

ON THE PROBLEM OF SOCIAL INNOVATION IN THE LITHUANIAN MILITARY

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Abstract

The article shows the expression of social innovation in the Lithuanian military. By presenting different innovation models and processes, the authors argue that social innovation could be an effective tool for increasing the efficiency, resilience and intelligence of the armed forces. While the general public perception of the military is very technocratic, social practices (leadership, collaboration, communication) can broaden that perception through social innovation. The empirical study reveals that the expression of social innovation enriches social practices, and introduces new perspectives, ranging from advanced mental health support measures to operational collaborative strategies. Social innovation can contribute to the management of contemporary challenges both in the military and in society. By presenting the current expression of social innovation, the paper reveals the opportunities for improving social innovation in the Lithuanian military.

KEY WORDS: implementation of social innovations, leadership in the military, Lithuania, military, social innovation, teamwork in the military.

Anotacija

Straipsnyje atskleidžiama socialinių inovacijų raiška Lietuvos kariuomenėje. Autoriai, pristatydami skirtingus inovacijų modelius ir procesus, teigia, kad socialinės inovacijos gali būti veiksminga kariuomenės efektyvumo, atsparumo ir humaniškumo didinimo priemonė. Nors bendras visuomenės suvokimas apie kariuomenę yra gana technokratiškas, socialinės praktikos (lyderystė, bendradarbiavimas, komunikacija), taikant socialines inovacijas, gali tą suvokimą praplėsti. Empirinis tyrimas atskleidžia, kad socialinių inovacijų raiška praturtina socialines praktikas ir įtvirtina naujas perspektyvas: nuo pažangių psichikos sveikatos palaikymo priemonių iki operatyvinių bendradarbiavimu pagrįstų strategijų. Socialinės inovacijos gali prisidėti prie šiuolaikinių iššūkių suvaldymo tiek kariuomenėje, tiek ir visuomenėje. Pristatant dabartinę socialinių inovacijų raišką, straipsnyje atskleidžiamos socialinių inovacijų tobulinimo Lietuvos kariuomenės pajėgose galimybės.

PAGRINDINIAI ŽODŽIAI: socialinių inovacijų diegimas, lyderystė kariuomenėje, Lietuva, kariuomenė, socialinės inovacijos, komandinis darbas kariuomenėje.

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Introduction

General understanding of social innovation. The definition of social innovation is widely discussed everywhere (Borzaga, Bodini, 2014) from scientific

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literature to the popular media, yet some researchers still call the general body of knowledge on social innovation anecdotal (Calò et al., 2023; Foroudi et al., 2020; Pel et al., 2020a). Moreover, this lively debate has not yet concluded with one unified definition for social innovation (Cajaiba-Santana, 2014). Social innovations in the last decade were defined as the area to ‘scale-up solutions’ and ‘achieve systemic change’ (Eaves, 2015), or as ‘social practices’ which focus on ‘the poorest and most disadvantaged’ (Ates et al., 2019). This perception of social innovation has strong historical links with business development, because social innovations were often seen as a tool to bring technological and scientific inventions to the business sector, and make the multiplication and replication of these inventions generally accessible to society (Dawson, Daniel, 2010).

Rooted in the principles of creativity, collaboration and systemic change, social innovation strives to bring about positive, measurable impacts on communities and societies. At its core, social innovation involves the development and implementation of novel solutions that go beyond incremental improvements (Dawson, Daniel, 2010; Deserti, Rizzo, 2020). It seeks to disrupt established norms and paradigms, fostering transformative shifts in how society addresses issues such as poverty, inequality and environmental degradation (Pel et al., 2020b; Solis-Navarrete et al., 2021). Unlike purely technological innovation, social innovation emphasises the human and social dimensions of problem-solving, recognising that sustainable change requires not only technological advancements, but also shifts in behaviour, attitudes, and institutional structures (Foroudi et al., 2020). Moreover, social innovation is not confined to a single sector or discipline; it spans the intersection of various fields, including sociology, economics, psychology and technology (Batista, Helal, 2023; Solis-Navarrete et al., 2021). It encourages interdisciplinary research and application, recognising the interconnectedness of social challenges and the need for holistic solutions (Broekema et al., 2022).

In the debate around social innovations, it is important to signify what/who are involved, and what/who plays a leading role (Micelli et al., 2023). Here, opinions were different for some time: some researchers underline that social innovation should be carried out by non-profit organisations, others that the leading role be delegated to the public sector, and others point out the significance of the private sector (Batista, Helal, 2023; Dawson, Daniel, 2010). Currently, the common consensus includes all three of these sectors as instigators and developers of social innovation (Foroudi et al., 2020). Moreover, it is strongly argued that collaboration between different stakeholders is a key to inspiring and effective social innovation (Urmanaviciene et al., 2022). Quadruple or even quintuple helixes are used as expressions for such collaborations and partnerships (Broekema et al., 2022).

The recent Covid-19 crisis could be presented as an example of the rapid implementation of social innovation. The Covid-19 pandemic instigated innumerable revisions of existing common understanding (Santos et al., 2023). The concept of social innovation was revised and investigated significantly during and after the pandemic. Calò et al. (2023) essentially revised the concept of transformative social innovation, and provided valuable insights for the foundation of the development of the theory. Additionally, many practical ideas were manifested in various forms. Rapid advancements in telemedicine ensured the continuity of health-care services while minimising the risk of virus transmission (Durugbo et al., 2022; Omboni et al., 2022; Sharma et al., 2022). Contact tracing apps emerged as technological tools to monitor and curb the spread of the virus, showing the potential of digital solutions in public health emergencies (Sharifi et al., 2021). Moreover, the global scientific community witnessed unprecedented collaboration, with researchers sharing data and insights at an accelerated pace, leading to the rapid development of vaccines. Furthermore, beyond healthcare, the pandemic spurred creative approaches to address economic and social challenges (Sharma et al., 2022). Remote work became the norm, prompting the reimagination of traditional work structures (Omboni et al., 2022). Local businesses embraced online platforms, and communities rallied to support each other through crowdfunding initiatives and mutual aid networks (Santos et al., 2023). Education underwent a digital revolution, with innovative e-learning solutions bridging the gap created by school closures. Covid-19 catalysed social innovation by necessitating adaptability and resilience (Santos et al., 2023). The crisis underscored the importance of fostering collaborative, flexible, and sustainable solutions (Durugbo et al., 2022; Sharifi et al., 2021). These examples of Covid-19 crisis management show the potential of social innovation, which can be applied in various other struggling sectors.

Moreover, social innovations are often mentioned among solutions to respond to climate change, achieve climate neutrality, or implement the European Green Deal (Bresciani et al., 2022; Gregg et al., 2020). It is expected that social innovation would promote behaviour change in society and cause a shift in the mindset towards more climate awareness (Engelbrecht, 2018; Gregg et al., 2020). It is expected that social innovation would spur the creation of inventive solutions that not only mitigate the environmental impact but also foster inclusive and equitable development. Moreover, social innovations in the context of carbon neutrality extend beyond technology to embrace novel approaches in policy-making, education and community engagement (Engelbrecht, 2018). Such collaboration between public and private sectors and grassroots organisations and citizens cultivates a collective intelligence that accelerates the adoption of sustainable practices and policies.

Additionally, social innovations are often investigated in the context of public sector institutions, such as local government, government institutions, and organisations related to them or business enterprises (Aksoy et al., 2019; McGowan, Westley, 2016; Sharifi et al., 2021), yet academic literature barely skims over how social innovations are created, developed and implemented in the national armed forces. Meanwhile, the dominant consensus regarding social innovation is that social innovations are extremely useful in improving an ‘organisation’s effectiveness, improvement, competitiveness, and ultimately long-term sustainability’ (Água, Correia, 2021) as well as improving policy development (Borzaga, Bodini, 2014), and driving social change (Cajaiba-Santana, 2014). Moreover, many researchers have investigated and proven a strong link between technologies and society (Achmad, 2021; Dawson, Daniel, 2010; García et al., 2015; Millar et al., 2018). So, by extension, social innovation should be useful in all realms and contexts.

Social innovation in the military. Social innovation in the military could be a compelling synergy between novel problem-solving approaches and the traditionally structured military (Farrell, Terriff, 2002; Terriff, 2006). This paradigm has the potential to significantly improve various dimensions of military operations by bringing to the forefront discussions on how the military could be reshaped, augmented and humanised (Nicholls et al., 2015). At its core, the concept of social innovation in the military is rooted in the identification and addressing of multifaceted challenges faced not only by military personnel but also by veterans and their families, as well as, by extension, all of society (Franco et al., 2016). This perspective acknowledges that the challenges encountered by members of the military extend beyond combat situations, encompassing psychological well-being, family dynamics, the successful transition to civilian life, and more (Garcia Zea et al., 2023; Voelz, 2016). By integrating the principles of social innovation, the armed forces have a unique opportunity to bolster the resilience, well-being, and overall efficiency of their personnel, thereby constructing a more robust and sustainable military framework (Nicholls et al., 2015; Rusu, 2023; Voelz, 2016).

In this article, we will focus on several topics which can usually be improved by various social innovations. We explore how communication, collaboration, leadership and training can be enhanced in the military by social innovation. In the recent book *Adaptation under Fire*, Barno and Bensahel (2020) argue that in order to face and overcome 21st-century challenges, the military must change and adapt very rapidly. Additionally, this shift should include social and cultural areas. One of the best-known developments brought about by social innovation is improved communication. In military organisations, the chain of command is important, yet communication and feedback are just as essential (Garcia Zea et al., 2023). The integration of social innovation as a communication training tool in the military

represents a novel approach to addressing the complex and evolving challenges inherent in modern warfare. Effective communication is paramount in military operations, influencing mission success, troop morale, and overall strategic outcomes.

Social innovation as a communication strategy in the military is nuanced due to strategic purposes and aims. In this context, effective communication is not merely a tactical tool but a strategic imperative. It is argued that social innovation principles, such as adaptability, empathy and inclusivity, must be integrated into military communication (Garcia Zea et al., 2023). By emphasising collaboration, social innovation can transform military communication from a hierarchical model to one that fosters co-creation and participatory engagement (Pel et al., 2020b). In order to achieve this goal, it is necessary to embrace the diversity of cultural perspectives inside and outside the military structure, as well as the dynamics of interpersonal relationships, which can be crucial knowledge in conflict zones. Through interactive exercises and simulations, military personnel can develop the capacity to navigate complex social contexts, enhancing their ability to communicate effectively with diverse stakeholders (Garcia Zea et al., 2023). The anticipated outcomes of the integration of social innovation extend improved communication efficacy and strengthened team cohesion, and ultimately enhance the success rates of military action (Jensen et al., 2020; Rusu, 2023).

Moreover, social innovation emerges as a promising avenue for addressing gender issues in military structures, offering a transformative approach to promote gender equality and inclusivity (Doan, Portillo, 2019; Erwin, 2022). The traditionally male-dominated military has long been marked by gender disparities in recruitment, advancement and overall representation. The list begins with simple ignorance and discrimination, and ends with sexual harassment and assault (Arnold, 2019; Erwin, Cseh, 2023). Social innovations based on collaboration and inclusivity challenge these entrenched norms, by fostering a culture of diversity and equity (Erwin, 2022). Additionally, initiatives driven by social innovation in the military aim to dismantle barriers to entry for women, providing pathways for recruitment, training and advancement based on merit rather than gender (Doan, Portillo, 2019). By leveraging human-centred design and participatory approaches, social innovation interventions promote inclusive policies, restructure existing organisations, and lead to women's empowerment (Erwin, 2022). The anticipated outcome of such integration is more diverse perspectives during decision-making processes, and benefits from the wide spectrum of talents and capabilities shared by every participant (Arnold, 2019). Hence, social innovation emerges as a catalyst for redefining gender dynamics in the military (Erwin, 2022), challenging conventional structures (Terriff, 2006), and contributing to the creation of a more inclusive and effective military.

Social innovation could be used as a solution for enhancing risk assessment methodologies in military operations, offering a paradigm shift that integrates human-centred design and collaborative approaches (Hill, 2015). Traditionally, risk assessment in the military has been rooted in conventional models focused on technological and strategic factors, often overlooking the human element (Hopster, 2021). Social innovation principles advocate for a comprehensive understanding of risk by recognising the intricate interplay of social, cultural and psychological dynamics. By incorporating participatory methodologies and leveraging collective intelligence, social innovation transforms risk assessment into a collaborative process that engages diverse stakeholders (Hill, 2015). This approach includes everything from the accuracy of risk identification to the development of risk mitigation strategies. Moreover, the integration of social innovation in military risk assessment establishes adaptability and resilience. As a result, the military can proactively address emerging challenges, from asymmetrical warfare to humanitarian crises, by integrating social innovation principles into risk assessment methodologies, thereby forging a more robust and responsive organisation (Hopster, 2021).

The implementation of social innovations in the military could contribute to a shift in organisational structures and operational methods, due to collaboration, inclusivity and adaptability. This implementation process involves the integration of innovative practices that transcend traditional hierarchies, fostering a culture where diverse perspectives and ideas are actively solicited and valued (Doan, Portillo, 2019). For example, Seifried et al. (2017) proposed a conceptual model of innovation diffusion through a historical review of the United States armed forces and their bowl games, emphasising the interaction/synergy of communication systems, time and social systems. Additionally, Sefidan et al. (2021) noticed the important links between leadership and motivation, which could be fostered by social innovation. So by embracing social innovation, the military aims not only to optimise its response to evolving threats but also to create more agile and resilient teams which are capable of navigating the complexities of contemporary security issues (Dyson, 2020; Seifried et al., 2017). Additionally, many training strategies include programmes with social innovations that emphasise adaptability, collaboration and diverse perspectives (Ramalho et al., 2019; Sefidan et al., 2021). Furthermore, if social innovation is woven into military planning processes, influencing everything from mission design to policy brief, the military not only enhances operational efficiency but also builds stronger connections with local communities and stakeholders (Dyson, 2020).

Bureaucratic hurdles may hinder the swift adoption of social innovation practices (Carpenter, 2006). Moreover, the inherently risk-averse nature of military operations, where precision and predictability are paramount, can impede the ac-

ceptance of unconventional or experimental strategies associated with social innovation (Hill, 2015). Balancing the imperative for innovation with operational stability presents a conundrum that military leadership has to navigate. Various constraints, due to the lack of human, financial and/or material resources, also manifest as challenges for the implementation of social innovation, which often demands substantial investment in training, technology and cultural change (Dyson, 2020; Sefidan et al., 2021). Successfully incorporating social innovation into military frameworks necessitates a nuanced understanding of these challenges, coupled with strategic planning and commitment (Stănculescu, Beldiman, 2019). It is often advertised that social innovation will align seamlessly with the operational imperatives of military institutions, yet the promise of such change does not always look as promising (Micelli et al., 2023).

The positive image of the military is very much linked to the recruitment process, where the application of social innovation could act as a progressive practice to reimage traditional perception, acknowledging the necessity of a diverse and inclusive force in addressing contemporary security challenges (Cortez, 2014; Marshall, Brown III, 2004). Hinks et al. (2007) analysed several military cases to identify several recurrent facets that resonate with the contemporary approach to achieving innovation in facilities management. The recruitment strategies emphasise technical skills and physical capabilities, but also the value of a diverse range of experiences, backgrounds and perspectives. Initiatives include the development of outreach programmes that actively engage with under-represented communities (Springer-Gould, 2020), dismantling barriers to entry (Cortez, 2014; Marshall, Brown III, 2004), and promoting inclusivity in the military (Cakiroglu et al., 2020; Dyson, 2020). Additionally, the integration of human-centred design principles allows for the creation of recruitment processes that better understand the unique needs and motivations of potential candidates (Manegold et al., 2020). By incorporating collaborative approaches, such as mentorship programmes and community partnerships, social innovation transforms recruitment into a more dynamic, equitable and transparent process (Cakiroglu et al., 2020; Hinks et al., 2007). To navigate the above-mentioned challenges, a comprehensive and well-strategised approach is required; it should include targeted educational programmes, cultural sensitivity training, and ongoing evaluation and adjustment of recruitment practices (Cortez, 2014). Additionally, the occasional inclusion of the latest societal shifts helps, as Peralta and Caporusso (2020) presented possibilities in the use of social media, such as Facebook and LinkedIn, as a tool for military recruitment. Despite these challenges, the potential benefits lie in a future military that is resilient and equipped to meet the complexities of future challenges (Cortez, 2014). The application of social innovations in military recruitment is a strategic imperative for

enhancing operational effectiveness and fostering a military culture that values and celebrates diversity as a strength rather than a challenge (Hill, 2015; Rusu, 2023).

Scientific literature suggests that teamwork and leadership in the military could be addressed as the implementation of social innovation. Šimanauskienė et al. (2021) showed that leadership behaviours, such as support for innovation, delegating and offering rewards, positively influenced the innovative behaviour of military officers in the Lithuanian armed forces. Today's cooperation-oriented structures in modern military organisations emphasise the effectiveness of 'teams of teams' in battlefield situations (Kuikka, Nikkarila, 2019). Cakiroglu et al. (2020) highlighted the potential for shared leadership to drive change to be implemented in different military contexts. So teamwork and leadership in the military can foster social innovation, or be the aim of the implementation of social innovations.

To sum up, military development depends strongly on the people employed in the organisation. So social innovations will always have their role. Sometimes they are appreciated and celebrated, at other times they are perceived as a nuisance. In the following chapters, social innovations in the case study of Lithuania are discussed.

1. Methods

Background information. This study investigates social innovation in a particular case study, the Lithuanian armed forces. The Lithuanian armed forces (LAF) were established after the restoration of independence. The structure consists of several different branches, visualised in Fig. 1.

This investigation focuses on the land forces, since it is the largest according to personnel and the diverse technical equipment used. The land forces have 13,500 military personnel. They also include Nato, and conduct many training activities in partnership with other Nato allies. In particular, this research explores social innovations in the Iron Wolf Infantry Battalion and the Juozas Lukša Training Centre. These two institutions were chosen due to their importance in training, recruitment, participation, involvement and preparation for various international activities (such as Nato training or participating in military action around the world). The core mission of the Iron Wolf Infantry Battalion is 'to maintain the required capabilities for the defence of the land territory of the Republic of Lithuania in order to defend the sovereignty and territorial unity of the state, ensure the combat readiness and ability to interact with allied forces, prepare for and participate in multi-national operations, assist state and local authorities in cases set out by legislation, and conduct other peace-time tasks' (Lietuvos kariuomenė, 2016). Additionally, the Juozas Lukša Training Centre aims to educate and train the military



Figure 1. LAF services

personnel of the land forces by applying new and innovative methods. This centre seeks to establish and provide ‘military expertise in the fields of manoeuvres, military engineering, intelligence and support’ (Lietuvos kariuomenė, 2023). Both these institutions play a significant role in training and preparing various simulations in response to various crises.

Research method. The article focuses on social innovation in military practices in Lithuania. One of the commonly used investigation methods to explore social innovation is interviews with stakeholders and experts. Although the authors are aware of different models and processes of innovation through interviews, they did not limit respondents to discussing just one particular framework of understanding, since most of the respondents are not trained in the social sciences and are unfamiliar with the theoretical debate regarding social innovation.

Interviews were conducted in April 2023 at the Rukla military training campus. Twelve interviews with military personnel from the Iron Wolf Infantry Battalion

and the Juozas Lukša Training Centre were collected. Respondents were selected by applying basic non-probability convenience selection and the snowball principle. The respondents varied according to their age, gender, education, rank, expertise, time in the military, etc. In order to guarantee anonymity, all respondents were provided with a code (R1 to R12).

A semi-structured questionnaire was used to collect the data, but additional in-depth questions were asked of all respondents in order to clarify different points in the debate and concepts mentioned during the interview, as well as to ask for particular examples or other elaboration. The main goal was to reach data saturation, which was achieved, and the interviews were concluded after the information presented by the respondents started to be repeated.

Afterwards, the data was analysed using the MaxQDA tool. The data was encoded, analysed and interpreted with regard to the literature review findings and empirical results. The code system comprises three main categories: social innovation implementation, social innovation effects, and social innovation examples. Each major category consisted of narrower sub-categories, which allowed for the elaboration of various nuances.

This discussion is presented in the following chapter.

2. Results and discussion

To begin an empirical analysis, it is important to establish a common understanding of the concept of social innovation. From the beginning, respondents indicated that social innovations focus on *'human development based on innovative courses, training, studies'* as well as competencies on *'leadership, socialisation in the fields of work and society'* (R12). Other respondents pointed out that *'some kind of improvement in living conditions'* (R8) could be interpreted as one of the versions of the manifestation of social innovation. Further, another respondent elaborated that social innovations should be preserved as *'measures that help to advance the daily activities of the facilitated service life'* (R8), or an even more explicit version of understanding what social innovation stands for is *'measures that help to advance the daily activities of the facilitated service life, meaning measures, maybe, that improve communication, that improve people's social skills, that improve the social security'* (R4). In general, all the key descriptives were listed by respondents: the focus on the human part of all operations, primarily training, leadership and teamwork, as well as the aim to improve partnerships and interpersonal relationships, along with institutional communication with society generally and collaboration with other institutions.

As Carpenter (2006) argued, institutional leaders, via social innovations and other means, could change the organisational culture, but junior-level military personnel could build up a background for future higher leadership positions in the military. Although almost all respondents, in one way or another, pointed out the rigidity of the structure of military organisations, several respondents underlined the possibility of sharing knowledge after attending some leadership courses. During such inside lectures, lower-rank officers could ‘educate’ their leaders and their peers. R7 provided an example: ‘*a person comes back from a very serious course with a lot of competence and, let’s say, as a leader, and could undertake a training course with all the heads of their department*’. Others disclosed that they already organised knowledge-sharing activities with their colleagues (R10, R12).

Furthermore, such knowledge sharing and creation contribute significantly to teamwork and team spirit. These transformative activities could range from small, rarely occurring and quite insignificant initiatives like ‘*days without uniform*’ (R6, R10) to a ‘*continuous updating and development of knowledge*’ aimed at improving the competencies of military personnel (R12). The literature discloses that social innovations, if organised correctly, have a strong influence on camaraderie and loyalty to the team that could be extremely important in combat situations (Garcia Zea et al., 2023; Jensen et al., 2020; Stănciulescu, Beldiman, 2019). However, Carpenter (2006) underlines the importance of avoiding mixed signals or unclear situations, which could have a negative impact on the entire innovation culture.

Moreover, the debate about teamwork is not explored if the question of leadership is not addressed. The literature is full of arguments that explain and discuss the importance of leadership in the military, and, in particular, the role of leaders during the implementation of social innovations (Sefidan et al., 2021; Stănciulescu, Beldiman, 2019). The respondents to the interviews easily identified links between leadership and social innovation, and discussed various aspects of them. The respondents (R7, R10, R12) linked social innovation with leadership, and even more provided personal examples of this connection. R3 elaborated that understanding could build up diverse knowledge and practices that are so much needed in today’s ever-changing environment. R12 identified that institutional initiatives, including social innovation, could have a significant importance to cooperation, promotion and the sharing of information. This goes hand in hand with the findings of Rusu (2023) on teamwork and collaboration in military organisations.

In addition, several respondents disclosed that participating in common training activities has the power to improve team loyalty and spirit. R4 elaborated that even online training could improve teamwork. Respondents stated that training could be on very diverse topics, from how to manipulate new technologies (R4) to patrol (R2), survival and escape (R9, R12), to medical training (R4), including the

medical assistance of military dogs (R12). R4 shared experiences in response to the Covid-19 pandemic and communication lessons, which were taught at various levels of public administration and their institutions, including the military.

As the military adapts to the dynamic nature of modern threats, the development of social innovation becomes a critical component of organisational resilience, enabling the armed forces not only to respond effectively to immediate challenges, but also to proactively shape strategies that align with the broader goals of security, diplomacy and community engagement. Respondents shared several effects of social innovation worth mentioning, including feeling stable but not frozen in their position (R1), and constant learning (R2), which provides *'measures that help to advance the daily activities of the facilitated service life, meaning measures [...] that improve communication, that improve people's social skills, that improve the social security'* (P4).

Furthermore, social innovations have a strong link with various initiatives for veterans or family members of military personnel (Franco et al., 2016). Wolf et al. (2017) underlined the strength of social innovation in providing support and interventions to military families to enhance cohesion, connectedness and stability during and after deployment, and the use of video-conferencing technology to deliver assessments and treatment for individuals residing in remote locations (Sloan et al., 2011). However, none of the respondents recognised such an opportunity. Meanwhile, although in Lithuania veteran culture is not as widespread and elaborate as in other countries, respondents were able to suggest that social innovation could contribute to military veterans in various respects, including experience sharing and integration into the job market (Guo et al., 2020; Manegold et al., 2020).

Some respondents (R4, R12) also pointed out how important communication is, and the development of communication by social innovation. The respondents pointed out that, time after time, poor communication raises negative perceptions of truly beneficial changes or new initiatives in the organisation, including social innovation. So respondents' experience was: *'we are like guinea pigs, everything is being tried out on us in the sense that up to now, it is still, what, five or six from years now, the system is trying to do something, but up to now it is still not done properly'* (P6). This long-term affair establishes resistance to innovations (R3, R5, R6, R9). The unclear goals of new implementations strengthen such feelings even more (P11), but loyalty, teamwork and leadership skills are left unaddressed.

A resulting challenge of implementation for social innovation, according to the respondents, is a rigid bureaucratic structure in combination with a lack of resources (material, technical and human). Even though Lithuania has been independent for more than 30 years, the negative legacy of the Soviet Union is still present, and has a decreasing impact every year, according to several respondents

(R2, R3, R5, R8). Respondents share the hopeful view that the upcoming generation Z will change this situation for the better thanks to their '*friendship with new technologies*' and '*acceptance of changes*' (R2, R5). Ramalho et al. (2019), after investigating and comparing seven case studies of strategic innovation projects, support such expectations, and underline the transformative potential in such implementations. Meanwhile, the lack of resources could manifest itself in causing mistrust, and could negatively impact loyalty and the sense of belonging: '*above, I am sure they have done some of that, but it hasn't descended to the level of us*' (P5); '*it is up there [...] somehow the bottom and the top don't go together*' (P7); '*the government is higher up, but it doesn't understand what's going on down below*' (P11). Such a perception establishes different silos within the organisation, which destroys trust and builds up mistrust and misinterpretations in the chain of command.

So in a way, resistance to social innovation in the military is rooted in the confluence of historical, cultural and structural factors that have long characterised military organisations. First and foremost, the military is inherently conservative and risk-averse, due to its primary function of defence, as well as the hierarchical command structure, which has been a hallmark of military organisations that emphasise discipline, order and adherence to established protocols. Nevertheless, Carpenter (2006) proposed how to establish a culture of innovation in the military via changes in the leadership strategies and the organisation. In this case, social innovation could contribute significantly to technical innovation. So after educating the leadership, which is often social innovation, the military results in more efficient technical equipment and practices. Other suggestions for establishing a more suitable environment for innovation exist alongside Carpenter's proposal. For example, R3, with regard to current affairs, points out that social innovations could act as a trigger to instigate crucial collaborations between different institutions and wider society. Partnerships between the military, private companies and academia tend to strengthen the innovation ecosystem. They also stimulate the best management strategies and their development (Ramalho et al., 2019).

Bureaucratic hurdles, slow decision-making processes, and the need for conformity may hinder the swift adoption of innovative practices, making it a challenge to introduce and sustain social innovation in the military. As an antidote to this, the respondents suggest '*increasing the sociality with general society*' (R3), and having more activities with youth (R2, R5), which should contribute to creating a more open-minded culture. Furthermore, it could lead to better teamwork between different levels of the organisation. Additionally, R12 stated that opinions should be prioritised towards ones who are actually '*first-hand users*'. So the decision-

making process could be improved by establishing measures that foster two-way communication.

Last but not least, social innovation could help bridge military and civilian communities. In the current situation, countries bordering the Russian Federation or its supporting countries are vulnerable if their military are not supported by non-military people. By organising community gatherings or gamified training, the military can raise awareness, educate society, promote military service, and form a positive image of the military, just to name a few. Such social innovations tackle stigma about the army, its organisation and its purpose. Furthermore, it was observed that social innovations help to move retired military personnel into civilian life. They also help veterans to integrate back into society and the workforce (Manegold et al., 2020). Such support ranges widely, from psychological support to training or mentoring programmes for new job positions (Guo et al., 2020; Sefidan et al., 2021). Addressing the challenges listed necessitates a comprehensive approach that combines cultural sensitivity training, educational programmes, and a gradual shift in the organisational mindset. Recognising that social innovation can enhance adaptability and effectiveness without compromising core military values is crucial for overcoming resistance and fostering more innovative and resilient armed forces.

Conclusion

An investigation of the literature showed that the implementation of social innovation can contribute to the development of communication, partnerships with other institutions and communities, and the perception of the military. Social innovations can also help address gender issues and improve the recruitment process (Cortez, 2014). Social innovations contribute to training programmes. However, their implementation can be hindered by the existing institution's culture, attitudes and the domination of technocratic problem-solving methods.

The empirical research results go hand in hand with the theoretical findings. All the respondents were able to indicate what social innovations are, and listed several important features, as well as possible applications in the military. The respondents acknowledged social innovations as promising opportunities to improve training, communication, teamwork and leadership skills. However, they also pointed out the most common culprit for the successful implementation of social innovation. Exactly as was discovered during the literature review, the respondents pointed out that a rigid bureaucratic structure hinders this process.

Additionally, social innovations in the military can be used for the development of soft skills and the rise of military intelligence practices (Cortez, 2014; Mane-

gold et al., 2020). The respondents stated that improved relationships between the military and wider society can be useful for the daily representation of the military and life-saving in combat zones.

Moreover, one of the most underlined areas for the implementation of social innovation is training. The respondents continually pointed out the need for training in the military due to the changing security context around the world. Some of the respondents shared examples of knowledge sharing after participating in some specialised training courses. This shows a high level of collaboration and team spirit, which could be the foundation for more elaborate social innovation. As the military evolves to meet contemporary challenges, the guiding principles of social innovation could be instrumental in steering it towards a better future.

Finally, through a holistic way of addressing the challenges faced by military personnel, veterans and their families, social innovation can serve as a potent tool for enhancing the efficiency, resilience and humaneness of the military (Franco et al., 2016; Manegold et al., 2020; Patiño-Valencia et al., 2022; Stănciulescu, Beldiman, 2019). The respondents listed several areas where social innovation can contribute to the long-term well-being of military personnel, such as various programmes for families and veterans.

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