ASPECTS OF VIRTUAL PSYCHOLOGICAL HELP

Lidiya Vasileva[1], Malina Jordanova[2]

[1]*Institute for Population and Human Studies – Bulgarian Academy of Sciences*
e-mail: lidiyavasileva@abv.bg
[2]*Space and Solar-Terrestrial Research Institute – Bulgarian Academy of Sciences*
e-mail: mjordan@bas.bg

Key words: Virtual psychological help, consumers' attitudes, long-lasting flights

Abstract: Securing psychological help during long-lasting flights is a vital condition for success. That is why, knowing in details consumers' attitude towards virtual psychology services is essential.

The presentation is focused on the results of assessing clients' attitudes toward e-psychology service with time. The first part of the survey was performed in the spring of 2006, and the second – in 2008. The study is part of Project OHN 1514/2005 funded by the National Science Fund, Bulgaria.

The objective of this study is to reveal the changes and trends in clients' attitude towards innovative virtual psychological care. The surveys involved men and women between 19 and 70 years of age, who have different opinions on the application of virtual psychological technologies. The sample is stratified by age, gender, educational level.

АСПЕКТИ НА ВИРТУАЛНАТА ПСИХОЛОГИЧНА ПОМОЩ

Лидия Василева[1], Малина Йорданова[2]

[1]*Институт за изследване на населението и човека – Българска академия на науките*
e-mail: lidiyavasileva@abv.bg
[2]*Институт за космически и слънчево-земни изследвания – Българска академия на науките*
e-mail: mjordan@bas.bg

Ключови думи: виртуална психологична помощ, потребителски нагласи, продължителни космически полети

Резюме: Осигуряването на психологична помощ по време на дълготрайни полети е едно от жизненоважните условия за успеха. Ето защо, проучването на информацията за отношението на хората към виртуалните психологични услуги е от съществено значение.

Настоящата презентацията е фокусирана върху резултатите от проучване на нагласите на потребителите към виртуалната психологична помощ във времеви аспект. Първата част от изследването е проведена през пролетта на 2006 г., а втората - през 2008 година. Проучването е част от проект ОХН 1514/2005, финансиран от Фонд "Научни изследвания», България.

Целта на това проучване е да се проследят промените и тенденциите в отношението на потребителите към иновативните виртуални психологини услуги. В изследването участват мъже и жени между 19 и 70 години, които имат различни мнения за прилагането на виртуалните психологични технологии. Резултатите отразяват различията по отношение на възраст, пол и образование.

Introduction

Telepsychology is closely related to the history of Internet. Discussions about utilization of the net for the needs of psychology began almost 40 years ago with the start of Internet's prototype - the project ARPANET in 1969. It was when man first went to space that the necessity for further development of telepsychology became a reality. Both Russian and USA space programs were actively working in this field at first separately and in closer cooperation after 1990s. A number of psychological issues that may affect people working in space as well as in polar settings or in isolation have been identified. To cope with these problems various virtual psychological monitoring and

support strategies were developed (Kanas et al., 2002; 2007; Johannes et al., 2008; Hoermann et al., 2008). Unfortunately, terrestrial psychology has to solve the problem with virtual psychology support in its own way, using scarcely published pieces of information.

Telepsychology, for terrestrial applications, was facilitated by the explosion of World Wide Web in 1990's. Today Internet is used to provide psychological services to people all over the world. The utilization of information and communication technologies for online counselling and therapy is one of the most interesting and at the same time rather controversial areas of contemporary psychology.

Telepsychology is the provision of psychological services in a technology-assisted environment, including telephone, Internet media (written, voice and digital pictures) and video conferencing (Campos, 2009). The essence of telepsychology is a detailed sharing of information between a psychologist and a client aiming at creating a basic therapeutic alliance. The difference from face-to-face psychology consultation is that telepsychology contacts are performed in the virtual space despite of the fact that sessions are structured in a similar way as they are structured during face-to-face meetings.
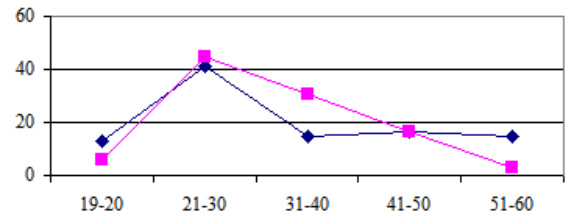
In general, telepsychology is used when face-to-face contact with licensed psychologist is impossible due to lack of transport, long distance, extreme situations, etc. Virtual consultations are alternative, especially for people who cannot afford private consulting (as in most countries psychology support is not reimbursed by health insurance funds), or for those who are afraid to speak about their difficulties face to face to a counselor as well as for those who want quick answers. To put it briefly, thanks to the development of new information and communication technologies this service is available and is an option for rapid psychological consultations, while at the same time expands the group of potential users of psychological help.

(a)

(b)

(c)

Fig. 1. Age and gender differences (%) (a) 2006, (b) 2008, □ - women, ◊ - men and (c) changes in women's attitudes
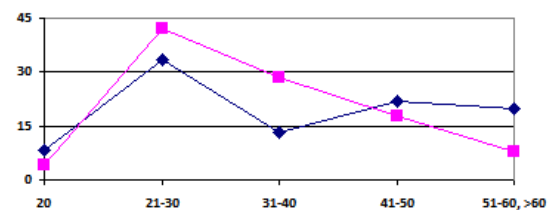
Methodology

Two surveys, studying clients' attitudes towards virtual psychology consultations, were performed in 2006 and in 2008 as part of project OHN 1514/2005 funded by National Science Fund, Bulgaria and Bulgarian Academy of Sciences. The reason to conduct these surveys was that project's goal was to develop and offer a virtual, high quality, psychology support to people from remote areas that have no contact with licensed psychologists. When starting the project no data about attitudes of Bulgarian costumers towards virtual psychology were found.

The objectives of both surveys were to study clients' attitudes and demands when telepsychology is concerned. Total of 603 subjects, aged 18-65 yrs old, divided in 5 age groups, took part in the studies performed via Internet.
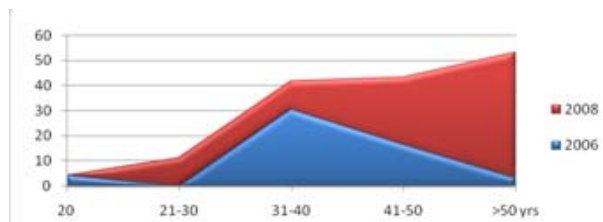
Participants took part in the studies voluntarily, anonymously and had the right to withdraw. Questionnaires adapted for web applications were applied. Questionnaires were published online at the website of Psychology-Bg.com.

Results and Discussion

Readiness to Use Telepsychology

As a first step, we were trying to find out whether potential clients are ready to use Internet as a media to receive psychological help and/or advice or prefer face-to-face contact with the expert. The results were more than promising – almost 77% of participants were ready to use virtual psychology support. The difference between 2006 and 2008 was not significant. It is important to underline that almost ¾ of these clients are with colleague or university education.

Clear age and gender differences were also revealed (Figure 1 a, b). Till late 20's both sexes need and look for psychological help, while after that age the interest of women gradually declines. The decline is very sharp in men in the 4th decade of life. Around the age of 50 men again start looking for psychological support, which probably is related to the middle age crises.

Comparing the samples of women 2006 vs 2008 a clear tendency for increasing the acceptance of telepsychology service was also revealed (FIGURE 1 c). More and more women, especially after the age of 40 years are ready to use virtual psychology help. All of them are working women, with secondary or mainly high education, engaged in the offices 5 days a week. Tele-support for them is a gift "from heaven".

Fig. 2. Preference of communication channels (%): 2006 in grey and 2008 - black

Preference of Communication Channel

Another important question was about the preferred communication channel with licensed psychologist (Figure 2). Despite of our expectations, within 2 years period, the preference of e-mails as a main communication source dropped with 20,2%. At the same time, both Skype program and video programs gained strength. The preference of Skype had increased with 8,6%, while the amount of video supporters – with 5%. An explanation of the revealed difference in the preferable communication channel is that Skype, as a user-friendly, free of charge or a very cheap program, became more popular. In addition, it combines possibilities to use written and/or voice messages and video plus the benefit of providing storage of written communication for further analyzes. That's why users feel reluctant to use it. This result also reveals that if professionals would like new communication technologies to be accepted as unavoidable part of psychology services, more attention has to be dedicated on the advertisement and making information and communication technologies user friendly and acceptable in citizens' everyday life. This may ensure the gradual acceptance of tele- services.

Anxiety, Locus of Control and Telepsychology

Anxiety level was evaluated in 153 subjects and they were distributed in 3 groups - with low, moderate and high level of anxiety.

Data reveal that anxiety influences the attitude towards virtual psychology (Figure 3). As anxiety increases, the acceptance towards virtual psychology support is also linearly increasing. There is a statistical significant difference in the attitudes of subjects with moderate and high level of anxiety ($\chi2=0.01065$, $p<0.05$).

Clients are also changing their preference towards the way to communicate with experts with the increase of anxiety level. Low anxiety users prefer Skype program, e-mails and video communications are less preferable. As the level of anxiety increases, the preference changes towards e-mail. Perhaps this is due to the fact that e-mails are still considered a reflection of
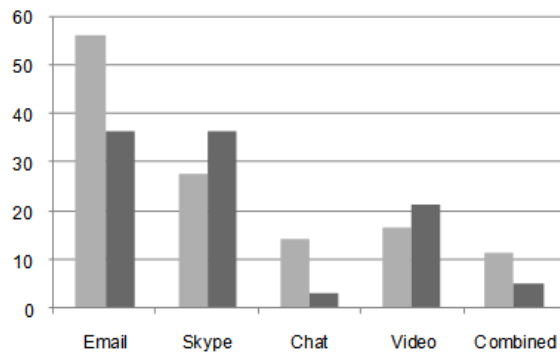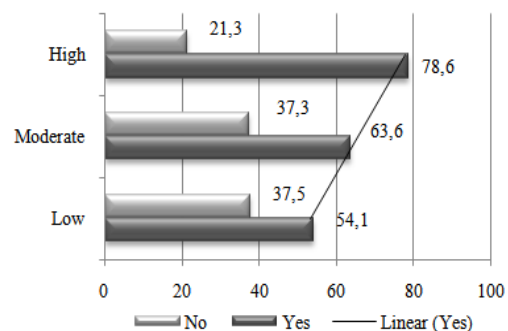

Fig. 3. Anxiety level and acceptance of virtual psychology (%)

ordinary paper letters and are accepted as more structured source of communication. The Skype loses its dominating position but remains as a second choice while chat and video are far behind. Let's not forget that Skype allows saving a back-up of the contact's content with psychologist for further analyses, training and revision. Statistically significant are the differences between low and high anxiety groups for the application of all communications: e-mail/ Skype ($\chi2= 0.02969$, $p<0.05$); chat and video ($\chi2=0.00415$, $p<0.05$); as well as between groups with low and moderate level of anxiety for the communications via chat and video ($\chi2=0.00025$, $p<0.05$).

As anxiety increases clients become more fixed on details. They start looking for additional information about the consulting psychologist such as sex, age, marital status, professional information. The difference low – high anxiety group is statistically significant ($\chi2=0.01065$, $p<0.05$).

Locus of control is another characteristic that influence clients' attitude toward telepsychology. Two groups – one consisting of individuals with extreme external locus of control (ELC, N=22) and another with extreme internal locus of control (ILC, N=36) were compared. Individuals with mixed locus of control were excluded from the analyses.

Data revealed a statistically significant difference based on locus of control:

- 50% of participants with ILC and 81,8% of those with ELC are ready to use e-psychology counseling ($\chi2=0.00194$, $p<0.05$).
- Although 38,88% of clients with ILC and 13,68% of those with ELC will not run "the risk" of searching virtual psychology consultations, the difference is not significant.
- There are also differences in the preferred communication channel for contact with licensed psychologist. E-mails are preferred as main communication source by clients with ILC (52.72%). Both Skype program and video programs also gained strength. But e-mails are leading the statistics. There are many possible explanations – the fact that e-mails resemble so much ordinary mails; that they give the opportunity to create a text talk; many people feel that they can express themselves better in written words, etc. Let's not forget that e-mails usually do not occur in real time. This is essential for clients as it gives time to think, evaluate and compose messages in a most appropriate way. Last but not least, e-mail exchange enables the record of interactions by saving the text messages
- Clients with ELC are keener to applying Skype and Chat programs as the latter give possibility to more direct and vivid, even online, interaction. Unfortunately, perhaps due to the relatively small groups, the only significant difference ($\chi2= 0.00078$, $p<0.001$) is with the Chat program.
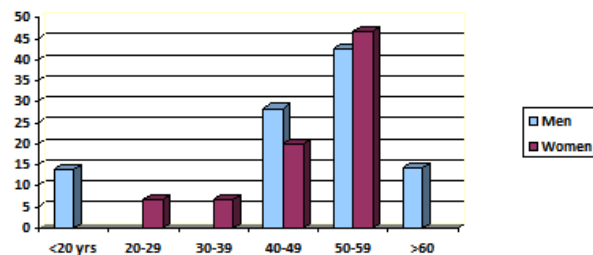
(a)
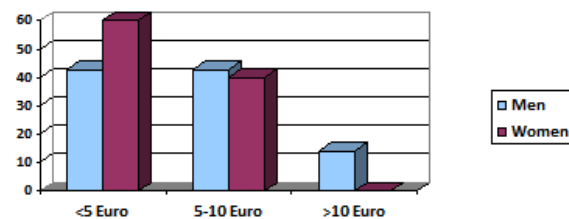
(b)
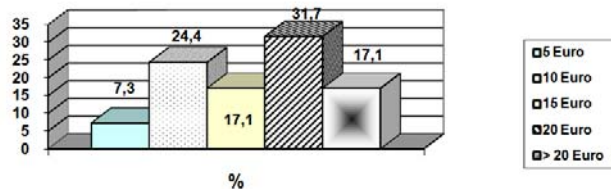
(c)

Fig. 4 (a) Percentage of clients ready to pay, (b) Amount of payment, (c) International study

Reimbursement

Are clients ready to pay for telepsychology help? Only 36,6% of clients are ready to pay for virtual consultations. Figure 4 presents the results. At first glance the payment may seam extremely

low but it is essential to underline that: First, there is no adequate reimbursement model for psychology consultations even via the insurance funds. Second, reimbursement of all kinds of eHealth applications, including telepsychology, is an issue to be solved in the years to come at local, national and European level. Last but not least, the attitude towards payment is not an exception. As part of another survey in 2007, 52 eHealth experts from different countries answered various questions, one of them - focusing on payment for telemedicine services. The results were similar – 80,5% agreed on payment not exceeding 20 Euro (Figure 4 c).

Personality characteristics as locus of control influenced reimbursement. 47,2% of ILC participants and 54,54% of ELC participants are ready to pay for virtual psychology support. The difference in both groups is $\chi2=0.04214$, $p<0.05$. It is not surprising that ELC clients are more reluctant to offer reimbursement for distant psychology consultations / help as their believes are that their own behavior doesn't matter much and that rewards in life are generally outside of their control. In this case – it is the licensed psychologist who will control and solve their problems.

Discussion and Conclusions

It is necessary to underline that telepsychology is a great opportunity for those who need psychological help no matter where the client is situated and at what time of the day or the night he/she needs to receive psychological support. Telepsychology musters up strength but lots of advertisement is needed in order to reach potential clients.

For those that are planning to introduce virtual psychology in their practice, we would like to propose some recommendations:

- Applying personality tests priory the begging of telepsychology consultations is necessary. It is not a waste of time. The tests are rather quick and the efforts are paid off;

- Based on our experience about 34% of all requests for virtual support are during the weekend. Most of them - ~ 20% - on Sunday;

- Regarding the time of the day - the greatest activity is between 7-8 pm (7.41% of the requests), followed by the period 0-2 am, 11-12 am and 4-5 pm. Each of the last 3 time intervals is responsible for 6.48% of consultations requests.

- A seasonal activity was also observed. Spring (March, April and May) and beginning of the autumn (August, September and October) are the months characterized with the highest numbers of consultation requests.

- No need to be afraid of the wide introduction of telepsychology. Studies revealed that it is as effective as as conventional treatment when some psychology disorders as depression, panic disorder and post-traumatic stress are concerned (Lange et al., 2001; Carlbring et al., 2003; Farvolden et al., 2003). As a result of virtual treatment more than 80% of the patients reduced their symptoms and improved their health. In addition, 68% of telepsychology clients said that they had never been in therapy before contacting a therapist via the Internet (Ainsworth 2005). In other words, most of the clients of telepsychology are people for whom traditional psychology is not accessible. The reason may be a stigma, life in remote areas, etc.

- It is not news that traditional psychology serves only a part of the population who need it. Around 60% of those people who start with telepsychology lately are searching for face-to-face psychological consultations.

This paper does not answer all possible questions. Further research is needed for revealing the personality issues concerning virtual psychology counseling.

Acknowledgements

References:

1. A i n s w o r t h, M. E-Therapy: History and Survey, 2004, www.metanoia.org/imhs/history.htm#today – Last visit August 22, 2010
2. C a m p o s, B., MAPSConvenor, APS Telephone and Internet-based Counselling and Psychology Interest Group, http://www.psychology.org.au/publication/inpsych/hitchhiker - Last visit March 7, 2010

3. C a r l b r i n g, P., L. E k s e l i u s and G. A n d e r s o n. Treatment of panic disorder: A randomized trial of CBT vs. applied relaxation. Journal of Behavior Therapy and Experimental Psychiatry, 34, pp. 129–140, 2003
4. C h r o n a k i, C. E. Consumer Attitude towards eHealth in Greece, In Jordanova M., Lievens F. (Eds.) Med-e-Tel: The International Educational and Networking Forum for eHealth, Telemedicine and Health ICT, Proceedings, Luxexpo, Luxembourg, ISSN 1819-186X, pp. 324-327, 2007
5. F a r v o l d e n, P., C. M c B r i d e, R. M. B a g b y and P. R a v i t z. A web-based screening instrument for depression and anxiety disorders in primary care. Journal of Medical Internet Research, 5(3), e23, 2003
6. H o e r m a n n, H-J., B. J o h a n n e s and V. S a l n i t s k i. The "Digital Friend": Aknowledge-based decision support system for space crews, Acta Astronautica, 63, pp. 848 – 854, 2008.
7. J o h a n n e s, B., V. S a l n i t s k i, H. S o l l., M. R a u c h and H-J. H o e r m a n n. De-individualized psychophysiological strain assessment during a flight simulation test—Validation of a space methodology, Acta Astronautica, 63, pp. 791–799, 2008.
8. K a n a s, N. A., V. P. S a l n i t s k i y, J. B. R i t s h e r, V. I., G u s h i n, D. S. W e i s s, S. A. S a y l o r, O. P. K o z e r e n k o and C. R. M a r m a r. Psychosocial interactions during ISS missions, Acta Astronautica, 60, pp. 329–335, 2007.
9. K a n a s, N., V. P. S a l n i t s k i y, E. M. G r u n d, V. G u s h i n, D. S. W e i s s, O. K o z e r e n k o, A. S l e d and C. R. M a r m a r. Lessons learned from Shuttle/Mir: psychosocial countermeasures, Aviat Space Environ Med, 73, pp. 607-11, 2002.
10. L a n g e, A., J. P. v a n d e V e n, B. S c h r i e k e n and P. M. G. E m m e l k a m p. Interapy. Treatment of posttraumatic stress though the Internet: A controlled trial. Journal of Behavior Therapy and Experimental Psychiatry, 32, pp. 73–90, 2001.