

ARTICLE

CIVIL SOCIAL PRACTICES OF WASTE RECYCLING IN RUSSIA (BASED ON MOSCOW AND KAZAN CASES)

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ABSTRACT

The article focuses on the description of current waste management practices in the Russian megalopolises exemplified by Moscow and Kazan. Based on the results of a public survey, it is possible to distinguish sustainable and unsustainable practices in the cities. According to the public, the main impediment to separate waste collection is the lack of waste management infrastructure; only 10% of the population separate their waste on their own. The development of public participation promotes the development of the linear economy where public participation in the process of decision-making is higher than in the conditions of the circular economy. The study has shown that sustainable practices featuring the utilization of less packaging and eco-friendly packaging, as well as the elements of the sharing economy are unpopular in Russia; repairing and purchasing higher-quality goods is also secondary to the price issue.

INTRODUCTION

KEY WORDS
waste, modernization of the environmental policy, waste management, territorial schemes, social and environmental practices

The rationale of the article is determined by the necessity to solve the deepening and escalatory controversies between the negative (deconstructive) and positive (restorative and sustainable) social environmental practices against the backdrop of the challenges of the worsening waste pollution in the Russian cities [1-5].

The research presented in this article is focused on the development of the social and environmental waste-management practices in the Russian cities that are defined as "a system of individual and collective action predetermined by the state of culture, the level of social development, and changes in the nature of the human-environment relationships aimed at the restoration of the destroyed ecosystems and preservation of the existing ones [6]".

Sustainable practices were studied from the perspective of developing a single environmental and political space by Ulrich Beck [15], Anthony Giddens [16], and Niklas Luhmann [21]. There are works on the importance of reducing the amount of waste through practices by Dennis Meadows [22], Alvin Toffler, Nikolay Reimers [24], Anna Davies [2]. There is data on the practices that help to reduce the amount of waste in cities in the works of Oleg Yanytsky [28], Victor I. Danilov-Danilyan [18], Dmitry Kavtaradze [17], Alexandr Kapto [24; 23], Marina Rybakova [26]; the practices of waste management were studied by Polina Ermolaeva [19], Yulia Ermolaeva [20], Icek Ajzen [1], Shalom H. Schwartz [8, 9; 10; 11], and Paul C. Sterna [12, 13]. These concepts review the values, regulations, standards of individual behaviour, institutional control, and ways of achieving an environmentally-oriented behavior [7-11].

At the social and environmental level, such practices can include a cognitive (based on the rational action), value-based and motivational, and behavioural aspects (the behavioural aspect is the direct observed aspect of action that forms behavioural patterns). Elna Orlova [23] distinguishes a passive-destructive practice type characterized by the unwillingness to make efforts to solve an issue, which leads to the degradation of resources and social opportunities. An active-destructive type is represented by the establishments that cause pollution (the industrial sector). A passive-functional type features adapting to the current situation. An active-functional type of reaction involves neutralizing or transforming the threat.

There are only two patterns of environmental behaviour presented in this work that are relevant for the analysis of the practices that allow to reduce pollution, they are the functional pro-environmental behaviour (a complex of practices and actions aimed at the environmental protection) and anti-environmental destructive behaviour (a complex of practices resulting in the unsustainable use of natural resources), a certain passivity. The goal of this article is to analyze the functional practices and classify them according to the life-cycle phases.

Types of functional public practices: civic engagement (voting, signing petitions and letters for the government), self-education, financial action (donating money, boycotting companies or products), using the legislative system to ensure compliance with the environmental laws, propaganda, green purchase behaviour and environmentally friendly consumption (for example, purchasing local products, organic foods, and products with recyclable packaging on a regular basis), reducing the occurrences of the destructive behaviour or abandoning it, improving the efficiency of individual behaviour (for example, not using a car alone).

Received: 14 Aug 2019
Accepted: 13 Sept 2019
Published: 15 Sept 2019

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At the institutional level, the following social tools are applied by the government: social programs featuring collaboration with the private sector (encouraging social entrepreneurship), including the integration of exclusive groups, social and economic tools for the private sector: benefits, subsidies, grants, supporting and encouraging public engagement and participation, engagement and monitoring of the functioning of the informal sector.

The private sector practices social entrepreneurship, the inclusion of exclusive groups, technological advancement that helps to reduce pollution and waste production, the establishment of an environmentally responsible company complying with the standards of the reduction and offset of emissions, the development of a corporate social responsibility policy. Non-profit organizations coordinate with one of the institutes and carry out educational and organizational activities as practices. Scientific institutes develop BATs, work closely with the business sector, and achieve the goals of governmental programs.

The issue of proliferation of functional civic practices in cities remains a major problem due to its mass character, since the maintenance and frequency of such practices directly affects the amount of waste produced and its toxicity, which is the essence of the empirical part of our research. [20; 25; 26; 28; 29; 7]

MATERIALS AND METHODS

To fulfil the research objectives, we used the method of a representative survey based on stratified random non repeated sampling of the population of Moscow and Kazan. The total number of persons surveyed comprised 1,500 (Kazan, n=750 persons.; Moscow, n=750 persons). The district of the city where the respondent lives, their gender, and age were determined as quota qualities. The total volume of the sample frame of the survey comprised 1,500 units, with 750 units in each sub-sample, which ensures high accuracy of the obtained results illustrating the patterns of the distribution of qualities in their total and allows to project them on the population of Moscow and Kazan as a whole with the non-sampling error of 3.6%. The main objectives: Assessing the involvement of the population into different municipal environmental practices and the frequency of involvement of functional sustainable practices. To fulfil the objective, we compiled a number of questions and statements that the respondents were to assess based on compliance and frequency which characterized the importance of each practice. The social and demographic qualities were not taken into consideration in this part of the research since it is important to assess the general spread of functional practices.

RESULTS AND DISCUSSION

The residents of megalopolises assessed the following issues as major in the area of waste management: the biggest problem determined was the "absence of containers for separate waste collection next to the house" as selected by 662 persons (44%), the second most popular answer was "insufficient number of dust bins in the streets" chosen by 534 persons (35.6%); the third place is shared among the "untimely rubbish removal from the adjacent territory of the houses", the "insufficient number of trash containers in the adjacent territory of the houses", the "constant appearance of unpermitted garbage dumps", and the "poor quality of rubbish collection in the streets" as chosen by 300 (20%) of the respondents; the fourth place is occupied by the "absence of equipped spaces for waste storage" and the "burning of garbage dumpsters" as selected by approximately 10% of the surveyed. 156 citizens (10%) "do not see any problem" or "struggle to give an answer".

Social environmental practices carried out by the population of the megalopolises are contradictory. The practices of responsible waste management are the most important since they allow to reduce pollution. One third of the respondents does not follow sustainable practices of separate waste collection or do it seldom. Only 127 persons (8.5 %) marked "I separate different types of waste at home and take them to the appropriate collection points", while 535 persons have never done separate waste collection (35.5 %). The respondents stated that they do not separate their waste due to external factors, such as the "absence of the separate waste collection infrastructure at the place of residence" (69%), 20% of the surveyed "do not know how to separate waste", and 61 person (11%) said they do not have time for it. Activist forms of environmental practices are as frequent as the separate waste collection. "I participate in street-cleaning events" 10% of the population often take part in garbage collection, 6% of the respondents do it regularly, which is a good activism showing, almost one third (26 %) of the surveyed never take part in the events of the kind; the number of people who take part in cleaning events in Moscow is smaller than in Kazan by 5%.

Respondents were asked to assess the statements related to everyday waste management practices: "I compost organic waste": 46 % replied 'never', 11% do it often, and only 7% always compost their organic waste.

"I recycle hazardous waste (batteries, lamps)": 17% of the respondents often recycle such products, 26% do not do it, 23,5% of the surveyed do it from time to time. Hazardous waste is considered priority when it comes to recycling since it poses the greatest threat to the well-being of citizens, but it is only recycled by 1/5 of the population.

"I recycle textile and clothes or have it reused (give it to charity or acquaintances)": 10 % recycle such materials, 30% never do it (456 persons). 26.8% of the respondents recycle such materials from time to time within the scope of promo events.

Next, we evaluated the number of preventive practices.

"I try to purchase durable goods even if they cost more": 13.5% of the respondents never try to purchase such items, 30% do it from time to time, 30% do it often, and only 15% of the surveyed do it on a regular basis. Preferring higher quality and expensive products largely depends on the economic capacity, but in the long-term perspective, purchasing more expensive and higher quality goods is more beneficial than substituting nondurable items with new ones. Citizens tend to opt for fast fashion.

"I choose products made of recycled materials and biodegradable goods (marked appropriately) that do not damage the environment": 15.1% of the respondents disagreed with the statement, 32.5% partially agreed to it, and only 7.1% of the surveyed fully agreed with it; 8.4% struggled to provide an answer. Choosing environmentally friendly products requires specific knowledge about such issues as waste management, different types and quality of packaging, and companies. The results of the survey show that the population is poorly informed about the problem.

"I choose organic and safe detergents and washing products that are marked as environmentally friendly": 13.4% did not agree with the statement, 34.9% partially agreed with the statements, 25.8% agreed with the statement, which is a significantly larger number. There is a wide range of eco-friendly products displayed in the supermarkets alongside the usual ones, and using them does not require any effort, but the citizens do not see it as a priority. "I will not purchase goods and food if I know that producing them had a negative impact on the environment or if they cannot be recycled": 12.5% of the respondents disagreed with the statement, 32.9% found it true in part, and only 10.7% of the citizens agreed to it fully. This issue reflects the same tendency as the issue of product packaging: the efficiency of a product is still a higher priority than nature for the consumers.

"I try to extend the service life of things by repairing them and treating them with care": Respondents pay a lot of attention to the practices that allow to extend the service life of goods, as 24.4% of the respondents partially agreed with the statement and 28.2% fully agreed with it. The elements of the sharing economy are insufficiently developed. "I purchase second-hand goods in commission shops, second hand shops, and on such platforms as AVITO and Yula": 38.7% of the respondents disagreed with the statement, only 22.9% partially agreed with it, and 7.5% fully agreed with it. High-cost electronics was more popular than clothes and homeware.

"I monitor the news related to the environmental pollution caused by waste": 23% of the respondents are not interested in monitoring environment-related news, 13 % often check them, and 6 % regularly follow the news of the kind.

CONCLUSIONS

The following are the major solutions that would allow to promote functional practices: neutralizing destructive solutions, cultivating viable practices, developing conditions favorable for the social participation and collaboration with non-profit organizations, businesses, and authorities. Individuals strive for the consolidation characterized by reciprocity (correspondence of skills), complementarity (satisfaction of individual and group interests), standardization (adoption and repetition of actions). Double rearrangement is possible: social practices set out the direction of social processes, or, when one of the factors included into the process changes (cultural, technological, social, etc.), practices change. To spread the sustainable practices, it is necessary to monitor the level of awareness, original habits and possibilities of an individual, and general knowledge. It is important to take into consideration the context (the level of financial solvency and the technological advancement of the infrastructure that affect the implement ability of practices of different complexity, and the existing system of sanctions and incentives that affects the rationalization of the process).

CONFLICT OF INTEREST

There is no conflict of interest.

ACKNOWLEDGEMENTS

The work is performed according to the Russian Government Program of Competitive Growth of Kazan Federal University. The research (methodology, data collection and analysis) was supported by Russian Science Foundation under grant "Russian megacities in the context of new social and environmental challenges: building complex interdisciplinary model of an assessment of 'green' cities and strategies for their development in Russia", project No. 17-78-20106.

FINANCIAL DISCLOSURE

None.

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