ask the following research questions: Do authors of public affairs research differ in their influence on practice depending on their academic interests? What type of public affairs research author is most effective at influencing practice? And can public affairs researchers influence the use of their work by practitioners? This dissertation contributes to the growing research considering the extent that authors of research can influence the use of their work by practitioners.

Chapter two contains a literature review of the use of research by public officials. It begins by grounding the use of terms used throughout this dissertation within the existing literature. Chapter two reviews and analyzes different factors theorized to influence the use of research in practice. It then examines the different ways academics position themselves within academia and the distinctions between these different types of academics. A novel theoretical framework is presented and defended within the context

of the literature. It describes four different models of academics based on their interests and the way in which they seek to build a reputation.

Chapter three describes the methodology for this dissertation. It begins with the data collected. A survey was sent to authors of published research articles in seven high quality public affairs journals. The survey includes questions that relate both to the specific article from which they were included, as well as questions regarding the respondent's entire career. Questions focused on the specific research article include whether they have knowledge that their article has been used in practice, if and how they sought to advertise the publication, and their motivations for producing the paper. Questions relating to their overall career include their motivations to have their work used in practice, their previous interactions with practitioners, and their perceptions of how they create an impact on the academic field. Chapter three also provides descriptive results of the survey, as well as results of data collected through publicly available sources about the respondents. It also includes discussions of the internal and external validity of the survey as well as explaining and defending choices made in the data collection process. The dissertation tests the theoretical models presented in chapter two by using the data collected and conducting a factor analysis on variables theorized to define each of the four models. It then presents regression analysis using the factor scores derived. Chapter four presents the descriptive results of the variables and then presents the empirical results of the factor analysis and regression.

Chapter five discusses these findings and examines the results of the data collection. It discusses both strengths and limitations with the data and what can be

extrapolated from this dissertation's research for the field of public affairs. The dissertation concludes with suggestions for future inquiry.

CHAPTER 2

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

Introduction

This chapter contains a literature review of the field of policy knowledge utilization and subsequently presents original theory on how academics can have different routes to influence practice. It will also review the literature of the constructs and variables used in the analytical sections of the dissertation.

Term Definitions

Parsing out specifically what is meant by "research use" itself is its own challenge as it encompasses multiple different lenses of meaning. (Weiss, 1979) Research can be 'used' in numerous different ways, ranging from explicit applications that are easy to both identify and measure empirically, to much more subtle and nuanced influences that elude examination. The ways in which scholars define this concept can be equally heterogenous. A primary reason for this complexity is the widely diverse contexts in which research is expected to be applied in practice. These contexts usually associate with different sectors of public administration and policy; and, likewise, also associate to different academic disciplines of research to be applied. (Landry, et al., 2003) Another complication relates to the different aspirations authors hold of how their work should be used. Depending on the specific contexts involved, an author may consider their work is used only when it has been applied in a specific way, such as direct change in public policy, or implementation of a new administrative process. The actual circumstances which lead research to being applied can be much more subtle and much less visible to researchers. The core issue is that no consistent method of identifying when and how a

work is applied in practice exists. Imperfect measurements have been adopted to serve as a proxy for such knowledge such as research being cited in statutes, legislative debates, or policy oriented thinktanks. But these do not account for the subtler applications mentioned earlier. Research can influence practitioners' understanding of their field and potential best practices within their specific work.

Some have attempted to conceptualize use within a generalized framework for the purpose of extrapolating to diverse contexts. One of the earliest attempts to distinguish between different types of use was Weiss' (1979) distinction of instrumental, conceptual, symbolic, political, or enlightening forms of use. These have been generally reduced within the literature to only include instrumental use, were the application of research has a visible and marked effect in altering policy or processes; conceptual use, where research has affected, albeit more subtly, the understanding, discourse, and debate among policymakers and administrators which results in change; and symbolic use where instead of meaningful application of a scholarship, research is merely used to support or defend preexisting policy positions. (Rossi, et al., 1980; Profetto-McGrath, et al., 2003; Amara, et al., 2004)

A separate model that seeks to create a unified framework of measuring use is Knott and Wildavsky's (1980) framework that describes research's utilization as a process, rather than as a singular event. This theory suggests that if research is to be used, it must meet a set series of stages. If the research fails at any of these steps, it generally will not be used in practice. The steps include first being received, and then cognitively understood by users. Potential users then must be able to reference or understand how the

research can influence practice. Finally, users must exert intentional effort to have the research adopted within policy frameworks for it to be used.

These typologies for use have been both adopted and, in some cases, tested within the knowledge utilization literature. For instance, Amara et al., (2004) examined evidence of instrumental, conceptual, and symbolic use of research in Canadian government agencies. Additionally, Landry et al., (2001) examined Knott and Wildavsky's model using social science research to identify barriers between the research passing through the different stages. While Knotts and Wildavsky's typology is highly extrapolatable making it applicable to a highly diverse set of research use contexts; Nelson, et al. (2023) correctly points out that the theory's strict linearity makes it unrealistic to capture more subtle instances of use.

Despite these valuable typologies for conceptualizing the different forms and processes of use, there remains an absence of a universally accepted framework of what constitutes research use across disciplines. (Nelson et al., 2023) The variety of different contexts in which research is used to simply to expansive for a single typology to suffice both for defining what constitutes research use and in identifying when it has occurred. In this absence, a frequent occurrence is for authors to create a simple, pragmatic definition of use that adequately fits their research context but is not necessarily extrapolatable to other contexts such as Kremer, et al. (2017) framing of use as "informing decision-making."

In the interest of being as inclusive as possible to the many forms of use of research, this dissertation applies Nelson et al.'s (2023) definition of research use as "referring to any use of ideas, language, documentation, data, theoretical constructs,

arguments, or anything else that originates in academic research by government officials." (pg. 1483) In doing so, this dissertation seeks to remain as sensitive to any possible applications of published research in influencing policy or practitioners.

Defining practitioners is its own challenge as there are so many different areas and professions in which research can be used. Not surprisingly, identifying who is intended to use research primarily depends on the type of research being produced. Narrowing it solely to the field of public affairs brings little relief, since it itself is highly interdisciplinary. A frequent deconstruction the term practitioner within public affairs, as demonstrated by Frederickson and colleagues (2016), is by distinguishing public officials by those who are elected, those who are appointed, and career civil servants. This deconstruction is useful, as it allows for nuance between different types of public officials while encompassing the bulk of those who influence public policy and administration. This dissertation adopts these distinctions and uses the term 'practitioner' to encompass public officials, either elected or appointed, and career civil servants.

Research for Academics vs. Research for Practice

Rather than this gap falling on deaf ears, the calls for change do seem to be heard, but few know how to overcome the inertia of significantly changing the research system. Several authors blame this on the starkly different contexts of producers and recievers of research. (e.g., Lauto, et al., 2013; Jessani, et al., 2018) Even the earliest research in this topic recognizes the "two separate communities" nature of this relationship. (Caplan, 1979) Williamson and colleagues (2019) noted that "Co-production [is] considered a worthy goal by all, conferring a range of benefits, but one that [is] difficult to achieve in practice." (p. 1) It requires significant coordinating efforts which require both attention

and time of both parties. While there is a universal need for science to inform policy, at a micro level, public affairs academics rarely need the support of practitioners to succeed in their careers, and individual practitioners rarely need the help of academics. For this reason, literature on ways academics seek attention from practitioners to their research is unsurprisingly sparse.

Among the myriad of prescriptions offered in policy knowledge utilization research, increased and more intense interaction between practitioners and academics is the most frequently cited faciliator of practitioners' use of research. Examples are given that communication can faciliate research dissemination while also building relationships and trust. (Owino, 2014; D'Ostie-Racinea, et al, 2021) Also, research designed and drafted in collaboration between academics and practitioners is cited as a major way to bridge this use gap. (van der Goor, et al., 2017) Collaboration allows researchers and practitioners to engage in research that can be harmoneous to both professional spheres.

Some suggest that the role of strategic communications between researchers and practitioners is critical. (Heinsch 2017) Kaino, et al (2014) and Klenk & Wyatt, (2015) cite the use of multiple methods of communication and dissemination as critical in reaching practitioners. Additionally, Haynes, and colleauges' (2011) qualitative interviews of 36 influential Austrailian researchers also suggested the effectiveness of the use of multiple methods of promotion. They specifically recommend strategic use of the media to garner practitioner attention. (Haynes, et al., 2011) The use of specific media channels is also suggested as effective dissemination strategies such as social media (Derian-Toth, 2014; Gollust, et al., 2017) and news media (Hinchcliff, et al, 2010; Tieberghien, 2014).

Given the existing divide between science and practice, it is evident that knowledge dissemination does not occur naturally, (or when it does it is not sufficient to adequately inform practice.) For knowledge utilization to be effective, it generally requires effort to be expended through knowledge dissemination activities. But Cherney et al. (2015) noted that engaging in activities designed to appeal to practice imposes a significant cost on academics through a reduction in their publishing rate, the primary means of evaluation in academia.

Research drafted specifically for one impact, or another requires significantly different kinds of activity by scholars. Many of the tools for effective dissemination that lead to practical use like building and maintaining relationships, co-production with practitioners, and ensuring user friendliness of results are outside of the official responsibilities of most academics. (Goede, et al., 2012) Given that academics and practitioners both express feelings that they are already too busy to engage in knowledge utilization, it is understandable that these additional actions are left by the wayside. (Gollust, et al., 2017) Incentive structures are a critical component that largely determines how researchers spend their time. Shanley & López (2009) have suggested that organizations do not provide sufficient motivation for academics to engage in functions that lead to distribution.

Catering research for academic impact is generally detrimental to practical impact for several reasons. One of these is how research is framed. A common complaint cited among practitioners is that research produced by academics is seemingly answering questions not related to issues which practitioners face. (Zardo & Collie, 2014) A similar, though distinct factor is how formal results are presented. (Brown, 2011; Goede et al.

2012) Even if research is applicable to their work, academic research articles are often framed in such a way that obscures the valuable information contained in them, especially for those who lack the technical skills to read formal research. (Goede, et al, 2012) There has been some modest efforts to combat both issues. Some, but not all journals require authors to frame their research around policy centered questions. (Jewell & Bero, 2008) Additionally, journals like *Public Administration Review*, for example, now requires all submissions to contain several "points for practice" sentences which summarize and frame their results in clear language oriented towards practical use. (Public Administration Review, 2022)

Dimensions of the Researcher Context and Academic Reputation

Among the most significant barriers between academics and practitioners relates to their individual sets of incentives. (Waddell, et al., 2007; Wilkinson, 2008) In particular, the promotion and tenure requirements faced by most researchers in academia is viewed as a major inhibitor of effective knowledge utilization. (Shanley & López, 2009; Lemay & Sá, 2013) Researchers in traditional academic appointments are generally subject to publishing requirements to retain their positions and to secure tenure. A major factor in promotion decisions is the number of publications a candidate has produced and the perceived strength of the journals where they were published. (Shanley and López 2009)

Tenure and promotion standards for academics have traditionally given little or no consideration for the practical impact of publications. (Kothari, et al., 2009; Jessani, et al, 2020) While tenure decisions do incorporate aggregate measurements of research value, such as an author's h-index or journal impact scores, these measurements primarily only

indicate uptake of research by fellow academics, not practitioners. Under current promotion standards, researchers are incentivized to conduct research in ways that maximize the publication value instead of practical use. While the two are not necessarily opposed to each other, the priority given to ensuring research is publishable highlights factors that are antithetical for research having practical use. In this vein, Shanley & López (2009) have specifically called for "a shift in incentive structures…that rewards actual impact rather than only 'high impact' journals."(p. 1) Despite the little attention generally given to practical impact, the field of public administration and policy likely places more emphasis on impact than most other fields by virtue of the discipline, as small as it may still be.

Another incentive is the way research is funded. (Kothari, et al., 2009; Landry, et al., 2010; Decoster, et al., 2012) Specifically, organizations that fund research can incentivize authors to ensure their work is applicable for practical use. For example, funders can specifically require collaboration between researchers and practitioners. (Arnott, et al., 2020) "Benefactors of academic research can also stipulate a higher value of real-world impact." (Bax, et al., 2009)

Funders can stipulate other requirements such as specifying funds to be used for knowledge transfer activities (Ellen, et al., 2016), giving researchers adequate time to engage in collaborative relationships with practitioners (Kothari, et al., 2009), and funding sources acting as an intermediary to link researchers with interested practitioners for consultation and collaboration (Riley, et al., 2011; Arnott, et al., 2020) An example of this principle was demonstrated by Liu and colleagues (2018). They found that research that is specifically funded through government sources is more likely to be transferred

into practice. They hypothesize that since governments generally have a greater incentive for more practical knowledge, researchers are more likely to ensure their research is fit for use.

When researchers are incentivized to ensure their work is used for practice, what tools or methods do they have to affect the utilization of their research? It is worth examining if the behaviors academics engage in naturally can be used to facilitate such practitioner – author engagement, since such activity requires less effort. Given that academics naturally engage in building a positive academic reputation for themselves, this dissertation examines if authors' reputation as created through their career choices influence practice differently.

Reputation is an ambiguous social construct which affects how an individual is perceived to others. (Boyd, et al., 2010) In academia, reputation consists of measurable indicators like publications, awards, and employment, and less-measurable qualities like personality, motivation, and skill. This is an intentionally broad definition that includes nearly all aspects of a researcher's context. Many, if not most of the different variables that make up reputation are influenced directly by the academic herself, either in response to innate desires or in response to external stimuli such as incentives offered for certain behaviors or as a result of peer pressure and the desire to conform to expectations. Perhaps the most common application of reputation among academics is seen in hiring practices. Potential employers seek for evidence of an individual's reputation which offers the organization the greatest chance of scholarly excellence and furthering institutional goals. For example, some form of publishing reputation has increasingly become a requirement for new Ph.Ds. seeking to begin their careers in academia. (Warren

2019) The days when an applicant could apply for an assistant professor position without having multiple publications have long since passed, and most applicants must now demonstrate a sufficient scholarly history to be seriously considered. These new expectations are, in effect, a requirement for potential hires to have a type of reputation of sufficient quality.

Because of its importance in the academic community, the variables of reputation are vulnerable to exaggeration, gaming, and plain lying. (Espeland and Sauder, 2016) Despite this, reputation has serious effects on academics' professional lives. Nearly all tenure and promotion decisions are made using indicators of their reputation from their article count to topics they have written about, to the number and subject of classes taught, student evaluations, and amount of grant money received (Petersen, et al. 2014). Additionally, several of the indicators associated with reputation depend on the reputation of others. Academic publications are partially judged on the strength of the journal's reputation of quality research. (McKiernan, et al., 2019)

There is likely a discrepancy between some of the variables that academics deem important compared to practitioners. For example, practitioners may care more about an academic's overall impact on the academic field rather than on any single publication. Similarly, a major practice-related innovation may garner practitioner attention more easily than does a high H-Index. But academics generally have little incentive to give priority to influencing practice, given that few tenure and promotion decisions consider such impacts. (Sá, et al. 2011; Gollust, et al. 2017)

Some elements of an academic's reputation may only be recognizable among practitioners and have minimal influence among scholars. For example, an academic that

has extensive experience working with practitioners may have a higher reputation among practitioners but not with academics. Alternatively, extensive applied work could have a negative effect on overall academic reputation and diminish their visibility generally, even to a practitioner, the very people they are trying to serve.

A substantial amount of scholarly work has examined productivity among academics but not reputation. Certainly, reputation as a general concept has a substantial literature primarily based in the fields of business, psychology, and organizational behavior. Academic reputation has primarily been examined in relation to universities and academic programs rather than individual scholars.

Only a relatively small amount of current literature deals with the professional reputations of academics. For example, O'Loughlin, et al (2015) conducted qualitative interviews among academics on which elements of reputation are most influential. There exists disagreement among scholars on which elements of reputation are most influential. Crane (1965) argues that reputation gained more from affiliation with a high prestige university than from individual productivity due to the institution's ability for networking. This does not, however, suggest that productivity is value neutral to academic reputation. But Cole and Cole (1967) and Dewett and Denisi (2004) argue that quality of research outputs is much more influential on reputation than quantity of outputs.

How does academic reputation influence practitioners in their work? The literature focusing specifically on this topic is scant. There has been research examining individual academic reputation's effects on the receipt of grant funding. Arora, et al. (1998) concluded that past publication performance has critical effects on levels on grant

funding. Furthermore, Vogler (2020) examined how publicity via news media affects receipt of grant funding and concluded that positive news media coverage associates with higher levels of private funding but not public. The article that comes closest to examining this question of effects of academic reputation is Gallotti and Domenico's (2019) research into the nomination process of Nobel laureates. They find that "nominees endorsed by central actors – who are part of the system's core because of their prestigious reputation – are more likely to become laureate within a finite time scale than nominees endorsed by nominators in the periphery of the network." (Gallotti and Domenico 2019, p. 1)

Theoretical Framework: Four Models of Influence

This section offers a conceptual model depicting how authors choose to build and maintain their academic reputation affects the influence they have on practice. The core component of the model suggests that an academic's career path is the primary determinate on the influence they have among practitioners.

Reputation is, at least partly, a result of an academic's career motives. In discussing these motives, it is useful to consider Boyd, et al.'s (2009) assertion that the individual factors of reputation have synergistic characteristics that outweigh their own individual value. If an academic has worked with specific intent to have a positive impact on practice, she is much more likely to have a higher reputation among practitioners. The model seeks to allow subtle and indirect influences of an author's motivation to manifest through indicators of their reputation.

This dissertation's theory suggests that how an author positions themselves within academia will significantly determine the size and type of influence they have on the field

of public affairs. The different ways which public affairs academics strive to influence is highly heterogenous; and the model seeks to differentiate between the ways academics seek to have impact and whether practitioners actually respond to such efforts. It is likely that the best judge of an academic's impact on the field will be the academic herself. The challenge then is to determine empirical measures of the effectiveness of academics' efforts in simple and uniform ways regardless of how an academic seeks to have impact.

There of course are no such scales or indexes available to measure such opaque constructs. Therefore, this dissertation uses two dependent variables to measure an author's influence among public affairs practitioners. The first variable is whether an academic has direct evidence that a specific journal article they have authored has been in any way used by practitioners. This provides a pseudo cross-section of an author's career, allowing examination of their short-term immediate impact among practitioners. The second dependent variable is a measure of how many times an academic has been 'cold-called' by practitioners. These cold calls are defined as receiving communication from a practitioner, with whom they are not previously acquainted, asking questions, seeking advice on applying results from their research, or asking for other forms of help. This phenomenon proves an instrument through which the effects of an academic's cumulative influence on practitioners can be measured.

The model uses these two variables to measure the influence an academic has on practitioners in different but complimentary ways. While the first focuses on the more traditional phenomenon of research uptake, it is applied here in a unique way. Those who do have evidence their work has been used by practitioners could be indicative both of the research's appeal to practitioners as well as the strength of an author's network to

know their work was utilized. Instead of asking only generally about the use of their work, this dissertation asks about use regarding specific research articles. This permits investigation of different research articles published at generally the same time period. It also is a semi-random selection of an author's recent published work.

Measuring cold calls is a unique indicator of an academic's influence on practice. It permits several subtle and less visible methods of influence to manifest. Practitioners may choose to reach out (or to not reach out) to research authors for a variety of reasons related to how appealing the author is for their need. Many of these factors are likely to relate to individual attributes. Jessani and colleagues (2018; 2020) found that individual attributes and reputation played a positively critical role in forming government-academic relationships. Furthermore, Haynes et al. (2011) suggests that being considered highly influential can alone increase the use of research.

Practitioners will be more likely to cold call authors who are more productive in the academic field. More productive academics have more chances of having their research read by potential callers. First, the more articles they produce, the more they increase their potential readership (*ceteris paribus*.) It allows for more potential cold callers to read their work and become familiar with their research. As this occurs, practitioners build confidence that the author's knowledge and ability as a researcher is sound, making them a prime candidate to contact if they want additional information from them. It is important to note that the variables of reputation and productivity could have significant co-variance.

Individual academics vary significantly in ways that elude measurement. For example, authors' views about their contribution to the field of public administration can

determine their interests, what they choose to publish, what methodologies they use, and how (or whether) they decide to publish at all. Since this research is interested in understanding how practitioners respond to reputation, it is likely that the motivation of authors will manifest through their work. Among these academics, I suspect that how they view their impact on the field of practice will significantly affect their reputation and therefore their likelihood of receiving cold calls.

Academics can have many different motivations for pursuing an academic career in the field. For example, some have a strong desire to directly affect public policy itself. These academics may choose highly tailored topics and research questions to directly influence public administration practices or procedures. Some instead may desire to work directly with practitioners in tackling specific challenges. They may seek to inform practitioners or policymakers who then modify their actions to make impact.

Academics can have an influence, although less directly, even without a substantial publishing record. Some may influence public affairs by serving as public administrators or public officials, including through temporary appointments to state, local, or federal positions while maintaining their academic career. Indeed, some academics have careers in public affairs and later earn doctoral degrees and enter academe. But there are many routes. Academics could also seek election to public office themselves. In these cases, their impact comes directly through their own service rather than through the medium of others. Public affairs academics frequently take on voluntary service roles within their employment that bring them into the sphere of practice. Community or local government advisory boards, pro bono consultations, contributions to news or social media feeds, or participation in national advisory councils such as the

National Academy of Public Administration or the American Council on Education are all potential avenues in which scholars can influence practice in their academic position without publishing. Others may view their contribution as shaping public discourse through their work. This can be done in a variety of ways, but each requires distribution of their work to a public audience. Some may seek to influence discourse through traditional media outlets like television or radio broadcasts. Others may seek to have their input printed in newspapers as either research or opinion articles. Finally, some may seek more contemporary outlets to have their work distributed such as social media.

Perhaps one of the most consistent methods academics can influence on practice is through teaching students who ultimately become practitioners themselves. Their contribution in training and mentoring future public officials or scholars which, in turn, affects society. This influence is notably more indirect and subject to a more unpredictable time frame. Indeed, some of the strongest influences an academic can have through students are through maintained relationships after the student has graduated. These former teachers can act as mentors, confidantes, or sounding boards to these now practitioners in their roles. A research-oriented academic with no real interest in influencing policy can still have a major, though indirect, impact on practice through their influence on former students or Ph.D. advisees. Along with classroom teaching, some academics conduct workshops for public officials which provide training and skills that improve their work as practitioners.

Impact can clearly come from a variety of channels and strategies. Each of these choices may affect perceptions of practitioners with respect to the individual's extent and type of reputation. Because these academics orient their priorities differently based on

how they wish to have impact, practitioners will likewise view the academic's work differently.

Academics can have substantive impact in practice, even if they are not directly interested in working to have their work used. While it is true that one powerful method author's can achieve impact in practice is to strive to have their published work used, this is hardly the only mechanism of influencing public administration and policy. Research authors can dedicate their careers to publishing excellence without a particular focus on having direct impact on practice and still end up having their work used in practice.

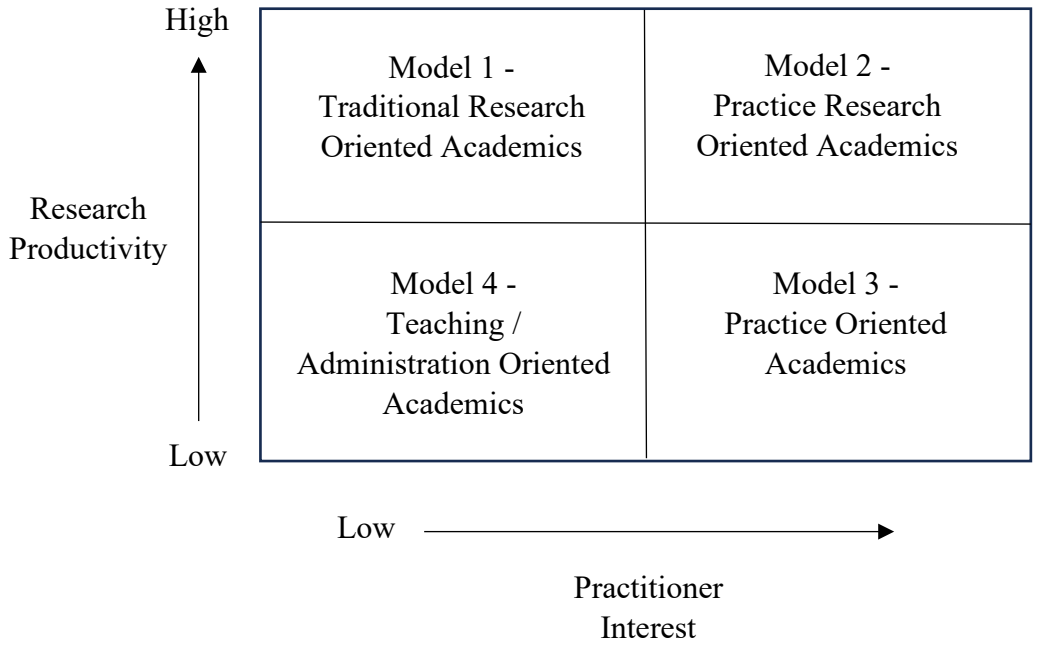
This discussion is not to suggest that academics can do anything (or nothing at all) and have a meaningful impact on practice. Nor does this imply that academics with similar interests will have comparable influence. It does, however, indicate that there are several routes within academia to have a substantive impact on practice. The scope and degree of impact that an academic will have depends on their interests and the decisions made within their academic career. Some impacts will be largely indirect and difficult to measure empirically.

There are two primary dimensions that determine an academic's influence on practice: whether an academic is interested in having direct influence on practice, and whether an academic is interested in strongly influencing research. These two 'archetypes' are distinguished in different, and sometimes opposing ways. Where an academic's research and practitioner interest intersect can predict the different methods, they can influence practice. I'll briefly introduce broader themes between practice interested academics and research academics. Fundamental to this model is that while these two dimensions describe different attributes and interests among academics, both

can lead to practitioner influence. The model's dimensions, and their defining intersections are depicted below in figure 1.

Figure 1.

Four Models of Influence



Practice oriented academics are distinguished by having a significant interest in positively influencing practitioner's work. Principally, these academics will have a higher intrinsic motivation to have their research used in practice. This motivation will likely result in higher measures of practitioner impact. In previous studies, O'Brien, (2005) and Weiss-Gal, et al. (2015) both have found that an author's intent to have their work used in practice was influential in actual use.

Academics with practitioner interest will likely focus on smaller research areas that are more contextually focused but are more directly applicable for immediate use in practice. There are contrasting conclusions from previous studies on how much research

focus determines practitioner influence. Avey & Desch (2014) concluded that prioritization of practitioner needs in research associated positively use, while Landry, et al. (2003) concluded it did not. Despite this, I expect practice oridented researchers to generally conduct less basic and more applied research as they publish. This likely results in practice interested academics having lower academic reputation as measured by traditional instruments such as h-index. They are also likely to have lower overall citation counts on their research, since a narrower research focus will likely be read by fewer people. Despite these lower academic reputation statistics, these academics are more likely to have examples of having their research used in practice, even though their total number of published articles is likely fewer than research-oriented academics.

Another distinguishing feature of practice interested academics is that I expect they are more likely to have been practitioners themselves at some point in their career. An academic who previously served as a public administration or policy official would likely have an increased interest in research that is actionable towards practitioners. They likely are better able to translate or present their research findings towards practitioners. Ensuring that research is presented in accessible ways has been consistently found in prior studies to associate positively with use. (Meagher et al., 2008; Sanni et al., 2016; Rose et al., 2020) They are also likely more aware of when research topics may be of timely interest, which Phoenix et al. (2019) posit as a crucial element in practitioner use of research.

Higher levels of practitioner interest among academics can also inspire higher engagement with practitioners. These interactions can take a variety of forms. Authors can engage with practitioners by promoting their work to garner greater attention or by

working with them during the research process. They can also co-produce research. (Majdzadeh, et al., 2008)

Engagement with practitioners can also have a greater positive effect on their reported use over time. Relationships which start modestly can strengthen over time as trust and frequency of communications builds. (Gollust, et al. 2017) These relationships can also grow to include additional people which gives authors a larger network of practitioners who may be interested in their work. This is true particularly if an author specializes in an administrative or policy field with which practitioners are also equally knowledgeable. Over time, these can spawn future collaborations in research which further increase the likelihood of an author both having and knowing that their work has been used. (Klenk and Wyatt 2015)

Academics can engage with practitioners through efforts made by practitioners themselves, although I expect that these instances occur less frequently. There is some literature discussing practitioner led initiatives to partner with academics. Koontz (2019) for instance found that policymakers who initiate contact with researchers have higher levels of use. Furthermore, Kok, et al., (2016) found high levels of use of practitioner-initiated research projects.

Finally, academics with higher practitioner interests may be incentivized to hold such interests. The incentive structure created by academic tenure and promotion standards is frequently lamented as hindering knowledge utilization. (Jacobson et al., 2004) While still relatively uncommon, some academic units have imposed practitioner use or impact requirements in their tenure and promotion standards. Academics may be more likely to be subject to these incentives if they hold high practitioner interest.

Research oriented academics have different, but not necessarily opposing interests to practice-oriented academics. Their research typically orients towards broader topics within the field of public affairs and more often participate in major current debates within the field. They more frequently conduct basic research, where the topics are less immediately conducive to immediate use in practice. However, there is more to productivity than just the number of articles. It matters where authors publish their research. Authors who are highly productive in the sense that they publish a high number of articles can have little impact if they are seldom read. If research is published in obscure or even predatory journals, the practical benefit of being a productive researcher decreases. Having their work published in high quality journals likely increases readership of their research. It also boosts their reputation in the eyes of practitioners than if they instead are published in obscure journals. Also, considering that practitioners likely do not survey the literature field extensively, having work published in the top-tier journals of the specialty may be required if practitioners are to encounter their work at all. (Bozeman, et al., 2018)

Among academics, the most common metric regarding an academic's publishing productivity is their h-index. An h-index is a measure of an author's productivity and academic influence through their written work and has been examined in the literature as a measure academic reputation. (Bornmann and Daniel 2007; Cervi, et al 2013) It is designed to remain insensitive to articles with an unusually high citation count. (Bornmann and Daniel 2007) It is important to note that an h-index can be strengthened from citations that come from important articles published in lower-quality journals. Therefore, while two authors may have a similar h-index, they may have varying

reputations due to how their impact goals affect their written work, their discipline, their age, or even the relationship between their topics of interest and the scopes of the major journals in their field. Since this research examines only authors of public affairs work, several of the issues with using h-index as a measure of productivity are reasonably contained. Ultimately, h-index is used here as an easily available metric to offer some perspective into an author's reputation garnered through publishing numerically. Therefore, these academics are likely to publish more frequently, have higher h-indexes, and are more likely to have a Ph.D. They also are likely to be more motivated to be perceived as a productive member of their academic unit than those with lower research interest.

As a result, these academics are likely to hold more senior academic rank. Rank can have a substantial influence on behaviors associated with practitioner impact. Junior assistant professors are less likely to report having their work used in practice than their more seasoned colleagues for several reasons. First, (assuming their tenure requirements do not include practitioner use), having their work used is generally a very low priority for those seeking tenure. Since most tenure requirements focus heavily on productivity as a researcher, untenured faculty will be more focused on publishing with the intent to have their work published in high quality journals, rather than publishing for practitioner use. (Shanley & López, 2009) Second and relatedly, the time pressure which assistant professors are subject to successfully receive tenure likely limits their willingness to engage in activities which they deem nonessential. Absent the use incentives on tenure and promotion, I suspect they will not engage in these activities, even if they have a strong desire to influence practice generally. Third, newer authors have had less time for

their publications to be in circulation. This also means that they've had less time to reach practitioners and less opportunity to generate a name reputation within the field. They also have a lower number of publications generally, which further limits their availability to practitioners.

Rank also likely has a positive effect on engaging in dissemination activities after acquiring tenure. Associate and full professors have more time to engage in efforts to attract and interact with practitioners. Associate and full professors are more likely to obtain grants and other funding sources generally, but these also are increasingly including incentives to ensure their work has practical value. (Ellen et al., 2016) Furthermore, senior academics have greater opportunities to coauthor with others who are not academics themselves, including practitioners.

Practitioners may view academic rank as a proxy for professional expertise and therefore practitioners may have higher confidence in senior and experienced authors than junior ones. This is reflected by van der Arend (2014), who suggests that academics early in their career need to take proactive steps to build a reputation as someone amenable to practitioners. These practitioners may be more interested in extending or receiving communications with practitioners, lends itself to greater network expansion.

Similar to the rationale regarding rank, I expect that age will also independently affect whether academics engage with practitioners. Besides the absence of tenure requirements, older professors are more likely to have more research publications overall, and more publications in high quality journals. Considering that practitioners are generally limited in the amount of time or access to read journal articles, when they do it

will likely be limited to well-known and established research journals. This lends favorably to older professors having their work used more.

Older professors also have had more time to grow their professional network, increasing the likelihood of more practitioners being familiar with them and with their work. Even if academics themselves have not taken effort to engage with practitioners directly, older ones have had more time to establish a name reputation among their professional field. This leads both to more academics knowing who they are and practitioners knowing them through the academic's individual networks. The same principles apply to more productive professors. The more active authors are in publishing offers a greater chance of their work being received by practitioners in the first place. Higher productivity also could establish a greater name reputation in the field which in turn could lead to more practitioners either seeking engagement or being open to receiving engagement from the author.

Model 2 academics (High productivity – High practitioner interest) will likely have higher H-indexes than the lower productivity models but not as high as Model 1 (High Productivity interest – low practitioner interest). This is because this groups' research focus is less oriented towards fellow researchers and more towards academics and therefore less likely to be cited in academic journals. Model 2 researchers will likely have a higher number of cold calls with their dual interests in practitioners and their high research productivity, giving them more chances for their work to be read by practitioners. I expect their attempts to advertise their work to practitioners to be equal with Model 3 academics, but I expect that Model 2 academics will be more likely to report that their work has been used.

I suspect that there may be underlying differences of practitioner influence by gender. The divergent experiences in academia based on gender are well documented. For example, Bozeman & Gaughan (2011) found differences based on gender in several facets of research collaboration. Furthermore, there have also been conflicting research conclusions by gender in areas of research productivity (Stack, 2004; Arensbergen, et al., 2012; Mayer & Rathmann, 2018). Finally, some articles have noted differences by gender in how research is judged. For example, Aksnes, et al., (2011) conducted a large study of Norwegian scientists and found that female scientists were cited less than their male colleagues.

In the engagement with public practitioners, the impact of gender is mixed. Landry et al, (2007) find that male researchers engage more in knowledge transfer activities than their female colleagues, while Tajedini, et al., (2018) find no distinction by gender. Given the conflicting conclusions from previous research, I suspect that gender will have a significant, but not specific influence in the model. Accordingly, this variable is included as a control in each of the four models.

These two dimensions of research interest and practitioner interest define an academic's generalized method of impact. It is important to note here that there are many academics who have a low interest in both research and in having direct influence on practitioners. Low research productivity does not necessarily mean no research. It instead suggests that these academics engage in less research for reasons specific to their context. For example, model 3 academics (high levels of practitioner interest – low research interest) could publish smaller amounts of research targeted towards more specific and

more applicable contexts where research can be readily applied. When these academics engage in research, they are more likely to do so collaboratively with practitioners.

Similarly, those who classify into model 4 (low productivity - low practitioner interest) might be primarily focused on teaching or administrative roles within academia. They might publish only when necessary for career requirements or when a particular circumstance arises that spurs their interest of research. This could be a particular topic that is appealing to them, or the chance to publish with coauthors they are interested in or have existing relationships with. These academics could also be more interested in university administration or in having an impact through social media, placement of internships, interacting with elected officials, or working with ex-students. These academics' lower interest in practitioners also does not indicate a form of antagonism towards practice. Interest in practitioners is remanded to a being lower priority in their work.

Academics within model 4 will likely hold very different opinions on how they impact the field to academics in models 1,2, and 3. As a result, the impact this group has on practice is still present, but likely less than all other models. Most influence on practice will occur indirectly through the students they mentor that ultimately go into public service. But this influence will largely escape quantifiable measurements based on published research use and cold calls statistics.

The following chapter describes the research methodology of this dissertation and describes how data will be collected and used.

CHAPTER 3

METHODOLOGY

Introduction[2]

To empirically test the four models of influence academics can have in practice posited in the previous chapter, this dissertation conducts an original survey of public affairs researchers. Uniquely, rather than asking public affairs researchers generally about their published work, the survey seeks authors from published research articles. The authors included in the survey were drawn from a sample frame consisting of all published articles in high quality public affairs journals over five years (between 2015-2019). Respondents were queried on a variety of questions relating both to the specific article from which they were drawn from the sample, as well as questions that ask about their entire career as a researcher. Particular focus was given to the levels of interaction between the author and practitioners, as well as how highly participants prioritized practitioner use of their work. The survey generally defined public practitioners as consisting of "public policymakers" or "public administration practitioners." For brevity, these are referred simply as 'practitioners' in this dissertation but were generally specified throughout the survey. There were instances where the type of practitioner was further defined to give greater detail to the differences between use of public affairs research by specific types of practitioners. In these cases, practitioners were divided into

[2] Some descriptions of the survey's design, implementation, and results have already been published prior to this dissertation's completion in Bozeman et al., (2023) and Nelson and Lindsay, (2023). The author of this dissertation is a coauthor on both works. Any description of the survey's design or implementation, and any presentation of results already published is done with permission of the authors and is noted in the footnotes.

three major types of officials: elected officials, appointed officials, and career civil servants. Additional data on participants were also collected from publicly available information via the web including participant's h-index scores, citations, and the institution and department they were affiliated with at the time of their research was published.

Selection of Sample Journals

The decision of which journals were included in the survey was based on several factors. There is no clear definition of what constitutes a journal as being specifically a "public affairs journal." Including only the flagship subdisciplines of public management or policy excludes many, if not most, applications of public affairs research used in practice. Alternatively, using too liberal criteria of what constitutes public affairs research could create too heterogenous a sample frame, rendering comparisons of use between journals too contextually diverse for meaningful takeaways. Also, considering how large the number of journals that could be considered as relating to the field, it would quickly outsize the resources available for this study. Given these polarizing concerns, this dissertation's inclusion of journals sought for an adequate 'middle ground' where priority is given to ensuring a strong diversity of the different forms of public affairs research, including specialized fields, while also seeking for results that are comparable given the interdisciplinary and heterogeneous nature of the field. Ultimately, constraints were made both to demarcate a line of inclusion for the purposes of this dissertation as well as to fit practical limitations of this research.

The first factor in selecting the journals constituting the sample frame was that each be prestigious, high-quality research publication focusing, broadly or specifically,

on topics within public affairs. Narrowing the sample pool in this way restricts the inclusion of participants to those who have already demonstrated the ability of being published in competitive, refereed journal. This naturally affects the sample frame to favor authors further along in their professional career which could cause spillover effects in other variables such as age, tenure status, or productivity. Another factor in journal selection aimed to provide a broad diversity of different subfields of public administration, including public administration theory, management, policy, and policy evaluation. To fit this requirement the following three journals were added: *Public Administration Review (PAR), the Journal of Public Administration: Research and Theory (JPART), the Journal of Policy Analysis and Management (JPAM),* and *Research Policy (RP)*. Two prestigious evaluation journals were then added: *the American Journal of Evaluation (AJoE) and Evaluation Review (ER)*. Finally, a public health policy journal, *the Milbank Quarterly (MQ)*, was added to represent a specialized field of public administration. From these seven journals, research articles between 2015 to 2019 are included. Book reviews, point-counterpoint, and editorials are excluded. Furthermore, since this dissertation is focused on authors with established careers within public affairs, articles solely authored by graduate students were also excluded.[3] Given these criteria, table 1 presents the author sample frame by journal and designation of first, second, and third authors.

[3] In addition to these protocols, articles solely written by practitioners with no academic coauthors would have also been excluded. However, no articles fell under this category. All survey participants had a university affiliation at the time the survey was conducted.

Table 1.

Initial Author Sampling Frame by Journal[4]

Journal	First	Second	Third	Total
AJoE	49	27	14	90
ER	50	34	17	101
JPAM	114	75	35	224
JPART	156	75	19	250
PAR	223	134	51	408
MQ	92	66	38	196
RP	142	96	29	267
Total	826*	507	203	1536

* (Also, the total number of articles)

Survey Distribution

The survey began with an initial invitation sent by email to all first authors of articles in the sample frame on January 28, 2021, to complete an online Qualtrics survey.[5] After one week, an additional email reminder was sent to the first authors who had not completed the survey at that time.[6] Additionally, the initial invitation was sent on the same day to both second and third authors (where applicable) of articles where the first author had not yet responded. This was done to increase the response rate of articles included in the sample frame were at least one coauthor of the article responded.[7] A week

[4] This data was first published in Bozeman et al., (2023) and is replicated with permission of the authors.

[5] This invitation is presented in Appendix A.

[6] This invitation is presented in Appendix B.

[7] The benefits of increased representation of articles in the sample frame by inviting participation from other co-authors justified the risk of overrepresenting co-authored articles due to a higher chance of at least

later, the reminder email was sent to the second and third authors of articles where no author had yet responded to the survey.

184 individual authors from the initial sampling frame did not receive the initial invitation because of incorrect email addresses. These authors were excluded from the overall sample frame, which reduced it to 817 articles and 1352 authors. The inclusion of second and third authors (when applicable) increased responses by 113 articles, as well as provided 21 'duplicate' responses from multiple authors of the same article. The overall response rate for articles where at least one author responded was 50.01% (409 responses of 817 in sample frame).

Table 2.

Articles Where at Least One Author Responded by Journal

Journal	Freq	Response %	% of Total
AJoE	24	48.98	5.87
ER	15	30.00	3.67
JPAM	40	35.40	9.78
JPART	93	60.78	22.74
PAR	144	65.16	35.21
MQ	25	27.78	6.11
RP	68	48.23	16.63
Total	409	50.01	100.00

Survey Instrument

The survey was divided into three major sections. The first included questions that related to the specific article from which the respondent author was included in the

one author responding due to a survey invitation going to two or three, rather than a single solo author. Of the 826 articles in the sample frame, a majority (507 or 61.4%) included at least one co-author.

sample frame. The second section asked questions relating to the participant's overall career. The third section concludes by collecting demographic information about the participant.

A major focus of the survey related to the author's interaction with practitioners and knowledge of their research's 'use' in practice. It also sought for information relating to their personal motivation to have their work used by public practitioners, as well as their opinion on how they most substantially have an impact on the field. Additional questions related to their specific work contexts and how these might influence motivations to have work used by practitioners. One such example related to whether they were subject to incentives or rewards offered by their academic units to have their work used in practice.

Besides motivations, interactions between research authors and practitioners was a major focus. The questions asked whether the author had communication with practitioners about their work, and, if so, at what point during the research process. The survey also asked participants if they have ever been 'cold contacted' by practitioners seeking information or advice about their published work.

The primary purpose of these questions is to garner understanding of how authors view their published work and the motivations behind it. For example, the underlying motivation behind a paper could have been to satisfy employment or tenure requirements, personal curiosity, or to have it used in practice. The survey concludes with general demographic questions that are theorized in the literature review to be relevant in the use of public affairs research by practitioners.

Empirical Testing of Theoretical Framework

The data collected from the survey questions are used to empirically test the framework describing different types of academics and how effectively they influence practice as presented in chapter two. The independent variables are first presented and organized into their respective theoretical model. The dependent variables are then presented. This dissertation uses two key dependent variables to measure public affairs' researcher's influence among practice: the degree to which respondents have been cold called by practitioners during their career, and whether they have direct knowledge that their recent research work has been used in practice. These two variables are measured through respective questions in the survey.

The variable of measuring cold calls was used to estimate how many times non-academics attempted to contact the respondent to discuss their published research or regarding their expertise generally. This variable is further defined as being only interested in non-academics contacting respondents with whom they have had no relationship with prior to initiating a cold call. The framework in chapter two argued that academics who had received more cold calls throughout their career demonstrably have a higher level of influence among practitioners. Considering that this variable asks respondents to think back over their entire career and the inherent level of recall bias that would undoubtedly be present in asking for precise estimates of the number of cold calls received, I chose to measure this phenomenon ordinally. This still permits quantification of the number of cold calls beyond a mere binary 'yes/no' option, while mitigating the variance introduced from recall bias. A follow-up question posed to those who responded

that they had been cold contacted at least once in their career were asked about how they would usually respond to such queries from practitioners regarding their work.

The other dependent variable related to whether respondents have knowledge that their specific research article had ever been 'used' in practice. This variable is perhaps the most important and the most treacherous in terms of validity. Asking authors about knowledge of practitioner use of their work presents potential response bias by respondents overstating their works' use so as to appear more virtuous. (Nederhof, 1985) This bias would also likely influence the data unequally, since respondents who are motivated by practitioner use may be more likely to overstate the research's influence. Present also is potential recall bias of respondents being unsure of whether their work has been used at all. Finally, there is ambiguity of the concept of 'use' that might threaten construct validity as respondents may have different stringent conceptions of what constitutes 'use.' Navigating these potential pitfalls mandated care in wording the question so as to ensure specificity in both the definition of 'use' and the requirements for claiming that a work was, in fact, 'used.'

Initial descriptive statistics are presented through summary statistics of relevant survey questions. The factor analysis is done on all variables hypothesized as predicting the four models theorized in chapter two. The variables are organized by the two dimensions based on the theoretical framework: Interest in research productivity, and interest in practitioners. A careful evaluation of the data is done to ensure the data is suitable for factor analysis. I construct correlation matrices and descriptively analyze the independent variables which describe the theoretical models. The model's independent

variables then undergo both Bartlett's test of sphericity and the Kaiser-Meyer-Olkin test to demonstrate appropriateness of using factor analysis.

Considering that the purpose of this analysis is primarily to identify whether the collected data fits in the theorized model, I use maximum likelihood factor analysis on the variables. Factor scores are derived which were then used in regression modeling. Doing this reduces the complexity of each model and creates an empirical score from which further analysis is then possible. (Watkins, 2018) I then discuss each factor and their relative strengths and suitability for further use. The empirical analysis of the theoretical framework concludes by conducting a regression analysis of the factors against the two dependent variables.

The following chapter presents the results of this data and conducts the empirical analysis of the theoretical framework.

CHAPTER 4

RESULTS

Introduction

This chapter presents the results of this dissertation's data collection and analysis. The survey described in chapter three provided the vast majority of the data for this dissertation. The survey offered significant insights into a large cross section of authors of public affairs research. Specifically, their motivations and how they believe they impact the field of public affairs most offered unique insights regarding this group. The presentation of these variables is organized according to the two dimensions theorized in chapter two that define an academic's influence on practice: research productivity and practitioner interest. Descriptive results including responses and summary statistics of variables used in analysis will first be presented. The variables are then organized according to the four models proffered in the theoretical framework. The empirical test of the theoretical model will begin by presenting correlation tables used to assess the appropriateness of using factor analysis. A maximum likelihood factor analysis is conducted and discussed with particular interest placed on examining the suitability of each factor's fit and explanatory power. Scores will then be derived from each factor, and the chapter will conclude with final regression models to test the four model's effect on predicting the dependent variables.

Descriptive Results - Variables Suggesting High Research Productivity

The h-index is a measurement of a scholar's career research impact conceived by J.E. Hirsch. It was designed to provide a "an estimate of the importance, significance, and broad impact of a scientist's cumulative research contributions." (Hirsch, 2005, p. 16569)

It is a calculation that compares the citations of published scholarly work with the number of publications of a given author. (Bernard Becker Medical Library, 2024) Given potential response bias and variance of knowledge of what their own scores are that would accompany authors self-reporting their h-index score, h-index scores were not collected via the survey. Instead, each participant's h-index was collected via their Google Scholar profile subsequent to the survey's completion. Among all survey respondents, the mean h-index score was 21.48 with a standard deviation of 22.46, indicating a heavily right-skewed distribution. The highest score collected was 237 and the lowest was 1. This result appropriately reflects the sample frame from which the survey was conducted, that is, the group consists generally of mid-career to senior level research professionals who are capable of being published in top scholarly journals in their field. But the variance of the results also indicates a sizeable portion being outside of this primary group.

The next set of variables came from the first section of the survey instrument which asked questions related to the respondents' recently published article from which they were included in the sample frame. Regarding this specific article, each respondent was asked about different possible motivations behind undertaking the project. Responses were measured via a Likert scale. Among these different motivations, one related to an author's desire to be seen as productive research scholar. The specific question was, "*Please indicate the extent to which each was important for the above paper: Be perceived as a highly productive member of my academic unit.*" The responses are listed below in table 3.

Table 3.

Author Productivity Motivation (MOT_MYFAC)[8]

Response	(Code)	%	N
Not Important	(0)	20.4%	80
Somewhat Important	(1)	34.4%	135
Very Important	(2)	35.7%	140
Most Important	(3)	9.4%	37

There was substantial diversity in responses to this question. Over half (54.8%) either said that being seen as a productive member of their unit either was not a factor in undertaking the project or was of only modest importance. Only a few indicated that it was the major reason for undertaking the project.

Since non-academic authors would have been excluded from the sample frame, each participant was asked regarding their current academic rank. The results are presented below in table 4.

[8] The parentheticals in this and future variables indicate an abbreviation for concise reference to the response.

Table 4.

Author Academic Rank (RANK)

Response	(Code)	%	N
Instructor	(1)	0.26	1
Other	(2)	4.92	19
Assistant Professor	(3)	22.80	88
Associate Professor	(4)	28.76	111
Full Professor	(5)	43.26	167

Consistent with other findings thus far, a sizeable majority (70.02%) were of tenure-rank. An 'other" category was included to capture any possible non-tenure track, non-instructor positions. Only approximately 5% of participants indicated this option. After the survey, I examined the online public profiles of respondents who selected this option to see if there were consistent patterns across this group. At the time of the survey, 18 of this group were in university researcher positions and one was an emeritus full professor. This latter response was re-coded as being a 'full professor' for data analysis purposes while the others kept the ordinal code of '2' indicating a higher seniority than instructors but a lower one than assistant professors.

Among the other questions regarding demographic information, the survey specifically asked what the highest academic degree earned by the author was. The results are listed below in table 5.

Table 5.

Author's Highest Degree Earned (DEGREE)

Response	(Code)	%	N
Ph.D.	(1)	98.2	379
Juris Doctor / Law Degree	(0)	1.8	7
Master's Degree	(0)	0	0
Other	(0)	0	0

Nearly the entire sample reported holding a Ph.D. at the time of the survey. The only exceptions all reported holding Juris Doctorates.

Additionally, the survey also requested respondents enter the year that they received their highest academic degree. This was done to use as an estimate of the length of time they have participated in the academic field. This data was converted to demonstrate how many years have elapsed since receiving their highest degree at the time of the survey. The mean number of years since their highest degree was 15.4 with a standard deviation of 11.72. The minimum was zero years, and the maximum was 53 years. To help standardize the data, the natural logarithm of this data is used in subsequent analysis.

Each of these variables was theorized in chapter two to define the dimension of being highly productive research authors. The descriptive statistics for each of these variables are listed below in table 6.

Table 6.

High Research Productivity Variables – Summary Statistics

Variable	Obs.	Mean	Std. Dev.	Min.	Max.
H-Index	349	21.48	22.46	1	237
MOT_MYFAC	392	1.34	0.91	0	3
Rank	386	4.10	0.94	1	5
Degree	386	0.98	0.13	0	1
Years Since Degree	375	15.40	11.72	0	53

Descriptive Results - Variables Suggesting High Practitioner Interest

Of the variables suggesting interest regarding practitioners, one of the most prominent was identifying respondents who had been practitioners themselves before their academic career. It is important to note that it is likely common for academics to take non-academic jobs during or shortly after undergraduate or graduate school before transitioning to academia. To differentiate those who spent a sizable portion of their career away from academia from those with only an incidental outside work history, the question was drafted to require a minimum of 12 months or more in order to be included in this category. The question was worded, "*Have you ever worked full-time for 12 months or more as a public policy or public administration practitioner?*" The results are presented below in table 7.

Table 7.

Authors Previous Work as a Practitioner (PAWORKER)

Response	(Code)	%	N
Yes	(1)	25.32	98
No	(0)	74.68	289

Nearly 75% of respondents indicated that they had not worked as a public policy or public administration practitioner prior to their current academic position.

Another potential indicator of practitioner interest is how motivated authors are to have their work used. Among the survey questions asking the respondents' motivation for undertaking the research project, authors were asked if utilization by public policy or public administration practitioners was a motivation. The specific question was, "*Regarding your own motives (not your co-authors') for undertaking this study which of the following statements best describes your view?*" The results are presented below in table 8.

Table 8.

Author Motivation for Practitioner Use (USEMOTIVE)

Response	(Code)	%	N
Utilization of results by policymakers or public administration practitioners was not a motivation for the research.	(0)	10.89	43
Utilization of results by policymakers or public administration practitioners was only a minor motivation for the research.	(1)	43.29	171
Utilization of results by policymakers or public administration practitioners was a major motivation for the research.	(2)	38.48	152
Utilization of results by policymakers or public administration practitioners was the most important motivation for the research.	(3)	7.34	29

There were mixed responses from participants regarding this question. 45.82% indicated that it was a major, if not the most important reason for undertaking the study while a nearly equally sized group indicated it was only a minor one. Considering that public affairs is by nature a practical one, it is slightly surprising that this motivation is not higher among authors.

Similarly, respondents were asked to what degree their research paper was motivated by interactions they had with practitioners prior to the work beginning. The question was, "*Please indicate the extent to which each was important for the above paper: The topic was suggested by a public administrator or policymaker who was not a co-author.*" The results are presented below in table 9.

Table 9.

Author Motivation from a Practitioner's Suggestion (MOT_PASUGGEST)

Response	(Code)	%	N
Not Important	(0)	81.6	314
Somewhat Important	(1)	10.4	40
Very Important	(2)	5.2	20
Most Important	(3)	2.9	11

The vast majority of survey participants indicated that such a suggestion was not a motivation for their published work. But despite this, there was a group (18.5%) who indicated that a practitioner suggestion did have at least a moderate influence on their motivation for their research project.

Similarly, the survey instrument also queried authors about the level of communication they have with practitioners about their work. Regarding their specific published paper, the survey asked if they had spoken to a practitioner about it at any point before, during, or after the project was completed. The question was, "*At any point before, during, or after the research project, did you have any communication with public policymakers or public administrators about your research?*" The results are presented below in table 10.

Table 10.

Author Communication with Practitioner Regarding Research Project (COMM_BYPUB)

Response	(Code)	%	N
Yes	(1)	65.64	256
No	(0)	34.36	134

Follow-up questions to those who answered 'yes' specified when these communications took place relative to which stage the research project was in development and who initiated these communications.

The final question regarding the author's specific article related to their interest in attracting the attention of practitioners to their published work. The question was, "*Did you or any member of your research team take actions at any point before, during, or after the research project with the objective of attracting the attention of policymakers or public administrators to your research?*" The results are presented below in table 11.

Table 11.

Author's Efforts to Attract Practitioners to Research (ATTRACT)

Response	(Code)	%	N
Yes	(1)	51.28	200
No	(0)	48.72	190

This question was initially kept definitionally broad to capture any attempt of advertisement. Further follow-up questions to those who indicated 'yes' specifically asked what types of communication mediums they used, when such communications happened, and which types of practitioners they were attempting to advertise to.[7] A small majority of respondents indicated that they had taken efforts to attract the attention of practitioners to their published work.

The second half of the survey related to the participants' overall career rather than only to the article from which they were included in the survey. Perhaps the most important factor to gage interest of practitioner use was to inquire their motivation to have their work used by practitioners. The question was, "*Characterizing your research*

career, to what extent have you been motivated in your research by a desire to have your research work used by public policymakers or public administration practitioners?" The results are presented below in table 12.

Table 12.

Author Motivation for Practitioner Use Throughout Career (USEMOTIVE_CAREER)

Response	(Code)	%	N
Very Unimportant	(0)	1.5%	6
Unimportant	(1)	2.8%	11
Neither important nor unimportant	(2)	16.2%	63
Important	(3)	44.7%	174
Very Important	(4)	34.7%	135

The results of this question suggest that practitioner use of their published work was an important element to most. The question intentionally kept the concept of 'use' unspecified so as to capture any individual interpretation of use. Since this research is examining whether the research was actually 'used,' allowing the verbiage to remain undefined so as to allow broad concepts of use was appropriate. Considering that public administration is a practical field, and that the concept of use was kept vague, it is perhaps unsurprising that a wide majority of respondents (79.4%) reported that having their work used in practice was at least somewhat important to them.

The survey then examined to what degree authors were incentivized by their academic unit to have their work used in practice. Because of the difficulty of quantifying both how much practitioner use is incentivized, as well as how much that incentive may have influenced authors, the question was split into two so as to look at different

incentive structures, specifically tenure and promotion standards and annual evaluations. Additionally, each question was worded so as only to measure (from the author's perspective) how much the unit rewards these behaviors, not necessarily how much it influenced them personally. Each question was given standardized ordinal answers to simplify responses. The questions were, "*With respect to promotion and tenure decisions, which of the following best describes how your academic unit rewards use of your work by practitioners?*" and "*With respect to annual evaluations, which of the following best describes how your academic unit rewards use of your work by practitioners?*" The results are presented below in table 13 and 14, respectively.

Table 13.

Promotion and Tenure Incentive for Use (REWARD_T&P)

Response	(Code)	%	N
No Value	(0)	18.9%	73
Minor Value	(1)	39%	151
Moderate Value	(2)	34.1%	132
Major Value	(3)	8%	31

Table 14.

Annual Evaluation Incentive for Use (REWARD_EVAL)

Response	(Code)	%	N
No Value	(0)	35%	132
Minor Value	(1)	34%	128
Moderate Value	(2)	25.5%	96
Major Value	(3)	5.6%	21

The results to these questions demonstrate that practitioner use remains largely outside the expectations academic units place on their research faculty. 57.9% indicate that practitioner use of their research has little to no value in tenure and promotion decisions, while 69% indicated the same regarding annual evaluations. Still, sizeable groups do suggest that it is at least of marginal interest to their academic unit.

The survey instrument was designed in part to measure how authors believe they have a substantial impact on the field of public affairs. Participants were asked about 16 different methods of impact and requested they express how sizeable an impact they feel they have personally made via a Likert scale. Among these results, I utilize eight of these listed methods of impact and assign them according to the theoretical model posited in chapter two. The first of these variables considered to be indicative of higher levels of practitioner interest was how substantially respondents view they have impacted the field by responding to practitioners' requests for ideas or advice. The specific question posed was, "*There are many ways, not just publishing, in which people can have a significant impact on policy and administration. Thinking back over your career, to what extent, if any, have your following activities affected public policy or administration: Responding to practitioners' (not former students) requests for ideas or advice."* The results are listed below in table 15.

Table 15.

Author's Impact on Field – Responding to Practitioners (IMPACT_PAREQUEST)

Response	(Code)	%	N
Not Important	(0)	15.04	54
Somewhat Important	(1)	35.93	129
Very Important	(2)	38.44	138
The Single Most Important	(3)	10.58	38

The vast majority (84.96%) of respondents reported that responding to practitioner's requests for help was at least somewhat important in how they have a significant impact on the field. Furthermore, nearly half of respondents (49.02%) report that it is at least "very important."

There are parallels between this question and to the dependent variable of receiving cold calls. The primary difference is that this question measures how the author feels that responding to these requests impacts the field. Unlike the cold call variable which limits cold calls as coming uniquely from practitioners from which they have no prior contact, this question permits multiple communications from the same practitioners as influencing the author's view of their impact.

Another question of how authors feel they impact the field related to the use of their work by practitioners. This question differs from the USEMOTIVE question because it asks the degree which authors want to be involved with practitioners when they use their work. This was divided into two in the survey by asking about author's interest in interacting with practitioners when they use their work. The questions were, "*There are many ways, not just publishing, in which people can have a significant impact*

on policy and administration. Thinking back over your career, to what extent, if any, have your following activities affected public policy or administration: Use of my research by practitioners, but not with direct interaction with me or my research colleagues." and "*There are many ways, not just publishing, in which people can have a significant impact on policy and administration. Thinking back over your career, to what extent, if any, have your following activities affected public policy or administration: Use of my research by practitioners, with direct interaction with me or my research colleagues.*" The results are presented below in tables 16 and 17 respectively.

Table 16.

Author's Impact on Field – Use of Work by Practitioners (No Communication)

Response	(Code)	%	N
Not Important	(0)	15.04	54
Somewhat Important	(1)	42.06	151
Very Important	(2)	35.93	129
The Single Most Important	(3)	6.96	25

Table 17.

Author's Impact on Field – Use of Work by Practitioners (With Communication)

Response	(Code)	%	N
Not Important	(0)	17.55	63
Somewhat Important	(1)	28.69	103
Very Important	(2)	38.44	138
The Single Most Important	(3)	15.32	55

There are sizeable differences between the responses to these two questions. Both sets of responses are normally distributed, but the number of responses indicating that it was the

single most important way they impact the field more than doubled when communicating with practitioners was added. Additionally, the 'somewhat important' category took a noticeable decrease from the question without communication to the one with.

Each of these variables measure the responding author's interest in practitioners and how their own work influences them. The summary statistics for these variables are listed below in table 18.

Table 18.

High Practitioner Interest Variables – Summary Statistics

Variable	Obs.	Mean	Std. Dev.	Min.	Max.
PAWORKER	387	0.25	0.44	0	1
USEMOTIVE	395	1.42	0.78	0	3
MOT_PASUGGEST	385	0.29	0.70	0	3
COMM_BYPUB	390	0.66	0.48	0	1
ATTRACT	390	0.51	0.50	0	1
USEMOTIVE_CAREER	389	3.08	0.87	0	4
REWARD_T&P	387	1.31	0.87	0	3
REWARD_EVAL	386	1.22	0.85	0	3
IMPACT_PAREQUEST	359	1.45	0.87	0	3
IMPACT_NOCOMM	359	1.35	0.82	0	3
IMPACT_COMM	359	1.52	0.95	0	3

Descriptive Results: Variables Suggesting Low Productivity and Practitioner Interests

The last set of variables presented in this section relate to individuals who have neither interest in research productivity nor in practitioners' work. To briefly reiterate some of the theory in chapter two, these individuals are indeed academics and research authors, but their main priorities lie outside of publishing and assisting practitioners

directly. These individuals can often be engaged in higher education administration or teaching roles that generally occupy their professional time. Each of the following variables reflect these unique priorities that deviate from the variables preceding them.

This category of variables was measured using different variations of the question measuring how an author views they have the most significant impact on the field. The first of these questions asks authors about their impact via being elected to political office. The question was, "*There are many ways, not just publishing, in which people can have a significant impact on policy and administration. Thinking back over your career, to what extent, if any, have your following activities affected public policy or administration: Being elected to political office.*" The results are presented below in table 19.

Table 19.

Author's Impact on Field – Election to Political Office (IMPACT_ELECTED)

Response	(Code)	%	N
Not Important	(0)	91.21	301
Somewhat Important	(1)	2.42	8
Very Important	(2)	3.03	10
The Single Most Important	(3)	3.33	11

The results of this question overwhelmingly indicate that the vast majority of authors do not view election to political office as a way they impact the field. There were some who indicated otherwise but these represent a small minority.

The next few versions of this question are to measure an author's impact via either instruction or administrative roles within higher education. The first of these

possible roles was how authors view their impact through teaching or administering internships. The question asked was, "*There are many ways, not just publishing, in which people can have a significant impact on policy and administration. Thinking back over your career, to what extent, if any, have your following activities affected public policy or administration: Teaching or administering internships.*" The results are presented below in table 20.

Table 20.

Author's Impact on Field – Facilitating Internships (IMPACT_INTERNS)

Response	(Code)	%	N
Not Important	(0)	32.86	115
Somewhat Important	(1)	31.71	111
Very Important	(2)	29.43	103
The Single Most Important	(3)	6.00	21

There was high diversity in the responses to this question. Sizeable groups indicated they viewed their impact in teaching or administering internships as ranging from not important to very important. Relatively few however indicated that this was the most important method they have impacted the field. The next question similarly asked about teaching or administering student workshops. The question stated, "*There are many ways, not just publishing, in which people can have a significant impact on policy and administration. Thinking back over your career, to what extent, if any, have your following activities affected public policy or administration: Teaching or administering student workshops.*" The results are presented below in table 21.

Table 21.

Author's Impact on Field – Facilitating Student Workshops (IMPACT_WORKSHOP)

Response	(Code)	%	N
Not Important	(0)	32.58	116
Somewhat Important	(1)	35.67	127
Very Important	(2)	25.28	90
The Single Most Important	(3)	6.46	23

The impact of conducting workshops was comparable to the impact of internships with only modest deviation.

I next consider how an author views their impact via participation on social media. The question asks, "*There are many ways, not just publishing, in which people can have a significant impact on policy and administration. Thinking back over your career, to what extent, if any, have your following activities affected public policy or administration: Contributions or coverage on social media.*" The results are presented below in table 22.

Table 22.

Author's Impact on Field – Coverage on Social Media (IMPACT_SOCMEDIA)

Response	(Code)	%	N
Not Important	(0)	38.70	137
Somewhat Important	(1)	42.94	152
Very Important	(2)	15.25	54
The Single Most Important	(3)	3.11	11

A majority (61.3%) of respondents indicate that social media is at least a somewhat important way they influence the field of public affairs, though with only few indicating a large importance.

The final variable considers the degree to which authors view interacting or helping former students as influencing the field. The question stated, "*There are many ways, not just publishing, in which people can have a significant impact on policy and administration. Thinking back over your career, to what extent, if any, have your following activities affected public policy or administration: Responding to my former students' requests for ideas or advice.*" The results are presented below in table 23.

Table 23.

Author's Impact on Field –Responding to Former Students (IMPACT_EXSTUD)

Response	(Code)	%	N
Not Important	(0)	24.43	86
Somewhat Important	(1)	40.06	141
Very Important	(2)	30.68	108
The Single Most Important	(3)	4.83	17

A large majority (75.57%) indicate that interacting with former students is an important way they influence the field of public affairs. But it is noteworthy that a sizeable group remains who do not view this as impactful.

Each of these variables represents different ways of impacting the field outside the traditional roles of publishing or working with practitioners directly. Each of these variables' summary statistics are presented below in table 24.

Table 24.

Low Productivity / Low Practitioner Interest Variables – Summary Statistics

Variable	Obs.	Mean	Std. Dev.	Min.	Max.
IMPACT_ELECTED	330	0.19	0.64	0	3
IMPACT_INTERNS	350	1.09	0.93	0	3
IMPACT_WORKSHOP	356	1.06	0.92	0	3
IMPACT_SOCMEDIA	354	0.83	0.80	0	3
IMPACT_EXSTUD	352	1.16	0.85	0	3

Dependent Variables

The final variables collected via the survey instrument were two dependent variables used to measure impact both regarding a specific research article as well as over

an author's entire career. As mentioned in chapter three, these variables relate to whether authors have direct evidence that their research article had been used by public policymakers or public administrators. The specific question was, "*To your knowledge, has your research been at any point "used" by a policymaker or public administrator (where "use" includes direct application in policy or administrative actions; evidence of influence or shaping opinions of policymakers or public administrators).*" The results are presented below in table 25.

Table 25.

Author Knowledge of Practitioner Use of Research (USED)[9]

Response	(Code)	%	N
Yes, I have knowledge of the use of this research by policymakers or administrators.	(1)	29.7%	116
I have no evidence or experience with the use of this research by policymakers or administrators.	(0)	70.3%	274

Overall, only a minority of authors reported holding direct evidence that their work had in fact been used by practitioners at the time of the survey. Additional follow-up questions were asked to participants who selected 'yes' about specific types of use by specific types of practitioners. These are included in appendix X.

The survey also uniquely asks participants if they have ever been 'cold called' by practitioners seeking advice about their published work. This offered insight to how favorably practitioners view authors, their published work, or both. The question posed to authors in the survey was "*During your career, about how many times (if any) have you been cold contacted (no previous communication) by public policy or administration*

[9] This data was first published in (Bozeman et al., 2023) and is replicated with permission of the authors.

practitioners who have read your research and wish to discuss with you or to use it" The results are presented below in table 26.

Table 26.

Cold Contact by Practitioners

Response	(Code)	%	N
This has never happened.	(0)	15.7%	61
This has happened, but only one or two times.	(1)	28.4%	110
This has happened several times. (3-5)	(2)	28.6%	111
This has happened often. (more than 5 times)	(3)	27.3%	106

Among the responses, an overwhelming majority of authors (84.3%) have received at least one cold call during their career. Furthermore, over half (55.9%) reported receiving multiple cold calls.

Each of these variables were used to measure the diverse ways authors view their own motivations and interests within academia. By determining these, inferences can then be made in how they influence the field of public affairs. These variables were organized based on the two dimensions upon which the model is predicated: Interest in research productivity and interest in practitioners and their work. Figure 2 below organizes these variables into the respective model they associate. Table 27 then presents correlation tables between the independent variables organized by model with the two dependent variables.

Figure 2.

Four Models of Academic Influence with Variables

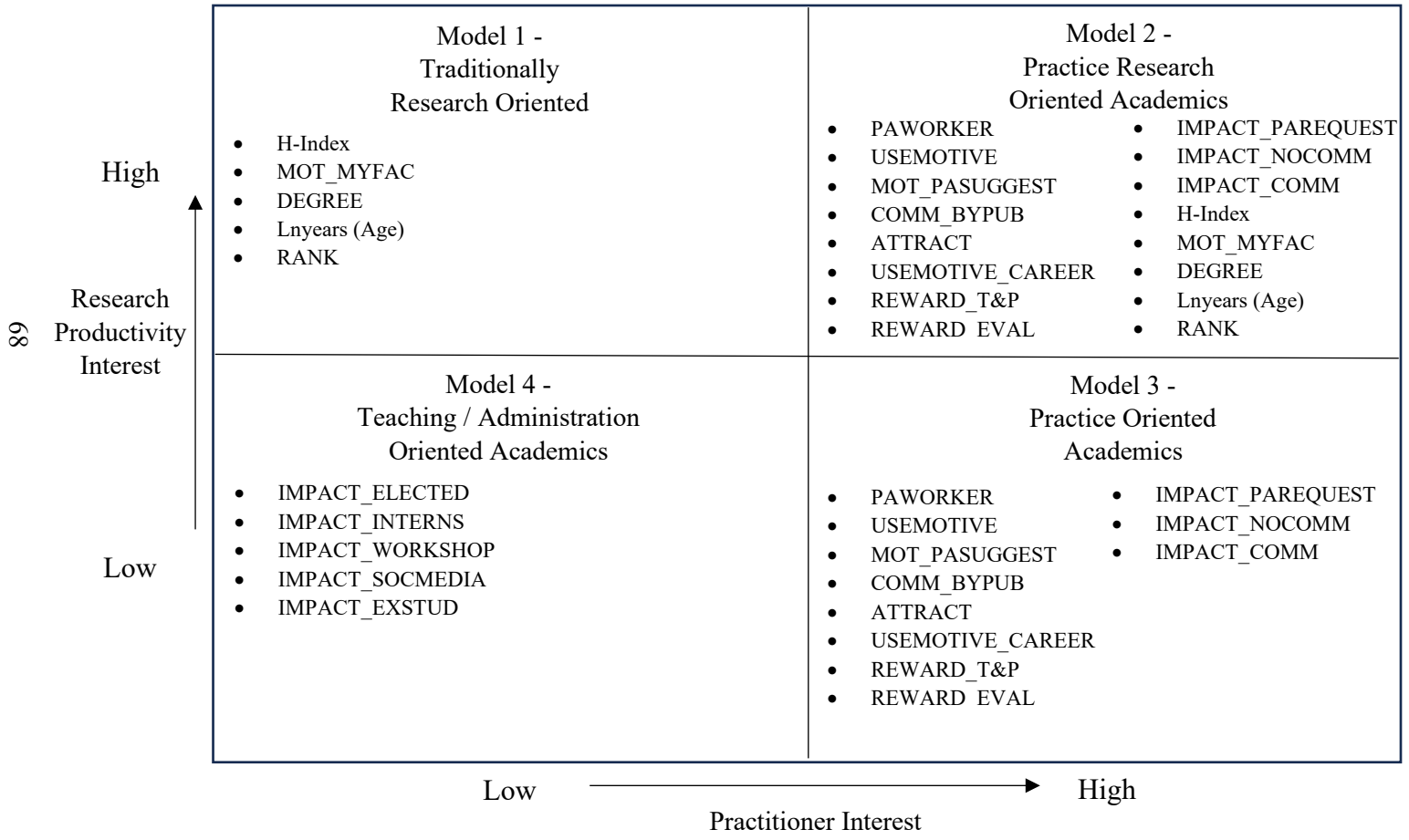


Table 27.

Correlation Tables Between Independent and Dependent Variables by Model[10]

Model 1 - Traditional Research Oriented Academics

Variable	H-Index	MOT_MYFAC	RANK	DEGREE	nears
COLDCONTACT	**0.2772*****	**-0.1518*****	**0.3319*****	-0.0615	**0.3423*****
USED1	0.0466	**-0.1098****	0.0752	**-0.102****	**0.1371*****

Model 2 - Practice Research Oriented Academics

Variable	PAWORKER	USEMOTIVE	MOT_PASUGGEST	COMM_BYPUB
COLDCONTACT	0.04	**0.1504*****	**0.1275****	**0.1915*****
USED1	0.0396	**0.3432*****	**0.2763*****	**0.3204*****

Variable	ATTRACT	USEMOTIVE_CAREER	REWARD_T&P	REWARD_EVAL
COLDCONTACT	**0.1872*****	**0.1951*****	**0.1396*****	**0.1431*****
USED1	**0.2456*****	**0.1323*****	0.0647	**0.1507*****

Variable	IMPACT_PAREQUEST	IMPACT_NOCOMM	IMPACT_COMM	H-Index
COLDCONTACT	**0.3505*****	**0.3428*****	**0.3002*****	**0.2772*****
USED1	**0.2229*****	**0.1906*****	**0.2904*****	0.0466

Variable	MOT_MYFAC	RANK	DEGREE	lnyears
COLDCONTACT	**-0.1518*****	**0.3319*****	-0.0615	**0.3423*****
USED1	**-0.1098****	0.0752	**-0.102****	**0.1371*****

[10] P-Value Significance is Indicated as follows: ******* = p > 99%; ****** = p > 95%; ***** = p > 90%.

Correlation Tables Between Independent and Dependent Variables by Model[11]

Model 3 - Practice Oriented Academics

Variable	PAWORKER	USEMOTIVE	MOT_PASUGGEST	COMM_BYPUB
COLDCONTACT	0.04	**0.1504*** **	**0.1275** **	**0.1915*** **
USED1	0.0396	**0.3432*** **	**0.2763*** **	**0.3204*** **

Variable	ATTRACT	USEMOTIVE_CAREER	REWARD_T&P	REWARD_EVAL
COLDCONTACT	**0.1872*** **	**0.1951*** **	**0.1396*** **	**0.1431*** **
USED1	**0.2456*** **	**0.1323*** **	0.0647	**0.1507*** **

Variable	IMPACT_PAREQUEST	IMPACT_NOCOMM	IMPACT_COMM
COLDCONTACT	**0.3505*** **	**0.3428*** **	**0.3002*** **
USED1	**0.2229*** **	**0.1906*** **	**0.2904*** **

Model 4 - Teaching Administration Oriented Academics

Variable	IMPACT_ELECTED	IMPACT_INTERNS	IMPACT_WORKSHOP
COLDCONTACT	-0.0194	0.0681	**0.1105** **
USED1	0.0253	**0.1154** **	**0.1473*** **

Variable	IMPACT_SOCMEDIA	IMPACT_EXSTUD
COLDCONTACT	**0.1908*** **	**0.1219** **
USED1	-0.009	0.0351

[11] P-Value Significance is Indicated as follows: *** = p > 99%; ** = p > 95%; * = p > 90%.

There are numerous positive correlations between the several independent variables and the dependent variables, regardless of whether they are measuring practitioner interest, research interest, or neither. Beginning with the variables measuring interest in being productive researchers, the correlations suggest mixed results. An author with a higher h-index is associated with receiving more cold calls but is not significantly correlated with having knowledge of their work being used. Authors whose recent work was primarily motivated to be perceived as productive members of their academic unit were significantly less likely to have their work used by practitioners and to receive cold calls. Rank again had mixed results, where those with higher academic rank were more likely to have received more cold calls but were not significantly likely to have more knowledge that their work was used in practice. The opposite, however, was true regarding the author's highest degree. Those with a Ph.D. as opposed to a J.D. were slightly less likely to report their work was used in practice, although the number of those without a Ph.D. was minimal. Finally, an increase in the natural log of years since their highest degree showed significant positive correlations with both knowledge of having their work used in practice and in receiving more cold calls.

Overall, the variables representing interest regarding practitioners are generally both highly significant and positively correlated. A notable exception was authors who reported working previously as practitioners were not significantly correlated for either dependent variable. Additionally, authors who are affiliated with academic units that require practitioner use in their tenure and promotion incentives are not correlated with having their work used by practitioners but are correlated with receiving more cold contacts.

Empirical Results – Factor Analysis and Regression

In order to utilize factor analysis, there must be demonstrable intervariable correlation from which to identify underlying constructs or patterns. (Knekta et al., 2019) To do this, I create a correlation matrix between all independent variables to evaluate the extent of intervariable correlation. The results are presented below in Table 28.

Table 28.

Intervariable Correlation Matrix[12]

Variable	H-Index	MOTMYFAC	RANK	DEGREE	lnyears	PAWORKER	USEMOTIVE
H-Index	**1.0000**						
MOT_MYFAC	**-0.2481*** **	**1.0000**					
RANK	**0.4298*** **	**-0.0940** **	**1.0000**				
DEGREE	-0.0335	0.0512	**-0.0890***	**1.0000**			
lnyears	**0.5147*** **	**-0.1654*** **	**0.6385*** **	**-0.1077** **	**1.0000**		
PAWORKER	-0.0802	-0.0650	-0.0470	-0.0555	-0.0567	**1.0000**	
USEMOTIVE	0.0798	**-0.1526*** **	-0.0011	-0.0507	**0.1253** **	**0.0948***	**1.0000**
MOT_PASUGGEST	0.0102	-0.0667	-0.0028	0.0292	0.0169	**0.0855***	**0.2697*** **
COMM_BYPUB	0.0564	**-0.0927***	0.0307	-0.0176	0.0494	0.0118	**0.3196*** **
ATTRACT	0.0216	**-0.1014** **	**0.0931***	-0.0163	0.0410	0.0388	**0.2982*** **
USEMOTIVE CAREER	**0.0972***	**-0.0882***	0.0253	**-0.0995***	0.0807	**0.2812*** **	**0.4661*** **
REWARD_T&P	0.0531	-0.0496	0.0156	**-0.1086** **	0.0304	0.0479	**0.2216*** **
REWARD_EVAL	0.0802	-0.0497	**0.0948***	**-0.1043** **	**0.1276** **	0.0724	**0.2091*** **
IMPACTPAREQUEST	0.0385	**-0.1178** **	-0.0210	0.0719	0.0133	**0.1249** **	**0.2914*** **
IMPACTNOCOMM	0.0382	-0.0672	0.0129	-0.0391	-0.0013	**0.1452*** **	**0.1414*** **
IMPACT_COMM	0.0066	-0.0313	-0.0351	0.0338	0.0192	0.0484	**0.1999*** **

[12] P-Value Significance is Indicated as follows: *** = p > 99%; ** = p > 95%; * = p > 90%.

Intervariable Correlation Matrix Continued[13]

	PASUGGEST	COMMBYPUB	ATTRACT	USEMOTIVE CAREER	REWARD T&P	REWARD EVAL	IMPACT PAREQUEST	IMPACT NOCOMM	IMPACT COMM
MOT PASUGGEST	**1.0000**								
COMM_BYPUB	**0.2274*** **	**1.0000**							
ATTRACT	**0.1098** **	**0.3630*** **	**1.0000**						
USEMOTIVE CAREER	**0.1888*** **	0.0625	**0.2893*** **	**1.0000**					
REWARD_T&P	-0.0246	0.0726	**0.0914***	**0.2737*** **	**1.0000**				
REWARD_EVAL	0.0565	**0.1207** **	**0.1285** **	**0.1905*** **	**0.7595*** **	**1.0000**			
IMPACT PAREQUEST	**0.1685*** **	**0.1768*** **	**0.2191*** **	**0.2988*** **	**0.1402*** **	**0.1257** **	**1.0000**		
IMPACT_NOCOMM	0.0752	0.0363	**0.1135** **	**0.2522*** **	**0.1576*** **	**0.1127** **	**0.5024*** **	**1.0000**	
IMPACT_COMM	**0.1242** **	**0.1569*** **	**0.2511*** **	**0.3355*** **	**0.1637*** **	**0.1610*** **	**0.6156*** **	**0.5673*** **	**1.0000**

[13] P-Value Significance is Indicated as follows: *** = p > 99%; ** = p > 95%; * = p > 90%.

The intervariable correlation matrix shows a large number of off-diagonal correlations. While the statistically significant correlations vary in terms of strength, ranging from modest to very strong, there are distinctive patterns among these within the table which suggests the presence of underlying constructs between variables. It is important to note that while correlated variables are an essential part of factor analysis, not all factors must be correlated for factor analysis to produce meaningful results. (Watkins, 2018) I now examine the correlation of the independent variables measuring model 4, the model that suggests low research productivity and low practitioner interest. The results are presented below in table 29. In this table, the variables measuring how authors believe they make the greatest impact are strongly correlated, each with statistical significance. The same was true with the other impact variables presented previously in table 28. With the exception of these impact variables, the model 4 variables are noticeably less correlated with the research productivity and practitioner interest variables both in terms of strength and in statistical significance. This would have been expected under the theoretical framework - those with administrative or instructional interests will be less associated with variables measuring research productivity or practitioner interest. The model 4 variables are now compared against each other to see intervariable correlation. These results are presented in table 30.

Table 29.

Model 4 Variable Correlation with Model 1, 2, and 3 variables[14]

Variable	H-Index	MOT MYFAC	RANK	DEGREE	Lnyears	PAWORKER	USEMOTIVE	MOT PASUGGEST
IMPACT_ELECTED	-0.0592	-0.0003	-0.0295	**-0.1045***	-0.0542	**0.1344****	0.0492	0.1417
IMPACT_INTERNS	0.0273	**-0.0926***	0.0326	-0.0313	-0.0076	0.0627	**0.0971***	0.0039
IMPACT_WORKSHOP	-0.0312	-0.0774	0.0831	**0.0975***	0.0176	0.0415	0.0577	**0.0980***
IMPACT_SOCMEDIA	0.0824	-0.0109	0.0081	0.0719	**-0.1116****	-0.0062	**0.0882***	**0.1260****
IMPACT_EXSTUD	-0.0499	0.0018	0.0522	0.0508	0.0313	**0.1204****	0.0823	**0.1146****

Variable	COMM BYPUB	ATTRACT	USEMOTIVE CAREER	REWARD_TP	REWARD EVAL	IMPACT PAREQUEST	IMPACT NOCOMM	IMPACT COMM
IMPACT_ELECTED	**0.0452****	0.0125	0.0897	-0.0392	-0.0480	0.0561	0.0207	0.0135
IMPACT_INTERNS	0.0631	0.0413	0.0660	-0.0083	-0.0199	**0.2540*****	**0.1482*****	**0.1974*****
IMPACT_WORKSHOP	0.0662	**0.0965***	0.0226	-0.0105	0.0226	**0.2831*****	**0.1876*****	**0.2314*****
IMPACT_SOCMEDIA	0.0553	**0.2032*****	**0.1394*****	0.0820	**0.0505**	**0.3307*****	**0.2142*****	**0.2416*****
IMPACT_EXSTUD	0.0692	0.0497	**0.0895***	-0.0326	-0.0685	**0.4188*****	**0.2648*****	**0.2596*****

[14] P-Value Significance is Indicated as follows: *** = p > 99%; ** = p > 95%; * = p > 90%.

Table 30.

Model 4 Intervariable Correlation Table[15]

Variable	IMPACT ELECTED	IMPACT INTERNS	IMPACT WORKSHOP	IMPACT SOCMEDIA	IMPACT EXSTUD
IMPACT_ELECTED	**1.0000**				
IMPACT_INTERNS	**0.1039****	**1.0000**			
IMPACT_WORKSHOP	0.0370	**0.5264*****	**1.0000**		
IMPACT_SOCMEDIA	**0.1218****	**0.2129*****	**0.1923*****	**1.0000**	
IMPACT_EXSTUD	0.0135	**0.3275*****	**0.3713*****	**0.1639*****	**1.0000**

As expected, there is a high degree of intervariable correlation among model 4. It is worth noting before continuing further that while numerous correlations between variables are statistically significant, not all are strongly correlated. Optimal circumstances for conducting factor analysis include several variables with 0.3 correlations or higher. The variables here suggest a mixed bag. There are several variables suggesting both strong and significant correlations while also demonstrating weaker ones. Despite these, the correlation matrices support the theoretical framework's assertion of the presence of underlying constructs. Therefore, factor analysis would still be appropriate.

The final tests to evaluate the appropriateness of using factor analysis are Bartlett's test of sphericity and the Kaiser-Meyer-Olkin (KMO) test. "The Bartlett test conducts a statistical test of the sphericity assumption in a factor analysis and tests a null hypothesis that the correlations in a matrix are zero and calculates the p-value

[15] P-Value Significance is Indicated as follows: *** = p > 99%; ** = p > 95%; * = p > 90%.

significance of rejecting that null hypothesis." (Vogt, 2005, 20-21) The KMO test is "an indicator of the strength of relationships among variables in a correlation matrix determined by calculating the correlations between each pair of variables after controlling for the effects of all other variables." (Vogt, 2005, p. 167) The output is beween 0 and 1 and an output greater than 0.6 is considered acceptable for this survey's sample size. (Shrestha 2021) The results of these tests for each model is presented below in table 31.

Table 31.

Bartlett's Test of Sphericity and KMO Test

	Variables
Chi-square	1399.916
Deg. of Freedom	210
p-value	0.000
KMO Test	0.663

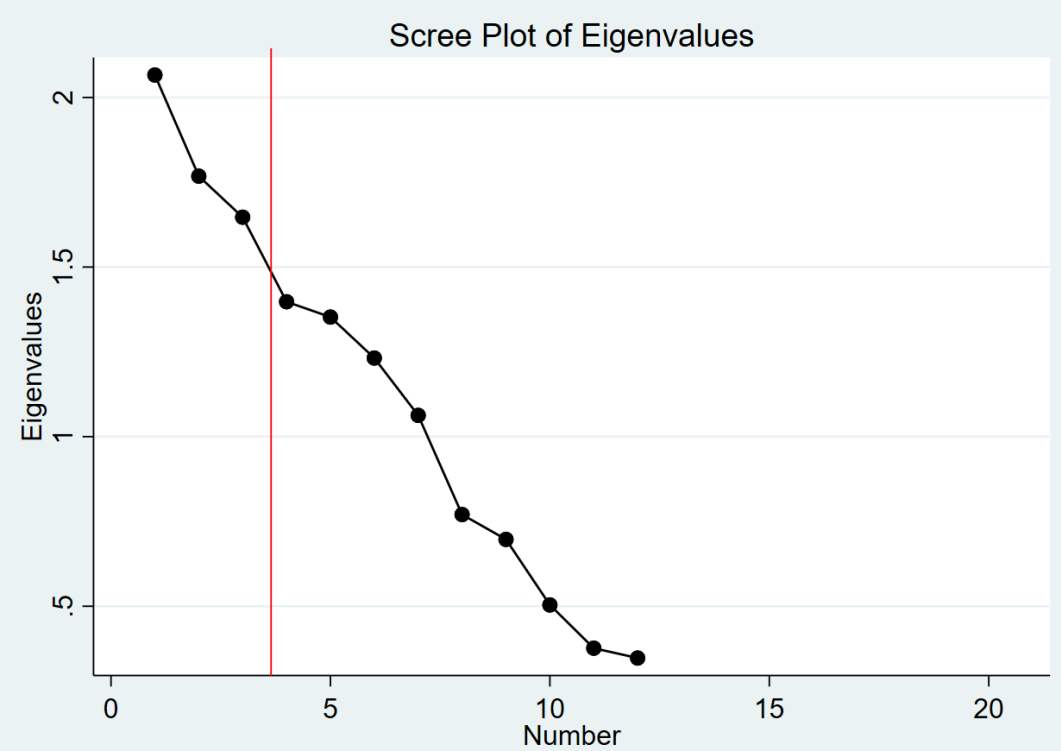
The Bartlett test of sphericity rejects the null hypothesis that the matricies are uncorrelated for each model at the 99% confidence level. The KMO test resulted in values above 0.6 for each model, further evidencing that factor analysis is appropriate for these models. (Watkins, 2018)

The factor analysis is conducted on each model using principal factor analysis without specifying the number of factors. Since factors are expected to be correlated with each other, an orthogonal rotation (Varimax) is used on each model. Because of the

various types of data gathered from the survey, the factor analysis resulted in numerous factors. While the typical method of exclusion is to use the Kaiser criterion there was large variance in the levels of eigenvalues greaster than one. The scree plot of the factors indicate an ‘elbow’ after the first three factors. The screeplot is presented below in figure 3.

Figure 3.

Screeplot of Eigenvalues



Considering the high variance in eigenvalues and to ease in intrepretation of the analysis the factor analysis was rerun limiting the number of factors to three. Each model’s factor scores post-rotation is presented in table 32. The eigenvalues and variance explained by each of these factor based on their respective model is presented in Table 33.

Table 32.

Pre-Rotation Factor Loadings

Variable	Factor 1	Factor 2	Factor 3
hindex	0.2192	**0.5040**	0.1372
MOT_MYFAC	-0.0911	-0.1473	-0.1220
DEGREE	-0.0682	-0.0678	0.1129
lnyears	0.3418	**0.8167**	0.1464
RANK	0.2670	**0.6774**	0.0900
PAWORKER	0.0922	-0.0870	0.1147
USEMOTIVE	0.3243	-0.0602	0.2149
MOT_PASUGGEST	0.0496	-0.0767	0.1890
COMM_BYPUB	0.1903	-0.0534	0.1562
ATTRACT	0.2064	-0.0471	0.1697
USEMOTIVE_CAREER	0.3150	-0.0765	0.1697
REWARD T&P	**0.8142**	-0.2211	0.2308
REWARD EVAL	**0.8432**	-0.1111	-0.2811
IMPACT PAREQ	0.3365	-0.2595	**0.6923**
IMPACT NOCOM	0.3259	-0.1839	**0.5423**
IMPACT COMM	0.3831	-0.2351	**0.5927**
IMPACT ELECTED	-0.0521	-0.1074	0.1091
IMPACT INTERNS	0.0475	-0.0622	**0.3227**
IMPACT WORKSHOP	0.1091	-0.0720	**0.3303**
IMPACT SOCMEDIA	0.0955	-0.2021	**0.3252**
IMPACT EXSTUD	0.0610	-0.1074	**0.4753**

Table 33.

Eigenvalues and Variance Explained by Each Factor

	Eigenvalue	Diff. from next strongest factor	Proportion
Factor 1	2.31	0.59	0.38
Factor 2	1.73	-0.39	0.28
Factor 3	2.11	-	0.34

Applying the Varimax rotation aids in simplifying interpretation of the factors by attempting to maximize variance between factors. (Dilbeck 2017) The post rotation loadings are presented below on in table 34.

Table 34.

Post-Rotation Factor Loadings

Variable	Intrinsic Use Motivation	External Use Motivation	Research Motivation
hindex	0.0506	0.0298	**0.5634**
MOT_MYFAC	-0.0973	0.0001	-0.1882
DEGREE	0.0981	-0.0911	-0.0637
lnyears	0.0095	0.0667	**0.8949**
RANK	-0.0259	0.0532	**0.7313**
PAWORKER	0.1589	0.0550	-0.0312
USEMOTIVE	**0.3185**	0.2154	0.0847
MOT_PASUGGEST	0.2083	-0.0150	-0.0212
COMM_BYPUB	0.2190	0.1182	0.0384
ATTRACT	0.2347	0.1259	0.0517
USEMOTIVE_CAREER	**0.3344**	0.2043	0.0695
REWARD T&P	0.0892	**0.8828**	-0.0025
REWARD EVAL	0.0613	**0.8891**	0.1079
IMPACT PAREQ	**0.8085**	0.0783	-0.0094
IMPACT NOCOM	**0.6485**	0.1125	0.0301
IMPACT COMM	**0.7276**	0.1563	0.0095
IMPACT ELECTED	0.1115	-0.0666	-0.0962
IMPACT INTERNS	**0.3234**	-0.0736	0.0162
IMPACT WORKSHOP	**0.3536**	-0.0197	0.0277
IMPACT SOCMEDIA	**0.3820**	-0.0014	-0.0987
IMPACT EXSTUD	**0.4779**	-0.1130	0.0065

The loadings reveal general support for the framework in that the three groupings indicate differing motivations of authors of public affairs research. Model 1's factor indicates positive correlations for numerous variables relating to interest with practitioners. The variables that defined factor 1 in order of most influencal to least was believing author's greatest impact was responding to practitioner requests for help, having work used by practitioners with and without direct interaction, responding to former students requests for help, impact via social media, facilitating practitioner workshops, and internships. The final defining variables for factor 1 was the authors desire to have their work used by practice both throughout their career and for their specified paper. Given this how this factor is defined, I label it as "Intrinsic Use Motivation."

Model 2's factor loadings indicate that the only variables strongly influential are increased rewards via an author's academic unit for having their work used in practice. This is true for both tenure and promotion and for annual review. No other variable compares in strength in this factor. Given these limited defining variables, I label this as "External Use Motivation."

Model 3's factor loadings indicated that an author's h index, length in career, and acacdemic rank were the only variables which strongly influenced this factor. This indicates strong interest in influencing research, without a specific interest in affecting practice directly. I label this factor as "Research Motivation."

Scores from each factor are then derived for inclusion in regression models against each dependent variable. For the model using cold calls as the dependent variable, a standard ordinary least squares regression is used. For the dependent variable of

whether or not the author has knowledge of their work being used, a logistic regression is used due to it being a binary variable. As mentioned in chapter 3, the variable of the respondent's gender is included as a control for each regression. The regressions are presented below in table 35.

Table 35.

Regression of Factor Scores Against Dependent Variables[16]

Cold Contact	Coefficient	Std. Error	*Work Used*	Odds Ratio	Std. Error
Intrinsic Use Motivation	**0.415*****	0.060	Intrinsic Use Motivation	**2.515*****	0.466
External Use Motivation	**0.124****	0.058	External Use Motivation	1.275	0.192
Research Motivation	**0.429*****	0.059	Research Motivation	**1.470*****	0.240
Gender	-0.038	0.067	Gender	1.021	0.166
R^2	0.299		Pseudo R^2	0.16	
(n)	260		(n)	259	

When the factor scores were regressed against the cold contact variable, each factor was positively correlated with receiving cold calls, but do so with different strength. Intrinsic use motivation and research motivation are strongly predictive of reciving higher levels of cold calls, while external use motivation, despite statitically significant, only has weak influence. Similar results occurred when the models were regressed against knowledge of having their published work used. In the logistic regression, models 1 and 3 positively and significantly increased the odds of having their

[16] T and Z value significance is indicated as follows: *** = p > 99%; ** = p > 95%; * = p > 90%.

work used, 150% for intrinsic motivation and 40% for research motivation. External use motivation was very slightly under the 90% level of statistical significance, but regardless, only had a modest increase in predicting having one's work used. The control variable of gender remained insignificant in both regressions.

CHAPTER 5

DISCUSSION AND CONCLUSION

Introduction

This dissertation began with the proposition that there are several ways public affairs researchers can influence practice, even if doing so is not one of their primary interests. It attempted to look at the use of formal research by practitioners by examining the contexts of authors, rather than practitioners. The theoretical framework created grouped research authors based on their motivations for research productivity and for direct practitioner influence. The results from testing the models suggest that there are different ways public affairs academics can influence practice. This chapter presents discussion of the results and the research's contributions to the field.

Methodological Validity

Discussion begins with the methodological validity of the data. It is important to note that decisions made in the methodology of this dissertation necessarily affect the empirical results presented in this and subsequent chapters. This survey is unique in that it focuses on a participant's specific research publications rather than asking generally about their work. There is little precedent in the literature from which to follow 'best practices' in conducting and analyzing such a survey. While care was taken to prevent bias from necessary research decisions from influencing the work, there will undoubtedly be bleed between the two. Furthermore, given the uniqueness of this inquiry many of the methodological decisions were made by reason and intuition rather than based strictly in literary precedent. This is not to suggest that previous literature had no influence on this

work. Indeed, care was taken to include theory and assumptions from previous work whenever appropriate. But the core of this work necessitated a new craftwork of methodology.

Given the primary intent of this survey is to target professional academics who publish in the area of public affairs, the internal validity of this study is relatively strong with a few noteworthy exceptions. A major objective was to adequately account for the heterogenous nature of public affairs research, particularly regarding the contexts of practitioner use of research. The survey, therefore, sought to sample from a wide variety of different subfields within public affairs. The inclusion of all research articles from seven high-quality journals from diverse subfields generally accomplished this goal. The response rates based on journal expressed in table 2 fit with the expectation that more people would participate who more closely identified with being a 'public affairs' researcher. The lowest participation rates came from the health policy journal *Milbank Quarterly* and *Evaluation Review*. The more 'traditional' public affairs journals of PAR and JPART participated at a much higher rate.

Furthermore, the survey samples from among high quality researchers who are capable of being published in top journals. This sample of researchers, as well as the protocols of excluding graduate students and non-academics, strengthen internal validity by ensuring the sample prioritizes academic professionals who are primarily oriented towards producing research. While the study was also going to specifically exclude authors who were solely practitioners from the sample frame, it is noteworthy that there wasn't any to exclude after the sampling process finished. Additionally. the distribution

of the survey did not coincide with any major historical events that would severely bias the use of research by practitioners.[17]

This is a non-experimental, cross-sectional survey and, thus, these data are unable to prove strong causal relationships between specific variables and public practitioner use of research. Principal factor analysis is used specifically for such exploratory research; and since this dissertation seeks to explore largely new and contextually specific questions, this design is appropriate. In doing this, care is taken to demonstrate the appropriateness of factor analysis at each step as transparently as possible. As previously discussed, the sample frame was selectively chosen and is therefore not random. For other research questions regarding how effective authors' efforts are in having their work used, the conclusions of this dissertation should be taken only as exploratory, rather than as causal.

Another threat to internal validity is that of social desirability response bias. It is likely that while having work used in practice may not be a major focus for authors, it is still a value driven appeal that most would prefer to have. The survey contains the risk that respondents overstated their work's practical use to appear both relevant and altruistic. I attempted to mitigate this by using in the survey a strict definition of 'use.' Restricting the definition of use this way prompts authors to have direct evidence that would be more difficult to justify without such evidence. It also suggests to the

[17] It is noteworthy that the survey was distributed during the COVID-19 pandemic. However, the conditions at this point likely did not affect survey responses. While there is an argument that the pandemic increased scrutiny on the place of science in public policy generally, it likely had only a marginal effect in the context of this particular survey.

respondent that having their work used in this way is less frequent and thereby less socially ostracizing to disclose that their work has not been used.

Additionally, since most of the dissertation uses the survey as its primary source of data, there is also the threat of single response bias. (Campbell and Fiske, 1959) To help mitigate this threat, additional data were collected from publicly available sources. These include the author's affiliation, h-index, and citation count. However, the vast majority of data comes from self-response survey questions. The sampling frame also is exclusive to academics who already have demonstrated publishing capability in high quality journals which undoubtedly is not representative of all academics and is therefore likely not transferable to other fields besides public affairs.

The survey's strength comes from its framing around response from authors who have already demonstrated that they contribute to public administration scholarship. Additional strength also comes from the inclusion of all authors published in the journal between the selected years rather than only a subset. The response rate boosted by the invitation to the survey of second and third authors was substantial, and the sample including just over half of all articles in the sample frame is a major strength. This gives stronger weight to the analytical results. While the sampling exclusions does create a possible threat to external validity via selection bias, the strong response rate reduces statistical noise among authors of public affairs research. (Infante-Rivard & Cusson, 2018)

Independent and Dependent Variables

Before discussing the models, several of the variables in the data collected were noteworthy. First, authors' motivation to be seen as a productive member of their

academic unit had a wide variety of responses. More than half of respondents indicated that that motivation was either not important or only somewhat. This could be indicative of authors holding other priorities relating to practitioner interest. However, considering the sample came from researchers from high quality public affairs journals, it is more likely that professors with tenure no longer need to worry about being seen as productive. This is supported both by the high proportion of respondents with tenure rank (72.02%) and the high h-index average of the sample.

The variable measuring an author's motivation to have their work used by practitioners closely fits a normal distribution, with the responses indicating a moderate, but not extreme interest. This suggests that authors thinking of their research as influencing practitioners may still be largely only an afterthought. Authors likely would have no qualms against practitioners using their work, but it generally is not the primary reason why they conduct research. Hence why the plurality of the sample indicated that it was only a minor motivation but very few said it was no a motivation at all.

The variables gaging the degree to which authors are incentivized by their academic unit to ensure their work has practical value indicate that, generally speaking, universities still place low emphasis on practitioner use of public affairs research by practitioners. The vast majority of respondents indicate that the reward structure of their academic unit minimizes the influence of practitioner use.

The impact variables comprising model 4, representing low research motivation and low practitioner interest, were low. The belief among authors that they had an impact on practice through serving as an elected official was minimal. Likewise, there were generally low responses indicating that conducting internships or workshops was

particularly significant to how they impact the field. The one exception was in authors responding to former students. A large majority indicated it held importance to them but very few said it was their single greatest way they impact the field. Considering the makeup of the survey's sample, it is not surprising that the group generally dismissed impact sources coming through methods other than research or practice.

In considering the dependent variables, a majority of authors queried had received between one and five cold calls throughout their career. (57%) The overwhelming majority of respondents (84.3%) report having received at least one cold call from a practitioner during their career. It is important to note that this is likely a higher incidence of cold calls than occurs among academics generally. Considering that authors were selected to participate in our study on the basis of having published in a high-quality journal associated with policy, administration and evaluation, the results are likely subject to selection bias. By virtue of their being selected to participate, they have already proven themselves to be able to produce high quality research. This also fits the "older and more experienced" nature of the authors in the sample. This gives them a significant advantage in their ability to receive cold calls over those who have not. Receiving cold calls may also be more prevalent in the field of public affairs than in other disciplines. Ultimately, the results suggest that the phenomenon of cold calls may be more significant than anticipated and warrants further study.

Likewise, the dependent variable asking whether an author had specific knowledge of whether their work had ever been used was higher than anticipated. Roughly 30% of authors indicated that they knew the specific research article had influenced practice. While there is present the threat of bias from social desirability, this

number still carries significance considering that many instances of research used by practitioners goes without the attention of the author. Regardless, the responses provided variance from which to use in interpreting each theoretical model's ability to influence practice.

Empirical Analysis

The loadings of each model's respective factor revealed that the variables hypothesized to define the different interests and motivations of public affairs research authors was generally supported. The exceptions reflect some nuances that are worth consideration. Model 1's variable measuring authors' motivation to be perceived as a productive member of their academic unit was positively, though weakly correlated. While this motivation was speculated to represent the inherent desire to publish, it could be merely an indicator of where the author is in the tenure process. Those without tenure are likely much more interested in appearing to be a productive researcher than those with. It could also be that the motivation to be a productive researcher was already captured through h-index score, academic rank, or length of time in their career, leaving the motivation variable as obsolete. The author's highest degree was also negligible in the factor. Considering that nearly everyone in the sample had a Ph.D., there likely was not sufficient variance from which to make any meaningful interpretation regarding this variable.

The factor analysis did contradict the theory posited in chapter two in several ways. The factor loading suggested that instead of differences based on the dimensions of practitioner interest and research productivity interest, it may be more accurate to depict differences between the types of practitioner interest. The separation between several of

the variables suggesting practitioner interest from the academic incentive ones were interpreted as a difference between intrinsic use motivation and external or applied motivation through incentives. The near identical loadings for models 2 and 3 were surprising. The inclusion of variables associated with research productivity did very little to distinguish authors who hold practitioner and research interest from authors with only practitioner interest. The close similarly presents a challenge for interpreting results based on these two models as they are nearly identical. In both, the variables measuring how authors viewed their impact through working with practitioners carried a disproportionate weight. The author's views of their impact through responding to practitioner requests and to having their work used with and without direct communication them were universally positively and strongly correlated. So, while models 2 and 3 do accurately reflect the theory's dimension of practitioner interest, it does distinguish between practitioner interested authors who have strong research interests and those who do not. This could be an artifact of how the sample was collected. The selection bias inherent in surveying authors who already have published in high quality research journals likely leaves little room for the model to capture authors *without* an interest in research. Future research could incorporate ways of including those who publish research, but who do not carry a major interest in it. These types of public affairs academics certainly exist, but they naturally elude capture when selected on the basis of their research publications.

Model 4 appeared to capture the theoretical construct of academics interested in administrative and teaching well. But this factor was not supported in the empirical analysis. Instead, several of the variables that were expected to define this type of academic were included as intrinsic use motivation. This widened the practitioner interest

dimension to include less direct ways of influencing practice, such as working with former students, administering internships or workshops, and influencing practitioners through social media. The variable of being elected to public office as a method of academic impact on practice was weakly correlated and few respondents indicated this was a major source of impact. Similar to the highest degree variable, there were few who indicated that election to office played even a modest role in how they view their impact to the field.

The regressions of each factor against the dependent variables produced significant and strongly positive results. When used to predict an author's influence via the proxy variable measuring the number of cold calls they have received from practitioners, those with a strong research interest and intrinsic and external practitioner interest were strongly and positively correlated. In the logistic regression that examined whether an author had knowledge of their work being used, intrinsic and research interest were both positively and strongly significant, while external use motivation was not.

The results indicate that being interested either in research productivity or in practitioner's work can be routes to influence. In particular, having stronger interest in practitioners greatly increased the chances that an author has knowledge that their research has been used. This could be because the author's work was more suitable for implementation in practice or that their relationships and interests with practitioners has given them knowledge that their work has been used. Both could also simultaneously be true as well. It was surprising that gender remained insignificant in both sets of regressions, considering the strong evidence in the literature that gender influences author's experience in academia and in interacting with practitioners.

The results did not support a model representing both low research productivity and practitioner interest. It instead was largely absorbed by the intrinsic motivation factor. From the outset, model 4 was substantially different than any other model because of its lack of publishing priority and practitioner interest. Indeed, it is worth noting that given how the sample frame was constructed priority was inherently given to authors with at least a research interest or a practitioner interest. Therefore, the number of authors that model 4 represents is likely understated. This could be put to more rigorous testing with different data in the future specifically looking at the motivations of academics whose primary interests lie outside of research or practice. But, as stated in chapter two, this does not mean that these individuals are less relevant or important to academia. On the contrary, it is likely members of this group have the most weight in influencing it because of their administrative capability and their ability to influence respective students and academics. More diverse variables could be directed towards defining these academics. These could be things like administration and leadership or teaching and student mentorship or community engagement. Despite these limitations, however, the factor loadings for this sample did indicate that the factor represents administration and teaching well.

Limitations and Future Directions

There are several important limitations associated with this work. First, this question is only being approached by focusing on the academic and I do not consider any factors associated with the practitioner. Since practitioner-oriented studies are more frequently done in literature, this dissertation sought to contribute specifically towards empirical examinations of the contexts that affect the producers, rather than the receivers,

of research. This study also sought to examine the use of specific articles which naturally oriented focus towards the producers of research.

Future research could examine the use of specific research articles and then do a parallel examination on the practitioners that actually use them. That is likely the next evolution of this research. It would permit examination on the effectiveness of advertising efforts and contrast between what the author thinks is important to accomplish for practitioner use and what the practitioner thinks is important. Practical limitations including money and time prohibited including practitioner perspectives prohibited this dissertation from conducting such a study.

Another limitation is that, while there were a large number of non-Americans, most survey participants were from western and developed countries. It does not provide insights in other cultural contexts and particularly outside of English-speaking ones. The ways in which research is put to use likely depend greatly on industrial and governmental development Despite this, there is still a noteworthy international element to the survey as about half of the participants do come from outside the United States.

In addition to these, there is selection bias in the set of authors represented in the sample to overrepresent individuals' interest in affecting practice. Also, as with all modeling efforts, there are likely important omitted variables that could bias the results. Given these limitations, this dissertation has sought to present the findings as suggestive rather than confirmatory in nature. Considering the importance of reputation within academic circles, it is not surprising that academics spend a significant portion of their time sculpting and presenting it. I sought to examine whether this essential element of academia has any influence on practitioners as they search for information and solutions

to their problems. The results suggest that practitioners are, at least to some degree, influenced by factors consisting of academic reputation through cold calling and use of their research.

Future research should be done to observe how practitioners make these decisions to engage with academics. Also, while the data describe the instances of first contacts via cold calls, they tell us nothing about what influences second or third calls from the same practitioner to the same authors. Looking specifically at why some conversations turn into long-term, and potentially collaborative, relationships could permit a further glance at how reputation influences practitioners.

A final caveat, especially when considering how this work affects our thinking about knowledge transfer. While it is noteworthy, even in this select group of authors, to find that cold calls are quite common, we do not know anything about the downstream outcomes from these cold calls. What percent of cold calls result in any knowledge transfer to practice? More important, what cold calls improve policy or administration outcomes? While this study cannot answer these questions, I hope it will encourage more academic attention to the phenomenon of cold calls and improve our understanding not only of determinants but impacts.

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APPENDIX A

INITIAL INVITATION LETTER

Dear (*Name of Author*),

I am conducting independent research focused on public policy and administration practitioners' uses of research published in selected public policy-related academic journals. We hope to learn more about the extent to which practitioners use scholarly work and the strategies scholars use to bring their research to the attention of practitioners.

You have recently authored the following paper:

(*Full Citation of Author's Article*)

We are interested in any practitioner interactions you may have had in connection with that paper (but we are also interested in knowing if there are no practitioner interactions to this point) I am inviting your participation, which will involve filling out a questionnaire.

Below is the link to the survey.

(*Link to Survey*)

If you have any questions concerning the research study, please contact the research team at: (*Contact Information*)

We hope you will be able to participate in our study but, in any case, thank you for considering our request.

Sincerely,

Name and Contact Information

APPENDIX B

FOLLOW-UP INVITATION LETTER

Dear (*Author Name*),

Several days ago, we contacted you about participating in our survey on a Study of Impacts of Scholarly Public Policy Research on Practitioners' Use. If you have not yet responded, we urge you to take a few minutes to complete the survey, a part of which regard one of your research publications. All respondent's reference publication will be cited in all our research monographs.

The link to the survey is below.

(*Link to Survey*)

If you have any questions concerning the research study, please contact the research team at: (*Contact Information*)

We hope you will be able to participate in our study but, in any case, thank you for considering our request.

Sincerely,

Name and Contact Information

APPENDIX C

IRB INFORMED CONSENT FORM

Dear (*Author Name*),

I am conducting independent research focused on public policy and administration practitioners' uses of research published in selected public policy-related academic journals. We hope to learn more about the extent to which practitioners use scholarly work and the strategies scholars use to bring their research to the attention of practitioners.

You have recently authored the following paper:

(*Full Citation of Author's Article*)

We are interested in any practitioner interactions you may have had in connection with that paper (but we are also interested in knowing if there are no practitioner interactions to this point)

I am inviting your participation, which will involve filling out a questionnaire. We expect that it will take about 20 minutes to fill out the questionnaire and there are no other participation requirements. You have the right not to answer any question, and to stop participation at any time.

Your participation in this study is voluntary. If you choose not to participate, please check 'I do not agree' below. There is no penalty for not participating and you will not be contacted further. If you decide to participate, please check "I agree" below. Please note that we provide no benefits for participating other than sharing our research findings upon request. There are no foreseeable risks or discomforts to your participation. Though we anticipate that you will find our questions as entailing no threats or sensitivities, we will in any event protect confidentiality of the data and your participation in the study.

After all our data are compiled your name and identifying information will be deleted and no longer associated with the data. The resulting de-identified data will be fully available only to the two lead investigators (*name*) and to the two above-named doctoral students, under the supervision of *name*. All data will be destroyed two years from the time the final data are collected. The data will be used only for scholarly research to be reported, in aggregate form only, in publishable scholarly papers.

If you have any questions concerning the research study, please contact the research team at:

(*Contact Information*)

If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the Human Subjects Institutional Review Board, through the ASU Office of Research Integrity and Assurance, at *phone number*. Please let me know if you wish to be part of the study.

By clicking "I agree" below, you are agreeing to be part of the study.

We hope you will be able to participate in our study but, in any case, thank you for considering our request.

Sincerely,

Name and Contact Information

APPENDIX D

ARIZONA STATE UNIVERSITY IRB EXEMPTION

ASU Knowledge Enterprise Development

EXEMPTION GRANTED

Barry Bozeman
WATTS: Public Affairs, School of
-
Barry.Bozeman@asu.edu

Dear Barry Bozeman:

On 10/23/2020 the ASU IRB reviewed the following protocol:

Type of Review:	Initial Study
Title:	Impacts of Scholarly Public Policy Research on Practitioners' Use
Investigator:	Barry Bozeman
IRB ID:	STUDY00012737
Funding:	None
Grant Title:	None
Grant ID:	None
Documents Reviewed:	• 0Bozeman_ followup email for nonrespondents10-23-2020.pdf, Category: Recruitment Materials; • 0Bozeman_ recruitment_methods_email_10-23-2020.pdf, Category: Consent Form; • 0Bozeman_Questionnaire_supporting documents 10-23-2020.pdf, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions); • IRB Protocol, Category: IRB Protocol;

The IRB determined that the protocol is considered exempt pursuant to Federal Regulations 45CFR46 (2) Tests, surveys, interviews, or observation on 10/23/2020.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

If any changes are made to the study, the IRB must be notified at research.integrity@asu.edu to determine if additional reviews/approvals are required.

Changes may include but not limited to revisions to data collection, survey and/or interview questions, and vulnerable populations, etc.

Sincerely,

IRB Administrator

cc: Richard Gilmour
Nicolas Didier
Barry Bozeman
Stuart Bretschneider
Spencer Lindsay

BIOGRAPHICAL SKETCH

Spencer Lee Lindsay grew up in Denver, Colorado. He received his primary education at Willow Creek Elementary School and West Middle School. He received his secondary education at Cherry Creek High School in Greenwood Village, Colorado and graduated with his high school diploma in 2013. He attended Brigham Young University – Idaho in Rexburg, Idaho and received the degree of Bachelor of Arts in Political Science in 2018. He then attended the Maxwell School of Citizenship and Public Affairs at Syracuse University in Syracuse, New York where he received the degree of Master of Public Administration in 2020. He then commenced his doctoral studies at Arizona State University in Phoenix, Arizona, studying under Dr. Barry Bozeman. He successfully completed his comprehensive examinations in 2022 and received the degree of Doctor of Philosophy in Public Administration and Policy in 2024.