

# *Journal of Organisational Studies and Innovation*

*Vol. 7, no.1, Spring, 2020*

---

## **The Organizing of Community Health Clinic of Lviv Polytechnic**

Nina Hayduk\*, Liliia Klos\*, Larysa Klymanska\* and Sofiya Stavkova\*

*Associate Professor, Head, Social Work Education Programme; Director, International “INTEGRATION” Centre for Professional Partnerships, Lviv Polytechnic National University, Lviv, Ukraine*

*Associate Professor, Department of Sociology and Social Work, Lviv Polytechnic National University, Lviv, Ukraine*

*Professor, Head, Department of Sociology and Social Work, Lviv Polytechnic National University, Lviv, Ukraine*

*Senior Lecturer, Department of Sociology and Social Work, Lviv Polytechnic National University, Lviv, Ukraine*

---

**Abstract:** With the complicated foreign policy and socio-economic conditions impeding the healthcare reform in Ukraine, a model for implementing a strategy for holistic community health development is offered. The study aims at providing a rationale for using a university community as a tool and a base for developing a healthy community in Lviv, improving the health and well-being of communities in Ukraine. A multi-method approach is used, including a search of the literature to explore the unsatisfactory population health problem in Ukraine, and an empirical study to investigate trends in the usage of psychoactive substances, as connected to the mental health of youth. The study reveals the population health deterioration in Ukraine and the tendency for risky behaviours among 15-year-old schoolchildren to increase and affect learning quality indicators in university studies. It supports the university community input into holistic community health development, involving an interdisciplinary team of professionals, activating social work and incorporating supervision. The findings suggest the need for constructing a comprehensive approach to address the population health deterioration in Ukraine, with the concept of Community Health Clinic of Lviv Polytechnic considered to be a concrete, functional response.

**Keywords:** *health, social work, management, supervision, university, Community Health Clinic.*

### **Introduction**

In Ukraine, external and internal transformations both in the healthcare system per se and approaches to ensuring its functioning at the international, national, regional and local levels as well as in connection with the reform of the healthcare system are taking place. However, these transformations are being significantly slowed by the problem of the poor state of health of the country's population.

The current situation in Ukraine is significantly complicated by the military operations in the East of the country due to the external military aggression of Russia. This has led to numerous

social problems and the emergence of new client groups, previously unregistered by social services in Ukraine. These are internally displaced persons (IDPs), veterans of hostilities, active participants of the Joint Forces Operation (JFO), families of servicepeople, and families of soldiers perished in the war. As a result of the military aggression of Russia and the Joint Forces Operation in the East of the country, there are more than 10 thousand dead, 20 thousand wounded, and 2 million IDPs. There has been a deterioration of living standards and an increase in the mortality rate from avoidable causes, i.e., such that could be prevented by a timely change in health-related behaviours. The country is experiencing high levels of mental health disorders as a result of PTSD, and an increase in dependence on psychoactive substances and mortality from their consequences, especially among young people. Additionally, an estimated 40% of deaths of working age men and 22% of women in Ukraine are associated with excessive alcohol use (World Health Organization, 2017). In achieving health, the population remains largely focused on the biomedical model and relies primarily on formal healthcare and medicines, not realizing their own role in improving health, as well as the possibility of involving professionals other than medical doctors in achieving health (Klos, 2018). The unsatisfactory state of health of the Ukrainian population continues to deteriorate and threatens the loss of the country's defence capability in the face of the external military aggression. It is also an obstacle to the sustainable development of Ukrainian society. Hence, the healthcare reform is defined as one of the priority areas of the state policy, the purpose of which is the fundamental and comprehensive transformation of this sphere, aimed at creating a patient-centred healthcare system capable of providing medical service to all Ukrainian citizens at the level of developed European states. The healthcare reform in Ukraine is largely aimed at changing the approach to solving health problems of individuals, families and communities based on the biopsychosocial model of health, with an important place provided to the individual as well as to a group of professionals, i.e., a health team (Ukraine. Law No. 2168-VIII, 2017). Communities as hubs of provision of a complex of social and medical services play an important role in improving health. In the context of the administrative-territorial reform in Ukraine, communities are expected to ensure the creation of favourable conditions and an accessible environment for health to be achieved by all its members.

The strategy of the healthcare reform to develop a healthy community in Ukraine provides both the rational and the motivation to create mechanisms for its implementation. In turn, this need has contributed to and promoted the search for new and already existing resources to rely on in order to both respond to the immediate needs of individuals and communities in the present day Ukraine and also to address the problem of the unsatisfactory and deteriorating state of health of the country's population.

This need provokes the *research question* as to what tools could be used to address the problem of the unsatisfactory and deteriorating state of health of Ukrainian citizens, with the example of one school of learning and education.

This, in its turn, implies observing the rights of every citizen to achieve, maintain and preserve health as a generalized indicator of the quality of life and well-being. This becomes possible only when universal, socio-cultural, and national values are embedded in the policies and community everyday practices. Traditionally, places central to developing and maintaining such values are universities, which are centres of education, science, as well as hubs of integrity, ensuring the realization of rights and freedoms, equality of opportunity, justice, and focus on creating conditions for a comprehensive development of the individual's personality of each citizen. From the Middle Ages till now, university communities have been distinguished by a high level of not only intellectual authority, but also of civic consciousness, social activity, progressive views, and unity in addressing the needs of communities for which and in which they implement their research and applied activities to solve vital tasks and

respond to the needs of citizens. This way universities become centres of community development. Particularly, their importance in the development of communities grows when cultures realize the need to focus on the development of each person as an individual entity, in its biopsychosocial and spiritual dimension, when an integral personality is considered to have achieved complete (holistic) health. As noted by the social determinants of health (World Health Organization, 2019), such development occurs in community and, as such, a university community contributes to the development of a healthy community in general, and its own example demonstrates how to achieve the improvement of the health of citizens.

*The purpose of our research* is to provide a rationale for using a university community as a tool for developing a healthy community in Lviv, improving the health and well-being of communities in Ukraine through organizing and implementing the concept of Community Health Clinic, using the example of Lviv Polytechnic. For this purpose, the study involves the following objectives: 1) to assess the community needs in healthcare and health promotion in Ukraine using theoretical and empirical methods of research; 2) to identify resources available to address health problems in the conditions of Ukraine in response to the community needs in healthcare and health promotion; 3) to offer a model for implementing the strategy for community health development based on Community Health Clinic of Lviv Polytechnic; and 4) to illustrate the role of supervision as a key mechanism for developing and managing human resources at the Community Health Clinic of Lviv Polytechnic.

*The research methodology* is based on applying the following approaches: *a systemic approach*, which allowed considering human health as a phenomenon of multifactorial determination, subject to the influence of various environmental factors, and the result of the activities of the group of professionals and the individual per se; to determine a proper level of the individual's health as part of his/her personal development, and to consider the process of maintaining health as a complex of social and medical services in the community; *interdisciplinary*, providing the application of theories and concepts of philosophy, social work, psychology, sociology and other humanities with a view to thoroughly analyze the theory and practice of the activities of professionals and the services provision at Community Health Clinic of Lviv Polytechnic; and *the theory of human capital*, which gave reason to consider human health as an integral part of human potential, the sustainable development of society, national wealth, and the application of supervision as a key tool for human resource development in terms of managing community health clinics.

## **Literature Review**

### **Related Work**

The health of individuals and communities has been both relevant and an issue in Ukraine throughout all the years of independence of our state, and the events of the recent five years related to the military aggression of Russia in the East of the country only reinforces the challenges. According to the European Regional Bureau of the World Health Organization (WHO), the current state of health of the population of Ukraine is characterized by extremely high rates of morbidity and mortality, low life expectancy, and the lack of access to appropriate healthcare. Thus, the average life expectancy in Ukraine is five years lower than in the European region and nine years lower than in the European Union countries (Ukraine. Verkhovna Rada Resolution No. 1338-VIII, 2016). To put things in perspective, Ukraine ranked the ninth in the top ten of the rating determined by Bloomberg in 2019 (out of the total of 169 countries of the world assessed), a determination attributed to countries with a rather low level of health. Nevertheless, this is already a certain improvement in comparison with 2013, when Ukraine took 99th place out of 146 (after the post-Soviet countries – Georgia, Armenia, Latvia, Lithuania, Tajikistan, Uzbekistan, Belarus, and Russia) (Miller and Lu, 2019). When compiling the Bloomberg index, such risks as tobacco use, obesity, and

environmental factors (access to pure water and sanitation) were considered, and attention was drawn to the life expectancy in the country.

At present, one third of Ukrainians (30.37%) in the labour-active period (aged 25–64 years) die from causes that can be prevented through primary prevention (66.26% of the causes in the structure of preventive mortality of both males and females), i.e., associated with circumstances that could be eliminated by timely changes in people's behaviours with regard to health (Kryachkova, 2015, p.12). Although data from numerous studies initiated by the WHO in the 1970s show that population health is only 10-12% dependent on the healthcare system (Sheridan and Radmacher, 1998; WHO, 1986), over the last decade, most countries in the world have been trying to strengthen their healthcare systems in pursuit of the goals of improving the population's health, observing the principle of justice in the allocation of resources, and increasing the system sensitivity with regard to the population expectations (WHO, 2008). In major strategic health-related documents, the international community emphasizes that all countries should strive for the fullest achievement of their goals in terms of efficiency (WHO, 2012; WHO, 2013). The results of national studies show that vulnerable groups of the population do not have sufficient response to their needs by the healthcare system due to the declining respect for their dignity, less freedom of choice of service providers, limited access to social support services and worse living conditions in the process of treatment (discrimination frequency according to these elements constitutes, respectively, 67%, 58%, 52% and 53%) (Kryachkova, 2015, p.30). The unifying principle of public health is its inherent "public" nature, as well as the fact that it is mainly focused on the health of the whole of population. Public health is recognized as a key aspect of a wider health system, playing an important role in improving the efficiency and effectiveness of the healthcare system and improving the health and well-being of citizens (WHO, 2012, p.8). The healthcare reform is defined as one of the priority areas of the state policy, the goal of which is the fundamental and comprehensive reform of this sphere, aimed at creating a patient-centered healthcare system capable of providing medical care to all citizens of Ukraine, at the level of developed European states (Ukraine. Verkhovna Rada, 2016).

Thus, the preconditions created by the international community, as well as poor health of the population, and the national legal framework that has been developed (the Concept of the National Program "Health - 2020: Ukrainian Dimension") (Ukraine. Cabinet of Ministers Decree, 2016; Ukraine. Cabinet of Ministers Decree, 2017; Ukraine. Presidential Decree, 2015) made it possible to begin real healthcare reform in Ukraine in 2018 (Ukraine. Law No. 2168-VIII, 2017). Due to the defined reform principles, both an interdisciplinary and an interprofessional approaches are key to improving the quality of services in public health. At the same time, the participation of social workers and other social professionals in the social sphere is enshrined at the legislative level (Ukraine. Cabinet of Ministers Decree No. 560-r., 2017; Ukraine. Cabinet of Ministers Decree No. 1018-r., 2017; Ukraine. Cabinet of Ministers Decree No. 530-r., 2018).

The increased attention to the quality and efficiency of social services also highlights the need to provide employees with an adequate level of support from a professional source, which is supervision in social work (administrative, educative, and supportive) in particular (Stavkova, 2018). Hence, there is a firm belief that professionals in the social sphere need an alternative for further education, support, and administrative assistance from someone more proficient than themselves (Kadushin and Harkness, 2002). Supervision of these professionals becomes a safeguard to the stability of the system.

This is especially true in view of the results of the national research in the field of management of healthcare services for the population, which revealed a large cohort of managers of healthcare settings (90,23 %) with numerous restrictions on management activities (on average  $4,64 \pm 0,1$  per 1 manager). The most frequent are such restrictions as

blurred personal values (56.91%); low ability to form a team (53.28%), and inability to teach subordinates (51.22%) (according to the results of Libanov et al., 2007; Tarallo, 2007; Liubinets', 2011; Zhalinska, 2011; Medvedovska, 2011; Chepelevska, 2014; Khobzei, 2010 in Kryachkova, 2015, p.14).

All the above provides a rationale for the search for alternative ways of introducing changes in the area of provision of health care and health promotion services for citizens, and in the management of these services. These changes are radically different from the strict medical model that has been in use to date and will require much thought and support. Given limited material resources, on the one hand, and, on the other hand, considering the community potential and means of social work, based on universal values, with the uniqueness of each individual and the value of everyone's life and health being a priority, Lviv Polytechnic National University has launched an initiative to develop Community Health Clinic on its basis.

## **Results and Discussion**

The idea to organize community health clinics is not random, but the result of the long-term theoretical and empirical research (including the community-based), as well as discussions in academic circles, involving professionals from the social sphere and the field of healthcare. Theoretical and empirical methods of research have revealed the deteriorating state of the country's population and resources already in existence upon which to begin addressing the problems, based on Lviv Polytechnic as an example of school of learning and education. The research results as achieved in addressing the research goal and objectives are provided below.

*Assessing the community needs in healthcare and health promotion in Ukraine using theoretical and empirical methods of research*

According to the WHO Regional Office for Europe, the current state of health of the population of Ukraine is characterized by extremely high rates of morbidity and mortality, low life expectancy, and the lack of access to appropriate healthcare.

Thus, the average life expectancy in Ukraine is five years lower than in the European region and nine years lower than in the European Union. According to the State Statistics Committee of Ukraine, only 15% of the total number of our citizens are 65 years and older.

Compared to European countries, the mortality rate in Ukraine is almost twice as high (in 2014, 14.7 cases per 1000 population vs. 6.7 in the countries of the European Union). At the same time, mortality from cardiovascular diseases is one of the highest in the world and amounts to 67.3% of total mortality, and mortality from oncological diseases constitutes 13.3% (data of the Ministry of Healthcare of Ukraine for 2014). In fact, these two classes of diseases account for 80% of the annual loss of the population of Ukraine.

Over the years of independence (1991 - early 2014), Ukraine lost more than 6.5 million people (according to State Statistics Service of Ukraine – 6.518 million). And this loss is related to the period before the start of the anti-terrorist operation in the East of Ukraine. Such a deep demographic crisis is caused by the high level of morbidity of the population, primarily due to chronic non-infectious diseases.

According to the state of health of its citizens, Ukraine occupies one of the lowest ranked places in the European region. In the ranking of the health status of citizens of various countries of the world, as determined by Bloomberg in 2013, Ukraine ranked 99th among 145 countries of the world taken for assessment (after the post-Soviet countries – Georgia, Armenia, Latvia, Lithuania, Tajikistan, Uzbekistan, Belarus, and Russia).

From 12 to 14 million Ukrainians suffer from cardiovascular diseases and more than 1 million suffer from cancer, with nearly 2 million suffering from diabetes, and over 130,000 of them being insulin dependent.

Ukraine remains the leader in terms of the incidence of HIV infection and tuberculosis. According to the pace of the HIV / AIDS epidemic in Europe and in the world, our country is second and fifth, respectively, and ranks 22nd among 123 countries in the estimated number of people living with HIV. While at the international level, 2015 was recognized as a year of success in the fight against HIV, due to the low access to treatment, the situation in Ukraine remains difficult. Of the 218,000 persons registered as HIV-infected, only 64,000 have access to treatment (according to the Ukrainian Centre for Socially Dangerous Disease Control) (Ukraine. Verkhovna Rada Resolution, 2016).

Ukraine continues to occupy a leading position in Europe in terms of the spread of tuberculosis. According to official data, in 2015, the total number of tuberculosis patients in Ukraine was 457 thousand people, however, according to expert estimates, the number of Ukrainians with tuberculosis can reach 1 million. According to the WHO, Ukraine entered the top three countries in Eastern Europe (Ukraine, Russia and Azerbaijan), where a particularly dangerous situation with the incidence of multidrug-resistant tuberculosis has developed.

The incidence of hepatitis B and C, which has already acquired the character of an epidemic and may have more serious consequences than the epidemics of HIV infection and tuberculosis, is growing rapidly (Ukraine. Cabinet of Ministers Decree No. 1002-r., 2016).

The assessment of community needs in healthcare and health promotion using theoretical methods of research has confirmed the poor state of health of the Ukrainian population, which continues to deteriorate in our country. The problem is due to various factors, including the lack of enough understanding at the state level of the value of health as an important resource for individual and social development, and accordingly no clear understanding of the way to improve the well-being of people and develop healthy communities, which arise here. Therefore, there is no adequate state support of changes related to the healthcare system reform in the country, based on the application of a holistic approach and intersectoral interaction, particularly with the involvement of social workers. Another factor causing the problem is misunderstanding, and often resistance and sabotage of the reforms initiated by health-related professionals (practitioners and administrators), due to the commitment to the “traditional” paternalistic approach in providing services and the biomedical model of health awareness. There is also the lack of understanding by healthcare professionals and community of the importance of public health as a key tool for addressing community health problems and community development to improve people’s well-being. Additionally, there is a low level of community awareness regarding the need for people to actively participate in solving their health problems as well as their passive (consumer) position with respect to community health services as the main tool for problem-solving and health development. The problem is aggravated by the complicated foreign policy and societal and socio-economic conditions in the country. All the enlisted above requires fundamental changes in the practice of preserving the public health as a means of community and society development, i.e., applying a comprehensive approach based upon an interdisciplinary interaction of professionals (Ukraine. Cabinet of Ministers Resolution No. 1106, 2017).

To justify the establishing of Community Health Clinic of Lviv Polytechnic as a hub for providing community health services and a tool for solving the problem of the Ukrainians’ health, the first wave data from the “Research of Lifestyle Risks of Contemporary Youth” was used. The researchers were faced with the need to obtain reliable information on the problems that characterize the region's youth (because it is the youth of the region who are the target group – entrants, future students of the University), the level of problems associated with risky behaviours, the persons who require priority attention, and the factors that cause identified problems. The international ESPAD study belongs to the known research in this area in Ukraine. It is carried out by the scientific staff of the Ukrainian Institute for social research named after Alexander Yaremenko under the direction of Olga Balakireva

(Balakireva, 2015). At the same time the presented information appeared to be insufficient, it did not provide a coherent social picture in the region, particularly in Lviv district.

The researchers were interested in the situation from the perspective of the U. Beck risk theory (Beck, 1992; Beck, 2000). It is worth noting the thorough research conducted by modern Ukrainian sociologists, such as O. Deyneko, and L. Sokuryanskaya (Deyneko and Sokuryanskaya, 2015). However, these researchers bypass mental health issues in their studies, focusing on social aspects. Strengthening the dynamics of social change, uncertainty and instability of social processes cause the emergence and growth of risky behavioral practices in the youth environment. Complicated external social conditions (and for Ukraine this complexity is also connected with the war in Eastern Ukraine and its consequences for the society) significantly affect the value orientations and everyday practices of today's youth.

*The Hypothesis:* The main hypothesis that the researchers put forward was the premise regarding the situation in which contemporary Ukrainian youth find themselves. It can be described as a kind of "scissor effect", i.e., the inconsistency of the life plans of young people with the possibilities of their implementation in conditions of modern Ukrainian society, which in turn entails numerous manifestations of social deviance, and the deterioration of social well-being accordingly. The outlined factors led to the initiation of our own empirical research. It was suggested to apply the methodology and toolkit of the well-known longitudinal project in Poland – the so-called Mokotów studies (Warsaw), the five research waves of which were conducted by scholars of the Warsaw Institute of Psychiatry and Neurology under the guidance of Professor Krzysztof Ostaszewski among 15-year-olds since 2004 (2004, 2008, 2012, 2016), and the 15-year-old youth in mid-2004 (2004, 2008, 2012, 2016) (Ostaszewski, 2017). This project relates to the research that experts call "trend research". The traditional purpose of Mokotów research is the analysis of psychosocial factors of risk behaviours and problems, and construction of empirical foundations to formulate prevention recommendations (Ostaszewski, 2017, p.10).

The research was conducted in 2016 in order to monitor the risk-taking behaviors and the use of psychoactive substances by the student youth due to the joint efforts of a group of scholars from Ukraine and Poland, specifically by the professionals from the State Agency for Alcohol Problems Resolution (Państwowa Agencja Rozwiązywania Problemów Alkoholowych), Institute of Psychiatry and Neurology in Warsaw (Poland), under the guidance of K. Okulich-Kozarin, and K. Ostashevsky (Polish sociologists), and L. Klymanska and S. Shchudlo (Ukrainian sociologists) (Okulicz-Kozaryn *et al.*, 2017; Shchudlo, 2017).

The main objectives of the study involved identification of the level of risky behavior manifestation in students' environment; consumption of psychoactive substances (alcohol, drugs, tobacco, medicines); identification of mental health status (depression, psychological abuse); danger of using modern technologies (Internet, computer); classification of differences between lifestyles and threats to young people in the big city, medium (small) city and village (settlement); and similarities and differences in risky behaviors of Ukrainian and Polish youth (Ostaszewski *et al.*, 2013, p.10).

The methodology and tools, tested in the well-known Mokotów research (conducted since 1989, and repeated every 4 years since then) allowed light to be shed on the current state of the problem in the Western Ukrainian region, and thus to address some of the risk factors for the future students of Lviv Polytechnic National University. The study carried out in 2016 (intended by the authors to be longitudinal) was conducted by means of questioning 15-year-old schoolchildren; the choice of the grade was random; and the total sample was 1801 respondents (Herasym *et al.*, 2017, p.30).

Accordingly, 1763 Ukrainian schoolchildren from grade 9 were interviewed, including 1217 residents of the city of Lviv, 303 residents of the city of Drohobych, and 243 rural residents (from Drohobych district). The study was carried out using group interview, with handouts

containing a structured anonymous questionnaire, which respondents filled by themselves. The empirical results obtained were presented at a number of national and international scientific conferences, including VIII International Scientific Conference of European Association for Prevention Research Quality in Prevention, held in Vienna on September 20-22, 2017, under the auspices of Austria Federal Ministry of Health and Women's Affairs, and were published in the conference proceedings (Okulicz – Kozaryn *et al.*, 2017, p. 201).

The empirical study of the mental health condition of the youth of Lviv and the region indicated the inherent risky behaviors among 15-year-old schoolchildren, as provided below.

*Alcohol abuse.* In 2016, the percentage of adolescents trying to drink alcohol totaled 47%. The largest number of such adolescents was in the city of Lviv - 61%, the least number – in rural areas - 43%. The incidence of young people who consumed alcohol and at the same time reached the state of alcohol intoxication (a subjective definition of the respondent) was significantly lower - 15% in general (Herasym *et al.*, 2017, p.35).

Other studies conducted by the sociologists from Kharkiv National University of Internal Affairs under the guidance of I. Rushchenko and O. Serdiuk (7 waves of the “Youth and Drugs” study in 2017) (by Rushenko and Serdiuk, 2016, in Herasym *et al.*, 2017, p.36), where the respondents were not only pupils of high schools and vocational schools but also students of higher educational establishments, show that attempts to drink alcohol intensify, when young people change their status from “schoolchildren” to “students”. Therefore, one should expect an escalation of the tendency towards alcohol consumption among the student youth, or as they grow older.

*Abuse of other psychoactive substances.* In general, 4% of young people in the Lviv region reported they had experience using drugs, 10% - smoking cigarettes, and 21% - of non-medical use of medications (Herasym *et al.*, 2017, p.34). The most common is the use of marijuana and hashish, somewhat less common is LSD or other hallucinogens, spice, psychotropic drugs, sedatives, sleeping pills, glues, solvents, etc. (Herasym *et al.*, 2017, c.38) As demonstrated by the study, schoolchildren with an average level of academic achievement were most inclined to use drugs, cigarettes and medications, which can lead to dangerous consequences in the future, particularly while studying at a higher educational establishment. Low cognitive ability that is directly related to school performance, combined with drug addiction, cigarette smoking and uncontrolled use of drugs, does not allow schoolchildren to successfully master a university education program. It may become a reason for students dismissal, and, therefore, affects the learning quality indicators.

Several factors “push” young people towards psychoactive substance abuse, such as influence of other people (communities, and companies), lack of employment, lower self-control, and the desire to belong to those who already abuse them. 51.7% of the respondents gave an affirmative answer to the question “Have you been in a youth company that drank beer, wine or horilka (vodka) from last September till now?” (Herasym *et al.*, 2017, p.36).

It is a youth culture that has become a social environment where 43.9% of respondents last used alcohol, and among those who drank “more than 60 grams” are 70% of those who drank “only in a youth company” (Herasym *et al.*, 2017, p.37).

It can be concluded that the tendency to drink alcohol in the youth environment increases the likelihood of drinking more alcohol by adolescents later, for example, in an adult environment. When entering higher educational institutions, teenagers find themselves mainly in a youth environment (while learning and at leisure time), while parents' control over the risky behaviors of their children decreases. These factors can strengthen the abovementioned tendency.

Another problem linked to risky behaviors is the so-called “freeze on the Internet”. To determine the place and role of the Internet in the life of today's student youth, the research toolkit contained several questions that contributed to understanding the feelings and

experiences of 15-year-old schoolchildren associated with using the Internet. The analysis of the results obtained was based on the rate of staying in the Internet for more than three hours a day. This time interval was recognized by Polish researchers in “Mokotów Research 2012” as a threat to the mental health of a teenager (Biechowska, 2013, p.123). The results of the study demonstrated that more than half (53.5%) of the respondents use the Internet for more than 3 hours per day, while the rest – 43.7% – spend from 1 to 3 hours per day (by Mirchuk, 2017, in Okulicz-Kozaryn *et al.*, 2017, p. 40). This percentage is significantly higher among girls than among boys and constitutes 59% and 47.4% respectively.

In addition, an attempt was made to identify the manifestations of excessive use of the Internet by the nature of use: *functional* (as a controlled method, without threatening consequences for health and social life) and *dysfunctional* (such as involving threats and manifestations of control loss over using the Internet, which can lead to isolation, rejection of active social life, training, active rest, and personal hygiene or health (Biechowska, 2013, p. 125). Functionally, the Internet is used by 85% of teenagers, and the threat of excessive use of the Internet appears in 11% of respondents. Threats and manifestations of dysfunctional use of the Internet in girls are higher (19.5%) than in boys (10.8%). The subjective feeling of dependence on Internet-surfing does not always occur, but it can become an obstacle to exhibiting appropriate behavior by a teenager-school pupil, and later – by a student of a higher educational institution.

*Identifying available resources in response to the community needs in healthcare and health promotion to address health problems in the conditions of Ukraine*

We find the legal and regulatory framework at the international and national levels to be a major resource to rely on in addressing the problem of the poor and deteriorating state of health of the population in Ukraine.

Thus, the National Healthcare Strategy for Ukraine was developed in accordance with the Action Plan on Implementing the Association Agreement between Ukraine, of one side, and the European Union, the European Atomic Energy Community and their Member States, of the other, for 2014- 2017, and supported by the value and evidence based provisions of the new European policy for health, i.e., “Health 2020”. It was approved by the Order of the Cabinet of Ministers of Ukraine, as of September 17, 2014 No. 847-r (WHO, 2012; WHO, 2013; Ukraine. Cabinet of Ministers Resolution No. 1106, 2017).

The European policy “Health 2020” sets forth first a set of universal human values, evidence and experience, which forms the platform for the development of partnership and cooperation. “Health 2020” calls for the inclusion of all strata of society as a key element in the planning, developing, implementing and monitoring of health strategies at all levels. This policy contains strong arguments in favour of empowering citizens, consumers and patients as the most important factor contributing to improving health indicators. In line with the five priorities of the WHO global reform governance, in the European policy for health “Health 2020”, public health is reinstated as an approach to strengthening healthcare systems, in accordance with the Tallinn Charter: Health Systems for Health and Wealth (WHO, 2008; WHO, 2012, p. 6).

Restored attention to public health corresponds to one of the five priorities of the WHO global reform program, particularly in the category "Strengthening health systems". Public health work in the WHO European Region is carried out as part of an approach to strengthening health systems, in line with (WHO, 2008; WHO, 2012, p. 6). The unifying principle of public health is its inherent “public” character, as well as the fact that it is mainly focused on the health of the whole population. Thus, public health can be understood as a key aspect of the wider health system and can play an important role in improving the effectiveness and efficiency of the healthcare system (WHO, 2012, p. 8).

The legal and regulatory framework at the national level is supported primarily by the following legislative acts: **(1)** Resolution of the Verkhovna Rada of Ukraine as of April 21, 2016, No. 1338-VIII “On Recommendations of Parliamentary Hearings on the topic: “On Health Care Reform in Ukraine” (Ukraine. Verkhovna Rada Resolution No. 1338-VIII, 2016); **(2)** Order of the Cabinet of Ministers of Ukraine "On Approval of the Concept of Development of the Public Health System" (Ukraine. Cabinet of Ministers Decree No. 560-r., 2017); **(3)** The Strategy for Sustainable Development of Ukraine until 2020; **(4)** National Human Rights Strategy of Ukraine; **(5)** Strategy of reforming the system of providing social services until 2022; **(6)** Regulation of the Cabinet of Ministers of Ukraine of December 27, 2017, No. 1018-p Kyiv “On Approval of the Concept of the National Mental Health Program in Ukraine for the Period until 2030” (Ukraine. Cabinet of Ministers Decree No. 1018-r., 2017).

The Social Work Education Program (SWEP) at Lviv Polytechnic appears to be another tangible resource in our addressing the needs of community health. It was launched within the framework of the Canada-Ukraine “Reforming Social Services” project (1999-2003), funded by Canadian International Development Agency (CIDA). The model of professional social work education was developed as a result of effective partnerships between the University of Manitoba (Canada) and Lviv Polytechnic National University as well as between Canadian and Ukrainian social service agencies.

The SWEP is aimed at training highly qualified social workers committed to social change and innovation and promoting the development of democracy and civil society in Ukraine. It is student-centred, competence-based and research-oriented. Social development and commitment to social justice and understanding social work practice in the context of social policy are emphasized. The SWEP is based on professional social work values. The integration of theory and practice is its major feature. The importance of Field Instruction as the core element of the SWEP is highlighted. Ongoing professional development of agency site supervisors as well as of the SWEP faculty is accentuated.

It is the generalist model, which is incorporated into the 4-year undergraduate curriculum leading to a Bachelor of Social Work degree (BSW). The 1,5-year graduate curriculum, launched in 2005, provides two specializations for gaining a Master of Social Work degree (MSW), i.e., “Social Administration” and “Social Technologies”. Starting 2016, the 4-year curriculum leading to a PhD degree in social work is offered. Health care and health promotion courses are incorporated within the curricular at all the levels of studies.

The research conducted led to the initiation of professional development (PD) training targeted at the faculty of the Department of Sociology and Social Work, to develop their professional competences in the area of “Social Work in Mental Health Care” and its component “Therapy of Dependencies”. These components were to be applied in: (a) providing counselling services and consultations in the Community Health Clinic to both instructors and students regarding services provision to persons with dependencies; (b) teaching within the framework of the Social Work education program, particularly in carrying out an in-depth study of educational modules on the peculiarities of social work with those dependent on psychoactive substances, and dealing with behavioral dependencies; (c) conducting large-scale prevention work to prevent different types of addictions (Fedun and Savka, 2018; Klos *et al.*, 2018, p.35). The related PD training is already launched and being carried out within the scientific internship framework at the Institute of Psychology of the Academy of Special Pedagogy named after Maria Gzhezogzhevska in Warsaw.

Partnerships and alliances continue to evolve, and our experience at Lviv Polytechnic testifies to the importance of promoting partnership collaboration networking at the local, regional, national and international levels to rely on in addressing the immediate needs of the country, particularly in the area of healthcare and health promotion. At this time, “No Limits”

Partnerships Network is developed, involving partners from Canada, Germany, Norway, Poland, Israel, Australia, USA, Portugal, Latvia and other countries. Academics and professionals are also united based on “No Limits” Research Platform. Accordingly, the partnership collaboration networking is found to be one more tangible resource to rely on in addressing the problem of poor and deteriorating health of the population in Ukraine.

The partnerships already in place also initiated an Advisory Committee of the SWEP. The Advisory Committee consists of representatives of Lviv governmental and non-governmental social service agencies. To advocate for social change, the SWEP places the major emphasis on further developing its “University-Community” partnerships.

*Offering a model for implementing the strategy for community health development based on Lviv Polytechnic*

The activities of “No Limits” Services of Accessibility to Learning Opportunities, “No Limits” Partnership Networking, initiated and established within the framework of the SWEP (Hayduk *et al.*, 2017, p.260), and the research conducted by its faculty and students brought forward the idea to develop Community Health Clinic in order to respond to local health challenges (Klos *et al.*, 2018, p.36), as well as to address the problem of poor and further deteriorating health of individuals and communities on the international level.

Based on the results of studying both community physical and mental health needs (Mokotów research) (Ostaszewski and Bobrowski, 2013) and the existing related legal framework and experience (national and international) (Hayduk *et al.*, 2016; Hayduk *et al.*, 2017), International "INTEGRATION" Centre for Professional Partnerships and the Department of Sociology and Social Work initiated the organizing of Community Health Clinic of Lviv Polytechnic in close cooperation with the administration of Lviv Polytechnic National University and its structural divisions.

Based on the values of social work (valuing the life and health of every individual, dignity and uniqueness of each person, the right of everyone to equal opportunities in achieving health and well-being, based on individual needs), social inclusion principles, and “No Limits” partnership networking, Community Health Clinic of Lviv Polytechnic was launched as a university unit for delivering counselling and coordination of other services to meet the individual’s whole health needs. The service provision is supported by dependence prevention and therapy, “No Limits” services of accessibility to learning opportunities (following the principle “Fix the environment, not the person”), and Veteran services for combatants, their families, and IDPs. The delivery of services relies on the Social Work Education Program, training professionals for the area of Mental Health Care in particular, Peace and Conflict Studies, and Adapted Physical Activity and Sport in Rehabilitation (Klos *et al.*, 2018).

As a result, our advanced international experience has been adapted with due regard to local peculiarities, and the Model of Community Health Clinic of Lviv Polytechnic has been developed (Klos *et al.*, 2018, p. 35). Following the above, Community Health Clinic of Lviv Polytechnic has been created and continues to grow as a University unit for delivering counselling and coordination services (Order of Rector of Lviv Polytechnic National University No. 135-1-10 as of March 20, 2019). Community Health Clinic of Lviv Polytechnic appears to be one tangible result of the partnerships networking and research conducted by both educators and students. In carrying out its counselling and coordinating functions, Community Health Clinic relies on both the interaction of the University structural subdivisions and the cooperation with governmental and non-governmental organizations in Lviv, this way going beyond the academic community and extending to the community of the city. Community Health Clinic of Lviv Polytechnic is further developing as a community-based centre for rehabilitation, evidence-based practice, research and education of Lviv Polytechnic and the city of Lviv.

*Illustrating the role of supervision as a key mechanism in managing Community Health Clinic of Lviv Polytechnic and a tool of human resource development*

The administrative, educative, and supportive functions of supervision to be introduced into the practice of Community Health Clinic help to conceptualize the diverse supervisory roles and need to be based on "...enormous value-based knowledge, skills and competencies expected of supervisors in social services" (De Groot, 2016). In this way, the university location of this program appears to be an excellent base to provide the needed supervision, and to teach supervision skills to those who will go further into the community.

Supervisors, as mid-level managers, are supposed to possess leadership qualities, be able to encourage supervisees to speak openly about their professional and personal issues and prospects in order to receive qualified support. As effective helpers, they inspire and motivate employees, and promote the development of their level of social tolerance, which involves, first and foremost, a careful attitude to the actual social problems. In their professional activities as agents of positive change, supervisors adhere to the imperative of tolerance and the principles of cultural compliance. Basic social work skills such as empathy, respect to a human being, trust, hearing, understanding the needs of others, self-awareness, self-reflection, and motivation complement to supervisory activity.

With respect to *administrative supervision*, supervisors' competencies should include the ability to monitor and improve the work of staff members; their managerial efficiency is determined by their aptitude to advance the work of others. These skills, in addition to budgeting, grant writing, fundraising, advocating for their clients, and strategic planning are of key importance in organization management. Scrupulous attention should be paid to specific skills in assessing the requirements and performance of the organization. This involves awareness of the needs of clients, employers, employees, top managers, and representatives of organizations' supervisory councils. The assessment procedure begins with an analysis of the organization that is involved in the process of providing social services, evaluating the results and their impact on clients and service providers, which requires from supervisors having mastery over research skills, and skills in statistical analysis. Planning the activities of the intervention process is among the most important aspects (Menefee and Thompson, 1994).

Relating to *educative supervision*, it is defined as "... a process in which supervisor and supervisee learn together: they learn a lot about clients and each other" (Jacobs *et al.*, 1995). It is also one of the sources for receiving satisfaction both by supervisors and staff members of the organization.

The educative roles performed by supervisors in social sector organizations are of utmost importance. Today, social sector organizations operate in a turbulent and dynamic environment influenced by socio-cultural, technological, economic, legal, political and international forces. Unpredictable environmental changes force organizations to react quickly and adapt to such an environment for survival. Globalization, development of information technologies and economy change the format of the business environment. Therefore, the organizations in which the culture of learning has become an integral part of their activity have more chances for a successful growth. This approach directly concerns supervision practice. Ideally, an effective social service "develops an organizational culture that provides and maintains an individual, team and organizational learning environment to guarantee better quality services provision" (Baker and Sinkula, 1999, pp. 411-427). Taking this into account, a special attention should be paid to educative function in supervision activities in the Community Health Clinic. It is important that supervisees should be actively involved into the learning process, which means that they must be proactive in their approach to the learning practice, and not just passive observers to help the supervisor correctly

envisage the results of learning and, as a result, correctly formulate goals and objectives of training.

The above testifies to the need to actively involve supervision as a resource and a key mechanism in managing Community Health Clinic of Lviv Polytechnic, and a tool of human resource development.

**Limitations of the study:** The complicated foreign policy, societal and socio-economic conditions in the country contribute to the instability in implementing the healthcare reform, which is a new experience for Ukraine. The concept of supervision as a tool of human resource development and a key mechanism in managing the provision of healthcare and health promotion services is also new for Ukraine. This, in its turn, brings to the fore the need to raise the level of awareness regarding these issues both among professionals in the field of healthcare and health promotion and in the community.

**Strengths of the study:** The initiative, which comes from “inside” the community, to use a university community as a tool for developing a healthy community and improving the health and well-being of communities, and apply supervision as a key mechanism of human resource development in managing the community-based services promotes the healthcare reform in Ukraine and speaks to the ongoing civil society development in the country.

### **Conclusions and Future Work**

The findings suggest the need for changes in the healthcare system and provision of social and medical services for the population, in order to construct a comprehensive approach to deal with problems related to the health and well-being of citizens in Ukraine. This requires active involvement of an interdisciplinary team of professionals, in which social workers play important roles. With this need in mind, the concept of Community Health Clinic of Lviv Polytechnic is offered as a model for implementing a strategy for holistic community health development. Follow up steps, particularly on the part of the University and the community in Lviv are needed to implement the concept of Community Health Clinic of Lviv Polytechnic in its full scope. Essentially, this is a pilot project that could become a template for the development of other community-based services for holistic health.

### **Acknowledgments**

The co-authors acknowledge and appreciate the willingness and openness of the public-schools teaching staff and other professionals’ commitment to their involvement in the survey. The support and promotion of the study provided by all the organizations involved, including both Ukrainian and Polish institutions, are really appreciated. The ongoing support of the concept of Community Health Clinic being currently implemented based on Lviv Polytechnic, as provided by the top administration of Lviv Polytechnic National University is highly acknowledged.

### **References**

- Baker, W. and Sinkula, J. (1999). The synergistic effect of market orientation and learning orientation of organizational performance. *Journal of the Academy of Marketing Science*, 27, pp. 411–427.
- Balakireva, A. (Ed.) (2015). *Smoking, alcohol and drugs consumption among adolescents who study: distribution and trends in Ukraine*, Kyiv: Foliant.
- Beck, U. (1992). From Industrial Society to the Risk Society. *Theory, Culture and Society*, 9 (1), pp. 97–123.
- Beck, U. (2000). *Risk Society. On the Way to Another Modern*. Moscow: Tradition.
- Biechowska, D. (2013). Dysfunkcyjne korzystanie z internetu. *Monitorowanie zachowań ryzykownych i problemów zdrowia psychicznego młodzieży. Badania mokotowskie 2012*. Instytut psychiatrii i neurologii w Warszawie Zakład Zdrowia Publicznego Pracownia Profilaktyki Młodzieżowej “Pro-M”, pp. 120–127.

- De Groot, S. (2016). *Responsive Leadership in Social Services: A Practical Approach for Optimizing Engagement and Performance*. Thousand Oaks, California: Sage Publications, Inc.
- Deyneko, O. and Sokuryanskaya, L. (2015). Students at Risk Society: Factors for Updating Social Subjectivity. *Youth in Central and Eastern Europe. Sociological Studies*, 2 (8), pp. 10-20.
- Jacobs, D., David, P., and Meyer, D. (1995). *The supervisory encounter*. New Haven: Yale University Press.
- Fedun, B. and Savka, V. (2018). Suicide among combatants: The social problem dimensions. In *Sociology-Social Work-Social Welfare – Regulating Social Problems: VIII International scientific conference, Lviv, April 19–20* (pp.71–73). Lviv: Lviv Educational and Scientific Centre for Professional Education of National Pedagogical University named after M. Dragomanov.
- Hayduk, N., Herasym, H., and Korzh, R. (2017). On the implementation of inclusive education policy in university education of Ukraine. *Yearbook of Varna University of Management*, 10, pp. 258–266.
- Hayduk, N., Herasym, H., and Korzh, R. (2016). On the issue of implementing inclusive education policy in higher education. *Pedagogy and Psychology of Professional Education*, 4 (4), pp. 187–199.
- Herasym, H., Gerus, O., Klymanska, L., and Savka, V. (2017). Using alcohol and other psychoactive substances in the youth environment in modern Ukraine. *Youth in Central and Eastern Europe. Sociological Studies*, 2 (8), pp. 27-43.
- Kadushin, A., and Harkness, D. (2002). *Supervision in Social Work*. New York, NY: Columbia University Press.
- Klos, L. (2018). Current state of social work in public health: Health care and health promotion activities of a social worker. *International Journal of General and Medical Psychology*, 1 (01), pp. 90–92.
- Klos, L., Klymanska, L., Hayduk, N., and Herasym, H. (2018). On the social work input in mental health care in Ukraine. *Mental Health: Global Challenges*, 1, pp. 32–37.
- Kryachkova, L.V. (2015). *Medical and social justification of the system of health care sensitivity provision to the expectations of the population*. Kharkiv National Medical University, Kharkiv.
- Menefee, D., and Thompson, J. (1994). Identifying and comparing competencies for social work management: A practice driven approach. *Administration in social work*, 18, pp. 1–25.
- Miller, L. J., and Lu, W. (2019). *These Are the World's Healthiest Nations*. Bloomberg Economics. Available at: <https://www.bloomberg.com/news/articles/2019-02-24/spain-tops-italy-as-world-s-healthiest-nation-while-u-s-slips> (Accessed: 24 February 2019).
- Okulicz – Kozaryn, K., Shchudlo, S., Herasym, H., Klymanska, L., Gerus, O., Savka, V., and Mirchuk, I. (2017). Mental Health and Risk Behaviors among West Ukrainian Adolescents. *Book of abstracts: 9th International Conference of the Faculty of Education and Rehabilitation Sciences, Zagreb, May 17 – 19* (p. 201). Zagreb: Zagreb University.
- Okulicz-Kozaryn, K., Shchudlo, S., Klymanska, L., Herasym, H., Gerus, O., Savka, V., and Mirchuk, I. (2017). Zachowania ryzykowne i zaburzenia zdrowia psychicznego młodzieży we Lwowie, Drohobyczu i w powiecie drohobyckim. Ostaszewski, K. (ed.) (2017). *Monitorowanie zachowań ryzykownych, zachowań nałogowych i problemów zdrowia psychicznego 15-letniej młodzieży Badania mokotowskie 2004–2016 Badania ukraińskie, obwód lwowski 2016*. Warszawa: Instytut Psychiatrii i Neurologii w Warszawie, pp.129-146
- Ostaszewski, K. and Bobrowski, K. (2013). Przedmiot i metodologia badań. In Ostaszewski, K., and Bobrowski, K. (eds.) *Monitorowanie zachowań ryzykownych i problemów zdrowia*

psychicznego młodzieży. *Badania mokotowskie 2012*. Warszawa: Instytut Psychiatrii i Neurologii.

Ostaszewski, K. (ed.) (2017). *Monitorowanie zachowań ryzykownych, zachowań nałogowych i problemów zdrowia psychicznego 15-letniej młodzieży Badania mokotowskie 2004–2016 Badania ukraińskie, obwód lwowski 2016*. Warszawa: Instytut Psychiatrii i Neurologii w Warszawie.

Shchudlo, S. (2017). Psychic health and risky behaviour of the 15-year-old youth of Lviv region. *Youth in Central and Eastern Europe. Sociological Studies*, 2 (8), pp. 7-26.

Sheridan, Ch.L., Radmacher, S.A., Dodziuk, A., Golec, D., Grzegorzewska-Klarkowska, H., Mroziak, B., and Zakrzewski, B. (1998). *Psychologia Zdrowia – Wyzwanie dla biomedycznego modelu zdrowia*. Warszawa: Instytut Psychologii Zdrowia.

Stavkova, S. (2018). On the issues of professional training of social work supervisors and supervision implementation in Canada and Ukraine. *Bulletin of Cherkasy University. Series "Pedagogical Sciences"*, 1, pp. 115–123.

Ukraine. Cabinet of Ministers Decree No. 1002-r. (2016). *On approval of the Concept of Development of the Public Health System*. Available at: <https://zakon.rada.gov.ua/laws/show/1002-2016-%D1%80> (Accessed: 16 May 2019).

Ukraine. Cabinet of Ministers Decree No. 1018-r. (2017). *On approval of the Concept for Development of Mental Health in Ukraine until 2030*. Available at: <https://zakon.rada.gov.ua/laws/show/1018-2017-%D1%80> (Accessed: 6 April 2019).

Ukraine. Cabinet of Ministers Resolution No. 1106. (2017). *About Agreement performance about association between Ukraine, on the one hand, and the European Union, European Atomic Energy Community and their state members, on the other hand, for the Years 2014-2017*. Available at: <https://zakon.rada.gov.ua/laws/show/en/847-2014-%D1%80#n12> (Accessed: 2 May 2019).

Ukraine. Cabinet of Ministers Decree No. 530-r. (2018). *On approval of the National Plan of Measures for Non-Communicable Diseases in Order to Achieve the Global Goals of Sustainable Development*. Available at: <https://zakon.rada.gov.ua/laws/show/530-2018-%D1%80> (Accessed: 12 May 2019).

Ukraine. Cabinet of Ministers Decree No. 560-r. (2017). *On approval of the Plan of Measures for Implementation of the Concept for Development of the Public Health System*. Available at: <https://zakon.rada.gov.ua/laws/show/560-2017-%D1%80> (Accessed: 1 May 2019).

Ukraine. Law No. 2168-VIII. (2017). *On State Financial Guarantees of Public Health Care*. Available at: <https://zakon5.rada.gov.ua/laws/show/2168-19> (Accessed: 2 March 2019).

Ukraine. Presidential Decree No. 5/2015. (2015). *On Strategy for Sustainable Development "Ukraine 2020"*. Available at: <https://zakon.rada.gov.ua/laws/show/5/2015> (Accessed: 1 May 2019).

Ukraine. Verkhovna Rada Resolution No. 1338-VIII. (2016). About Recommendations of the Parliamentary Hearings: on Health Care Reform in Ukraine. *Information from the Verkhovna Rada (IVR)*, 21, pp. 23-29.

Vus, V., Klos, L., Flaherty, M., and Sikorski, E. (2018). Peacebuilding and mental health: Moving beyond individual pathology to community responsibility. *Mental Health: Global Challenges*, 1, pp. 27–28.

World Health Organization. (2017). *Health response to the humanitarian crisis in Ukraine: Facts and figures*. Available at: <http://www.euro.who.int/en/health-topics/emergencies/health-response-to-the-humanitarian-crisis-in-ukraine/facts-and-figures> (Accessed: 10 April 2018)

WHO (2019). *Social determinants of health*. from Available at: [https://www.who.int/social\\_determinants/sdh\\_definition/en/](https://www.who.int/social_determinants/sdh_definition/en/) (Accessed: 17 May 2019)

- WHO. Regional Committee for Europe. (2008). *The Tallinn Charter "Health Systems for Health and Wealth"*. Available at: <https://www.euro.who.int/document/E91438r.pdf>
- WHO. Regional Committee for Europe. (2013). *Health - 2020: A European policy framework and strategy for the 21st century*. Available at: [http://www.euro.who.int/\\_data/assets/pdf\\_file/0017/215432/Health2020-Long-Rus.pdf?ua=1](http://www.euro.who.int/_data/assets/pdf_file/0017/215432/Health2020-Long-Rus.pdf?ua=1) (Accessed: 7 May 2019)
- WHO. Regional Committee for Europe. (2012). *The European Action Plan (EAP) for Strengthening Public Health Services and Capacity*. Copenhagen, WHO Regional Committee for Europe. Available at: [http://www.euro.who.int/data/assets/pdf\\_file/0008/171773/RC62wd12rev1-Rus-updated.pdf](http://www.euro.who.int/data/assets/pdf_file/0008/171773/RC62wd12rev1-Rus-updated.pdf)
- World Health Organization. (1986). *The Ottawa Charter for Health Promotion*. Geneva: World Health Organization.