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SUSTAINABLE DEVELOPMENT AS A CHALLENGE FOR MODERN ORGANIZATIONS – STUDENTS' OPINIONS AND ATTITUDES

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Purpose: Nowadays environmental education associated with sustainable development presents a critical social challenge. The objective of this study was to identify and assess the interest in sustainable development, along with initiatives undertaken in this respect, by the students of selected university courses. The sample consisted of the students of management, who, due to the specific character of their education, will prospectively manage organizations or become entrepreneurs, i.e. will become responsible for setting the trends for the development of organizations.

Design/methodology/approach: The subject matter of the present study pertains to environment-friendly attitudes of the students of selected universities in Lublin. The study was conducted by means of a diagnostic poll which was developed on the basis of the review of literature.

Findings: The analysis of the results of the study revealed that respondents' awareness regarding the impact of individuals upon the environment is strong. However, certain shortages were observed with regard to the impact of enterprises upon the natural environment.

Research limitations/implications: It seems advisable to conduct this research also with students from other faculties.

Practical implications: It seems advisable to commence environmental education during undergraduate studies so that students recognize the impact of enterprises upon the natural environment as early as possible.

Originality/value: The article contains new research results about environmental education associated with sustainable development, which were conducted based on the self-developed questionnaire.

Keywords: sustainable development, organizational challenges, environmental education, management students.

Category of the paper: Research paper.

1. Introduction

Globalization and rapid technology development pose several challenges for modern organizations. The challenges pertain to sustainable development analysed in the literature of the subject in the following three aspects: environmental, economic, and social. Each of these is linked with the progressing global degradation of the natural environment resulting from non-coordinated economic development. In order to improve the situation, a systemic change in the policies of individual states is necessary. In addition, individual initiatives, including those of entrepreneurs and citizens, are required. As a consequence, currently, environmental education associated with sustainable development presents a critical social challenge.

The objective of this study was to identify and assess the interest in sustainable development, along with initiatives undertaken in this respect, by the students of selected university courses. The sample consisted of the students of management, who, due to the specific character of their education, will prospectively manage organizations or become entrepreneurs, i.e. will become responsible for setting the trends for the development of organizations.

2. The concept of sustainable development

The term "sustainable development" was introduced in the literature of the subject relatively recently. However, it occupies a prime position in research. Sustainable development emerged as a response to the degradation of the natural environment in the course of e.g. excessive exploitation of the ecosystem, urbanization, industrialization, motorization, informatization, demographic problems, natural disasters, etc. The literature highlights that sustainable development ought to be perceived in the following three aspects: environmental, economic, social (Matuszczak, 2009; Domeracki, Tyburski, 2011). When studying the field, authors stress that the concept of sustainable development emerges in all spheres of life (Mieszajkina, 2016; Rydzewski, 2016).

Widespread degradation of the natural environment and the awareness of threats people are able to avoid by changing the attitude towards themselves and the environment resulted in environment protection becoming a popular issue. The mobilization of people to undertake environment-friendly actions and the need for introducing eco-development have become a priority. This is perceived as comprehensive and harmonious actions associated with the rational, responsible and sustainable exploitation of renewable and non-renewable resources (Zarębska, Adamczyk, Dylewski, 2013).

According to Z. Piątek, the realization of sustainable development requires multi-faceted actions to be combined. The actions include economic policies, natural environment protection, and a change of social morality, which may pose the most significant challenge of all (Piątek, 2007). B. Poskrobko outlines specific challenges of sustainable development economy. The author argues there exists a need for assessing the operation of the economy from the point of view of society-economy-environment system. The author includes the quality of life, maintenance of fitness, and development of societies among the primary values of the system (Poskrobko, 2012).

In response to emerging threats brought about by uncoordinated economic development (one which does not include social and environmental aspects), as well as guidelines and recommendations of international agendas (especially "Agenda 21 – action plan for global sustainable development in the 21st century, Rio de Janeiro, 1992), individual countries introduce formal documents associated with the implementation of sustainable development principles (Dokumenty końcowe..., 1993). In Poland, the document is named Poland 2025-Long-term Sustainable Development Strategy. It introduces guidelines and recommendations for sustainable development in the social, environmental and economic aspects (Strategia Zrównoważonego Rozwoju, 1999).

Modern enterprises operate in a turbulent environment. This requires managers to make constant decisions associated with the verification of undertaken initiatives and adjustment to the surrounding environment. Sustainable development requires companies to allocate additional efforts and finances in order to boost activity in the social and environmental aspects (Jonek-Kowalska, 2016). As a consequence, sensible managers ought to monitor the impact of the company upon the surrounding environment and make decisions enabling the harmonious operation of enterprises in the social, environmental and economic dimensions (Adamczyk, 2001).

3. Environmental education as a determinant of sustainable development

Adequate human capital constitutes a factor enabling the principles of sustainable development to be implemented. The literature of the subject highlights that individuals aware of their impact upon environmental, economic and social fields boost the harmonious implementation of the principles in individual economies. On the other hand, the shortage of knowledge, skills and attitudes in the society in this respect hampers the implementation of sustainable development policies (Andruszkiewicz, Kulik-Grzybek, 2017; Nowak, 2017).

The subject matter of the present study pertains to the attitudes and opinions of students regarding sustainable development. The study focused primarily upon environmental awareness, i.e. the awareness of people's dependence upon various natural elements, as well as

the impact people exert upon the natural environment (Kobyłko, 2000). Increasing devastation and excessive exploitation of the natural environment result in the growing need for environmental education (Kuzior, 2014; Zarębska, Adamczyk, Dylewski, 2013). It pertains to the understanding of the relationship between humans and nature, popularization of environment-friendly behaviour, as well as the search for solutions to existing environmental, demographic and social problems (Gawor, 2006).

Despite a general public consensus on the conclusion that the condition of the natural environment depends upon environment-friendly behaviour of individuals, few respondents surveyed in the hitherto studies declare they undertake such type of initiatives (Zbaraszewski, 2013; Strumińska-Kutra, 2011; Escher, Petrykowska, 2015). This necessitates the introduction of changes in citizens' behaviour by the introduction of educational activities addressing specific components of the environment-friendly attitude (Radzymińska, Jakubowska, Mozolewski, 2015; Escher, Petrykowska, 2015). The literature of the subject highlights the critical role of environmental education as a factor determining the popularization of environmental awareness. This ought to be global in character. As a consequence, it attracted the interest of the signatory states of various international agendas, e.g. the United Nations (UN), United Nations Educational, Scientific and Cultural Organization (UNESCO), European Union (EU).

However, despite the need for environmental education outlined in several documents and programs, scholars studying the issue indicate that Poles manifest a low level of education in the field. The fact that environment-friendly behaviour is the least popular in the youngest age group (18-24 year olds) is alarming. In addition, this group manifests the lowest care for the state of the natural environment (Zbaraszewski, 2013; Strumińska-Kutra, 2011).

The literature emphasizes the need for combining environmental education with the development of the entrepreneurial attitude. High environmental awareness of company owners and managers may translate into economically beneficial but also environment-friendly decisions being made (Rosiak, Szczypa, 2007). Authors highlight that the concept of sustainable development is inseparable from economical production and consumption which take into account the consequences of present actions and those which do not pose a threat to future generations (Rosiak, Szczypa, 2007).

4. Methodology of the own study

The subject matter of the present study pertains to environment-friendly attitudes of the students of selected universities in Lublin. The objective of the study was to identify and assess the interest in sustainable development and initiatives undertaken in this respect by the students of selected university courses. The sample consisted of management students, who due to the

specific character of their education, will prospectively manage organizations or become entrepreneurs, i.e. will become responsible for setting the trends for the development of organizations.

Graduates of the management course ought to manifest an awareness of the need for the natural environment protection, should develop appropriate attitudes in order to manage organizations so that sustainable development standards and care for the natural environment are ensured. Authors of the present study found it interesting to examine students' opinions on sustainable development, hitherto environmental education and the responsibility of individuals and organizations for the natural environment. At present, in light of corporate social responsibility, it is believed that organizations' care for the environment ought to constitute their fundamental duty.

The study was conducted in May 2017 by means of a diagnostic poll with the use of a random survey. The sample encompassed the students of management at two state universities in Lublin: Maria Curie-Skłodowska University (MCSU) and Lublin University of Technology (LUT).

A survey questionnaire was developed on the basis of the review of literature. The questionnaire served to collect empirical data. It consisted of 17 questions pertaining to students' environmental awareness, their attitudes towards the natural environment, and plans concerning the development of competences in the field.

The study encompassed the students of undergraduate (Bachelor's) and graduate (Master's) management studies. Ultimately, the questionnaire was completed by 325 students, 57% of whom represented MCSU and 42% LUT. Final year undergraduate students constituted 42% of the sample. The remaining 58% encompassed students of the graduate course. The sample was characterized with regard to sex, place of origin, financial and occupational situation, and grade point average from the previous year of studies. Women (64%) and city dwellers (57%) dominated the sample. Slightly more than half of the sample (53%) were employed in the period the study was conducted. Over half (54%) of respondents perceived their financial situation as good, 44% as average, and merely 2% as difficult. As far as the grade point average is concerned, the sample was divided into two subgroups – the average above 4 was represented by 37% of respondents, and those below 4 constituted 63%.

The results of the survey study were analysed statistically. The values of the analysed parameters measured nominally were characterized in terms of size and percentages. The χ^2 test of independence was applied in order to determine relationships among the analysed characteristics. The study adopted a 5% fallacy risk. The results scoring p < 0.05 were considered as statistically relevant.

5. Sustainable development as perceived by the students of management

When discussing environment protection, the issue of responsibility for its current and future condition becomes a critical one. According to the opinions of management students, the responsibility lies primarily among individuals, i.e. citizens of a particular society (75% of answers). This proves a high awareness of individuals' impact upon the surrounding environment. Respondents indicated that strong responsibility should also be assumed by local governments and the general policy of central government (50% of scores respectively). Approx. 40% of respondents believe that enterprises are among entities responsible for the protection of the natural environment. It is noteworthy that graduate students expressed such an opinion significantly more frequently than the undergraduate ones ($\chi 2 = 4.636$; p = 0.031). The discrepancy may stem from knowledge which was likely obtained in the course of studies. Nearly 30% of respondents observed that the responsibility for the natural environment ought to be adopted by non-government organizations. Students whose grade point average was below 4 selected this answer more frequently (p = 0.004).

Over half of respondents (56%) believe that people who care for the natural environment are characterized by a strong environment-friendly attitude. 24% of respondents described themselves as caring for the condition of the environment to a low degree. 20% stated they did not look after the state of the environment. Regardless of the care for the environment, respondents selected the following as the most frequently undertaken initiatives: no littering (83%), waste segregation (68%), proper utilization of dangerous waste (40%), saving electricity (39%), saving water (38%), preference for reusables (31%). It is noteworthy that women and students with grade point average above 4 voiced their preference for the reusables more frequently. Among the environment-friendly initiatives, 25% of respondents selected limiting their use of cars. However, apart from obvious environment-friendly character, this activity may result from other factors, e.g. money-related ones. This initiative was selected significantly more frequently by women and by those unemployed, which seems obvious. Merely 15% of respondents made comments to others regarding their improper behaviour towards the natural environment. This means that, even though to various degrees, the majority of students pursue environment protection. However, they do not criticize those who destroy it. This may be associated with the students' upbringing and the general attitude of the generation expressed by the premise that everyone ought to be responsible for him/herself, and that everyone has the right to "express themselves" - regardless of the impact upon others. Nearly 70% of respondents take part in environment protection campaigns such as: collection of recyclable waste (48%), car-free day (17%), clean-up day (15%). Respondents whose grade point average exceeded 4 take part in recyclable waste collection days more frequently than students with lower grades.

Unfortunately, merely 46% of respondents were aware of the protocol (how to act, who to notify) to be followed in case of a situation endangering the environment. However, it ought to be noted that LUT students selected this answer more frequently. 49% of respondents did not know the protocol but expressed interest in becoming familiar with it. On the other hand, 5% are not interested in the problem, and despite the shortage of knowledge, are not interested in pursuing the issue. When viewing the issue in the general sense, 75% of respondents observed that in order to intensify the care for the environment, environmental knowledge and awareness of societies ought to be expanded. Respondents indicated that environment protection regulations ought to be monitored and penalties enforced (58%). On the other hand, 37% of respondents stated that rewarding environment-friendly initiatives would improve the care for the environment. Merely 2% of respondents did not recognize the need for such actions.

When discussing the expansion of knowledge, entities responsible for the expansion ought to be discussed. According to respondents, education-related institutions (such as schools and universities) are primarily responsible for the development of environment-friendly attitudes (74%). In addition the following were indicated as responsible: media (61%), friends and family (53%), and government (46%). Interestingly, every third respondent indicated environment protection organizations as those responsible for the development of the friendly attitude.

Environmental education may be conducted in various forms. Management students believe that learning by direct experience, e.g. direct contact with nature and consequences of over-exploitation (52%), as well as participation in environment-protection-related events (37%), are the most effective. Women are more interested in pursuing this type of education. 25% of respondents observed that mandatory thematic classes at universities and various types of publications (brochures, leaflets, books) offer adequate education. It ought to be noted that students who were employed, rather than those who were not, preferred learning from printed materials. This is certainly a consequence of their time for extra-curricular activities being limited. Meetings, seminars and conferences as a form of environmental education were selected by 16% of respondents. Courses and e-learning were indicated by merely 11%. This means that despite the ubiquity of online forms in every walk of life, students prefer direct contact with regard to environment protection.

6. Conclusions

One of the most pressing problems of the modern world is the progressing degradation of the natural environment. Therefore, halting the process and bringing the nature back to the condition allowing living organisms to thrive is worthwhile for governments, enterprises and individuals. Although, in the general sense, the issue has been discussed on the national and global level, it is not so on the level of individuals. The research gap pertaining to the issue of environment-friendly behaviours indicates the need for environmental education to be intensified. The education ought to foster the development of views concerning the care for the natural environment and environment-friendly behaviour among the youth (Escher, Petrykowska, 2015).

The authors of the study found it interesting to examine whether the graduates of management studies are adequately trained to manage organizations properly. High awareness of company owners and managers regarding sustainable development may result in organizational decisions exerting a positive impact upon the environment being made. The analysis of the results of the study revealed that respondents' awareness regarding the impact of individuals upon the environment is strong. However, certain shortages were observed with regard to the impact of enterprises upon the natural environment. Therefore, it seems advisable to commence environmental education during undergraduate studies so that students recognize the impact as early as possible.

The majority of respondents believed they care for the environment. They declared active participation in various environment-related initiatives. Unfortunately, less than half of respondents declared they knew the proper emergency protocol to follow when a crisis emerges. This proves a further gap in environmental education.

When assessing the present state of respondents' knowledge, it ought to be highlighted that a new relationship emerged between the knowledge and grade point average. Therefore, a conclusion can be drawn that the subject of environment protection is discussed in the course of studies, and that students who are interested in learning acquire more knowledge in this respect. However, it ought to be noted that 75% of respondents recognize the need for further education and see universities and schools as actors providing the education. Due to the fact that students are aware of the shortage of knowledge and competences in the field and feel the need for bridging the gap, the present curriculum ought to be supplemented with environment-related issues. This seems of particular importance for management studies. This is due to the fact that the graduates of this course, in the course of their work and management of enterprises, will exert an impact upon environment not only as individuals but also as representatives of organizations as a whole.

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