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SIMULATION APPLICATIONS: A POTENTIAL APPROACH FOR TURKISH SOCIAL WORK EDUCATION¹

Simülasyon Uygulamaları: Türk Sosyal Hizmet Eğitimi İçin Potansiyel Bir Yaklaşım

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ABSTRACT

Social work education all over the world is reshaped within the framework of social entrepreneurship, social innovation, the use of information and communication technologies. role-play simulations of clients by actors, and simulation applications involving computerbased virtual reality. In social work simulation programs and applications prepared according to certain scenarios and cases, students may be expected to observe, to make certain decisions, to use professional skills, to measure empathic responding abilities and to evaluate the course of professional intervention methods while working with clients. On the other hand, although computer-based virtual reality simulations lack sincerity in face-to-face role-playing, they have some strong benefits in traditional prevention or intervention program formats. While accessing this technology has become easier in the world than ever, this is a dream not yet realized in Turkey in social work education presentation. Ultimately, this article aimed to direct social work educators to use simulation methodology and techniques. Fortunately, there are professionals and academicians who feel the need for revision of social work education in Turkey with new technological developments, understand the contribution of technological knowledge and communication, and advocate the use of social entrepreneurship, innovation and simulation techniques in education.

Key words: Social work education, role-play simulations, computer-based virtual reality, simulation techniques, Turkey.

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ÖZET

Dünyanın her yerinde sosyal hizmet eğitimi sosyal girişimcilik, sosyal yenilikçilik, bilgi ve iletişim teknolojilerinin kullanımı, müracaatçıların aktörler tarafından canlandırıldığı role-play simülasyonlar ve bilgisayar tandanslı sanal gerçeklik içeren simülasyon uygulamaları çerçevesinde yeniden şekillenmektedir. Belirli senaryo ve vakalara göre hazırlanan sosyal hizmet simülasyon program ve uygulamalarında öğrencilerin müracaatçıları ile çalışırken gözlem yapmaları, birtakım kararlar almaları, mesleki becerilerini kullanmaları, empatik tepki verebilme yetilerini ölçmeleri ve mesleki müdahale yöntemlerinin gidişatını değerlendirmeleri beklenebilir. Öte yandan her ne kadar bilgisayar tandanslı sanal gerçeklik içeren simülasyonlar, yüz yüze rol oynama konusundaki samimiyetten yoksun olsalar da, geleneksel önleme veya müdahale programı formatlarında bazı güçlü faydalara sahiptir. Bu teknolojiye erişim Dünya'da kolaylıkla sağlansa da Türkiye'de sosyal hizmet eğitimi sunumunda henüz gerçekleştirilemeyen bir hayaldır. Nihayetinde bu makale sosyal hizmet eğitimcisini simülasyon metodolojisini ve tekniklerini kullanma konusunda yönlendirmeyi amaçlamıştır. Neyse ki Türkiye'de sosyal hizmet eğitiminin yeni teknolojik gelismeler ile gözden geçirilmesine ihtiyaç duyan, eğitimde sosyal girişimciliğin, yenilikçiliğin ve simülasyon tekniklerinin kullanılmasını savunan, teknolojik bilgi ve iletişimin katkısını anlayan profesyoneller ve akademisyenler bulunmaktadır.

Anahtar kelimeler: Sosyal hizmet eğitimi, role-play simülasyonlar, bilgisayar tandanslı sanal gerçeklik, simülasyon teknikleri, Türkiye.

1. INTRODUCTION

Social work is a practice-based profession and academic discipline that supports social change and development, social integration, strengthening, and liberation of people. The social work discipline has three main aspects under the headings of social work education, research, and practice. Social work education, one of the main aspects of the social work discipline, is based on the principles of social justice, human rights, collective responsibility, and respect for diversity. Social work education associates people with social structures in order to cope with vital difficulties and improve the well-being of individuals.

Social work education all over the world is reshaped within the framework of social entrepreneurship, social innovation, the use of information and communication technologies, role-play simulations of clients by actors, and simulation applications involving computer-based virtual reality. Naturally, we evaluate simulation applications in social work education from two perspectives. While there is a limited discussion on role-play simulations of clients by actors and simulation applications involving computer-based virtual reality, and role-play simulations for social work educators and simulation applications involving computer-based virtual reality, and role-play simulations for social work educators and simulation applications involving computer-based virtual reality in the current literature (Petracchi, 1999), it is known that all these concepts are centralized in the revitalization of social work practices with children and families, particularly in Anglo-Saxon countries (Garret, 2005).

Information and communication technologies are becoming a contemporary force that transforms economic and social activity, and as a result, we are becoming increasingly involved in a digital society that significantly changes the information environment and affects every aspect of our lives (Rafferty & Steyaert, 2009). With the continuous improvement of software, hardware, and the developing internet, it is necessary to focus on the technology potential to maximize the training of social workers and the efficiency of institutions and their services (Choi et al., 2002). Simulation in social work education provides the use of this technology potential.

Moreover, social work education has a goal of guiding individuals, groups, and society to solve social problems (Alptekin et al., 2017). The science-society-technology relationship is examined in studies conducted on social problems (Pinch & Bijker, 1984). In practice, social problems can be addressed by means of scientific facts and technological equipment, and solutions to them can be easily discussed. By using this approach in social work education, it can also be possible to test the obstacles and activities that arise around the solution of social problems in the classroom environment.

It is becoming increasingly common among professionals to use simulation software that includes full-scale, realistic, sophisticated, computer-based virtual reality in engineering, industrial design, judiciary fields, and social policy production, and particularly in healthcare services (Alinier et al., 2006). Simulation forms and therapies, which involve sophisticated virtual reality putting the user's senses into the computer environment, are effectively used to address the individual's physical or environmental problems (for example height, flying, treating animal-related phobias) in the world (Smokowski & Hartung, 2003).

On the other hand, institutions, administrators, social organizations, and nongovernmental organizations they are involved in expect social work graduates to show the qualifications of practical education they have received right from the start. In social work education, including clients' behaviors in the knowledge repertoire of social work students through observation, imitation, and experiment, in other words, role-play simulations of clients by actors, is considered as an important output.

The use of simulation techniques in social work education may be functional in terms of determining the nature of human service delivery. Social work students who have a chance to practice continuously in a simulative environment before they start their career will, of course, be more fortunate and equipped than those who do not have such an opportunity. Simulations will encourage social work students to practice their clinical skills and actively participate in reflective practice activities, and students will feel more confident before they start providing service to clients. When they step in the field, they will take into consideration more variables in favor of clients.

Furthermore, the use of simulation in social work education will also become an important source of social support for practitioners. Social support reduces the difficulties experienced by the practitioner, alleviates the external stressors that the practitioner perceives during the practice, and changes the stress-tension relationship experienced by the practitioner (Viswesvaran et al., 1999). The social work practitioners' habit of providing social support should come to the fore from the very beginning with the techniques used in social work education. Social work students need to use simulation programs and applications developed for the purposes of developing problem-solving strategies and acquiring the necessary qualifications in Turkish social work education.

2. SOCIAL WORK EDUCATION PROCESS IN THE USE OF SIMULATION

The use of simulation in the educational environment is based on the andragogical theory in young and adult education. The andragogical theory refers to different and new forms of learning, methods of comprehending and processes for educational purposes for young people and adults. It emphasizes the control of learners. It is a theory that guides young people and adults to learn with new methods.

This theory sees the student as a self-managing, participatory, and independent individual capable of meeting the needs of the environment. In this theory, the life experience of individuals is recognized, emphasized and used. It is expected that the learner is ready to learn and is motivated by the immediate implementation of skills and knowledge (Knowles, 1980; Galambos & Neal, 1999; Knowles et al., 2005; Kara & Karakoç, 2017).

According to Galambos and Neal (1999), the use of simulation in social work education should include a three-stage process. The first stage is to explain to students the need for simulation: the purpose, why this simulation application is needed and the type of application, such as simulations involving computer-based virtual reality (the use of technology) or role-play. The second stage depends on the roles assigned to students by the scenario in the computer-based and role-play simulation. The purpose is to help students improve their problem-solving skills in a

different environment while the simulation is applied. Students' focus on simulation and participation in applications may increase their interest in classes and social problems. The final and most important stage is the feedback stage, which allows the educator to combine various independent aspects of the application. The feedback begins with a briefing about what happens in the process. It aims to make students gain intellectual honesty, in other words, to provide them with the ability to take into account evidence and reasons for situations that students accept and disagree with.

Then, it is necessary to discuss the main problems that arise during the simulation and how they relate to real-life situations. It is an important component to determine what kind of a grasp of life the simulation brings to the student. In other words, a briefing is designed to encourage critical thinking. The functioning of this social work education process, which is described in the use of simulation in Turkey, depends on the first step to be taken.

2.1. First Step: What should we do?

A study conducted on 245 social workers, who work with the public, has shown that technology and software applications are influenced by the computer skills and experience of social workers, their perceptions of the user-friendliness of systems and the usability of data (Carrilio, 2007). This result explains to us that we need to improve the computer skills of practitioners before adopting simulation techniques in practice and that with computer-based virtual reality, we need to create useful databases for role-play simulations of clients by actors. Computer use skills can be improved at some point through interpersonal support, training and the efforts of young social workers, but how will a useful database be created especially for the adoption of simulation techniques? The answer to this question will certainly be related to experience from one aspect.

Accepting the knowledge of social workers in different age groups and the similarities between different experiences supports the development of social work education. When specialization is combined with experience and technological development, management and sharing of information become easier. Thus, professional communication and understanding may be improved. The use of simulation in Turkish social work education may become a significant approach to professional interaction. The National Society of Social Workers can have an important function in the creation of useful databases for the adoption of simulation techniques. This society is responsible for popularizing the examples of good professional practices in the base of the population. Scenarios and cases can be collected through society. It is also important to consider the ethical aspect of this issue. First, permission must be obtained from clients for scenarios and cases. Then, all the scenarios and cases should be examined by the National Society of Social Workers' education ethics commission. Finally, all simulations (simulations involving computer-based virtual reality and role-play simulations) should be designed through the scenarios and cases selected depending on the importance of the experience gained from practice and the most beautiful reflections. In social work simulation programs and applications prepared according to certain scenarios and cases, students may be expected to observe, to make certain decisions, to use professional skills, to measure empathic responding abilities and to evaluate the course of professional intervention methods while working with clients.

There are examples of case and scenario studies in the world. It is known that in 1928 in the United States of America, the American Association of Hospital Social Workers published nearly 1000 cases from 60 hospitals (Gehlert, 2006, Özbesler, 2017). Why are similar studies not preferred to develop education simulations? Ultimately, this article aimed to direct social work educators to use simulation methodology and techniques. It aims to review the need for simulation programs and practices in social work education in the interest of social work students.

Technology can improve the quality of our lives, potentially enrich learning, social work practice, and education. Furthermore, technology can create challenges and dangers in the professional context. Orlikowski (2007) argues that the challenges related to organizational studies on the adoption, popularization, and the use of technology tend either towards technology influences (a techno-centric viewpoint) or towards interactions with technology (a human-centric viewpoint).

The human-centric viewpoint focuses on how people perceive technology in various situations and how they interact with technology (Orlikowski, 2007). The acquirement of all these gains depends on our active participation and the adoption of technology in our professional practice (Rafferty & Steyaert, 2009). In this context, we want to create a general framework starting from the obstacles in promoting the effective use of simulation in Turkish social work education.

3. OBSTACLES

It is known that the vast majority of university students effectively use technologybased communication tools and channels and that they enjoy spending time in front of the computer. In our country, although there are individual and group simulation applications such as role-play in the field of social work, there is no technology-based educational and guiding software developed for students. Moreover, the contents of role-play individual and group simulation applications are also controversial, because students who know each other and study in the same class become actors by the guidance of educators. The method that should be preferred is to carry out role-play simulations by selecting actors who will play clients and students who will plan the intervention from independent environments.

An example consistent with this logic (Petracchi, 1999) will certainly be given later in the article. However, at least we should accept that what we consider role-play simulation in our country is a practical application that depicts standard clients in the context of typical social work practices and includes interaction among students in the same class. We are trying to establish a strong understanding (Linsk & Tunney, 1997) that interaction with clients simulated by students during practical studies, which are completed with the feedback of impressions of students' peers and educators regarding the practice as in Turkey, receiving feedback from them, and participating in simulation both as a practitioner and an observer are beneficial.

Unfortunately, social work in Turkey does not constitute a market large enough in terms of information and communication technologies and computer-based simulation software industry. However, simulation software and the application needs of social work schools differ according to the needs of students and social work practice areas. Given that it is not possible to develop general software to cover many social work practice areas, it may not be a realistic expectation to think that technological approaches to be used in making human service effective will increase rapidly in the special case of Turkey (Tuncay, 2010).

In a successful transition in education, a road map, a shared vision, technology needs, a knowledge management strategy, redesigned education processes, and a need for change emerge (Kunkel & Yowell, 2001). We do not have infrastructure features, vision, and adequate equipment to provide simulation use in departments besides the insufficient number of educators who are aware of the necessity of changing social work education in our country. In the future, departments in Turkey will get access to

infrastructure possibilities for simulation applications, will change the vision window, and gradually some of the applications in social work education will require computer literacy. This will increase access to simulation programs that are reliably delivered on the internet and meet high professional practice standards and will also popularize the application of role-play simulations of clients by actors, selected from different environments, in classes.

The field of social work education, research, and application is surrounded by the speed of information and communication technologies. Social workers need to be competent in technological developments in order to maintain the ethical standards and values of social work practice under today's conditions. Thus, social workers can perform practices at all levels to help improve the lives of disadvantaged people deprived of their rights through broader access to education, information, and other resources.

Discussion of approaches such as the use of simulation in social work education has created a context that reminds social workers that they cannot resist technology and must understand the role that technology plays in everyday life (Perron et al., 2010). As a conclusion, the increasing frequency of simulation use will allow for the development of new practice methods and support for professional practices. Although access to this technology has become easier than ever in the world, it is a dream that cannot yet be realized in social work education presentation in Turkey. Simulations involving computer-based virtual reality have significant limitations. It is costly and difficult to fix when computer hardware and software problems arise. Hardware and software can quickly lose their currency.

Academicians should be trained on the use of technology, and department personnel should support students by using simulation programs (Smokowski & Hartung, 2003). Taking into account the opinions of the professional staff working in the field of social work and social work practices in our country, the development of guiding and educational software for the use of social work students and the diversification of simulative individual and group practices may be another step to contribute to their professional development.

4. OPPORTUNITIES: WHY IS SIMULATION IMPORTANT?

The use of information and communication technology in social work practice is a reflection of the climate change policy in social work, the importance of accountability

in public services, and the transition to the age of technological monitoring as a learning technique in practice (Rafferty & Steyaert, 2009). Nowadays, information and communication technology is included in traditional social work practice for administrative and therapeutic purposes (Bullock & Colvin, 2015). The importance of simulation in social work is, in fact, a concrete indication of the acceptance of information and communication technology, and the integration of simulation into practice offers opportunities for the field of social work, but opportunities in human service practices differ from institution to institution and from client to client.

Social workers, on the other hand, consider the need to prioritize the secrecy of the information they obtain from their clients, but also express their concerns about the revelation of this information (Richardson & Asthana, 2005). Nevertheless, many studies (O'Sullivan, 1988; Linsk & Tunney, 1997; Marlowe-Carr, 1997; Petracchi, 1999; Barnes et al., 2000; Helton, 2003; Foster & Stiffman, 2009; Kuehn et al., 2017) have shown that the use of online simulation involving role-play techniques and virtual reality in social work education is useful. As a matter of fact, the use of simulation in social work education can shed light on students' minds in terms of professional practice standards, the acquirement and sharing of information, ethics, and the importance of record keeping. This opinion is supported by statements (O'Neal, 1996; Moss, 2000; Sunarich & Rowan, 2017) of how social work simulations will integrate students' social work theory, knowledge, skills, and values into practice and eliminate the dilemma of how they should apply theory to practice.

The use of simulation can be reinforced by certain conditions of sharing information, professionals with whom the information is shared, the limits of shared information, ethical violations, and the need for effective report writing. Solutions to students' problems related to record keeping can be sought through the use of simulation techniques and role-play methods. The practitioner can become stronger with the use of simulations related to processes and procedures such as making more qualified interviews with the client, better communication, better social assessment report writing, record keeping, creating an intervention plan, and practice monitoring. It is possible to make use of technological opportunities and to include simulative applications in social work education.

Simulations provide a large number of repetition and enhancement opportunities more easily compared to time-dependent face-to-face skill training groups. Although simulations involving computer-based virtual reality lack the sincerity of face-to-face role-playing, they have some powerful benefits in traditional prevention or intervention program formats. According to Lowe (1996), simulations allow students to work on specific tasks in small groups. They enable students to integrate popular life skills with social work education. They provide an unlimited practice environment for students for practicing their new skills. Students who can easily be embarrassed by playing roles in front of others are more likely to appreciate the anonymity of computer simulations. Simulations do not only invite students to be alert against the client, but also impress them (Smokowski & Hartung, 2003) because simulations facilitate social communication and the understanding of knowledge. Through experience, they lead a student to a form of learning (Mar & Oatley, 2008). Thanks to simulations, the development of skills and professional change of students can be easily monitored in some practices in which specialized knowledge is required (Tuncay, 2010).

Computer simulations offer modulated, active participation and individual feedback opportunities to respond to the speed, skill level, and performance of students. Simulations require that participants make decisions and confront the results of those decisions. In simulation applications, students are exposed to situations similar to those in real life and students are asked to make a choice based on the information available. Thanks to the simulation experience, students confront a variety of perspectives, ideas, and information that need to be processed before reaching a judgment (Galambos & Neal, 1999). Thus, students are required to follow logical steps and to explore alternative behavior strategies by using simulation repeatedly in order to achieve results (Smokowski & Hartung, 2003).

However, technology has already taken its place in social work practice. Fax, e-mail, mobile phones, online messaging, and chat rooms are part of easy access to practitioners, colleagues, and clients via social media. Furthermore, simulations contribute to social work research. New research helps develop methodologies. It has the potential to facilitate a more productive and effective learning environment for both social work students and academicians (Videka et al., 2008; Perron et al., 2010). Therefore, the role of the social worker is developing, and social workers need to adapt to changes in social work practices in the technological age (Bullock & Colvin, 2015).

5. THE MEANING OF THE USE OF TECHNOLOGICAL SIMULATION FOR SOCIAL WORK EDUCATION

Some authors (Smith et al., 1980; Logie et al., 2013; Olson et al., 2015) made a critical appraisal of technological client simulations used in social work education to assess their effectiveness for teaching and for evaluating social work students' competence. However, using technological client simulations is well-received by students. Education for professions aims to prepare students in the professions' fundamental ways of thinking, performing, and acting with integrity (Shulman, 2005). In the Education (2008) adopted a competence framework with a focus on outcomes, similar to related health and human service professions such as medicine (Carraccio et al., 2002; Frank, 2005), nursing (Watson et al., 2002), and psychology (Kaslow et al., 2004).

Competence refers to the complex set of practice behaviors reflecting knowledge, skills, values, and attitudes that students should be able to demonstrate on completion of their educational program. Social work educators are now challenged to develop and test a range of methods to assess educational outcomes and to devise reliable and valid measures with simulations (Logie et al., 2013). Modern technologies allow for interactive and immersive learning experiences, which enable students to develop practice skills safely (Dodds et al., 2018). Through interactive and immersive simulations, facilitated by modern technology, we suggest that social work education can bridge the gap between knowledge and skills.

Moreover, we should not forget the following fact: Role-play simulation practices along with technological simulations should continue in social work education. In addition, it should be noted that virtual reality has different aspects from the virtual world. Virtual reality creates a strong perception that the simulated event intensively experienced by the user in an audio-visual manner is actually being experienced. In fact, the user feels the reality while experiencing an entirely virtual experience. In the virtual world, we consume reality instead of feeling the reality in everything including games, relationships, communication patterns, and social media accounts.

We consume excitement and strategies in games, love and longing in relationships, life in communication patterns and social media. Thanks to the virtual world, we always live the moment, consume our experience fast, and throw them away as if they are products. In the virtual reality, we try to understand the reality and gain

experience through fiction. In the virtual world, we drift away from the reality towards the side roads just like using passwords when we cannot finish games, continuously sharing photographs or check-ins on social media to show that we are happy with our lives. Now, we can enrich the use of simulation with examples.

6. USING SIMULATION WITH EXAMPLES

We challenge traditional approaches in social work education when we access and process information in new ways (Siegel et al., 1997). In a study conducted by Alinier et al., (2006) examining the effect of simulation training on the clinical skills and competences of students, it was reported that technology is a more useful educational tool than traditional techniques. Simulation techniques are generally used for entertainment and business purposes, but their ability to teach positive social skills to children and adolescents has not been adequately considered (Smokowski & Hartung, 2003). Simulation practices that will form the basis for teaching the dynamics of individual and group work with children and adolescents in social work education should be used primarily in social workers who will prefer to work in the field of school social work.

While social workers are considered to be key members of community mental health, oncology and forensic teams, the importance of computer-based virtual reality simulations, solving challenges in professional association especially among psychiatrists, oncologists, and nurses, and social workers, has been reported (Barnes et al., 2000). Simulation use can reveal perceived differences in attitude and value models such as stereotyping, professional description, and role clarity. The use of simulation techniques provides a point of view to emphasize the meaning of interprofessional cooperation before participating in medical and forensic teamwork and to see who implements what and how in teamwork.

6.1. Virtual Reality Simulation Application Examples

For example, in a project (Kuehn et al., 2017), virtual reality simulation application was carried out for the first time with nursing and social work students. Students participated in a learning experience based on the reflection content of the vocational practice through patient simulation, informing and open interpretation of treatment team members as the members of a medical treatment team. The participants noted that they got a better understanding of the practice scope of other team members thanks to reflection and learning during the simulation.

Furthermore, the participants reported that they understood the dynamics of teamwork better and learned their duties related to patient care. In general, simulation encourages the development of skills necessary to function as a part of a collaborative and professional team (Kuehn et al., 2017). Discussions on different information sharing activities carried out on different platforms and their mutual interaction can provide a good balance between new knowledge management approaches and the easier achievement of education objectives (Leung, 2014).

On the other hand, specifically to social work, computer-simulated avatars have been employed to replicate learning experiences of working with military veterans (University of Southern California, 2010) and computer-simulated microworlds to social work research (Wastell et al., 2011). In addition to explanations, evidence from a USA study on using simulation-education to teach social work students how to recognise depression in older adults suggests that this approach can facilitate student learning, concluding that 'exposure by social work students to simulation-based learning appears to have a positive effect on their clinical skills' (Gellis & Kim, 2017; Dodds et al., 2018). The above-mentioned facts highlight the potential for simulated exercises to help students acquire practical skills and knowledge (Dodds et al., 2018).

In a study conducted by Foster & Stiffman (2009) that aimed to show that the conception of social innovation is spreading among professionals working in the field of child welfare in the public sector stated that adaptation to institutional constraints, referral chains, and decision support systems is indispensable for the adoption of successful professional practices. The use of simulation involving computer-based virtual reality may allow the understanding of the structure and rules of public institutions, the referral chains, and decision support mechanisms to which institutions are subject, in the interest of students. Through simulation software during the education period, the institutions in which social workers serve in the public sector can be introduced. This development, which will also support the class of field experience in social work settings, is an indication of how much simulation use is needed in social work education.

6.2. Role-play Simulation Application Examples

In another simulative application (O'Sullivan, 1988), the development and use of a problem solving and decision-making game played by social workers are described. The aim is to discuss the place of role-play simulation in social work education and to investigate the nature of problem-solving and decision making in complex situations

in social work. During the simulation, social workers sometimes showed that they were equipped for complex activities.

On the other hand, there were also pieces of evidence that social workers' knowledge and skills in problem-solving and decision making were insufficient in a simulation involving a highly complex game. The participants stated that they found the simulation game useful, and a significant minority remained under the influence of the simulation without accepting the artificiality of the game (O'Sullivan, 1988).

A promising example that may complete these role-play simulation applications is the objective structured clinical examination (OSCE). Originally developed for medical education (Harden & Gleeson, 1979; Adrales, et al., 2003; Cogbill et al., 2005), it is now used to assess educational outcomes of health professionals such as nurses (Ross et al., 1988; Kelly et al., 2016), pharmacists (Austin et al., 2003; Galato et al., 2011), physical therapists (Ladyshewsky et al., 2000; Wessel et al., 2003), and dentists (Mossey et al., 2001). In an OSCE, students interact with standardized patients (SPs) or clients (SCs) for a set period of time and perform a series of tasks. SPs and SCs are actors specially trained to enact a situation typical of that profession. Using standardized scales to measure competence, a faculty member or clinical instructor observes and evaluates student performance (Logie et al., 2013).

In another role-play simulation application, in which clients were played by students who were receiving acting training at the first grade at the department of theater arts of the same university, all of the social work students expressed their excitement for the use of acting students in simulations and emphasized that it is a great approach to receive simulation education with actors for a real practice (Petracchi, 1999). This simulation actually shows that the perception is real. Petracchi (1999) reported that he understood that the students could understand how they felt instead of interacting with a "real person" and acting as a classmate to the client as a learning experience during practice.

Role-playing that uses professionally trained actors to simulate clients adds realism to feelings that may be lacking in a computer-based simulation. It is certain that distinguishing clients from actors challenges the creativity of social work students. Students also understand how social workers will behave in certain situations. Considering the extra freedom to experience a reality that does not exist, in addition to focusing on the development of skills in the social worker's pedagogical repertoire,

it will be revealed that actor and computer-based simulations should be used as a necessary component in social work education.

As the use of simulation in social work education becomes more widespread, the need for new technologies in social work organizations will increase, and new methods of intervention and perspectives will be developed against social problems. Therefore, the professional satisfaction of social workers and their freedom will increase. Sapey (1997) states that unless being involved in methods that use new technologies in organizations, the effectiveness of social workers on clients will not increase and they will not understand how technological applications positively affect the nature of social work in the future.

With a structured web-based simulation program, therapist social workers who will work in the field full-time and who will also carry out e-consultations outside the field will come to the fore in the future. They can create the infrastructure of providing advice to clients through textual communication. In the future, social workers, who learn how to use technology when they are students, can pave the way for e-consultation by developing joint simulation software with clients.

7. CONCLUSION AND RECOMMENDATIONS

It is understood that social workers, who play a role in the delivery of human services in Turkey, are unfamiliar with the teaching materials from which they will benefit considerably in terms of technology. It is ensured through simulation that students gain experience in how to react appropriately in the event of a critical professional practice in a safe and controlled environment. The use of simulation in social work education will educate students to use more effective behaviors in various real social systems and contribute to them. New social arrangements that will increase human dignity will be designed with the help of new learning approaches.

It is important for social workers to provide high-quality examples to students by exchanging information about experiential learning methods in field education and to try to develop best practices in social work education. This kind of education is also valuable for equipping students with minimum professional skills before graduating because it will involve questioning certain basic principles. In the worst possible scenario, a simulation center should be opened with a focus on social work education in Turkey. This center should be structured through the society of social workers or the association of national social work schools. The structuring of the center should

be designed with the permission from the institutions in charge of the Turkish higher education system (YOK² and MEB³).

It is suggested to adopt new approaches in social work education and to use simulation techniques to provide qualified services to those who demand social services and to improve the practice conditions of social workers. It can be the yield of simulation techniques to counteract the threat to students' practical skills and their civil freedom and to emphasize the importance of teamwork. According to our explanation of the difference between virtual reality and a virtual world, the former is a technology for achieving an experience; the latter is the location of the experience. In the instance cited in this paper, the experience is social work educational activities.

Fortunately, there are professionals and academicians who feel the need for revision of social work education in Turkey with new technological developments, understand the contribution of technological knowledge and communication, and advocate the use of social entrepreneurship, innovation and simulation techniques in education. Practitioners should work more for the adoption of new technologies and monitoring of program effectiveness together with the increased knowledge about the current and future use of technology in social work education. For this reason, social work educators should frequently use virtual reality simulation applications as a potential benefit to show students the interaction with clients and to assess students' professional skills.

We hope that scenario and case-based simulation applications in human service areas and the number of simulation software involving user-friendly computer-based virtual reality will increase continuously. The rate of this increase is undoubtedly based on the need for simulation learning and the computer literacy of social work students, professionals, and academicians. The use of simulation in education will make case management studies more effective in professional practice. It is likely that longstanding knowledge sharing among social workers, one of the professionals in the health and social care field, will clearly progress towards the best.

² Turkish Council of Higher Education

³ Republic of Turkey Ministry of National Education

REFERENCES

- Adrales, G. L., Chu, U. B., Witzke, D. B., Donnelly, M. B., Hoskins, D., Mastrangelo, M. J., ...
 & Park, A. E. (2003). Evaluating minimally invasive surgery training using low-cost mechanical simulations. *Surgical Endoscopy and Other Interventional Techniques*, *17*(4), 580-585.
- Alptekin, K., Topuz, S., & Zengin, O. (2017). Türkiye'de sosyal hizmet eğitiminde neler oluyor? [What is Happening in Social Work Education in Turkey?] . *Toplum ve Sosyal Hizmet*, 28(2), 50-69.
- Austin, Z., O'Byrne, C., Pugsley, J., & Munoz, L. Q. (2003). Development and validation processes for an objective structured clinical examination (OSCE) for entry-to-practice certification in pharmacy: the Canadian experience. *American Journal of Pharmaceutical Education*, 67(3), 1-8 (Article 76).
- Bullock, A. N., & Colvin, A. D. (2015). Communication technology integration into social work practice. *Advances in Social Work*, *16*(1), 1-14.
- Barnes, D., Carpenter, J., & Dickinson, C. (2000). Interprofessional education for community mental health: Attitudes to community care and professional stereotypes. *Social Work Education*, 19(6), 565-583.
- Carraccio, C., Wolfsthal, S. D., Englander, R., Ferentz, K., & Marin, C. (2002). Shifting paradigms: From Flexner to competencies. *Academic Medicine*, 77(5), 361-367.
- Carrilio, T. E. (2007). Using client information systems in practice settings: Factors affecting social workers' use of information systems. *Journal of Technology in Human Services*, 25(4), 41-62.
- Choi, G., Ligon, J., & Ward, J. (2002). Computer anxiety and social workers: Differences by access, use, and training. *Journal of Technology in Human Services*, *19*(1), 1-12.
- Cogbill, K. K., O'Sullivan, P. S., & Clardy, J. (2005). Residents' perception of effectiveness of twelve evaluation methods for measuring competency. *Academic Psychiatry*, 29(1), 76-81.
- Council on Social Work Education. (2008). *Educational Policy and accreditation standards*. Retrieved from https://www.cswe.org/getattachment/Accreditation/Standards-and-Policies/2008EPAS/2008EDUCATIONALPOLICYANDACCREDITATIONSTANDARD S(EPAS)-08-24-2012.pdf.aspx, Accessed 23 September 2018.
- Dodds, C., Heslop, P., & Meredith, C. (2018). Using simulation-based education to help social work students prepare for practice. *Social Work Education*, *37*(5) 597-602.

- Frank, J. R. (2005). *The CanMEDS 2005 physician competency framework: Better standards, better physicians, better care.* Ottawa, Canada: The Royal College of Physicians and Surgeons of Canada.
- Foster, K. A., & Stiffman, A. R. (2009). Child welfare workers' adoption of decision support technology. *Journal of Technology in Human Services*, 27(2), 106-126.
- Galambos, C., & Neal, C. E. (1999). Macro practice and policy in cyberspace: Teaching with computer simulation and the Internet at the baccalaureate level. *Computers in Human Services*, *15*(2-3), 111-120.
- Galato, D., Alano, G. M., Trauthman, S. C., & França, T. F. (2011). Pharmacy practice simulations: Performance of senior pharmacy students at a University in southern Brazil. *Pharmacy Practice*, 9(3), 136-140.
- Garrett, P. M. (2005). Social work's 'electronic turn': Notes on the deployment of information and communication technologies in social work with children and families. *Critical Social Policy*, 25(4), 529-553.
- Gehlert, S. (2006). The conceptual underpinnings of social work in health care. In S. Gehlert & T. Brown (Eds.). *Handbook of health social work* (2nd ed., pp. 3-19). Canada: John Wiley & Sons.
- Gellis, Z. D., & Kim, E. G. (2017). Training social work students to recognize later-life depression: Is standardized patient simulation effective?. *Gerontology & Geriatrics Education*, 38(4), 425-437.
- Harden, R. M., & Gleeson, F. A. (1979). Assessment of clinical competence using an objective structured clinical examination (OSCE). *Medical Education*, *13*(1), 39-54.
- Helton, D. (2003). Online therapeutic social service provision (Therap-pc): A state of the art review. *Journal of Technology in Human Services*, *21*(4), 17-36.
- Kara, K., & Karakoç, B. (2017). Yetişkin eğitiminde 'Sekiz Süreç Elementi' doğrultusunda öğretmenlerin aldıkları hizmet içi eğitim programlarının değerlendirilmesi [Evaluating In-Service Teacher Training Programs That Teachers Had in Accordance with 'The Eight Process Elements' within the Adult Education]. *Bayburt Eğitim Fakültesi Dergisi*, 12(24), 613-634.
- Kaslow, N. J., Borden, K. A., Collins, F. L., Jr., Forrest, L., Illfelder-Kaye, J., Nelson, P. D., ...
 Willmuth, M. E. (2004). Competencies conference: Future directions in education and credentialing in professional psychology. *Journal of Clinical Psychology*, *60*(7), 699-712.

- Kelly, M. A., Mitchell, M. L., Henderson, A., Jeffrey, C. A., Groves, M., Nulty, D. D., ... & Knight,
 S. (2016). OSCE best practice guidelines-applicability for nursing simulations. *Advances in Simulation*, *1*(10), 1-10.
- Knowles, M.S. (1980). The modern practice of adult education. Chicago: Associated Press.
- Knowles, M.S., Holton III, E.F., & Swanson, R.A. (2005). *The adult learner: The definitive in adult education and human resource development* (6th ed). California: Elsevier Inc.
- Kuehn, M. B., Huehn, S., & Smalling, S. (2017). Improving Collaboration Among Social Work and Nursing Students Through Interprofessional Simulation. *Creative Nursing*, 23(3), 179-183.
- Kunkel, B., & Yowell, T. (2001). e-Tools and Organization Transformation Techniques for Collaborative Case Management. *Journal of Technology in Human Services*, 18(1-2), 117-134.
- Ladyshewsky, R., Baker, R., Jones, M., & Nelson, L. (2000). Evaluating clinical performance in physical therapy with simulated patients. *Journal of Physical Therapy Education*, *14*(1), 31.
- Leung, Z. C. (2014). Knowledge management in social work: The interplay of knowledge sharing platforms. *International Social Work*, 57(2), 143-155.
- Linsk, N. L., & Tunney, K. (1997). Learning to care: Use of practice simulation to train health social workers. *Journal of Social Work Education*, *33*(3), 473-489.
- Logie, C., Bogo, M., Regehr, C., & Regehr, G. (2013). A critical appraisal of the use of standardized client simulations in social work education. *Journal of Social Work Education*, 49(1), 66-80.
- Lowe, J. I. (1996). The simulation of a neighborhood family service center for teaching macro practice. *Journal of Teaching in Social Work*, *13*(1-2), 27-41.
- Marlowe-carr, L. C. (1997). Social workers on-line: A profile. *Computers in Human* Services, 14(1), 59-70.
- Mar, R. A., & Oatley, K. (2008). The function of fiction is the abstraction and simulation of social experience. *Perspectives on Psychological Science*, 3(3), 173-192.
- Moss, B. (2000). The use of large-group role-play techniques in social work education. *Social Work Education*, *19*(5), 471-483.
- Mossey, P. A., Newton, J. P., & Stirrups, D. R. (2001). Scope of the OSCE in the assessment of clinical skills in dentistry. *British Dental Journal*, *190*(6), 323-326.

- Olson, M. D., Lewis, M., Rappe, P., & Hartley, S. (2015). Innovations in social work training: A pilot study of interprofessional collaboration using standardized clients. *International Journal of Teaching and Learning in Higher Education*, 27(1), 14-24.
- O'Neal, G. S. (1996). Enhancing undergraduate student participation through active learning. *Journal of Teaching in Social Work*, *13*(1-2), 141-155.
- Orlikowski, W. J. (2007). Sociomaterial practices: Exploring technology at work. *Organization Studies*, *28*(9), 1435-1448.
- O'Sullivan, T. (1988). Simulation games and social work education: The woods family: A problem-solving and decision-making game for social workers. *Social Work Education*, 7(3), 12-16.
- Özbesler, C. (2017). Tıbbi sosyal hizmete giriş ve tıbbi sosyal hizmet uzmanının rolleri. In S.A. Özden & E. Özcan (Eds.). Tıbbi sosyal hizmet (first published, pp. 3-13). Ankara: Nobel Yayıncılık.
- Perron, B. E., Taylor, H. O., Glass, J. E., & Margerum-Leys, J. (2010). Information and communication technologies in social work. *Advances in Social Work*, *11*(2), 67-81.
- Petracchi, H. E. (1999). Using professionally trained actors in social work role-play simulations. *Journal of Sociology & Social Welfare*, 26(4), 61-69.
- Pinch, T. J., & Bijker, W. E. (1984). The social construction of facts and artefacts: Or how the sociology of science and the sociology of technology might benefit each other. *Social Studies of Science*, *14*(3), 399-441.
- Rafferty, J., & Steyaert, J. (2009). Social work in the digital age. *The British Journal of Social Work*, *39*(4), 589-598.
- Richardson, S., & Asthana, S. (2005). Inter-agency information sharing in health and social care services: the role of professional culture. *British Journal of Social Work*, *36*(4), 657-669.
- Ross, M., Carroll, G., Knight, J., Chamberlain, M., Fothergill-Bourbonnais, F., & Linton, J. (1988). Using the OSCE to measure clinical skills performance in nursing. *Journal of Advanced Nursing*, *13*(1), 45-56.
- Sapey, B. (1997). Social work tomorrow: Towards a critical understanding of technology in social work. *The British Journal of Social Work*, *27*(6), 803-814.
- Shulman, L. S. (2005). Signature pedagogies in the profession. Daedalus, 134(3), 52-59.
- Siegel, E., Jennings, J. G., Conklin, J., & Napoletano Flynn, S. A. (1998). Distance learning in social work education: Results and implications of a national survey. *Journal of Social Work Education*, 34(1), 71-80.

- Smith, N. J., Parmar, G., & Paget, N. (1980). Computer simulation and social work education: A suitable case. *The British Journal of Social Work*, *10*(4), 491-499.
- Smokowski, P. R., & Hartung, K. (2003). Computer simulation and virtual reality: Enhancing the practice of school social work. *Journal of Technology in Human Services*, 21(1-2), 5-30.
- Sunarich, N., & Rowan, S. (2017). Social Work Simulation Education in the Field. *Field Educator*, 7(1). 1-9.
- Tuncay, T. (2010). E-sosyal hizmetler: İnsani hizmetlerde bilişim teknolojisi uygulamaları. In 3. İleri Yaş Sempozyumu: Kırılgan yaşlı e-özet kitabı (pp. 57-67). İzmir: Ege Geriatri Derneği. Retrieved from http://www.egegeriatri.org.tr/images/stories/3.pdf, Accessed 1 April 2018.
- University of Southern California. (2010). ICT and USC school of social work to demo virtual reality educational technologies at CES. Retrieved from http://ict.usc.edu/news/press-releases/ict-and-usc-school-of-social-work-to-demo-virtual-reality-educational-technologies-at-ces/, Accessed 23 September 2018.
- Videka, L., Blackburn, J. A., & Moran, J. R. (2008). Building research infrastructure in schools of social work: A university perspective. *Social Work Research*, *32*(4), 294-301.
- Viswesvaran, C., Sanchez, J. I., & Fisher, J. (1999). The role of social support in the process of work stress: A meta-analysis. *Journal of Vocational Behavior*, *54*(2), 314-334.
- Wastell, D., Peckover, S., White, S., Broadhurst, K., Hall, C., & Pithouse, A. (2011). Social work in the laboratory: Using microworlds for practice research. *British Journal of Social Work*, 41(4), 744–760.
- Watson, R., Stimpson, A., Topping, A., & Porock, D. (2002). Clinical competence assessment in nursing: A systematic review of the literature. *Journal of Advanced Nursing*, 39(5), 421-431.
- Wessel, J., Williams, R., Finch, E., & Gemus, M. (2003). Reliability and validity of an objective structured clinical examination for physical therapy students. *Journal of Allied Health*, 32(4), 266-269.