# E-course support and delivery for e-psychology

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Abstract: The Internet has been considered a new alternative for teaching-learning processes; vocational assessment; counseling and orientation (virtual psychological consultation); and intervention focused on specific health-related problems. The experiences of on-line psychological services and their conclusions constitute a valuable body of knowledge for the e-learners and interested users of the psychology science. However, such knowledge is widespread in the World Wide Web and consequently hardly accessed by the end-users. In this paper, an e-course platform is presented that serves the delivery of such knowledge via instructional-informative and communication web tools.

Keywords: e-psychology, internet lesson, multimedia application

#### 1. Introduction

The internet and World Wide Web are changing the very nature of our society in ways unparalleled since the industrial revolution. This is affecting local. national and global economies and their infrastructures. Information and learning contents are available at any time, at any place, and to any internet user. This is creating a tremendous opportunity for academic institutions and industrial training organizations to provide on-demand web based education and training via course delivery platforms. The same time, few learning/training models exist that are based on active utilization of the internet, web and state-of-the-art software engineering, multimedia, networking, communication, teaching, learning and information technologies.

Throughout the event, the rapid advance of Information Science was underlined, as well as its positioning as a vital tool for study and development of all knowledge and science fields. Psychology, as well as other disciplines, is not unaware of these advances [1,2], and makes use of this tool to create programs for psychological intervention, as a means of prevention [3,4,10,11,12], assessment [5,6], orientation, and specialized counseling. The most widely used means were e-mail, the web page, and chat rooms. At the same time, these information tools are used for learning by teleconferences, forums, virtual classrooms, and other channels [7,8,9].

There is a concern about the quality of the information obtained from websites as anyone can

publish information on the Internet [13,14,15,16]. However, in one study that sampled actual patients as compared to researchers conducting web searches, supported persons used many different websites for health information and consistently rated as their favorite websites those recognized to be reputable (i.e., from prominent universities, government organizations, or other recognized prominent health organizations). Also, the health information on the Internet [17] has a positive psychological impact on those who use it, as use of the Internet for health information among supported persons was found to be associated with greater social support and less loneliness. This all suggests the need for clinicians to recognize this new medium and incorporate it into their assessment and treatment.

In addressing the above context, we developed a course delivery platform for e-psychology that is based on the active utilization of:

- the principles of the learner-centered paradigm of education and training that lead to the highest possible learner convenience in learning
- the principle of modularity of learning content (based on the reusable learning objects concept) that leads to great flexibility in composing different customized versions of an online course for various groups of trainees with different educational backgrounds. learning objectives, technical skills and past experiences

 an innovative Web-Based Instructional (WBI) tool that uses web-based streaming multimedia and various communication technologies and offers both online and offline modes of learning content delivery.

# 2. E-psychology and Telepsychology

For better understudying of what telepsychology and e-psychology is, we must first say what psychology is: Psychology is the scientific study of the brain and behavior [18]. It is a science and a practice. As scientists, experimental psychologists conduct research to help understand why people think, feel, and behave the way they do. As clinicians, counselors, or other practitioners, psychologists apply scientific understanding toward helping individuals, institutions, and society deal with issues relating to human behavior and happiness. Now telepsychology and e-psychology is the use of information and communications technology to enable the practice of diagnostic psychology between geographically separated individuals.

## 3. The platform structure

The environment includes two general services categories, namely, informative and communication services (Fig. 1).

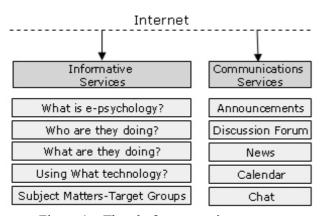


Figure 1 – The platform generic structure

The environment includes tools that offer flexibility and adaptability depending on their use. The design of these tools was based on the existing web services, as discussion forums, chat, message box, elibraries, which are widespread in the public web community. These tools are distinguished in two groups: "informative" and "communication". On the one hand, the "informative" tools include services related to the educational material and its presentation. On the other hand, the "communication" tools include services that allow

the communication of the users. More explicitly, the "informative" tools are the following:

- Definition of psychology and e-psychology,
- List of the organizations of e-psychology,
- List of services offered by organizations,
- Technologies used in e-psychology,
- Subject matters and target groups.

Respectively, the "communication" tools are:

- Discussion forums,
- Announcements,
- News,
- Calendar and
- Chat

### 4. Description of the thematic sections

#### 4.1 Informative Section

The informative section is designed to satisfy users' questions (Fig. 2) such as: what is psychology and epsychology; who are they doing psychology;

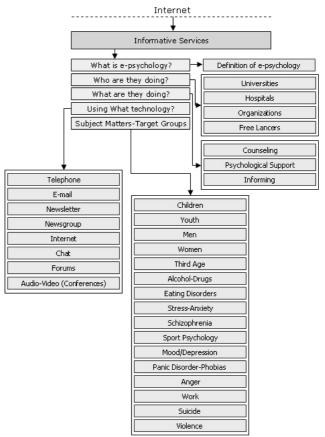


Figure 2 – The platform informative database structure

What are they doing; Using what technology; Subject matters and target groups.

All the above questions constitute a valuable body of knowledge for a person who enters for the first time the e-psychology sector. The sub-sections of the informative section answer the above questions offering structured information of each entry.

More explicitly, the "Who are they doing" section is consisted of the following fields:

- Universities.
- Hospitals,
- Organizations,
- Free lancers,

Each of them is analyzed into the following informative sub-fields:

- Name
- General description
- Research subject
- Services offered
- Phone
- Address
- URI

Correspondingly, the "What are they doing" section includes information of the following fields:

- Counseling
- Psychological support
- Informing

which are analyzed into the following sub-fields:

- Name
- General description
- Phone
- Address
- URL

Similarly, the "Using what technology" section includes information of:

- Telephone
- E-mail
- Newsletter
- Newsgroup
- Internet
- Chat
- Forums
- Audio-Video (conferences)

which are analyzed into the following sub-fields:

- General description
- URL

Finally, the "Subject matters-target groups" section includes:

- Children
- Youth
- Men
- Women
- Third Age
- Alcohol-drugs
- Eating disorders
- Stress-anxiety
- Schizophrenia

- Sport psychology
- Mood/depression
- Panic disorder-phobias
- Anger
- Work
- Suicide
- Violence

which are analyzed into the following sub-fields:

- Analytical description
- Symptoms
- Therapy
- Diagnosis
- Institutions
- URL

#### 4.2. Communication Section

The communication section includes the following services:

- Announcements: The administrator of the platform entries any announcements that may interest the e-learners of psychology
- Discussion Forum: Here, the e-learners have the capability of discussing about the different problems and subjects of psychological sections.
- News: Similarly, the administration entries news about the current evolution in epsychology
- Calendar: Calendar of events, conferences, seminars of psychology and e-psychology
- Chat: online chat rooms of different subjects

### 5. Conclusion

Advances in computer technology and the Internet will continue to revolutionize patients' access to information. This study suggests that the Internet shows promise of being an educational and therapeutic tool for supported persons. Finding effective and accessible ways of working with small groups, individuals and their families so that they benefit from the information available is one of the challenges facing the health care team. Libraries in general are currently enjoying a renaissance of public interest due in large part to the Internet and studies in how best to harness this phenomenon are timely.

The advantages of the presented system can be summarized as follows:

- It is a new alternative for the teaching-learning processes.
- Access to the Internet is available through home, institutional, or public computers.

- Frequently updating the web page motivates users.
- This is an efficient tool to assess aptitudes, interests, values, and to identify occupational alternatives and collect information on the occupational marketplace.
- It allows offering academic services that support career election and decision.
- Virtual orientation and counseling are provided through chat and e-mail modes.
- The Virtual Psychological Consultation is a preventive, rapid and free alternative service.
- Implementation of Virtual Psychologist Consultation depends on pre-established strategies that guarantee their effectiveness.
- Virtual Psychologist providers require specialized instruction and training.
- The Internet is a tool that could be used to address the massive worldwide impact of behavioral health problems such as smoking.

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