

INNOVATIVE BEHAVIOR AMONG PUBLIC SERVANTS: A CASE OF IDEA GENERATION ON THE MUNICIPAL LEVEL

Martin HORÁK
Lukáš DANKO
Lenka SMÉKALOVÁ
Filip KUČERA

Abstract

Public sector innovation is a widely discussed process that brings new approaches, incorporates new technologies, and improves public services. This study aims to explore the relationship between antecedents and idea generation, shedding light on the factors that contribute positively or negatively to the idea generation stage of public sector innovation. Semi-structured interviews were conducted with 28 respondents (heads of departments) to gather data on the antecedents that influence idea generation.

The findings resulted in the development of a framework of permissive and prohibitive antecedents – drivers and barriers – in three categories: organizational, individual, and environmental. The main barriers identified are limited availability of resources, incentives and rewards, limited learning opportunities, reluctance to take risks, leadership styles, and the cultural environment. The findings broaden the current knowledge of the innovation process within public organizations, with a focus on the initial phase. They can also have practical implications for creating educational and development strategies for public sector organizations.

Keywords: innovation, innovative behavior, public administration, public servants, innovation process, idea generation, municipal level.

Martin HORÁK

Assistant Professor, Department of Regional Development,
Public Administration and Law,
Tomas Bata University, Zlín, Czech Republic

Lukáš DANKO (corresponding author)

Assistant Professor, Department of Regional Development,
Public Administration and Law,
Tomas Bata University, Zlín, Czech Republic
E-mail: danko@utb.cz

Lenka SMÉKALOVÁ

Assistant Professor, Department of Regional Development,
Public Administration and Law,
Tomas Bata University, Zlín, Czech Republic

Filip KUČERA

Assistant Professor, Department of Regional Development,
Public Administration and Law,
Tomas Bata University, Zlín, Czech Republic

1. Introduction

Why do we need innovative public organizations alongside innovative businesses? One narrative reflects on innovative public organizations that address complex societal challenges and improve the delivery of public services. They enable governments to adapt to changing needs and demands, foster creativity and problem-solving skills among public servants, and drive economic growth through the development of new solutions (Țiclău, Hințea and Trofin, 2021). In other words, lack of innovative public organization can hinder innovative businesses as well as the solution to social issues. Thus, scholars and practitioners are increasingly interested in public sector innovation (PSI) (de Vries, Tummerts and Bekkers, 2018; Walker, 2014).

Public sector innovation can be defined as the creation and implementation of new or improved processes, products, services, or methods of delivery that result in significant improvements in results, efficiency, effectiveness, or quality (Bloch and Bugge, 2013; de Vries, Bekkers and Tummerts, 2016). This process has its antecedents, and there have been multiple studies that classify them into positive and negative ones (Lewis, Richard and Klijn, 2018; Wipulanusat *et al.*, 2019), internal and external ones (Agolla and Van Lill, 2016), and others.

The innovation process in public sector organizations can be conceptualized as a series of stages, such as idea generation, diffusion, and adoption (Cinar, Trott and Simms, 2019; de Vries, Bekkers and Tummerts, 2016; de Vries, Tummerts and Bekkers, 2018). Despite the importance of idea generation as a catalyst for the latter phases of the process, existing literature focuses more often on the following stages, as pointed out by De Vries, Bekkers and Tummerts, (2016) or Cinar, Trott and Simms (2019). In these latter and more understood stages, various antecedents have been identified (Cinar, Trott and Simms, 2019; Meijer, 2015).

This study builds on the work of De Vries, Bekkers and Tummerts (2016), who divided the general PSI antecedents into organizational, environmental, and individual. The focus is to explore further the relationship between antecedents and idea generation. Hence, we aim to shed some light on factors that contribute either positively or negatively to the idea generation stage of PSI. This stage is crucial to any of the following ones that may result in emergence of innovative practices, yet it is understudied, as mentioned previously. Therefore, this research is vitally important to broaden the body of knowledge and may interest academics, as well as public organizations' managers, some of whom were involved in its creation. The researchers conducted semi-structured interviews with 28 heads of departments of three public sector organizations to gather data on the antecedents that influence idea generation in PSI.

The paper is structured as follows: the second section describes theoretical underpinnings relevant to the study, including innovative behavior, innovation process, and antecedents; the third section covers the methods; the fourth section presents the results; the last section discusses the results; and finally, the conclusions, limitations, and suggestions for further research are presented.

2. Theoretical background

Innovation in the public sector has attracted considerable attention from scholars and practitioners to address improvement and novel approaches to provide higher quality public services and managerial practices and develop capacities to face societal challenges (de Vries, Bekkers and Tummers, 2016). Contrary to the private sector, public sector organizations prioritize innovation, reflecting the trends of digitalization, e-government, smart governance, and strategic management (Kusumasari *et al.*, 2019). These prospects of innovation tackle the challenges of public sector development concerning efficiency and productivity in public services. Over the last 10 years, the focus has shifted to new public management, which signifies the role of innovation in the public sector to achieve the change from government to governance. Theoretical underpinnings of public sector innovation are characterized by a blend of historical insights, collaborative frameworks, and dynamic capabilities to innovate effectively.

Hence, innovative behavior has become a central issue in empirical research due to the need for innovative approaches to design and implement public services (Criado *et al.*, 2021; de Vries, Bekkers and Tummers, 2016). Moreover, innovative behavior was defined by Scott and Bruce (1994) as the process that ‘begins with problem recognition and the generation of ideas or solutions, either novel or adopted’. A slightly different view was presented by West and Farr (1989), who argue that innovative behavior is the sum of ‘individual actions directed at the generation, introduction, and or application of beneficial novelty at any organizational level’. Considering the public sector, innovative behavior also inclines toward ‘Searching out new technologies, suggesting new ways to achieve objectives. Applying new work methods and investigating and securing resources to implement new ideas’ (Yuan and Woodman, 2010).

It is worth noting that public organizations are required to address socioeconomic issues that are prevalent in the public sector by designing and implementing public initiatives. The study by Moussa, McMurray and Muenjohn (2018) sheds some light on innovative work behaviors consisting of idea generation, idea promotion, and idea realization. In the first phase, employees use their creativity to produce new ideas, or they search for practices in similar entities. Therefore, innovation in public administration is understood as the process of developing ideas into new products, services or processes in order to achieve increased value for citizens (Palm and Algehed, 2017).

The development of new ideas is often a collective process because employees encourage their adoption by seeking a coalition of sponsors around them. This phase is labelled idea promotion, when an idea moves from generation to collaborative innovation (Collm and Schedler, 2017). Finally, the employee must engage in idea realization to translate it into a procedure that can be used in the organization (Scott and Bruce, 1994). In their systematic review of the literature, de Vries, Bekkers and Tummers (2016) found that innovative behavior is the result of complex interactions between intra-organizational and external antecedents, resources, and actors.

These interactions interact with the institutional setting to shape the antecedents, especially when the environment is open to enhancing idea generation. There have been multiple studies on the antecedents of public innovation, many of them dividing the antecedents into different categories, frequently considering the positive vs. negative antecedents, that is, drivers and barriers (Lewis, Richard and Klijn, 2018; Wipulanusat *et al.*, 2019), internal vs. external antecedents (Agolla and Van Lill, 2016), antecedents in various stages of the innovation process (Cinar, Trott and Simms, 2019; Meijer, 2015). In their paper, de Vries, Bekkers and Tummers, (2016) divided the antecedents of public sector innovation into environmental, organizational, and individual pillars. Environmental antecedents refer primarily to the wider political context in which organizations take part, considering specifically regulatory mechanisms and political mandates that affect public services. Organizational antecedents are composed of the structural layers and culture of public organizations, where employees engage in collaboration and individual work (Collm and Schedler, 2017). Individual antecedents are related to employees and their characteristics that affect innovative behavior on an individual level (Chen, Walker and Sawhney, 2020).

In addition to characteristics, antecedents depend on networking activities, which positively influence self-assessed innovation capacity in the collaborative nature of innovation in the public sector (Lewis, Richard and Klijn, 2018; Profiroiu *et al.*, 2019). On a similar note, regulatory aspects in the public sector form a significant antecedent of innovation as presented by Pelkmans and Renda (2014) and Kusumasari *et al.* (2019). In the public sector, it is good practice to adopt the same innovation or to modify one that another institution has already adopted, a practice frowned upon in the private sector (Lykkebo, Munch-Andersen and Jakobsen, 2019). Public sector organizations are often inspired by their peer organizations and adopt solutions that have been successful elsewhere (Lykkebo, Munch-Andersen and Jakobsen, 2019).

Most research on idea generation highlights employees and their creativity to produce new ideas, or they search for practices in similar entities (Chen, Walker and Sawhney, 2020; Moussa, McMurray and Muenjohn, 2018). Idea generation is linked to problem solving and changing processes in public administration (Criado *et al.*, 2021). Both problem solving and changing processes are not linear, and idea generation might end up being a failure due to the inability to move from idea to implementation. Therefore, the leadership role to create a supportive organizational climate for innovation and innovative behavior is fundamental in public administration (Țiclău, Hințea and Trofin, 2021). Organizational climate has a positive effect on both idea generation and implementation, especially when employees are encouraged to generate and share ideas (Moussa, McMurray and Muenjohn, 2018).

Considering the specifics of the idea generation phase in PSI, the rationale of this research is threefold. First, the study focuses on the antecedents related to the generation stage of the innovation process since this research area is understudied compared to the diffusion/adoption stage (de Vries, Bekkers and Tummers, 2016). Second, as identified in the systematic review by Cinar, Trott and Simms (2019), barriers within the idea generation

and selection stages have not been studied in detail. It is not different when speaking about drivers that foster employees' innovative behavior in the public sector (Bysted and Jespersen, 2014; Nguyen *et al.*, 2023). Hence, the study aims to explore antecedents and categorize them into the barriers and drivers of innovative behavior. Third, the studies related to the innovation process in the public sector mostly come from Western countries, including the US and UK (de Vries, Bekkers and Tummers, 2016). However, as pointed out by several scholars (Nguyen *et al.*, 2023), there is a lack of research from countries in the post-communist transition that have specific cultural and political settings and deep-rooted bureaucratic systems in place inherited from the central planning (Martinaitis *et al.*, 2024). Furthermore, the paper addresses the public sector that was affected by inefficient resource distribution and suppression of self-management. These two factors hampered the innovative behavior of public servants concerning the transition from centrally planned to market economy.

3. Methods

3.1. Context

The empirical research in this paper is based on a qualitative approach to understand the barriers and drivers of the innovation process. Desk research concerning the local municipalities in Czechia was conducted to understand the organizational structure and range of departments dealing with internal and external agendas. The primary focus was on heads of departments to address leadership in innovation processes. This step was used to design interviews for data collection (Charmaz, 2014).

The respondents were informed about the research at the start of the interview and were subsequently assured that their anonymized answers would be used solely for the purpose of developing municipal strategic documents and this empirical study. All participants in the interviews gave their consent to the use of the obtained data for research purposes. As indicated by the ethics committee, there was no requirement for approval since the research study did not include experimental activities with human subjects. The interviewers asked open-ended questions to identify barriers and drivers of innovation processes in public administration.

3.2. Sample

The sample included 28 heads of departments who could reflect on the idea generation phase of the PSI process (see Table 1 for sample characteristics). The sample addresses multilevel governance through internal and external agendas, giving empirical evidence of the idea generation phase. The paper is based on purposive sampling to match the sample with the goals of the qualitative research in order to improve the rigor of the study (Creswell and Poth, 2017). The context of the study was presented to help establish trustworthiness in the purposive sampling. The sample is gender-balanced, with 13 male and 15 female respondents, and the diversity was improved by the inclusion of various departments with

transdisciplinary expertise: education, economics, culture, social affairs, urban planning, environment, property and investment, internal affairs, and information and communication technologies.

Table 1: Basic characteristics of study sample

Authority/ City	Number of respondents	Involved respondents
Municipal authority in City A (population 60,000 to 100,000)	10 (3 M/7 F)	R1 Department of Culture R2 Department of the Secretary’s Office R3 Department of internal services R4 Department of Education and Sports R5 Department of Trade R6 Department of Economics R7 Department of Environment R8 Department of Implementation of Investment Actions R9 Department of Press Spokesperson and Tourism R10 Department of Personnel.
Municipal authority in City B (population 5,000 to 10,000)	7 (3 M/4 F)	R11 Department of Administrative Agendas R12 Department of Economics R13 Department of Social Affairs R14 Department of Spatial Planning R15 Department of Development and Investments R16 Department of the Municipal Trade Office R17 Department of the Environment and Building Office.
Municipal authority in City C (population 10,000 to 30,000)	11 (7 M/ 4 F)	R18 Department of Administration and Trade Office R19 Department of Social Affairs and Health R20 Department of Environment and Spatial Planning R21 Department of Property and Investments R22 Department of the Secretary R23 Department of Economics R24 Department of Building Authority R25 Department of the Mayor’s Office R26 Commander of the Municipal Police R27 Department of Internal Administration R28 Department of Information and Communication Technologies.

Source: The authors

3.3. Data collection

Semi-structured interviews were used to collect data, with the goal of exploring barriers and drivers holistically. Open questions allowed respondents to discuss their experiences, attitudes, and opinions. These in-depth interviews were held with the heads of departments from each municipality. A total of 28 interviews were conducted, with each interview divided into four parts: (1) definition of innovation, including current and future status within the department; (2) key barriers to introducing innovation in the department; (3) employee approach to innovation and ways to motivate them; and (4) best practices and level of cooperation between public authorities. The interviews were recorded and

transcribed while maintaining the anonymity of the interviewees in the transcripts. The primary data collected was transcribed to ensure that no information was missing from the empirical analysis.

3.4. Data analysis

The initial step in qualitative analysis was to apply deductive coding to cover and describe the data using theoretical input. The codes in the framework were drawn from the existing literature comprising organizational, individual, and environmental categories of antecedents (Bloch and Bugge, 2013; de Vries, Bekkers and Tummers, 2016). By employing this approach, the author team anticipated that certain core concepts would be present in the data. The rationale behind this approach is to base the analysis on a previously established theory (Creswell and Poth, 2017). A deductive approach in the qualitative analysis is employed to delve into the idea generation phase of PSI and uncover the underlying assumptions of barriers and drivers of innovation. The trustworthiness of data analysis is based on investigator triangulation, that is, examining the primary data from different perspectives by multiple individuals. The second step was to interpret the codes to examine the meaning that the respondents attribute to assumptions about the idea generation process in PSI. This step includes respondent validation to return to the data and testing initial results with respondents.

The rigor of the study is further supported by data triangulation with diverse respondents (heads of departments) and organizations (municipal offices), using multiple data sources to answer the research question. This means that any ambiguity in the response can be compensated for by the complexity of other responses, thus increasing the validity and reliability of the results (Stahl and King, 2020). Going back and forth through codes and their distribution resulted in grouping them into more abstract representations that reflect similar occurrences around the central theory (deductive approach). The last step was to calculate Cohen’s kappa statistic to determine intercoder agreement (see Table 2 below) regarding the reliability of the data analysis. Cohen’s kappa was chosen to address the reliability of the data (Warrens, 2015). The calculation reflects relative observed agreement among investigators, as well as the probability of agreement in codes reaching the value of 0.616 and 80.8% sensitivity.

Table 2: Intercoder agreement (Symmetric Measures)

		Value	Asymptotic Standardized Error ^a	Approximate T ^b	Approximate Significance
Measure of Agreement	Kappa	.614	.076	6.912	.000
	N of Valid Cases	95			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Source: The authors

4. Results

This section presents the main findings from interviews with heads of departments of three municipal authorities in Czechia. According to the literature (see de Vries, Bekkers and Tummers, 2016), the identified codes were divided into the three key categories of antecedents associated to the first stage of PSI — organizational, individual, and environmental — which are described in detail below. In addition, the specific barriers and drivers of innovative behavior are outlined.

4.1. Organizational antecedents

As de Vries, Bekkers and Tummers (2016, p. 157) claimed, organizational antecedents are ‘defined as those aspects that reflect the structural and cultural features of an organization’. In this study, the organizational antecedents list six specific themes that influence the degree of new idea generation within a public organization. They are as follows: lack of resources, incentives and rewards, opportunities to learn, degree of risk aversion, leadership styles, and cultural environment.

Lack of resources

The most frequent theme revolved around the scarcity of resources, including time constraints, finances, skilled employees, and individual capabilities. Public servants from all municipalities expressed dissatisfaction with the limited time available to generate new ideas. The following examples from R1, R18, and R23, respectively, demonstrate this:

‘We cannot even keep up with the assigned agenda, let alone think about new things’; ‘Departments simply do not have time to think about innovations due to staffing; we have little time for that’.

As pointed out by R23, this issue is closely connected to personal capacities, which are rather low in public organizations. R1 supports that:

‘I think that the main obstacle is that we don’t have the capacity for it here. We might even like to improve something, but we have other work tasks that must be solved as a priority, and here there is no capacity for those conceptual things that could simplify the processes. Someone would have to be specifically singled out to deal with it.’

Furthermore, it is worth noting that the number of people and their level of innovation-related competencies and skills can hinder innovation. R1 suggested that there could be a dedicated position for driving such progress:

‘Maybe also the impulse of someone who will push it further, who will deal with those processes – in private companies are called quality workers or something like that – a full-time job where people think about all processes and look for improvements.’

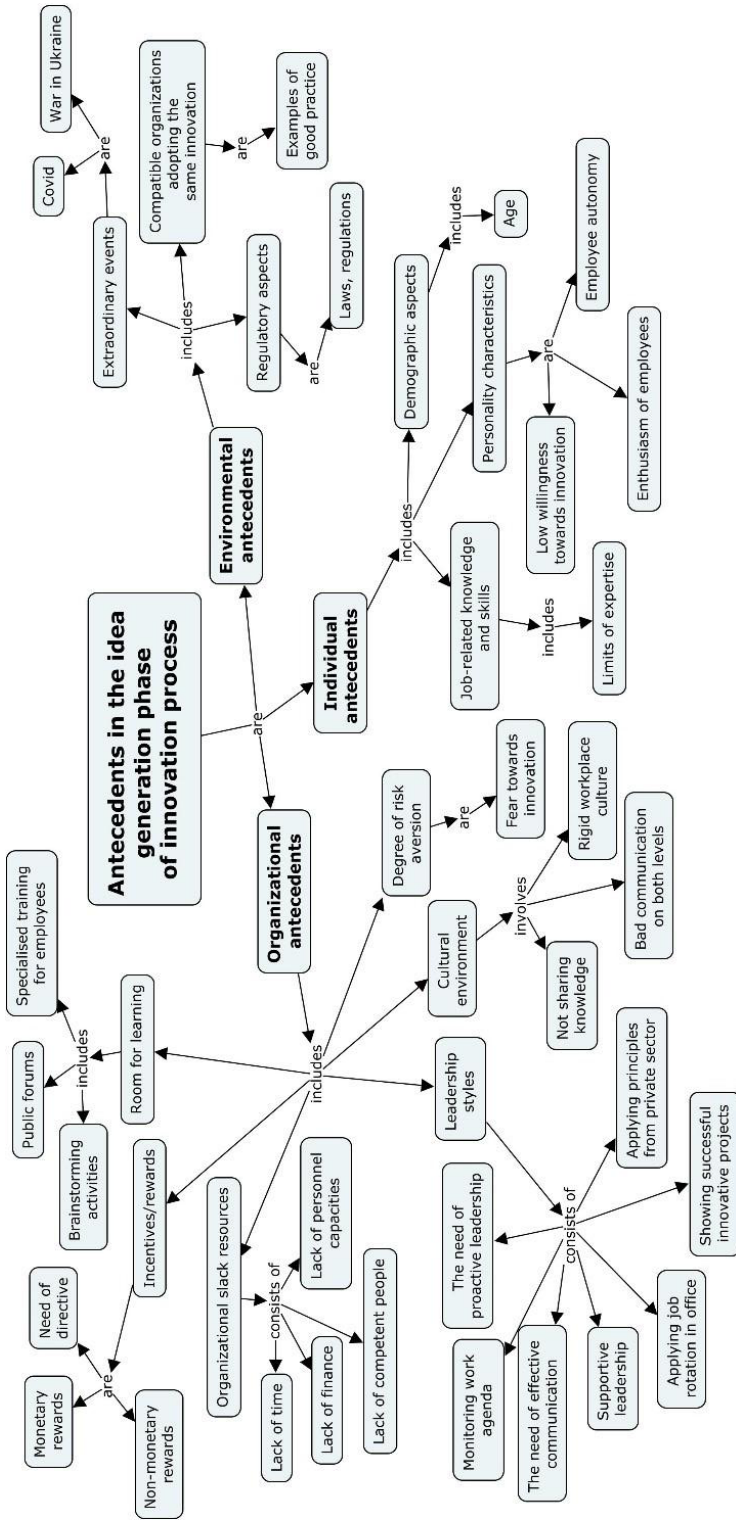


Figure 1: Antecedents in the idea generation phase of innovation process

Source: The authors

The presence of adequate resources can also present a critical factor in generating and selecting new ideas, as mentioned by R21 and R6: ‘There were some proposals for innovation, but due to finances, they were rejected and not implemented’ and ‘I think that it is more or less about the finances; the will within the municipality would be there, but the budget is very tied.’

Incentives and rewards

When discussing the second theme of incentives and rewards, it is important to highlight three key factors. First, public servants are requesting specific guidelines to foster innovative behavior among employees as R11 and R12 emphasized:

‘There is a need to implement a directive or regulation that will motivate people and also clearly determine how to work with innovation initiatives’, and ‘The new directive and processing of innovation initiatives is certainly important and necessary. However, it is necessary to think carefully about who will evaluate the suggestions from the employees.’

R9 and R1 highlighted the significance of non-financial incentives: ‘Perhaps the praise certainly also plays a role – it will surely give you no less joy when the superior tells you, ‘Good job, we are satisfied, thank you!’ – this is a great incentive.’ ‘I think that the reward can definitely help in this, but I don’t mean a financial one – for instance, the form of public praise is not very often here; it doesn’t happen much in our office.’

Furthermore, it is important to acknowledge that the respondents also emphasized the importance of traditional financial incentives. As an example, R23 stated the following: ‘Financial motivation is perhaps the only thing that could sway colleagues.’ In practice, this could be reflected in benchmarking initiatives (workshops), where public servants from different institutions meet face-to-face and deal with common challenges. Sharing a goal and developing a solution was presented as a non-financial reward in the idea generation process.

Opportunities to learn

The issue related to the opportunities to learn emerged throughout the interviews. Certain respondents believe that offering specialized training to department employees could facilitate the development of innovative ideas: ‘Training focused on initiation, design thinking would help; this will also lead to identifying colleagues with whom to work on possible innovations’, stated R22, and R10 added ‘I think that we need to rely more on education in order to change the attitude of employees towards innovation’.

In addition, it is important for public organizations to organize specific events, such as public forums — as these statements indicate (R6 and R7): ‘At the levels of managers as well as ordinary workers, something like such public forums would definitely help – for example, if once in a while the public servants in their field would meet and share their experiences and inspire each other’ or ‘I can imagine, for example, that once every six months

there will be some kind of meeting, brainstorming for that (generation of new ideas).’ The individuals who were interviewed emphasized that citizens could be invited to these events in order to cultivate innovative behavior according to R13: ‘Perhaps it would help if the public servants themselves heard from the citizens what could be innovated.’

In terms of practical examples, opportunities to learn relate to generating ideas through collaboration with colleagues. Respondents highlighted that inspiration comes from meetings, where ideas are shared between or within departments to collectively pursue public sector innovation. The idea generation process is nurtured by looking more into the private sector for inspiration and experience. In practice, the combination of expertise from the public sector and best practices from the private sector could improve PSI.

Leadership styles

Regarding further findings, respondents called for proper leadership within the workplace, which was coded under the theme of leadership styles. Specifically, there is a demand for proactive leadership as asserted by R5 ‘An initiative on the part of the management to be inclined towards it (generating ideas)’ or R18 ‘Innovation, if it is not pushed from above (management level), has no chance of success’. The second identified code in this theme related to showcasing successful innovative projects within the public organization, as stated by R20: ‘For instance, something like ‘innovator of the year’ can help; people will see that someone cares about their opinions’.

The respondents highlighted that leadership in PSI is somehow neglected in practice. This boils down to the issue of motivation and the lack of innovation culture in public administration. Hence, the vignette could reflect on initiatives to set up platforms to support building leadership in public administration, especially inspired by the private sector, introducing innovation leaders and particular awards/recognition. This initiative could motivate public servants to exceed their own self-interests to promote a culture of innovation.

Degree of risk aversion

At the organizational level, there is a certain level of risk aversion that may impede the process of generating new ideas during PSI. The level of apprehension was expressed by R16 and R17: ‘Fear is a barrier that needs to be removed at the beginning of the process by frequent and lengthy convincing of the necessity of the change’ and ‘In our organization, many people have been doing the same monotonous work activity for many years and are afraid of new things’. Additionally, the problem of employees lacking initiative may also stem from their fear of job loss.

Cultural environment

The final theme identified in the category of organizational antecedents refers to the cultural environment. Here, the public servants primarily expressed dissatisfaction with the inflexible workplace culture. According to R11 ‘The conservatism in office is a key barrier; there are well-established procedures in the office that most officials do not want

to change'. R13 added that 'The office environment is ossified, and the environment is not ideal for innovation'. Moreover, to identify problems in the working agenda and devise possible solutions, it is necessary to establish suitable communication channels among the various departments within the organization. However, R3 and R2 show that there is a common barrier in this regard with two of the examined municipalities:

'Poor communication at both levels (top-down; bottom-up) – employees are afraid to speak up, and heads of departments communicate poorly towards employees; e.g., regular meetings take place without employees, and they then do not know what should be changed'.

'Not sharing knowledge and information between employees and across unions – that's a big problem here.'

This barrier requires a delicate and systematic approach in practice. The rationale behind this is to not push public servants into PSI in a radical manner. Hence, the vignette to overcome the cultural environment reflects the formal and informal communication channels to change-oriented leadership. This signifies the multilateral communication between organizational units, simultaneously through various levels (top-down and bottom-up links).

4.2. Individual antecedents

The study revealed that both organizational and individual antecedents have an impact on the initial phase of the innovation process in Czech public administration, as reported by the respondents. During the interviews, three primary themes concerning individual antecedents emerged: job-related knowledge and skills, personality traits, and demographic factors.

Job-related knowledge and skills

Regarding job-related knowledge and skills, the majority of interviewed public servants expressed difficulty in dealing with the limitations of employee competency when it comes to innovation. For example, the subsequent statements were coded inside this theme: 'Unfortunately, we often don't even know what or how we could innovate' expressed R16. R15 added 'People in the office have been doing their routine for x years and are used to it, and they don't even know how they could change or innovate the agenda'. Finally, R20 asserted that 'The word innovation is not much used there; people often do not even know what to look for under this word, and that it does not always mean complexity and more work'.

The aforementioned statements show that public servants also face challenges in comprehending the concept of innovation within their work agenda. The absence of expertise in this field, coupled with adherence to standard practices, appears to be a major barrier impeding innovative behavior.

Hence, a practical vignette to overcome this barrier is to support information dissemination through digital media, where respondents highlighted the role of sharing best

practices through newsletters, blogs, and internal platforms. The reason behind this initiative is to address the lack of expertise (job-related knowledge) or knowledge (skills) to generate PSI through digital leadership and knowledge codification.

Personality traits

Personality traits can either hinder or foster innovative behavior among public servants. When it comes to public organizations, there is a significant problem of low motivation and enthusiasm to embrace innovation in some, as evidenced by the following statements by R2 and R9:

‘Such a typical Czech reluctance that people are used to some stereotype that they don’t like to leave. And I think that there are a lot of such people, especially in public administration’.

‘So, there is a clear deficit of people, where some do not want at all, some at least. The enthusiasm is simply minimal. I may even attribute it to the fact that those who have been here for 6/10/12 years are already conserved; they are already used to it’.

Other respondents experienced the same emotion as described above. For example, these could be mentioned: ‘For example, from those people, my colleagues, I don’t hear sentences like: I thought about it, and it would be good to do such and such’ said R23.

Furthermore, in practice, this category relates to generating ideas based on complaints and frustrations from public administration processes, where public servants monitor the work agenda and narrow down the issues. Idea generation in this case is a response and feedback to complaints and obstacles with new solutions or perspectives.

Demographic factors

Finally, the participants from all surveyed municipalities identified age as a crucial factor influencing PSI. The findings indicate an association between the generation of new ideas in the work agenda and the presence of young colleagues in the public organization. R22 claimed that ‘Young people are the way; they want to realize themselves and have ideas. If we give them space, the office will surely see interesting innovations’. R25 added: ‘Some time ago, there was a ‘retirement change’ of colleagues, and it helped, because I feel a fresh wind and initiative in the department and a desire to change something for the better’.

4.3. Environmental antecedents

The final category pertains to the environmental antecedents, which, according to de Vries, Bekkers and Tummers (2016), are frequently associated with the particular context in which an organization operates. This study encompasses three themes in this category: regulatory aspects, extraordinary events, and compatible organizations that adopt the same innovation.

Regulatory aspects

The initial theme, regulatory aspects, refers to the legal framework and regulations that frequently impede innovation activities. According to the R27: ‘We cannot think about innovation when the law tells us exactly what to do; we have a given agenda, and we cannot do what we want and introduce our own procedures or innovations’. It is important to note that certain departments are primarily responsible for tasks under delegated authority, resulting in limited competencies in terms of innovation. In addition, the number of laws keeps increasing, as highlighted by R6:

‘As for innovation in processes, legislation often complicates our lives rather than making them easier. Those laws change so fast. For example, 10 years ago, the agenda was not as active as it is now. It is constantly being said that the state administration will be simplified. But I see rather the opposite’.

In practice, the PSI is encouraged by overcoming rigid compliance requirements that reduce flexibility and adaptability in implementing new ideas among public servants. More importantly, this reflects the need to reduce the excessive rules and regulations that discourage experimentation for idea generation. The vignette could introduce a ‘sandbox’ where innovative ideas can be tested without full regulatory constraints.

Disruptions

Furthermore, several participants in the study reported that the previous months were challenging due to recent extraordinary events. In this context, R3 mentioned:

‘Maybe if there weren’t already such non-work matters (external influences) that have to be solved operatively – for example, the COVID or now again the situation in Ukraine – then many people have to work on that, and they can’t fully devote themselves to their work agenda and possible changes’.

Organizations adopting the same innovation

The last theme that has emerged in this category is referred to as the adoption of the same innovation by compatible organizations. Specific cases of comparable cities can enhance the potential for fostering innovative behavior among employees. These good practices can serve as inspiration for the officials in question. According to R11 ‘Examples of good practice from other cities are good – it turns out that it is possible and, above all, beneficial for everyone in the end’. This could serve as a stimulus for public servants and also mitigate the negative attitude towards producing similar types of innovations in the workplace.

This could be reflected in practical vignettes to share best practices among public servants to inspire them to pursue idea generation. The respondents highlighted that public servants get inspired from proactive organizations, especially in terms of environmental antecedents to change the culture of PSI.

4.4. Barriers and drivers in the idea-generation phase

The study classifies antecedents into two categories: barriers and drivers, which have an impact on innovative behavior in public organizations. The collected results are presented in the figure below.

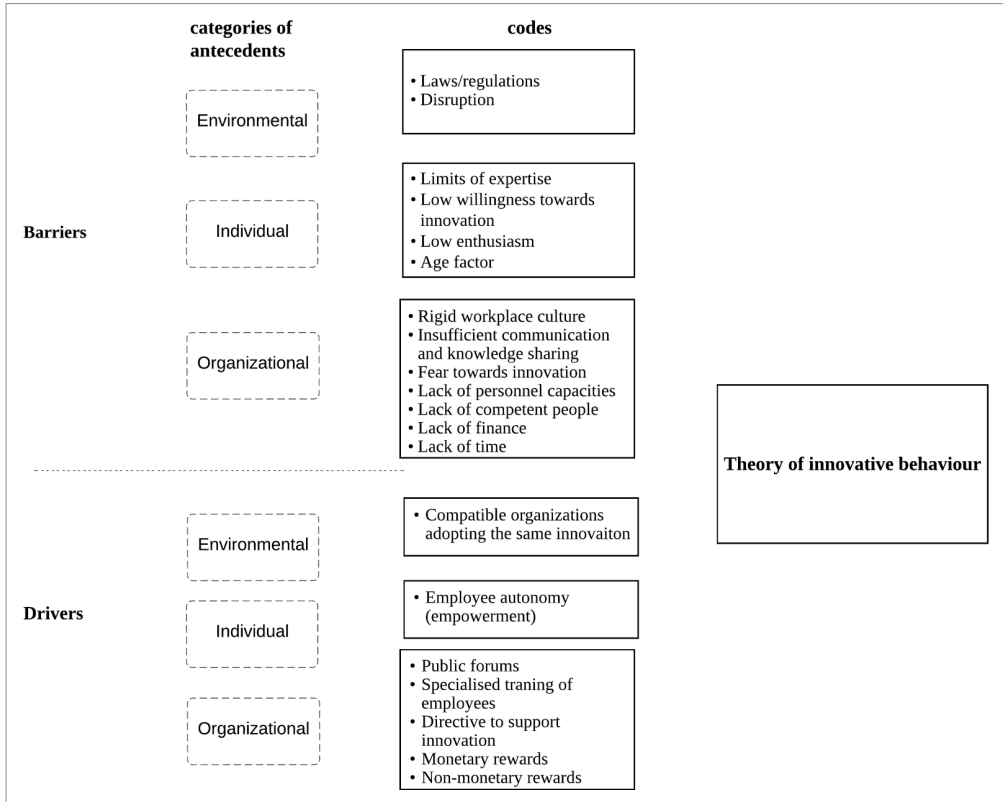


Figure 2: Framework of identified barriers and drivers related to the theory of innovative behavior

Source: The authors

5. Discussions

The findings emphasize crucial factors in the initial phase of the PSI process. Employee empowerment, targeted training, directives, and a reward system are the main drivers of innovation in its initial stages (Profiroiu *et al.*, 2019). Currently, relevant studies tend to overlook the investigation and comprehension of each stage of innovation. Hence, it is challenging to assess the specific obstacles that impact different stages and determine the appropriate strategies to enhance innovative behavior among public servants (Collm and Schedler, 2017; Moussa, McMurray and Muenjohn, 2018). Overall, the results highlight that the main obstacles in the idea generation phase are the limited availability of resources,

incentives and rewards, limited learning opportunities, reluctance to take risks, leadership styles, and the cultural environment (Țiclău, Hințea and Trofin, 2021). Therefore, our findings add to the barriers discussed by Lewis, Richard and Klijn (2018) and Agolla and Van Lill (2016) about risk-averse culture and inadequate management practices. Notably, the findings indicate that both job-related knowledge and skills in public administration, as well as personality traits, were identified as significant limitations in individual antecedents (Martinaitis *et al.*, 2024). These results align with the findings of Vivona, Demircioglu and Raghavan, (2021). In contrast to Bugge and Bloch's (2016) findings, the data suggest that regulatory factors, which were expected to be significant environmental barriers, are actually less influential; on the other hand, disruptions are emerging as a more prominent obstacle.

The study expands research in the field of innovative behavior by examining different antecedents that influence the idea generation process (Criado *et al.*, 2021; Moussa, McMurray and Muenjohn, 2018; Vivona, Demircioglu and Raghavan, 2021) in the field of public administration. Additionally, as highlighted by other researchers, de Vries, Tummers and Bekkers (2018) and Cinar, Trott and Simms (2019), it is recommended to analyze each of the indicated innovation stages individually due to their differences. Therefore, the study further divided antecedents into barriers and drivers, as discussed by Agolla and Van Lill (2016), and Chen, Walker and Sawhney (2020). The results showed a different trend compared to the findings of Wipulanusat *et al.* (2019) concerning drivers of innovative behavior such as employee autonomy and empowerment, highlighting individual antecedents. These findings are consistent with those of de Vries, Tummers and Bekkers (2018) about drivers such as compatible organizations, where employee innovative behavior is strengthened by particular cases of good practices. Furthermore, practical vignettes are presented to illustrate the interplay of factors within particular departments. These vignettes emphasize on idea generation on an operational level to provide an overview on PSI.

6. Conclusions

The innovative capabilities of public sector organizations are dependent on their employees (Bysted and Jespersen, 2014). Thus, their ability to generate ideas that result in useful innovations is crucial for the innovation process, which results in improvements of the public sector, which in turn influences the entire society considering the bureaucratic system (Li, 2019). The inquiries into the idea generation stage among the employees of public organizations are yet scarce (de Vries, Bekkers and Tummers, 2016; Cinar, Trott and Simms, 2019). This study addressed the idea generation stage, and its main contribution is the creation of a framework of antecedents, categorized into barriers and drivers, that influence innovative behavior within the first phase of the PSI process. The main identified categories include organizational, individual, and environmental antecedents that are deemed crucial by heads of departments concerning progress in the new public

management. The findings are essential prerequisites for enhancing the innovative behavior of public servants. Therefore, this study's theoretical implications revolve around analyzing the idea generation phase of PSI, which is crucial for the subsequent implementation of innovations (Cinar, Trott and Simms, 2019). The relationship between antecedents and idea generation linking existing theories of antecedents, idea generation and drivers/barriers of innovation, is presented in the proposed framework.

Theoretical implications reflect on factors as drivers or barriers to the idea generation stage of PSI. These findings add substantially to our understanding of the initial phase of innovation process in public organizations, as the catalyst for the latter phases of diffusion and adoption discussed by Cinar, Trott and Simms (2019). Our research has underlined the importance of idea generation process that supports the innovative behavior of employees in the new public management considering efficient resource distribution and self-management (Criado *et al.*, 2021). Furthermore, the study has presented a novel approach to examine innovative behavior with deeper segmentation of complex interactions between intra-organizational and external antecedents, resources, and actors. The study contributes to the dynamic that occurs between particular antecedents, towards understanding of innovation processes across different cultural contexts, especially countries that were dealing with inefficient resource distribution and suppression of self-management in centrally planned economies.

The findings have important practical implications for improving the innovation process, particularly in relation to the innovative behavior of public servants. The framework can serve as a guide for managers at different municipal offices when formulating educational and development strategies. This can ultimately result in the stimulation of idea development within their team by removing the barriers or strengthening the drivers that influence the innovative behavior in the bureaucratic system (Palm and Algehed, 2017; Li, 2019; Criado *et al.*, 2021).

However, it is important to consider the particular limitations that come with the research. The sample of participants is limited to the environment of a single post-communist country. Expanding the sample to more countries would have likely yielded more comprehensive and contextually relevant findings. Furthermore, although a number of researchers were involved in analyzing the data, there is a possibility of inadvertent bias stemming from the design of interview questions, the execution of interviews, the selection of codes, and the interpretation of interview results.

The researchers may use a quantitative research design in future studies to confirm how important the factors identified in this study are during the idea generation stage of the PSI process. According to recent studies (Bysted and Jespersen, 2014; Cinar, Trott and Simms, 2019; de Vries, Bekkers and Tummers, 2016; Nguyen *et al.*, 2023), there is a notable lack of knowledge about identification and understanding the antecedents associated with each phase of the PSI. Hence, research might be directed towards the remaining stages that are recognized in the existing literature.

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