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Public service motivation and job satisfaction: The role of social support during crisis

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Abstract

Research background: Different crises (COVID-19 pandemic, war, natural disasters etc.) usually require new ways for providing public services to the citizens and, from this, to rein-

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terpret and adjust the role of the public servant as the strategic key for assuring the continuity of the governance at all levels.

Purpose of the article: The article establishes a relationship between the public service motivation dimension and job satisfaction aimed to analyze the mediating role of social support in a crisis.

Methods: The standardized questionnaires, i.e. The Minnesota Satisfaction Questionnaire, Work Design Questionnaire, and Perry's PSM scale, were used to observe variables in the research model. An exploratory factor analysis was used before hypothesis testing. We deployed a structural equation modelling (SEM), as a multivariate technique, to test and evaluate multivariate causal relationships between constructs.

Findings & value added: Based on a sample of selected Central and East European countries (namely Poland, Romania, and Serbia), the study confirms the significant impact of social support on the relationship between self-sacrifice and compassion, as a public service motivation dimension, and extrinsic job satisfaction and intrinsic job satisfaction. Social support received from colleagues and supervisor is identified as a powerful non-monetary means of neutralizing negative effects during crises and increasing job satisfaction.

Introduction

The crisis resulting from the COVID-19 pandemic has created special challenges for the public sector, which are primarily reflected in finding ways to maintain continuity in the providing of public services, and then in identifying an adequate approach to managing public servants. Like all other crises, it requires unusual engagement of all public employees to ensure continuity in the daily routine of public services, such as administration, education, transportation, and health care. For some public sector organizations, such conditions are marked as regular, but with increased work intensity (for example, hospitals and health facilities), while for other organizations these occasions are noted as non-standard and require special directions (for example, schools and universities) (Yang, 2020). General recommendations for the provision of public services indicate that public servants should demonstrate care for others, self-sacrifice, empathy, creative and quick thinking in crisis situations and timely action in critical moments (Kauzya & Niland, 2020). All the above creates a completely new context for the work and activities of public servants by assigning them the roles of heroes, without prior psychological preparation or a developed approach to human resource management in such conditions.

Challenges in the work environment of public servants have occurred because of changes in the location of work, increased demands in work tasks and changes in lifestyle beyond work (Schuster *et al.*, 2020). These settings generate special challenges and risks faced by public servants in

the daily routine of performing tasks and they can generally be classified into two groups: those that arise as a result of working in a usual work place, but in new circumstances, and those that arise as a consequence of working from home, bearing in mind that a significant number of employees in the public sector are forced to work from home due to the application of the strategy of “locking” to preventing the spread of infection. The first group of challenges is associated with a higher risk of infection, which creates great psychological pressure on employees, especially those who have an increased fear of infection or a real higher risk of disease (mainly related to age, gender, or previous existence of chronic diseases). In addition, daily encounters with people who need help or who are helpless cause additional stress at work for employees, and often a sense of frustration due to the feeling of not being able to do more. This increases the risk of absenteeism or demotivation of public servants.

The second group of challenges is related to the circumstances of working from home, which is primarily based on the use of Internet tools for online cooperation or content sharing tools (Horowitz & Leino, 2020; Mihalca *et al.*, 2021)). This leads to a reduction in physical interactions between employees and increases the risk of alienation. Under normal circumstances, the option of working from home was mainly used as a motivational component, because it provided a better work-life balance, which gained high importance in previous years. In the new conditions of the pandemic, working from home instead of the traditional option becomes a “must” and brings with it an increased risk of stress and loneliness. For both of groups of public servants an increased work effort, difficult working conditions, loneliness, and exposure to stress can lead to a lower level of job satisfaction.

The listed challenges and an increased risk of negative effects of work in these settings require finding adequate mechanisms for employees in the public sector in order to neutralize the negative effects, preserve job satisfaction, and ensure continuity in the provision of public services. Times of crisis put managers of public sector organizations in a position to search for a “round cube” of a mechanism that will positively affect motivation and satisfaction. Limited opportunities to use usual incentives during the crisis intensified efforts to find other factors which can have a positive effect on job satisfaction of public servants. In this context, focusing on job characteristics, which can be influenced by job (re)design techniques, seems a realistic option, because it does not require significant prior preparation, nor

lengthy implementation time. The study of Glaser *et al.* (1999) has revealed a positive buffering role of social support indicating a lower stress level when the experienced social support was high. Social support demonstrated significant effect on the social stressor–performance relationship (Siu *et al.*, 2013). Foy *et al.* (2019) found that employees exposed to a higher level of job stress can improve performance if they receive social support. On the other hand, previous studies identified a positive relationship between social support and job satisfaction (Pohl & Galleta, 2017; Orgambidez & Almeida, 2020) or indirectly by reducing work-related stress (Sundin *et al.*, 2007).

The purpose of this paper is to examine the mediating role of social support in the relationship between public service motivation and job satisfaction in times of crisis. According to the authors' best knowledge, there are no previous studies in which such a research model has been used, especially in the context of Central and Eastern European countries. The aim of this paper is to identify and confirm the constructs of public service motivation in these countries, and then to determine the indirect impact of social support on the relationship between PSM and job satisfaction. Identifying the impact of social support on this relationship has important practical implications for managing the satisfaction of public servants during periods of crisis.

Theoretical background and hypotheses

Public service motivation and CEE context

Numerous scientific projects and contributions of various authors over the decades have not faded the importance of public service motivation (PSM), and the topicality is additionally encouraged by the current challenges in the public sector caused by the pandemic. Starting from the early effort of Perry and Wise (1990), who defined public service motivation as “an individual's predisposition to respond to motives grounded primarily or uniquely in public institutions”, various authors (Brewer & Selden, 1998; Chanlat, 2003) continued to shape the theoretical background by giving their own interpretations of PSM that differed from the initial ones. Respecting and summarizing the achievements of previous scholars, Vandenamee (2007) offered a compromise definition that describes PSM

as a unique set of “the belief, values and attitudes that go beyond self-interest and organizational interest, which concern the interest of a larger political entity and that motivate individuals to act accordingly whenever appropriate”. The useful framework for understanding PSM comes from the four-dimensional constructs (Perry, 1996): attraction to public policy making (APM), commitment to the public interest (CPI), compassion (COM), and self-sacrifice (SS) related to the typology of motivations associated with public service that includes rational, norm-based, and affective motives (Perry & Wise, 1990). APM refers the rational motives of people who are interested in participation in public policy and dedicated to public service and community building. CPI includes normative motives of people and describes their tendency to follow and respect commonly held public values. The COM dimension describes one’s desire to understand and identify with the needs and the wants of the other members of a community, and the SS dimension refers to an individual’s willingness to help other members of a community and subordinate own benefits to the interest of community, both of which noted as affective motives (Kim *et al.*, 2013; Min *et al.*, 2021).

The established theoretical background has enabled the proliferation of research in which the multidimensional facet of public service motivation has a central place. The scholars’ research registered evidence on the relationship between PSM and work-related outcomes, such as job performance, job satisfaction, job stress, and turnover intention. Vandenaabeele (2009) found that three dimensions of PSM are significantly related to self-reported performance of Belgian civil servants, while the path for self-sacrifice dimension is not confirmed. The same research has also revealed the mediation effect of job satisfaction for noted relationship. Kim (2012) reported a statistically significant and positive association between PSM and job satisfaction, indicating that Korean civil servants with a high level of PSM rate higher job satisfaction, as well as organizational commitment. Research among Egyptian professionals engaged in providing basic public services recorded positive and a statistically significant relationship between PSM and job stress, while direct effect of PSM on quit intention is not confirmed (Gould-Williams *et al.*, 2015). Bright (2021) reported that a direct relationship between PSM and turnover intention of federal employees in the State of Oregon is not statistically significant, while turnover intention is significantly predicted by job satisfaction, also supporting the mediating role of this variable. This result reveals that a high level of PSM

does not directly reduce the turnover intention, but a high level of job satisfaction can have a positive impact on reducing the turnover intention while indicating a direct and indirect association between PSM and job satisfaction. Such a complex of interrelated and conditioned relationships between variables may indicate that a higher level of PSM would result in a higher level of performance of public employees, a higher level of their job satisfaction or commitment to public organizations (Bright, 2008). At the same time, PSM can serve as a tool for setting human resource management practice in a public organization with the aim to shape a staffing process and identify candidates who are best fitted for public service. PSM can also have a significant application as a tool for identifying preferences of individuals for employment in a particular sector of the economy i.e. public, non-profit sector, and for-profit sector. Clerkin and Cogburn (2012) identified the moderator role of self-sacrifice dimension of PSM on students' sector preference of future work. Based on the results of this research, it is also possible to identify PSM as an important support factor for human resources professionals in their intention to identify through the selection process the individuals who are most suitable to work in the public service.

Hsieh (2018) stated that PSM is largely rooted in altruism and researchers often compare PSM to this feature. On the other hand, Perry (1997) noted that compassion and self-sacrifice as a dimension of public service motivation are closely associated with altruism. Additionally, Stefurak *et al.* (2020) emphasizes the importance of expressing altruism and prosocial values that are essentially contained in the compassion and self-sacrifice dimensions and at the same time highlight their central role in PSM. The current circumstances in which public employees perform their daily tasks focus on caring for the lives of others or performing activities that enable them to complete basic life activities without a lot of hindrance. Public employees subordinated their own interests to the interests of the community or society, putting their own lives at risk due to the possibility of infection with the virus. In this way, they expressed a high level of altruism and empathy towards other members of society, while demonstrating compassion and self-sacrifice in everyday work in stressful environment. Eldor (2018) argued that a stressful situation, such as workload or high demands from community members, can induce the coping mechanism of compassion. Public service employees can demonstrate compassion through interaction with the others within their organization or through daily routine at the workplace and interaction with citizens. In the context of the work en-

vironment, compassion as a type of socially oriented behavior enables individuals to better deal with unexpected circumstances (Nisar *et al.*, 2020) that may arise because of local events or global challenges. Dutton *et al.* (2006) stated that the demonstration of compassion is a multidimensional process that encompasses three elements: the ability to perceive the other person's suffering, an empathetic approach to the person experiencing pain or suffering and acting in a way to help that person alleviate suffering. Through PSM, the dimension of compassion is primarily related to the business context, but it is deeply rooted in different religions, philosophy, and sociology (Kalwani, 2021). The presence of compassion in the work environment and the development of a culture that supports it, strives to express a twofold positive effect: the first, the development of better relations among employees within the organization, and the second, the establishment of predispositions for high quality services in the public sector. Research carried out in the Chinese context registered a positive association between compassion and job satisfaction (Liu *et al.*, 2014). A longitudinal study has also revealed that compassion has a statistically significant and positive effect on work engagement, as well as a positive effect on service-oriented performance of public service sector employees in Israel, as rated by citizens (Eldor, 2018). The positive effect of compassion on work engagement is also revealed in Pakistan's public sector hospitals (Nadim & Zafar, 2021).

Following the research of other scholars, Giacomelli *et al.* (2020) highlighted self-sacrifice as a dimension of PSM, which essentially argues for the altruistic value of PSM. On the other hand, Zarychta *et al.* (2020) argued that some scholars insist on the distinctive dimensions of PSM and mainly focus on self-sacrifice in their studies, but also support self-sacrifice as a dimension to a large extent like altruism. Research on self-sacrifice in the health, local public administration and non-profit organizations in Italy registered a positive effect of self-sacrifice on organizational commitment. The relationship between these constructs also depends on procedural constraints that increase the sense of separation from the organization even when self-sacrifice is at a high level (Giacomelli *et al.*, 2020).

Despite the different results of the previously mentioned studies, it is possible to identify their common feature, i.e. that the research was conducted in different countries with different contexts. Comparing the four dimensions in Germany and the UK context, Vandenaabeele *et al.* (2006) concluded that PSM is a universal concept, while suggesting its varying

suitability of its application in different countries. Discussing the possibilities of international research on PSM, Kim and Vandenabeele (2010) concluded that the basis for understanding public services comes from the West, but also that through its own preferred culture each country can express prerequisite values that individuals adopt, and which depend on national and social conditions. This conclusion is also indicated by previous research in which numerous antecedents of PSM were identified. Camilleri (2007) identified a number of factors that may affect PSM and classified them into the following five categories: personal attributes, role states, employee-leader relations, job characteristics, and employee perception of an organization. These factors indicate the importance of social constructions as an antecedent of PSM, but also the important role of the country itself and its historical heritage and cultural values in shaping the values and verification of PSM constructs. Research conducted by Liu *et al.* (2008) in the Chinese context confirmed the presence of the three PSM dimensions, with the absence of the compassion dimension, although the authors state that the generalization of PSM is limited and depends on the political and cultural environment. Breaugh *et al.* (2018) stated that values and norms that come from social structures constitute the basis of PSM and indicated that the development of PSM depends on the socio-historical context, such as religion, education or family. Perry (1997) pointed out that political ideology influences the values and beliefs of individuals and argued that the greater presence of liberalism should have a positive relationship with public service motivation. Therefore, political ideology, i.e. the presence of different political systems in a country, is marked as an important antecedent of public service motivation. The intertwining of cultural-historical heritage and political systems creates a unique set of conditions for each country that can shape PSM.

The study on international differences in public service motivation conducted by Vandenabeele and Van de Walle (2008) revealed that there are significant differences between different regions in the world even when considering that PSM is a more or less universal concept. In the same study, the authors identified three regions on the European continent, such as Western Europe, Eastern Europe, and Southern Europe, which they independently observed in the analysis. Prior to that study, Norris (2003) in his research in the field of public service motivation identified the following regions on the European continent: Western, Central and Eastern Europe. In addition to the knowledge that these studies showed that differ-

ences in the patterns of PSM are present in different regions of the world, they have also found that the European continent cannot be viewed as a single region in research related to public service motivation, but it is possible to identify sub-regions constituted of several countries with similar historical, cultural, and political heritage. Considering the results of previous research and the identified differences between sub-regions, but also similarities within the sub-regions themselves, the subject study is focused on a single region of Central and Eastern Europe (CEE). Additional support for this approach was identified in Houston's (2014) study that examined PSM in a unique sample of post-communist countries of Central and Eastern Europe.

Research in the field of public service motivation is not the only one that views this sub-region as a single entity. A significant number of studies in the field of international human resource management practice consider this region as a unique entity. General employee motivation in the selected countries of CEE was identified in the study developed by Hitka *et al.* (2018). Berber *et al.* (2017) conducted research comparing compensation management practices in Central and Eastern Europe versus Western counterparts. They argued that the differences in compensation management practices between these comparisons stem from the communist, or socialist political heritage, bureaucracy, history, and culture. A study based on the CRANET project has identified specific characteristics of CEE countries that define their unique context, coming from the strong influence of communism and the planned economy until the 1990s, a state-led model of development, and a significant effect of culture, ethics, and religion (Berber & Lekovic, 2018). The study on human management practice in Central and Eastern Europe is based on the approach that this region is viewed by the West as a largely homogeneous region that experienced more than 40 years of communism (Poór *et al.*, 2020). Poland, Serbia, and Romania are present in the mentioned research in the group of CEE countries. The specific background of the public service in Poland, Romania, and Serbia is shaped by historical, political, and socio-economic factors unique to each country. These shared elements often reflect broader trends in post-communist transitions, European Union integration, and efforts to modernize governance. The reason for making research that embedded these countries is given by their common points regarding the evolution of public service: all three countries underwent a transition from communist rule to multi-party democracies in the late 20th century, leading to significant changes in public

administration structures and practices; post-communist reforms in Poland, Romania, and Serbia included efforts to decentralize governance structures which involved devolving power and decision-making authority to regional and local levels (Kondratenko *et al.*, 2020; Săraru, 2023, Dušan *et al.*, 2018); the establishment of professional civil service systems has been a common trend that involves merit-based recruitment, performance evaluations, and efforts to professionalize the public service workforce; the analysed countries have pursued (Poland in 2004 and Romania in 2007) or are pursuing (Serbia applied for EU membership in December 2009 and was granted EU candidate status in March 2012) European Union membership (Đinđić & Bajić, 2018). As part of this process, they have aligned their public service systems with EU standards, incorporating principles of transparency, accountability, and efficiency.

Socio-economic conditions in one country can also be identified as factors influencing PSM, especially in those situations where various crises lead to a rise of unemployment rate in private business, and job security is predominantly present in the public sector (Ballart & Rico, 2018). In such circumstances, it is possible to expect the modification of employees' behavior to the new situation through the demonstration of a much higher level of altruism due to the fear of losing their job. This effect can be expected in countries with less developed economies or in those that undergo economic transition, rather than in developed economies of the West. Zarychta *et al.* (2020) stated that jobs in public administration in developed Western countries are paid less than jobs in the private sector, which indicates the necessity to find additional motivators to ensure that vacancies in the public sector are filled and that work tasks are done satisfactorily. The beginning of the transition process and the transformation to a market economy in most CEE countries has brought two important effects in the context of the public sector: greater job security and higher compensations, than in the private sector, which was supported by foreign direct investment and high unemployment, which in turn brought to the employers a bigger bargaining power. Over time, public sector jobs have become less paid than private sector jobs in the countries belonging to this region. From the aspect of the research of public service motivation, this brought the countries of the CEE region closer to the countries of the West. This was further contributed by a drastic reduction in the unemployment rate, and some sectors evidenced deficit in the labor. The similarity of the existing PSM context in CEE and Western countries allows altruism to be fully ex-

pressed in the work of individuals in public administration. An additional reason lies in the fact that public sector wages in CEE countries are on average still lower compared to similar public sector jobs in Western countries. Due to the above and the intention to get employed in the West, special incentives for public employees in CEE countries came to the fore. In parallel with the economic transition, the transformation of the public sector in these countries took place, which — during the communist period — served more as a control structure for maintaining order than for providing the necessary services to citizens (Houston, 2014).

Jensen *et al.* (2019) stated that working conditions for frontline public service providers depend on decisions of policy makers and potentially induce the uncomfortable relationship between this group of public service stakeholders with expected negative effect on work attitudes. This kind of situation usually occurs during various reforms, changes in policy makers, or during crisis. The COVID-19 pandemic is one of those crisis situations that caused dramatic changes in the work of public employees. The need for altruistic behavior entirely tested the dimensions of PSM, while at the same time the imposed current circumstances at the workplace intensively affected job satisfaction, with an evident, potentially negative effect. The subject study is based on the expectation that in such circumstances compassion and self-sacrifice as key dimensions associated with altruism will come to the fore in the behavior of public employees. An additional reason for such expectations is the cultural heritage of the countries in which the research was conducted, i.e. countries which strive more for collectivism than individualism.

Public service motivation and job satisfaction

Over the decades, job satisfaction has attracted the attention of researchers and practitioners and has regained its importance with the changing business environment and the emergence of numerous contemporary challenges. Herzberg *et al.* (1967) defined job satisfaction as an employee's feeling about their job. Similarly, Spector (1997) describes job satisfaction as the extent to which employees like his/her job. The extension of the context was suggested by Yang (2009), who defined job satisfaction as the affective reactions of an employee to an organization. The previous determinants point to the twofold importance of job satisfaction: the first, in which the focus is on the individual and his/her feeling in relation to the

performed work individuals, and the second, which is focused on the organization and related outcomes. Hirschfeld (2000) suggested that job satisfaction is an important attitude for the employee because it affects the well-being of the individual and life satisfaction in general, but it is also essential for the organization because it is related to organizational performance. A higher level of job satisfaction establishes assumptions in which both the individual and the organization achieve benefits and prosperity. An analysis conducted in Serbia in Belgrade region in 2010 and 2017 shows that the employee satisfaction level increase into 2017 motivated by the reforms that were adopted and that conducted to higher wages, work shorter working hours and due to cooperation and relations with superiors that increase the human respect values (Lekić *et al.*, 2019).

Hsieh (2018) also noted the importance of job satisfaction by suggesting a relationship with other work outcomes such as performance, absenteeism, and turnover. The harmonization and interrelatedness of the outcome of job satisfaction at the same time indicates that the causes of a certain feeling of the employee do not derive only from her/himself, but also depend on other organizational factors. Other research (Androniceanu *et al.*, 2020) reveal that it is a direct correlation between motivation and professional performances for delivering qualitative public services. Also, a study that has as the main aim to explore the effects of job satisfaction practices for public sector employees in Spain and Poland shows a positive relationship between motivational factors and job satisfaction and reveals the fact that the variable 'country' doesn't make significant differences (de Juana-Espinosa & Rakowska, 2018).

The initial postulate about it came from Herzberg (1966) and his two-factor theory of job satisfaction, suggesting that job satisfaction depends primarily on intrinsic factors, while job dissatisfaction comes from extrinsic factors (Herzberg *et al.*, 1959). Research conducted by Centers and Bugental (1966) is based on the distinction between intrinsic sources of job satisfaction, such as opportunities for self-expression, feeling at work or interest in work, and extrinsic sources of job satisfaction, such as relationship to co-workers, job security or salary. Spillane (1973) noted that intrinsic factors are related to the essence of the work employees do, while extrinsic factors are related to the organizational environment in which employees perform work, and accordingly emphasized two different aspects: intrinsic and extrinsic job satisfaction. Into the same note the study developed by Profiroiu *et al.* (2021) shows that the public servants from Romanian Senate

feel work satisfaction more in remuneration level and job security and less in merit recognition and the opportunities to develop new skills. Weiss *et al.* (1967) identified three dimensions of job satisfaction, such as intrinsic satisfaction, extrinsic satisfaction, and general satisfaction, originating from the multifaceted Minnesota Satisfaction Questionnaire (MSQ). Subsequent research was based on two dimensions: intrinsic job satisfaction (IJS), which describes an individual's sense of the nature of work, and extrinsic job satisfaction (EJS), which refers to an individual's feelings about various external aspects of work (Spector, 1997). A recent study is also based on the two-dimensional identification of job satisfaction and indicates that intrinsic job satisfaction refers to an individual's sense of responsibility for the performed job, perceived self-respect or achievement, while extrinsic job satisfaction is described as satisfaction which comes from the work environment or organization, including factors, such as employee promotion or leadership (Chang *et al.*, 2021). The subject study is based on two-dimensional identification of job satisfaction and the identification of the relationship between PSM and the construct of job satisfaction.

Numerous previous studies addressed the relationship between PSM and job satisfaction. The study conducted in the Chinese context revealed a positive relationship between PSM and job satisfaction, except for the attraction to the public policy making dimension (Liu *et al.*, 2008). A study among emergency medical services professionals found that all three dimensions of public service motivation are significantly related to job satisfaction (Stefurak *et al.*, 2020). A positive and statistically significant relationship between PSM and job satisfaction was identified through a study in which participants were front-line police officers in the Midwestern United States (White *et al.*, 2021). A meta-analytical study of the relationship between public service motivation and job satisfaction has supported attitude that higher PSM has a positive impact on job satisfaction and suggests that affirmation of PSM-related needs of employees can serve as low-cost determinants of job satisfaction (Homberg *et al.*, 2015). Research conducted by Breaugh *et al.* (2018) has showed that the two dimensions of PSM, i.e. attraction to public policy and commitment to public values, supported a statistically significant indication of job satisfaction, while the other two dimensions did not. Some other studies did not identify a statistically significant association between the PSM dimension and job satisfaction (Bright, 2008; Caillier, 2015).

Social support

The crisis caused by the COVID-19 pandemic has highlighted the immeasurable importance of the functioning of the public sector in the delivery of public services during unforeseen conditions, while civil servants have felt particular pressure and responsibility, even fearing for their own lives. In such circumstances, the support provided to employees can be very effective in changing their motivational potential or work outcomes. Support can come from a variety of sources and two types can be identified: workplace support, which refers to an individual's perception of what the organization and its members are doing to maintain a certain level of employee well-being at work, and family support, which includes support from family members (Russo *et al.*, 2015). Both of these types of support can be realized in two ways: as instrumental or technical support, primarily aimed at providing advice on how to perform work tasks, or how to use certain instruments or tools in the work, and as socio-emotional support that refers to the willingness to accept someone else's negative experience or emotion in order to overcome it more easily and to reduce the harmful impact (Karasek *et al.*, 1998). The opportunities provided by ICT solutions offer a new way to develop social interactions even when social actors are not in direct contact, which at the same time enables the provision of social support without physical presence (Slavković *et al.*, 2021). In general, Schwarzer *et al.* (2004) defined social support as the "function and quality of social relationships, such as perceived availability of help or support actually received". Button (2008) described social support as a specific set of social relationships, emotional interactions, and behaviors by employees in specific settings that affect an individual's perception of received support. Workplace social support can be received from co-workers or from the immediate supervisor (Karasek *et al.*, 1998). The subject study views both types of support as an integrated construct of social support.

Previous studies have shown a strong and positive relationship between social support and job satisfaction. Perceived social support from co-workers and supervisors has revealed a positive effect on job satisfaction (Pohl & Galleta, 2017; Orgambidez & Almeida, 2020). Sundin *et al.* (2007) suggested that social support affects health and can improve job satisfaction by reducing work-related stress levels. On the other hand, research has shown that low levels of social support translate into higher levels of stress and burnout (Coffey & Coleman, 2001), pointing out that social support

enables employees to respond to job challenges and demands (Orgambidez & Almeida, 2020), thus reducing the negative impact of work stressors that may be particularly pronounced in crisis situations more easily.

In the individual relationship, PSM was labelled as a strong, positive, statistically significant predictor of job satisfaction (Liu *et al.*, 2008; Stefurak *et al.*, 2020). Although not in question, Min *et al.* (2021) suggests that numerous studies were devoted to identifying factors that may influence the relationship between PSM and job satisfaction. In the previous studies, researchers identified various contextual variables and constructs as possible mediators of the relationship between public service motivation and job satisfaction. The established positive direct relationship between PSM and job satisfaction became negative when organizational characteristics were included as a mediator variable (Kjeldsen & Hansen, 2018). The perceived organizational prestige achieved a statistically significant positive mediator role in the relationship between PSM and job satisfaction, suggesting that the outside view of the organization had a mediator effect on the noted relationship (Bright, 2021). A study conducted by Hsieh (2018) found that the “love of money” construct has a statistically significant moderating effect on the relationship between PSM and job satisfaction when “love of money” is the dominant work motive. These studies have revealed that a number of variables can affect the relationship between public service motivation and job satisfaction. On the other hand, social support has appeared in previous research as a variable that achieves a mediating effect in various studies focused on factors influencing work outcomes (Siu *et al.*, 2013; Slavković *et al.*, 2021).

A review of the available literature showed the absence of empirical evidence of the mediator effect of social support on the relationship between public service motivation and job satisfaction. With the esteem of the previous review and the existing gap in the literature, the following research question was formulated:

RQ: Does public service motivation affect job satisfaction of employees in public service institutions?

Method

Sample and procedure

The determination of the necessary sample size occurs prior to commencing the sampling procedure. In accordance with the recommendations proposed by Westland (2010), the minimal sample size was determined deploying Soper's calculator (2018). A minimum sample size of 288 respondents was achieved by including the assumptions of the research model into the computation. After considering the involvement of three nations in the study, it was concluded that around 100 participants per country were required. Subsequently, the sampling procedure was initiated.

The survey was conducted and targeted at public service institutions located in Poland, Romania and Serbia, and data was analysed during 2021. In order to create a diverse sample of participants representing a nationwide population of employees in public service institutions, several sectors were included in this research i.e. healthcare, courts, education, and social services. The list of public service institutions eligible for inclusion in the study was based on publicly accessible data that were available online during the research period. Data were collected in two ways, by an online survey and a paper-based survey. There are two primary justifications for implementing this approach: firstly, the availability of respondents during the research period, and secondly, guaranteeing an adequate number of valid questionnaires in accordance with the predetermined minimum sample size. A questionnaire survey was used to collect the study data. The English questionnaire was back translated into Polish, Romanian and Serbian. Apart from the questionnaire, a letter was sent to the CEOs, seeking permission to run a survey on their employees. In accordance with CEOs' permission, questionnaires were distributed to employees through a HR staff member or senior manager. The respondents were randomly selected and engaged in full-time employment. The snowball sampling method was employed to obtain responses by asking initially selected participants to enlist additional individuals to partake in a questionnaire. The sampling procedure was terminated upon receipt of 420 questionnaires, of which each country provided a minimum of 120 questionnaires. Before the questionnaires were distributed, the prospective respondents were told that participation was voluntary and that their individual responses would be confidential and used only for the purpose of this study. After discarding

uncompleted questionnaires, counted at 53 or 12.62%, a total number of useable questionnaires is 367 or 87.38%, including 104 from Poland, 107 from Romania and 156 from Serbia.

Measures

Independent variable. PSM was measured with items from a scale developed by Perry (1997). Perry used the scale that consists of four dimensions of PSM: attraction to public policy making, commitment to the public interest, compassion, and self-sacrifice. Later studies proved that the values associated with PSM are different in different national contexts (Norris, 2003). Vandenabeele and Van de Walle (2008) highlighted three dimensions: politics and policy, compassion, and self-sacrifice, while Liu *et al.* (2008) conducted research in China and proved that all dimensions initially proposed by Perry (1997) are supported, except compassion. Moreover, in line with previous empirical results, it was possible to identify concerns about the validity and substantive fit of the attraction to public policy making, with an explanation that this dimension emphasizes an interest in public policy, but not a desire to be actively involved in policy creation (Kim, 2009; McCarthy *et al.*, 2019). According to given evidence, the authors have used items representing commitment to the public interest, compassion and self-sacrifice as PSM dimensions. Respondents were asked to rate their agreement with questions about their interest in public service motivation. The authors used a 5-point Likert scale of “1 = ‘Strongly disagree’ and 5 = ‘Strongly agree’”). In this international research, the authors have found that two of the dimensions of the PSM construct were confirmed but the commitment dimension was unconfirmed. The results of the exploratory factor analysis (Table 1) (KMO = 0.627, Bartlett’s test of sphericity = 392.126; df = 21; $p < 0.001$) and the reliability analysis indicate two PSM dimensions. First, self-sacrifice represents the desire of employees to produce benefits for the community and to set social goals above their own interests (Perry, 1997; Kim *et al.*, 2012). Second, compassion is closely aligned with altruism. It represents “a motive that entails love and concern for others and a desire that others be protected” (Perry & Wise, 1990).

Dependent variable. Job satisfaction was measured by seven items adopted from Weiss *et al.* (1967) Minnesota Satisfaction Questionnaire. Respondents were asked to select one of the following values on a 5-point scale of “1 = ‘very dissatisfied’ and 5 = ‘very satisfied’”. According to the explorato-

ry factor analysis (KMO = 0.773, Bartlett's test of sphericity = 631.337; $df = 15$; $p < 0.001$), two dimensions of job satisfaction are constructed. The first dimension represents extrinsic job satisfaction, which explains employees' level of satisfaction with company policy and human relations. Another dimension is related to intrinsic aspects of job satisfaction, which explains the level of responsibility and current social status of employees in public sector (Hancer & George, 2003).

Mediating variable. Social support was constructed through the exploratory factor analysis (KMO = 0.632, Bartlett's test of sphericity = 199.828; $df = 3$; $p < 0.001$) based on three items taken from the survey questionnaire. Specifically, measures were adopted from previous research conducted by Morgeson and Humphrey (2006), who have created The Work Design Questionnaire (WDQ). According to their classification of work characteristics, the authors of this study have used social support which represents relations inside the organization and the opportunity to receive feedback from others.

KMO scores indicate that sampling is significant and adequate. Bartlett's tests of sphericity ($p < 0.001$) justify the utilization of factor analysis (Hair *et al.*, 1998). The values of Cronbach's alpha coefficient can be accepted (George & Mallery, 1999) and range from 0.603 to 0.751. Factor loadings range between 0.590 and 0.846, which is way above conventional cut-off values (Henson & Roberts, 2006). In terms of the convergent validity of measures, the average variance extracted (AVE) is slightly below the suggested level of 0.500 (Fornell & Larcker, 1981), while the composite reliability (CR) of all four measures is well above the suggested threshold of 0.600 (Fornell & Larcker, 1981). AVE also is acceptable (Lam, 2012; Dabić *et al.*, 2021), so it can be concluded that the measures assumed in this study are reliable (Table 2).

Control variables. In line with previous studies, some individual and organizational characteristics may affect the relationship between independent and dependent variables. Therefore, these variables need to be controlled to achieve an adulteration free relationship between observed variables (Delery & Doty, 1996; Liu *et al.*, 2008; Liu & Almor, 2016). The authors of this study took into consideration several demographic characteristics, such as age (under 34 years old, 35–54 years old, over 55), gender (male and female), educational attainment (high school degree or equivalent and at least a bachelor's degree), years of experience (under 5 years, 6–10 years, 11–15 years, 16–20 years, over 21 years), and number of employ-

ees in the organization (under 10 employees, 11–50 employees, 51–250 employees, over 250 employees).

Results

Common method variance

The authors used the method of marker variables, in which a variable that is theoretically unrelated to the model is used as a “marker” or surrogate for common method variance. The authors used years of experience of employees in the organization as the marker variable, which was not significantly correlated with any of the study variables. The smallest observed correlation between the marker variable and the variables used in this study was $r = -0.011$, $p = 0.982$. As the correlations are weak and non-significant, this suggests that there is not a substantial amount of common method variance in this study (Lindell & Whitney, 2001).

Direct and indirect effects

The subject research was comprised of several steps. First of all, the authors presented the results of descriptive statistics and zero-ordered correlations among variables of interest using SPSS 23 (Table 3). According to given results, several associations between variables are important. Self-sacrifice and compassion as dimensions of PSM are significantly and positively associated with job satisfaction and social support. In addition, social support is significantly and positively associated with extrinsic and intrinsic job satisfaction. Among the controls, age and gender are significantly and positively associated with compassion, while educational attainment and organizational size are significantly and negatively associated with compassion. Fourth, significant correlations are found between five principal variables in this study, implying the need to test the mediation effect.

Secondly, the authors applied structural equation modelling (SEM) to test the proposed theoretical model with the use of AMOS software. They made two models. The first one was made to test direct effects. The second model included the mediator variable. The authors followed the procedure established in prior studies examining the mediated effect using SEM (Wang *et al.*, 2018; Dabić *et al.*, 2021). Bootstrapping was used to determine

the significance of the indirect associations in the model (see Figure 1). Goodness of fit statistics was calculated for both models (Table 4).

In Table 5, the direct effects in the mediation structural model are presented. The results reveal that social support has significant and positive impact on intrinsic job satisfaction and extrinsic job satisfaction.

Table 6 outlines the indirect effects in the mediation structural model. The results from the entire structural model reveal the mediation effect of social support on the relationship between dimensions of PSM and extrinsic and intrinsic job satisfaction. The direct effect of self-sacrifice and compassion as PSM dimensions on extrinsic and intrinsic job satisfaction is not significant. Therefore, the authors observed statistically significant and positive indirect effects going through social support. Social support fully mediated the relationship between self-sacrifice and extrinsic and intrinsic job satisfaction. Also, social support fully mediated the relationship between compassion and extrinsic and intrinsic job satisfaction. According to presented results, the authors state that social support is a stronger mediator in relationship between compassion and both extrinsic and intrinsic job satisfaction.

The results of the invariance analysis indicate that the research model lacks an invariant and that the relationships between constructs vary across countries (Table 7). A multigroup SEM analysis has revealed that the relationship between compassion and intrinsic job satisfaction differs among Poland, Romania, and Serbia. Only in Serbia was a statistically significant impact observed in the aforementioned relationship. In contrast to Poland, social support had a statistically significant and positive impact on extrinsic job satisfaction only in Serbia and Romania, with the strength of this effect being greatest in Serbia. While Poland and Serbia observed a positive association between social support and intrinsic job satisfaction, this relationship was not confirmed in Romania (Table 8).

Discussion

The purpose of this study was to explore the mediating role of social support in the relationship between public service motivation and job satisfaction in times of crisis. There were several noteworthy findings and research results. For one, this study confirmed the existence of PSM dimensions in a sample of Central and Eastern European countries. Previous studies as-

sumed that PSM is a universal concept (Vandenabeele *et al.*, 2006) and that the basis for understanding it comes from the West (Kim & Vandenabeele, 2010). Similar to Houston's (2014) study that examined PSM in a unique sample of post-communist countries of Central and Eastern Europe, this study confirmed the presence of compassion and self-sacrifice as a dimension, but leaves the commitment dimension unconfirmed. Perry (1997) stated that compassion and self-sacrifice are closely associated with altruism, while altruism became particularly important during a crisis when the lives of large numbers of people were endangered, directly or indirectly, through the inability to provide public services. The results obtained further on verify the importance of compassion and self-sacrifice during the crisis period and confirm their central role in PSM (Stefurak *et al.*, 2020).

Secondly, the mediating role of social support in the relationship between the PSM construct and extrinsic and intrinsic job satisfaction was confirmed. The results of the research showed that the social support received from colleagues and supervisors has a positive impact on the relationship between the PSM dimension and job satisfaction. The results of this study follow previous research that showed that PSM is a positive predictor of job satisfaction (Liu *et al.*, 2008; Stefurak *et al.*, 2020) or at least some of its dimensions (Liu *et al.*, 2014). Insight into the tested relations of the structural model reveals that social support has the strongest influence on the relationship between compassion and extrinsic job satisfaction ($b = 0.418$, $p < .01$). Furthermore, although CEE countries are commonly perceived as a relatively homogeneous region (Poór *et al.*, 2020), multigroup analysis has revealed variations in certain relationships between the research model's constructs among Poland, Romania, and Serbia. Additionally, it signifies that variations in the socioeconomic landscape of these nations have emerged due to transformations during the post-communist era. Concurrently, the possibility for further investigation is generated in this manner.

Finally, with a focus on individual direct relations in a structured model of mediation, the results show a strong and statistically significant relationship between social support and extrinsic and intrinsic job satisfaction. Such a positive impact of social support on job satisfaction was identified in previous research (Pohl & Galleta, 2017; Orgambidez & Almeida, 2020). The absence of a direct link between the PSM construct and job satisfaction in the model has confirmed the full mediating effect of social support and its buffering role (Glaser *et al.*, 1999).

Conclusions

The study has confirmed that PSM offers an increase in job satisfaction among public servants when they receive social support from colleagues or supervisors. This statistically confirmed relationship creates benefits for both employees and public sector organizations. Public service motivation was labelled in previous research as a low-cost determinant of job satisfaction (Homberg *et al.*, 2015). Also, social support does not require significant investment, therefore it can be described as a cost-effectiveness option for improving job satisfaction. This is especially important in crises, which usually do not offer an abundance of resources, but have high requirements. Based on the above, it is possible to conclude that social support is a useful tool for increasing satisfaction, and in a specific pandemic crisis, social support contributes to easier overcoming of the challenges of remote working or increased stress for those who work in the standard mode. For both groups of public servants, those who work from home or who do their work from the office, various challenges, such as increased work effort, difficult working conditions, loneliness, and exposure to stress can lead to lower levels of job satisfaction. The results of the study have showed that social support can significantly nullify the negative consequences of these challenges. This effect may be direct or indirect, manifesting itself by reducing work-related stress, which was also confirmed in previous research (Sundin *et al.*, 2007). Maintaining or increasing the existing level of employee satisfaction can have significant positive implications for work-related performance.

As the work of public service employees, in almost all areas of the public service, is deeply regulated by law, the legal landscape regarding social support in public organizations is the crucial issue, especially during crisis. It can vary by country and jurisdiction. However, the legal solutions that public organizations might implement to provide social support during this challenging time may concern remote work policies, flexible work arrangements (Vyas, 2022), health and safety regulations, mental health support (Ong *et al.*, 2022), leave policies (Olding *et al.*, 2021), Employee Assistance Programs (Tsai, 2023), training programs (Barbosa *et al.*, 2022) or temporary employment measures (e.g. reduced working hours, furloughs) (Bennedsen *et al.*, 2023).

It is crucial for public organizations to work closely with legal advisors and relevant authorities to ensure that all implemented measures comply

with existing laws and regulations. The legal landscape is dynamic, and adjustments may be needed based on the evolving nature of the pandemic and legal responses.

The next practical implication confirmed through study shows that particular dimensions of PSM have a positive impact on intrinsic and extrinsic job satisfaction when there is social support during a crisis. Previous research has also highlighted the positive effect of certain dimensions of PSM to better deal with unexpected circumstances (Nisar *et al.*, 2020). This indicates that the presence of PSM creates prerequisites for a successful response of employees to crises, not only those caused by the pandemic, but generally for all crises in which specific challenges are expected for the public servant.

The results of the study confirm the presence of the two PSM constructs, i.e. self-sacrifice and compassion, but negate the presence of the commitment. The results create a dilemma of whether self-sacrifice and compassion are generally present in the context of the Central and Eastern European countries represented in the sample, and whether the absence of the commitment dimension of PSM is related to the crisis. This dilemma indicates the need to repeat the research in changed circumstances that would significantly reflect normal living and working conditions. Future research directions should include differentiating employees according to the mode in which they do their job. The subject study also includes employees who worked remotely, as well as those who did not perform work from home. For employees who worked from home, loneliness was probably a more pronounced challenge, and for others, one can expect greater stress due to increased job demands. For both groups of employees, social support has a significant positive effect, but by means of the following research it will be possible to determine whether the way of providing social support, directly or online, has the same effect on job satisfaction.

The study has certain limitations that indicate directions for future research in this domain. First, the sample size can be judged comparatively modest despite meeting the minimum sample size criteria. Another limitation is related to the research techniques was employed. In order to obtain the required number of valid questionnaires, the data were collected in two ways, by an online survey and a paper-based survey. This is not necessarily a limitation, but leaves room for improvement through unification of approach. The circumstances in which the research was conducted included a period in which working from home was present to a significant extent.

Therefore, two categories of respondents were included in the study: individuals who conduct their work remotely and those who are physically present at their respective workplaces. Adversely affecting the sample's homogeneity, this introduced an additional constraint that was created indirectly. While previous research has established the significance of social support for both cohorts of participants, obtaining more reliable results could be achieved through the replication of the study using a homogeneous sample.

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Annex

Table 1. Exploratory factor analysis

ID	Factors and items	Factors loadings
Factor 1	<i>Self-sacrifice</i>	
1.	Serving other citizens would give me a good feeling even if no one paid me for it.	0.817
2.	I am prepared to make enormous sacrifices for the good of society.	0.799
3.	Much of what I do is for a cause bigger than myself.	0.590
Factor 2	<i>Compassion</i>	
4.	I have little compassion for people in need who are willing to take the first to help others.	0.759
5.	I get very upset when I see other people being treated unfairly.	0.681
6.	It is difficult for me to contain in my feelings when I see people in distress.	0.636
7.	Most social programs are too vital to do without.	0.604
Factor 3	<i>Extrinsic job satisfaction</i>	
8.	I am very satisfied with the way company policies are put into practice.	0.829
9.	I am very satisfied with the way my boss handles his/her workers.	0.772
10.	I am very satisfied with the chance to tell people what to do.	0.764
Factor 4	<i>Intrinsic job satisfaction</i>	
11.	I am very satisfied with the chance to work alone on the job.	0.846
12.	I am very satisfied with the chance to do different things from time to time.	0.836
13.	I am very satisfied with the chance to be "somebody" in the community.	0.686
Factor 5	<i>Social support</i>	
14.	I have the opportunity to develop close friendships in my job.	0.840
15.	People I work with take a personal interest in me.	0.816
16.	I receive a great deal of information from my manager and co-workers about my job performance.	0.694

Table 2. Latent variables, measurement items, factors loadings, AVE, CR and Cronbach's Alpha

	Factor loadings	AVE	CR	Cronbach's α
PSM				
<i>Self-sacrifice</i>		0.551	0.783	0.617
Serving other citizens would give me a good feeling even if no one paid me for it.	0.86			
I am prepared to make enormous sacrifices for the good of society.	0.62			
Much of what I do is for a cause bigger than myself.	0.57			
<i>Compassion</i>		0.361	0.735	0.603
I have little compassion for people in need who are willing to take the first to help others.	0.56			
I get very upset when I see other people being treated unfairly.	0.43			
It is difficult for me to contain in my feelings when I see people in distress.	0.51			
Most social programs are too vital to do without.	0.62			
Job Satisfaction				
<i>Extrinsic job satisfaction</i>		0.622	0.832	0.743
I am very satisfied with the way company policies are put into practice.	0.65			
I am very satisfied with the way my boss handles his/her workers.	0.81			
I am very satisfied with the chance to tell people what to do.	0.65			
<i>Intrinsic job satisfaction</i>		0.628	0.834	0.751
I am very satisfied with the chance to work alone on the job.	0.69			
I am very satisfied with the chance to do different things from time to time.	0.84			
I am very satisfied with the chance to be "somebody" in the community.	0.61			
Social suport		0.618	0.828	0.685
I have the opportunity to develop close friendships in my job.	0.74			
People I work with take a personal interest in me.	0.42			
I receive a great deal of information from my manager and co-workers about my job performance.	0.48			

Table 3. Descriptive statistics and correlation

Variable	Mean	SD	1	2	3	4	5	6	7	8	9
1 Self-sacrifice	3.5422	.77879	1								
2 Compassion	3.4891	.83687	0.168**	1							
3 Extrinsic job satisfaction	3.7230	.84563	0.331**	0.137**	1						
4 Intrinsic job satisfaction	3.3706	.92991	0.358**	0.166**	0.617**	1					
5 Social support	3.4024	.88058	0.286**	0.275**	0.381**	0.340**	1				
6 Age			0.086	0.192**	0.102	0.037	0.074	1			
7 Gender			-0.080	0.158**	0.036	0.009	0.026	0.010	1		
8 Educational attainment			0.067	-0.291**	0.081	0.094	0.019	-0.081	-0.110*	1	
9 Years of experience			0.146	0.060	0.024	0.022	-0.011	0.496	-0.021	-0.016	1
10 Number of employees in organization			0.008	-0.169**	0.097	0.086	-0.038	-0.081	0.002	0.297**	0.063

Notes: * $p < .1$, ** $p < .05$.

Table 4. Goodness of fit statistics

Fit index	Model including mediator variables
χ^2/df	2.594
IFI	0.904
CFI	0.902
AGFI	0.887
RMSEA	0.066

Table 5. Direct effects in the mediation structural model

Path	Direct effect
Self-sacrifice – Extrinsic job satisfaction	0.083 (ns)
Self-sacrifice – Intrinsic job satisfaction	-0.063 (ns)
Compassion –Extrinsic job satisfaction	-0.086 (ns)
Compassion –Intrinsic job satisfaction	-0.055 (ns)
Social support – Extrinsic job satisfaction	0.851 ***
Social support –Intrinsic job satisfaction	0.710 ***

Notes: ns – not significant; *= $p < .1$; **= $p < .05$; ***= $p < .001$.

Table 6. Indirect effects in the mediation structural model

Hypothesis	Path	Direct effect	Indirect effect	Result
H1	Self-sacrifice – Social support – Extrinsic job satisfaction	0.083 (ns)	0.242**	Full mediation
H3	Self-sacrifice – Social support – Intrinsic job satisfaction	-0.063 (ns)	0.202**	Full mediation
H2	Compassion – Social support – Extrinsic job satisfaction	-0.086 (ns)	0.418**	Full mediation
H4	Compassion – Social support – Intrinsic job satisfaction	-0.055 (ns)	0.349**	Full mediation

Notes: *= $p < .1$; **= $p < .05$; ***= $p < .001$.

Table 7. Invariance analysis

Overall model	χ^2	Df	p value	invariant
Unconstrained	412,845	279		
Fully constrained	558,362	317		
Difference	145,517	38	0.000	NO (Groups are different)

Table 8. Multigroup analysis

Relationship	Poland		Romania		Serbia	
	Estimate	p	Estimate	p	Estimate	p
Self-sacrifice – Extrinsic job satisfaction	-0.031	0.798	-0.040	0.127	-0.036	0.262
Self-sacrifice – Intrinsic job satisfaction	-0.197	0.106	-0.221	0.108	-0.217	0.200
Compassion –Extrinsic job satisfaction	-0.036	0.806	-0.115	0.802	-0.152	0.538
Compassion –Intrinsic job satisfaction	-0.024	0.284	-0.068	0.313	0.096	0.074
Social support – Extrinsic job satisfaction	0.832	0.576	0.906	0.005	0.983	0.000
Social support –Intrinsic job satisfaction	0.735	0.000	0.710	0.130	0.831	0.000

Figure 1. Structural model, including mediator variables

