

Internet tools as a kind of career e-guidance

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Abstract: With the fast development of information and communication technology (ICT) and the Internet entering our life, we use the Internet daily for obtaining information and for entertainment, for education and spending leisure time, and as a serious profit-gaining source. The Internet and the opportunities it offers may be also used in career counselling. The purpose of using the Internet and Internet tools in career counselling is to help individuals, who need it, develop computer skills, obtain information regarding career choices or career development, as well as receive support from a career consultant. Consultations, information resources, and interactive evaluation tools may be received anytime – 24 hours a day. The paper includes the results of research on the use of Internet tools in career counselling. The overall research aim is to examine the use of Internet tools in career counselling. To achieve this aim, a questionnaire survey of practicing career consultants was conducted. The survey revealed the Internet tools that are used in providing career consultations. It led to a conclusion that Internet tools are one of the kinds of career e-guidance techniques. Internet tools in career counselling are easy-to-use interactive evaluation tools assisting customers make decisions concerning their career. The research findings will contribute to the understanding of the kinds and forms of Internet tools that can be used in career counselling as an additional consultancy technique or as the key kind of techniques in career e-guidance.

Keywords: career counselling, e-guidance, ICT, Internet tools

Introduction

Enhancing digital literacy and skills is one of the key elements of the flagship initiative “Digital Agenda for Europe”. This initiative contributes to the implementation of long-term e-skills and digital literacy policies (Pamatdati par IKT izmantošanu..., 2011). Information and communication technologies (ICT) provide a variety of tools that can open up new possibilities for career counsellors in their work with customers and for educating career counsellors themselves. Introducing a virtual online connection and Internet tools in career counselling is aimed at assisting people who need to enhance their skills, acquire information, and get support and advice from a carer counsellor regardless of time and place. They can particularly help tailor the counselling process to individual customers' needs, and they can also provide customers with the crucial digital competences needed in knowledge-based society.

Online services provide new opportunities for civic education. The Internet becomes an educational tool that expands working in a local community to working in a global community (Guthrie, McCracken, 2010).

The possibilities provided by the Internet can be exploited for career counselling and/or rendering career planning services in four ways:

- providing information about professions, including descriptions of professions, employment opportunities, qualification requirements, etc., by using textual information, photographs, and graphical and/or video materials;
- providing online searches in professional databases;
- providing interactive career counselling and career planning services. This particular way ensures that customers, either individually or in groups, have direct communication with a professional career counsellor;

- providing access to databases on job vacancies to any user (Guidelines for Internet Usage, 2013).

An effective use of ICT in career counselling is determined not only by the existence of a technology, but by also its accessibility. Over the recent years in EU countries, including in Latvia, large investments have been made so that the population can have access to ICT, and it, to a great extent, was achieved. The data on Latvia are presented in Table 1.

Table 1

Availability of computers and the Internet in all households as of the beginning of the year
(% of the total number of households in the corresponding group)

2009		2010		2011		2012		2013		2013/2009, percentage points	
Com- puter	Internet	Com- puter	Internet	Com- puter	Internet	Com- puter	Internet	Com- puter	Internet	Com- puter	Internet
60.10	58.00	62.80	59.80	64.30	63.60	69.50	68.70	71.70	71.60	11.60	13.60

Source: authors calculation based on www.csb.gov.lv data

An analysis of the data for the recent five years leads to a conclusion that in 2013, compared with 2009, the availability of a computer in all households rose by 11.6 percentage points (PP), and the availability of the Internet increased by 13.60 PP. It means that the use of and interest in ICT increases along with the rapid development of ICT, and career counsellors have to seek to use new technologies in career counselling and to identify the best way of exploiting the new technologies and the factors that hinder the successful use of these technologies.

Data on the purposes of use of the Internet by individuals as of the beginning of the year are shown in Table 2.

Table 2

Purposes of use of the Internet by individuals as of the beginning of the year
(of the total number of Internet users, %)

	2009	2010	2011	2012	2013	2013/2009, percentage points
Sending or receiving e-mails	83.70	83.20	-	86.40	86.30	2.60
Making phone calls or video calls, using a web camera, via the Internet	49.10	52.80	59.20	61.20	59.40	10.30
Reading or downloading online news, newspapers, and magazines	72.20	76.70	83.90	88.00	84.80	12.60
Searching for information on education	35.70	37.50	42.90	-	41.10	5.40

Source: authors calculation based on www.csb.gov.lv data

According to Table 2, the following changes in the purposes of use of the Internet by the population in the beginning of 2013, compared with the beginning of 2009, occurred: sending or receiving e-mails rose 2.6 PP; phone conversations via the Internet or video calls, using a web camera, increased 10.3 PP; reading or downloading online news, newspapers, and magazines surged 12.6 PP; and searches for information on education rose 5.4 PP. One can conclude from the mentioned facts that the Internet rapidly entered everyday life, therefore, the available Internet tools have to be more broadly used in

career counselling and career education, as well as new tools have to be introduced and adapted based on the experience of other countries.

The overall research aim is to examine the use of Internet tools in career counselling.

Methodology

From April to May 2013, a survey of practising career consultants was conducted to gain insight into how career counsellors exploit Internet tools in their career counselling. In the survey, 42 career counsellors aged 24-60 were engaged – 6 men and 36 women. Of the total number of the surveyed career counsellors, 37 used information and communication technologies in their career counselling. As regards their affiliation, 17 worked in the State Employment Agency, 10 – within an ESF project of the University of Latvia, the Faculty of Education, Psychology, and Art, implemented in schools, and 23 – as carer counsellors in schools.

The overall research aim is to examine the use of Internet tools in career counselling.

Research tasks:

- to discuss theoretically the possibilities of use of Internet tools in carer counselling;
- to analyse the respondents' opinions on the use of Internet tools in carer counselling.

The legal framework and other information sources were used to achieve the aim and fulfil the tasks. Statistical data were analysed employing descriptive statistics, and a questionnaire survey was used to identify the possibilities of use of information and communication technologies. The research location: social networks.

Results and discussion

Nowadays, the use of information and communication technologies in many European countries is regarded as the basic element of support for carer development. Internet portal can provide information on education, training, employment opportunities, and easy-to-use interactive evaluation tools to assist customers in making their career decisions as well as intermediaries that provide information, consultancy, and development support services.

Career planning services are differentiated from career counselling services. Career planning services include an active provision of information designed to help a client with a specific need, such as review of a CV; assistance in networking strategies; identification of occupations based on interests, skills, or prior work experience; support in the job-seeking process; and assessment by means of online inventories of interest, abilities, and/or work-related values. Although career counselling may include the provision of the above-mentioned services, the use of the term implies a deeper level of involvement with the customer, based on the establishment of a professional counselling relationship and the potential for dealing with career development concerns well beyond those included in career planning. Multiple means of online provision of career planning or career counselling services currently exist, the most common of which are e-mail, newsgroups, bulletin boards, chat rooms, and websites offering a wide variety of services. In a long-term, the use of potential technologies is likely to increase (Guidelines for Internet Usage, 2013).

Multimedia tools have been introduced in career support portal to increase the popularity of these portals among youth, and presently among adults as well. Multimedia tools are used to educate the population in the field of employment and career. Tests are also available on websites to assist their users in identifying their basic skills and interests as well as their suitability for various educations or careers. Interactive tools are available on Internet portal, which enable their users to examine opportunities fitting their skills, knowledge, and interests. Such possibilities assist the users in identifying a profession or a job that is appropriate for their interests and an education and training needed to do this job. Interactive tests are also often available on Internet websites to assist the users in raising their self-esteem by answering a range of questions about themselves, their talents, skills and interests when evaluating their interests, goals, and skills; youth can identify their most appropriate profession and acquire a list professions appropriate for themselves (Karjeras atbalsta..., 2010).

One of the most used tools in career counselling is online career tests. A test is a standardised exercise; upon its completion, an individual's intellect, abilities, suitability for a work, or other personal traits may be identified (Akadēmiskā terminu, 2013). Tests were used in Ancient Greece. "Get familiarised with oneself!" is one of the appeals what we have inherited from ancient Greeks, and even though such knowledge not always can be effective and useful, as ancient Greeks believed and as modern psychoanalysts believe, yet, it is obvious that the majority of population are very interested in their personality, temperament, intellect, traits of character, abilities, complexes, and other things (Aizenks, 2000). Tests possess 6 essential characteristics (Miķelsone, Strods, 2008):

- a test measures a certain feature (a personal trait, motivation, intellectual abilities);
- a test measures a particular and limited population possessing the measured psychic trait and certain socio-demographic characteristics (for instance, youth aged 11-16);
- a test is a standardised measure of a feature, as the same test procedures are applied to different individuals under equal conditions, a single scoring system is used based on a certain measurement scale, quantitative standards of the measured feature are identified, i.e. the frequency distribution of values in a population based on measurements of the sample;
- a test is reliable, i.e. its measurements are steady over time;
- a test is valid, i.e. it really measures the feature it was created for;
- a test is an objective measure, as the individual's test values are interpreted based on their position in the sample's values distribution (i.e. standards) rather than based on the counsellor's subjective opinion, as well as based on the test's credibility and validity. When a test is performed, it is important to a customer to understand the instructions, strictly follow them, while a counsellor has to process the data in accordance with the rules and to interpret the result achieved. In career counselling, tests of personal traits, achievements, motives, interests, values, intellect, and creativity, which may be verbal or practical, are carried out. Computer tests, which give instant quantitative and qualitative results and save them in the computer, are increasingly used.
- in Latvia, a very few such adapted tests are available (for instance, Holland, Amthauer, Ketel). Most often, the tests adapted to other countries are used (Miķelsone, Strods, 2008).

An analysis of historical data reveals that computerised psychological evaluations evolved through three stages:

- the conceptual and early research stage (from the beginning of the 20th century to the Second World War);
- the stage of practical use of systems, based on requests and direct needs;
- the open system development stage (Karjeras konsultēšanas..., 2009).

The conceptual and early research stage. Psychologists' efforts to create a technology that reduces the cost of administration/interpretation of psychological tests and surveys are characteristic of the early stages of this science. In 1928, Clark Hull designed a computing machine that could administer suitability tests and selected career recommendations based on the results obtained. Automatic processing of professional tests was started already in the 1940s, yet, a broad use of these ideas was possible only in the 1950s when electronic computers became widely available.

The technology's practical application began after significant investments were made in the educational system and especially in career counselling. The American Research Institute financed projects and initiatives in the field of counselling, which resulted in developing such computer programs as SIGI and Discover in the 1970s. The stage of the World Wide Web and the Internet began in the 1970s and they refer to the modern period, defining a new generation of systems characterised by free access to information through using computer networks of the whole world.

Computers themselves are not a specific career counselling technique, but it is only the application of the counselling functions that require algorithmic information processing and complicated calculations and operations which can be modeled and transposed, using a computer program that exploits a variety of electronic media resources/content (such as text, hypertext, images, animation, and sound), by means of certain equipment. Progress in computerised counselling turned computerised counselling into a special method (Karjeras konsultēšanas..., 2009).

Computerised psychological and pedagogical tests and surveys imply the use of a computer that automatically evaluates intellect, knowledge or training results, interests, abilities, values, or personal traits. The application of computerised methods in psychological testing takes over the various forms of technological functions that are used for the purpose of testing. Tests and surveys may be classified by individuals' interests, abilities, values, personality, etc. Internet resources that have a lot of textual materials and data and that are very structured obstruct reading. When counsellors work with their customers from remote places and with physically disabled customers who prefer their registration from home, videoconferences can be held (scheduled via e-mail) to present and discuss the interpretation of a test (Sampson, 2000).

Counsellors can communicate, using discussion groups, videoconferences, e-mail, or chat, not only with their customers, but also experts in the field of supervision, in cases of untypical test result interpretation, etc. When exploiting Internet testing, counsellors have to be aware of the potential problems that can arise and have to be adequately tackled. The credibility and confidentiality of testing may be endangered if a counsellor intervenes by providing counselling in remote territories without having sufficient information on the local situation, if the availability of the Internet and the information privacy in administering the test and in counselling are limited. Counsellors' attitude to the use of information technologies in their job ranges from full rejection to uncritical acceptance. A right approach would be "prudent optimism, which means that the counsellor considers testing potentially useful if a testing website is used by customers who are provided certain assistance and counselling (from a local authority's services to individual assistance services) that meet their needs" (Sampson, 2000).

In addition to informing about the potential problems, counsellors have to develop specific competences in providing Internet services, which would prevent from ethical problems, have to be able to evaluate the credibility and quality of specialised websites that they use and recommend, have to understand what level assistance customers need in any particular situation, and have to be ware of the search mechanisms and reference counselling websites they may integrate into their counselling. The special competences that a career counsellor needs for using the Internet are as follows:

- designing a website;
- navigating across forums;
- establishing e-mail accounts and using e-mail;
- assisting customers in their searches for information about counselling;
- observing the legal acts and ethics regarding Internet counselling services;
- understanding the strengths and weaknesses of Internet counselling;
- using the Internet to identify and access continuous learning opportunities;
- evaluating the quality of information available on the Internet (Karjeras konsultēšanas..., 2009).

Presently in Latvia, several free tests and surveys are available to career counsellors on the Internet, on the website of the State Employment Agency (Karjeras pakalpojumi, 2013), Interests Test for Youth, Interests Test for Adults, questionnaire "Professional Orientation" (identification of professional interests), Self-determiner "A", questionnaire "Examination of Interests", Self-determiner "B", questionnaire "Examination of Motivation – Motivation for Various Jobs", methodology "Professional Career Planning", survey "Job Seeking Strategy", test "Communication Strategy", Skill-age Test: Are You Ready for a Job?

The following tests are available on the website NIID.lv: Interest Test, Which study course I prefer most?, Multiple Intelligences Test, Personality Test, Career Values Test, Working Environment Choice Test (Karjeras izvēles testi, 2013).

Online career tests have several advantages:

- a test may be filled out according to one's abilities and swiftness;
- replies are given instantly after the test is completed;
- it is interesting to fill out an online test, and it develops computer skills;

- administering tests via the Internet has an advantage, as the number of potential customers to whom testing services are available increases because barriers created by distance or transportation problems due to physical disability disappear.

Disadvantages:

- limited access;
- customers do not wish to work with a computer or are afraid of it.

Youth and also adults are very interested in computer games; therefore, online computer games are designed and used for the purposes of career counselling. To make youth reconsider the choice of their profession, the social network Draugiem.lv offers an interactive game “Try on a Profession”. A youth can adapt his/her most appropriate profession to his/her profile photograph on the social website Draugiem.lv. The game “Try on a Profession” offers youth to fit in any of the ten professions in an interactive way: information technology project managers, pharmacists, carpenters, chemistry professionals, confectioners, electronics engineers and constructors, labour protection professionals, foresters, tourism information consultants, and telecommunication design engineers. The game enables its users to find out interesting facts about a particular industry and profession, skills needed to a professional for a successful career, as well as useful information about where to acquire this profession. The interactive game “Try on a Profession” is available on the website (Valsts izglītības..., 2013).

The purpose of the world of professions is to expand students’ views about a variety of professions/job positions and provide information on the specifics of a job and the requirements for employees in these professions or positions, as well as make students interested and wishing to profoundly study the world of jobs and opportunities for their own career.

The *world of professions* is designed as a virtual city consisting of objects – enterprises with their most typical professions. A description of every profession, an interview with an employee of this profession, a gallery of photographs, and opportunities for education in the profession are available in this world; in the future, videos will also be available. The Classifier of Professions of the Republic of Latvia was used to develop the structure and descriptions of professions. The portal *World of professions* is maintained by the State Education Development Agency’s Information and Career Assistance Department (Profesiju pasaule, 2013).

Counselling services and career development services often combine the websites presenting general information with personalised services such as e-mail (phone calls or chat). Compared with the information obtained from websites, the advantage of e-mail is that the replies given precisely meet the customer’s needs, which compels us to reconsider the concept of counselling and the potential changes in the counsellor’s working style, replacing or improving the other counselling services. As regards the interaction between a customer and a counsellor, it can be asynchronous – with a short interval (e-mail, forums, post, the Internet) or synchronic – with no short intervals (a phone, teleconference, or videoconference) (Karjeras konsultēšanas..., 2009). Chat is individualised counselling based on online written communication.

From April to May 2013, a survey of practising career consultants was conducted to gain insight into how career counsellors exploit Internet tools in their career counselling. In the survey, 42 career counsellors participated. The respondents were asked, “What popular Internet tools do you exploit in your career counselling?” (Fig.1).

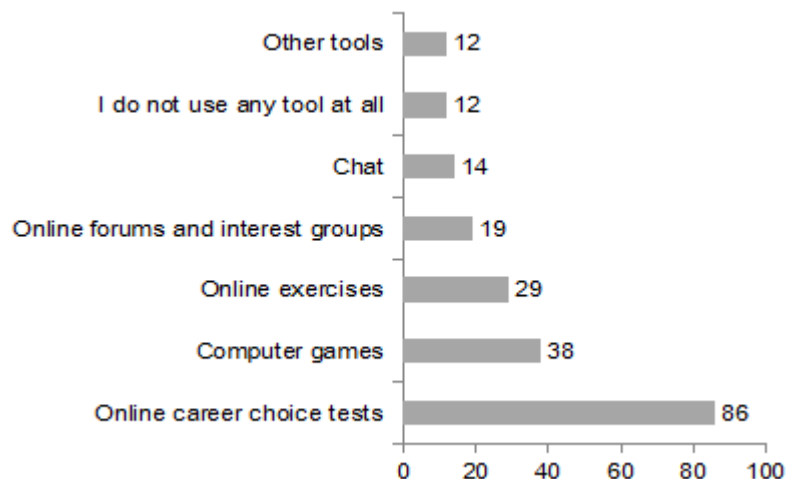


Fig.1. Respondents' replies to the question – what popular Internet tools do you exploit in your career counselling? The replies are expressed as a percentage. The data were obtained from 2 April 2013 to 20 May 2013 by anonymously questioning career counsellors, n=42.

According to Fig.1, in their work, 86% of the questioned career counsellors used career choice tests, 38% - computer games, 29% - online exercises, 19% - online forums and interest groups, 14% - chat, 12% did not use any online tool, while 12% mentioned that they used other tools, for instance, various databases, reference materials, portal NIID.LV (Karjeras izvēles testi, 2013), portal Profesijupasaule.lv (Profesiju pasaule, 2013), and e-mail for sending presentations and examples.

Watts A.G.(2002) argues that a very important question in career counselling is the synergy of technologies. A website has to contain not only courses and professional databases, but also a diagnostic package that, in the form of a document, provides evaluations and identifies skills, interests, and values (Watts, 2002).

Both risks and gains are possible if using Internet tools in career counselling. The key risk is fake identities in communication with a customer using e-mail. Professional activity on the Internet requires that counsellors assume the duty to identify themselves and their customers, using a phone or Skype.

The gains from using Internet tools in carer counselling involve the use of the Internet as a new way of providing career planning and counselling services. Upon gaining this professional career counselling experience in this environment, it is necessary to evaluate its effectiveness and conduct research in the Internet environment. The use of the Internet in informing customers about educational, training, employment, and other opportunities enables funds to be saved.

Conclusions

- Internet tools are one of the kinds of career e-counselling techniques.
- Internet tools in career counselling are easy-to-use interactive evaluation tools assisting customers make decisions concerning their career.
- Introducing a virtual online connection and Internet tools in career counselling is aimed at assisting people who need to enhance their skills, acquire information, and get support and advice from a carer counsellor regardless of time and place. They can particularly help tailor the counselling process to individual customers' needs, and they can also provide customers with the crucial digital competences needed in our knowledge-based society.
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