

Before Virtuous Practice. Public and Private Sector-Specific Preferences for Intuition and Deliberation in Decision-Making

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Before Virtuous Practice. Public and Private Sector-Specific Preferences for Intuition and Deliberation in Decision-Making

There are a number of well-established concepts explaining decision-making. The sociology of wise practice within public administration suggests that thinking preferences like the use of intuition form a cornerstone of public administrators' virtuous practice. This contribution uses conceptual and theoretical resources from the behavioral sciences and public administration to account for individual level differences of employees with regard to thinking preferences in the public sector. Institutional frameworks and social structures may enable or impede the habituation of virtue. The contribution empirically investigates this proposition with respondents from North America and the European Union. The analysis investigates the behavioral dimension preference for intuition/preference for deliberation. An analysis of data from 333 employees from organizations in North America and 1644 employees from organizations in the EU reveal prevalent differences in the preference for thinking styles. The public and private sector differ significantly in terms of the preference for rational as well as for intuitive thinking. What is exciting is that private employees rank higher than public employees on both scales, whereas the difference in rational thinking shows a small effect and the effect size in regard of intuitive thinking is negligible. We explore possible explanations for such differences and similarities.

Keywords: intuition; deliberation; decision style; virtue; wisdom; public–private-sector comparisons

Introduction

The best craftsmen are aware of the fact that their efforts are adventurous, lack any clear blueprint, and require skilled *intuition* or ‘tacit knowledge’ (Polanyi & Sen, 2010) – i.e., implicit or unarticulated knowledge that can only be acquired through personal experience, continuous learning and on-the-job tenure (emphasis added van Steden, 2020, p. 241).

The public administration literature, that orients itself towards ethics, welcomes interpretations of Aristotle’s virtuous practice as a path to make good decisions, for a summary see Rooney and McKenna (2008) and van Steden (2020), for a perspective from organization studies see Massingham (2019):

For Aristotle, practical knowledge and moral virtues go together: it is impossible to be practically wise without being good (van de Ven & Johnson, 2006). Eikeland (2008, p. 53) remarks that *phronesis* has ‘both an intellectual virtue and an ethical virtue’; for Overeem and Tholen (2011) *phronesis* is prudence of public administrators; Van Steden (2020) suggests that public administration can learn from Aristotle to study virtues instead of values, see also de Vries, M., & Kim, P., 2011).

Within the field of public administration (Andersen, 2010) and beyond, several scholars associate the above mentioned illustrative concepts closely with affective and emotional thinking processes (Massingham, 2019). This intuitive *fast* thinking style wrestles with an analytic or deliberative *slow* thinking style.

There are also critics of affective and emotional thinking processes (McMahon & Good, 2016), associating fast intuitive thinking with a reduced probability of ethical behavior (Street, Douglas, Geiger, & Martinko, 2001).

In the wake of uncertainty emerging from New Public Management (NPM) reforms (van der Wal & Huberts, 2008), van Steden (2020, p. 242) draws attention to the work of Kane and Patapan (2006), who sketch the contours of a public sector guild

that is too deliberative and rationalistic displaying an “omnipresent ‘engineering model’ guided by businesslike rules and mechanisms”. Kane and Patapan (2006, p. 720) call for a public service ethos, encouraging public service employees to act wisely. To say that there is an overemphasis on deliberation, is to say that public administration’s decision-making is likened to the image of the engineer (van Putten, 2020). Requesting change of perspective to emphasize the use of intuition, is to say that public administration’s decision making can benefit from the image of the craftsman (Paanakker, 2019).

Engineers and craftsmen seem to propose competing decision making styles.

Overeem and Tholen (2011, p. 738) think that there is too much managerialism expressing a sense of *Unbehagen* in the present day scenario around NPM. The work of MacIntyre (2007) has been extended in Public Administration research in a premodern Aristotelian tradition, as well as in intuition research into ethics and decision-making (Sadler-Smith, 2012).

Repeatedly, scholars suggest that public administration professionals might be too constrained in their effort to display virtuous practice (Kane & Patapan, 2006). Often, new public management discourse comes across as a main constraint on virtuous or wise practice.

Researchers reconstructing the cognitive processes that foster *practical* wisdom take recourse to intuition, when they are to describe, what virtuous practice or practical wisdom means from a practitioners’ point of view (Paanakker, 2019; Rooney & McKenna, 2008; van Putten, 2020; van Steden, 2020).

The public administration literature that looks at wise practice often shines a light on skilful actors that use their intuition. For example, Paanakker (2019, p. 886) describes public *craftsmanship* thus:

It constitutes an emphasis on practical beliefs and practices rather than theoretical guidelines, and, through trial and error, on a continual quest to find contextualized and tailor-made ‘best ways’ rather than on protocolled work (‘muddling through’ in the words of Lindblom (1959), or ‘artistic, intuitive processes’ in the words of Schön (1983, p. 49).

Experts in public craftsmanship accentuate how, in their own behavior, they “intuitively seek to enact and advance the informal skills and practices attached to them, rather than mentioning or appreciating the formal tools and mechanisms that the sector has set up to express these values” (Paanakker, 2019, p. 891).

However, even though these studies unearth a research program favouring additional attention to intuition, their work is only loosely connected to extant work in multidisciplinary research on intuition. The image of engineers and craftsmen serves to illustrate different decision making styles, but there is no agreement with regard to the nature of interaction between these dual processes. Hodgkinson and Sadler-Smith (2018) differentiate between intuition research giving either cold, calculative cognition or somewhat biased intuition center stage, and intuition research providing fine-grained more careful naturalistic depictions of decision makers, who think and feel. The latter conception seems much closer to virtue ethics, with its emphasis on inspiration through emotion and intuition.

Repeatedly, the community of public administration scholars call for diverse theoretical and methodological contributions to improve research on public organizations (Davis & Stazyk, 2017; Hou, Ni, Poocharoen, Yang, & Zhao, 2011). Current wisdom studies are an interdisciplinary endeavour. One camp using a qualitative methodology, for example interviews or ethnography like Massingham (2019) and another camp using a quantitative methodology (for example, see overview in Rooney and McKenna 2008). Through testing, in how far the decision making style

of public servants differs from private employees with regard to their thinking preference for intuition or deliberation, the paper addresses an important lacuna. The paper therewith adds a missing quantitative sample in work on wisdom in public administration.

Before Virtue come thinking preferences

The conversation about potential blind spots in wisdom research continues both in public administration (van Steden, 2020) and intuition research (Sadler-Smith, 2012). Solutions for the challenges that public administrators face might come through a different kind of public administration literature in the spirit of MacIntyre (2007), drawing inspiration from Aristotle, see also van Putten (2020). The sociology of wisdom research program suggests that excellence in public and private practices exemplifies *phronesis* along the lines of Aristotle's (2000, 1218b37-1219a1) ethical philosophy. Public administration concerns itself with community well-being (Rooney & McKenna, 2008), since practical knowledge and moral virtues both go together to foster public interest. An instance of wise practice could be, e.g. knowing when a situation needs more emotional, rather than rational-scientific conduct. Alternatively, a situation is in need of an artisan, rather than an engineer.

The overriding concern for this kind of research in answering questions relevant to wisdom in public administration is not to define wisdom but to **understand how practice can become wiser, a question we know little about**. (Rooney & McKenna, 2008, p. 717 emphasis added).

The practice-based approaches of sociological wisdom research lay an emphasis on intuition (van Putten, 2020). For example, Paanakker (2019, p. 893) draws propositions from ethnographic research in the public sector, highlighting the generally opposing frames of “intuitive behaviour” and “the use of formal institutionalized tools and

measures”. Explicating how practice can become wiser is beyond the scope of this article. However, this article can shine a light on the decision-making style present among public sector employees to determine, whether there is a propensity to use intuition or deliberation.

The discourse on intuition and deliberation (as can be seen in the next section) mirrors propositions such as the one by Paanakker (2019) closely. Assuming that “morality is culturally- and socially-situated and shaped within circumscribed limits” (Sadler-Smith, 2012, p. 351) leaves space for explanations of ethics grounded in works outside of public administration (Sadler-Smith, 2012). The article contribute towards the overarching question on how public administrators can become “virtuous agents” (Beadle & Moore, 2006), or wiser (Rooney & McKenna, 2008) from a multidisciplinary perspective. Propositions about thinking preferences relevant to ethics, are tested methods from decision-making research. In the next section, the main takeaway from this interdisciplinary field is briefly outlined before the article goes on to report methods and results.

Explaining intuition

Intuitions are “affectively charged judgments that arise through rapid, non-conscious and holistic associations” (Dane & Pratt, 2007, p. 33). Overall, most scholars from different disciplines have endorsed intuition from a dual process perspective. Dual-process theory (e.g. Epstein, 1994; Kahneman, 2011; Sloman, 1996; Stanovich & West, 2000), holds that there are two types of cognitive processes underlying people’s judgments, decisions, and problem solving. People use both thinking processes, however, they tend to display a preference for either one thinking style (Betsch, 2004), even though both processes compete for guiding decision makers (Hodgkinson & Sadler-Smith, 2018).

System 1 processes are automatic, fast, unconscious, and referred to as the heuristic, intuitive processes, and System 2 processes are slower, conscious, deliberative, and referred to as rational, analytical, or deliberate processes. In this context, default-interventionist accounts of dual processes imply that judgments come to the mind fast and without effort from System 1 processing, only sometimes System 2 processing overrides System 1 (Kruglanski, 2013).

“To become virtuous, people require the interplay of two dual thinking processes, of System 1 (intuition and affect) and System 2 (analysis and reason)” (Sadler-Smith, 2012, p. 373). However, there is a risk for empirical research traditions to highlight the predominance of intuition more strongly, than the advantages of the very interplay of intuition and deliberation.

Sadler-Smith (2012, p. 357) suggests that to leverage virtue more effectively, psychological inquiry like the dual process theory of thinking can be fruitfully applied within research programmes that focus on moral learning as a socially-situated phenomenon (for example Kaptein, 2008; Solomon, 2004).

Public-private sectors differences from the perspective of empirical intuition research

The research on intuition stands on a cognitive foundation that is common in behavioral public administration (Battaglio, Belardinelli, Bellé, & Cantarelli, 2019). However, the dominant discourse within cognitive intuition research, the dual process theory of thinking, has hardly been evoked in behavioral public administration. One would expect to find dual process theory conceptualizations of behavioral public administration and an integration of the sociology of wisdom research program.

Through this contribution, new discourse is introduced into the field of public administration. The omission of this perspective is somewhat surprising since several

connections to ongoing work within the public administration domain can be observed, most notably in the realm of wisdom theory. Even though, wisdom theory based on a cognitive framework using quantitative methodologies is used repeatedly, little integration of the dual process theory of thinking may be seen. Likewise, the wisdom theory that aligns itself with Aristotelian ethics, of which intuition is an important part, orients itself towards qualitative methodologies (with exceptions of Ermasova, Clark, Nguyen, & Ermasov, 2018). Rooney and McKenna (2008) leave a liminal space for quantitative research in a cognitive tradition in support of wisdom theory. Through bringing dual process theorizing into the discourse, this contribution locates itself in the liminal space, between behavioral public administration focussed on cognition and wisdom theory as it orients itself towards the reality of public servants. The public–private distinction accounts for historicity, linking place to intellection (Rooney & McKenna, 2008). Empirical research into wisdom should account for the preferred decision making style in the public sector and in the private sector, since the perceived discretion to act indicates everyday behaviors (Roman, 2015).

So far, decision-making behavior with regard to the use of intuition has hardly been looked into in public administration (Andersen, 2010 is an exception). The practice of wise management or *phronesis* has not been studied often in contemporary organisations (for an example from the private sector see Goodsir, 2018).

It is difficult to find recent research on decision-making behavior in public sector employees. However, some studies have addressed issues of restrictions on public employees' decision-making (Connor & Becker, 2003; Fallman, Jutengren, & Dellve, 2019; Turaga & Bozeman, 2005; Villadsen, Hansen, & Mols, 2010). Restrictions on decision-making may indicate limitations on wise practice of public sector employees.

Stazyk and Davis (2015, p. 630) highlight that “external ethical controls embedded in laws and rules are extremely generic”, this so-called *low road* approach to ethical decision making relies on principle-based reasoning. A *high road* approach, as Stazyk and Davis (2015, p. 629) carve out relies on “values grounded in personal integrity that emphasize discretion, reflection, virtue, and intuition” closely tied to people’s subjective morality.

The high road approach which is associated with virtue and intuition is required for exercising discretion in favour of ethical decision making. Overall, the sizeable number of rules and regulations may lead public employees to train a preference for deliberation, suggesting more of an engineer’s style of decision-making. By extension, it is assumed that in public service people learn more rules and regulations, so that a preference for deliberation is a learned action in the public sector. Likewise, people with a prior disposition for deliberation might rather choose a career in public service. People with an orientation toward intuition, and a looser rules-based framework might prefer work in the private sector.

Virtues require learning from others in a given context; hence employees need ‘teachers’ such as bosses, co-workers, trainers, coaches, and mentors “who are themselves virtuous” (MacIntyre, 2017, p. 88).

Hypotheses

It is assumed, that public sector employees have a stronger preference for deliberation and private sector employees have a stronger preference for intuition. This choice also grounds on the more stable assumptions about the environment on which the public sector operates. Private sector employees appear more exposed to volatility, uncertainty, complexity and ambiguity.

Methods

Testing specific hypotheses using multi-country statistical data is common in public administration, for an overview see Pollitt (2011). Ten years ago, Baarspul and Wilderom (2011) reviewed whether employees behave differently in public-vs private-sector organizations according to decades of research. Repeatedly researchers investigate the perceived differences between employees in public- and private-sector organizations. So far, a “clear pattern of unequivocal empirical evidence to support the notion that employees behave differently across sectors” (Baarspul & Wilderom, 2011, p. 992) has not been confirmed. Two *pure* organizational types; will be covered referring to a governmental agency as a public-sector organization and to the for-profit business firm as the prototypical private-sector organization. These definitions of archetypical public- and private-sector organizations are similar to the ones used by other authors in the field (e.g. Hooijberg & Choi, 2001; Wamsley & Zald, 1973).

Sample and data collection

The data were collected as part of a larger online questionnaire on intuition and digital trust at the workplace between March and August 2020. The participants filled in the online survey after invitations. In two countries, invitations were sent from a participant recruitment agency (USA and Slovakia). In all other countries, invitations were sent as snowball sampling through social media by the first and the fourth author and their professional and private networks. These data were analyzed using SPSS V26. The final sample for this study consisted of 1679 participants (938 male and 79 LGBTQ). Most participants were from the EU ($n = 1432$) with participants from 9 European countries (Austria, Czech Republic, Germany, Poland, Portugal, Romania, Sweden, Slovakia, Spain). Most respondents ($n=26.7\%$) are between 49-58 years old. Table 1 indicates the distribution of the sample by age and sector. Shapiro-Wilk and Kolmogorov-Smirnov

tests designate that the data is not normally distributed. No claim is made that the samples investigated are representative for all public and all private sector employees in the European Union or North America. Therefore, a Mann-Whitney-U analysis of difference was conducted to test the hypothesis.

The following analysis show the results of the Mann-Whitney-U tests.

Instruments

To measure the preference for decision and intuition in decision making the PID-inventory by Betsch (2004; 2008) was used. 13 self-disclosure items were inspired by the original inventory and translated into the respective national language. The PID is a valid and reliable test of decision making preference consisting of two scales: one measuring preference for rational decision making (5 items, e.g. “I tend to be a rational thinker.”; Cronbach’s Alpha .892) and second scale measuring preference for intuitive thinking (6 items, e.g. “I am an intuitive individual.”; Cronbach’s Alpha .867). Items were assessed on a 4-point Likert scale ranging from 1 (strongly disagree) to 4 (strongly agree), such that higher scores indicate higher agreement to the decision making style.

Results

Descriptive statistics

Enter Table 1 Age of participants here

Propensity of Public Servants to use intuition or deliberation

Enter Table 2 here

Mann-Whitney-Analysis of difference revealed that employees in the private sector preferred significantly more deliberate/rational as well as intuitive thinking styles.

For the preference for deliberation (rational thinking style), a statistically significant difference was measured between the private and governmental sector, although the effect size is small.

For the preference for intuition (affective thinking style), a significant difference was also observed, but the effect size is to be neglected (see table 2).

The results do not hold up to the proposition that private sector employees are the ones, who are more intuitive, meaning that they have a more pronounced preference for the use of intuition. The results can be interpreted along these lines; however, the data does not show strong effects.

Overall, the effect is weakly demonstrable, but the private sector has higher scores on both scales, i.e. private employees declare to have a stronger tendency to use deliberation, but also to use intuition. The public sector shows lower mean scores on both scales, meaning that their preference for intuition and deliberation is not as pronounced as expected.

The results show that the private sector employees have a tendency to rate themselves higher, both in their preference for the use of intuition, as well as in their preference for deliberation. One interpretation could be that private sector employees appear to be more aware of their choices, their own decision-making, and their discretion to act. Public sector employees might not share the same level of awareness and consciousness with regard to their decision making style, i.e., their decision-making might be mostly unaware. This brings the argument back to the assumption about a rule-based decision style in the public sector. People in the public sector might feel that they have a margin of discretion whereas employees in the private sector seem to perceive more degrees of freedom in regard of their choices.

Discussion

Do people even know that they are making conscious decisions given that the human brain has the capability to carry out unconscious thinking (Dijksterhuis, Bos, Nordgren, & van Baaren, 2006; Dijksterhuis & Nordgren, 2006; Zhong, Dijksterhuis, & Galinsky, 2008)? There is considerable evidence that apart from conscious decision-making, solutions sometimes just come to the mind of the decision maker (Billett, 2004).

There is a rising attention to questions about the scope and use of discretion, and often assuming that it is values guiding “administrators’ behaviors when they exercise discretion” (McCandless, 2021). Drawing on Weick’s (1995) sense-making perspective of organizations [Klicken oder tippen Sie hier, um Text einzugeben.](#), Roman (2015) advances people’s “perceived level of discretion” to act as a realistic indicator that conditions their everyday practices.

A descriptive claim is advanced, about which thinking preferences people actually prefer. Like Haidt (2001, p. 815) it has to be stressed that this is “not a normative or prescriptive claim, about how moral judgments ought to be made” (Haidt, 2001, p. 815). The thinking preferences that *becoming* virtuous practitioners display are pointed out.

Organizations need to grapple with how they want to enable their servants to use intuition in order to exercise wise practice. When public service intends to follow virtue ethics, provisions have to be installed making sure, that people are aware of consciously using their intuition in the first place.

Theoretical implications

In a 2015 survey Menzel (2015, p. 346) noted that the “theme ethical decision-making and moral development received the least research attention” in the field of public administration. Overeem and Tholen (2011) suggest that public administration’s

mission as a discipline is to “assist and train [...] public administrators in developing moral and professional excellence” Overeem and Tholen (2011, p. 740), see also the scholarly tradition that Raadschelders (2008) calls “practical wisdom”.

Aristotle’s virtue ethics remains an inspiration for many scholars of administration. Building on virtue ethics approaches in public administration, support for the use of intuition and deliberation is observable. Rather than conceptualizing only the use of intuition and only the use of deliberation as a path towards wise practice, the interplay of these two processes promises virtue. The theoretical contributions on virtue ethics take this duality into account (Rooney & McKenna, 2008; van Steden, 2020), but there has been little empirical work highlighting this.

By testing of the hypothesis, the results suggest that there is no one best solution through decision-making, but that it is much more about the interaction of the two processes, and the interaction is more of a competition than a default intervention of either intuition or deliberation. This supports conceptions that see these dual processes of cognition as competing for a path of action (see, Hodgkinson & Sadler-Smith, 2018; Sadler-Smith, 2012). The article theoretically contributes to the sociology of wisdom through highlighting how close public and private sector employees are in their thinking preferences. The findings also imply that wisdom research has to care for raising awareness about how decisions are enmeshed with everyday administrative practice.

Managerial implications

The research object *intuition* is intangible, for the practitioner using intuition appears to be hard to access. Extending the theme ethical decision-making and moral development, it is proposed that a better understanding of the use of intuition raises awareness for virtue ethics approaches. Raising awareness about their freedom of choice when it

comes to decision-making can be a first step towards improving public administrators' use of intuition to encourage wise practice proactively for building integrity.

To use intuition more consciously, is to perceive freedom to act more consciously, and becoming more conscious of the discretion to act. In the long term, intuition should help practitioners to make more wise decisions; for this, a community of practice (see also Sadler-Smith, 2012) is helpful. Exchanging ideas and experiences with (more experienced) colleagues could help to become more aware of alternative paths of action in given situations. Overeem and Tholen (2011) summarize some work going into this direction, where practitioners work on prioritizing virtues in their daily practices. In addition, Sadler-Smith (2012) highlights the advantages of involvement in communities of practice to shape actors' moral development (for an empirical illustration see Mailloux & Lacharité, 2020).

To foster intuitive decision-making among public administrators, mental simulation could be a propitious training strategy. When intuition is understood as the capability to recognize situational cues and to retrieve relevant knowledge structures (Simon, 1992) it successfully supports professionals' problem solving and decision-making under time pressure (Kappes & Morewedge, 2016). Professional development of expertise in general, as well as the development of intuition in particular, is supported by several deliberate practices; of which the usage of mental simulation is a promising approach (Klein, 2003; Sonnentag & Kleine, 2000). The mental and imagined rehearsal of difficult scenarios in which potential courses of action are evaluated is called mental simulation (Klein, 2008). This cognitive strategy enables professionals to prepare for challenging future tasks, i.e. tasks and problems they have not yet faced before. Consequently, this mental training allows individuals to come to appropriate and successful solutions within complex and suddenly emerging situations (Steffen, Goller,

& Harteis, 2020). For a detailed description of mental simulation and its contribution to intuitive decision-making, see Steffen et al. (2020). Public servants should be encouraged to implement the use of mental simulation strategies within their professional learning environment. In this way, mental simulation can help to decide more intuitively, and in the long term make wise decisions.

Limits and implications

Limitations stem from the conceptualization of a relatively homogenous public and private sector, as summarized by Baarspul and Wilderom (2011). There are advantages, when the type of public sector organization forms part of the study's rationale as in Andersen (2010). In addition, the authors are aware that there are scales that specifically measure ethical decision-making. Across the social sciences, scales like these have come under attack for inevitably guiding survey respondents towards answers that trigger socially desirable responses (Krumpal, 2013). Prior work shows that an instrument that investigates decision making in general, rather than *ethical* decision-making bypasses these perils to some extent. It also needs to be noted that the scales are all based on self-disclosure, i.e. professional's decision-making style in practice has not been measured.

Future research

Empirical research into wisdom should account for historicity, linking place and geography to intellection (Rooney & McKenna, 2008). This follows the aim to elicit taken-for-granted truths. McKenna, Rooney, and Liesch (2006) also highlight location and intellection for the tendency toward institutional isomorphism.

When and how decisions are consciously made, rather than just knowing what to do in a

given situation?

Another research desideratum is to explore, of which decisions actors are aware and of which they are not aware. It needs to be noted that intuitive decision-making is an unconscious process, but the data show that in this field private employees are still more aware of their choices than public employees are. It is a first cautious approach to the subject of research, which is otherwise researched using mainly qualitative methods. To use intuition more actively, is to perceive freedom to act more consciously, becoming more conscious of the discretion to act.

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Table 1: Sample: Age distribution by sector

		Private	Governmental	
		Sector	Sector	Total
Age Group	18 or younger	19	5	24
	19-28	300	87	387
	29-38	258	64	322
	39-48	357	86	443
	49-58	285	164	449
	59 and older	31	23	54
Total		1250	429	$n = 1679$

Table 2 Summary of Mann-Whitney Test for Sector on Deliberation for Decision Making

						Asymptotic significance (2-sided) (Effect size Cohen's d)
	Organizational Sector	<i>n</i>	Mean (Standard Deviation)	Mean Rank	Sum of Ranks	<i>Z</i>
PID Rational	Private Sector	1240	2.9668 (.82503)	854.17	1059176.50	
	Governmental Sector	426	2.7934 (.93836)	773.32	329434.50	-3.009
						.003 (0.203)
PID Intuitive	Private Sector	1226	2.5015 (.80256)	836.90	1026034.50	
	Governmental Sector	413	2.3834 (.83223)	769.84	317945.50	-2.498
						.012 (0.146)