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National survey on the use of telepsychology in the work of psychologists in Serbia

Nacionalna anketa o korišćenju telepsihologije u radu psihologa u Srbiji

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Abstract

Background/Aim. In recent decades, telepsychology has gradually developed due to the increasing availability of digital technologies. However, its expansion was led by the pandemic and the introduction of social distancing rules. The aim of this study was to determine the level of computer and internet use by psychologists in Serbia in their everyday work. **Methods.** A hybrid research design was employed, combining survey methodology with content analysis. The survey consisted of 70 questions related to the use of digital technology in the practice of psychologists. The national survey included 340 graduate psychologists of both sexes and all age categories. The participants worked in various regions of Serbia and covered nearly all areas of psychological practice, including healthcare, education, industry, the military, and private practice. **Results.** The questions addressed to psychologists when a respondent is sent for tests assessment most often related to personality exploration, diagnostic/neuropsychological assessments, and psychotherapy-related evaluations. In the total sample, as many as 51% of psychologists in Serbia conducted online therapy, while a significantly smaller number of respondents (17%) performed test assessments *via* the Internet. In assessments, the most frequently used tests were domestically produced and have been in use for a long time, while a smaller number of psychologists used new psychological instruments. The survey revealed that younger psychologists and those from Belgrade valued telepsychology more positively compared to older psychologists and those living and working in other areas. The therapeutic orientation of the respondents was not a significant factor in assessing the success of telepsychology. **Conclusion.** The paper provides an overview of the current situation in the area of personality assessment and shows that the use of digital technology and telepsychology in Serbia is more developed than the professional regulations and education of psychologists regarding this modality. For the widespread application of telepsychology in the work of psychologists, it is necessary to introduce topics related to this specific modality into the curricula of university courses, both globally and in Serbia.

Key words:
digital technology; mental health teletherapy; personality tests; psychological tests; serbia.

Apstrakt

Uvod/Cilj. Poslednjih decenija, telepsihologija se postepeno razvijala zahvaljujući sve većoj dostupnosti digitalnih tehnologija. Međutim, njena ekspanzija bila je podstaknuta pandemijom i uvođenjem pravila socijalnog distanciranja. Cilj rada bio je da se utvrdi nivo korišćenja računara i interneta u svakodnevnom radu psihologa u Srbiji. **Metode.** Primenjen je hibridni istraživački dizajn, istraživanje anketnog tipa sa analizom sadržaja. Anketa je imala 70 pitanja koja su se odnosila na korišćenje digitalne tehnologije u praksi psihologa. Nacionalna anketa obuhvatila je 340 diplomiranih psihologa oba pola i svih starosnih kategorija. Učesnici su radili u različitim regionima Srbije, pokrivajući skoro sve delatnosti psihološke prakse, uključujući zdravstvo, prosvetu, industriju, vojsku, i privatnu praksu. **Rezultati.** Pitanja koja se upućuju psiholozima kada se ispitanik šalje na procenu testovima najčešće su se odnosila na eksploraciju ličnosti, dijagnostičke/neuropsihološke procene i procene vezane za psihoterapiju. U ukupnom uzorku, čak 51% psihologa u Srbiji radilo je *on-line* terapiju, dok je značajno manje anketiranih (17%) radilo procenu testovima putem interneta. U proceni su najčešće korišćeni testovi domaće proizvodnje, koji

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su već dugo u upotrebi, a manji broj psihologa koristio je nove psihološke instrumente. Anketa je pokazala da su mlađi psiholozi i psiholozi iz Beograda pozitivnije vrednovali telepsihologiju u poređenju sa starijim psiholozima i psiholozima koji su živeli i radili u drugim sredinama. Terapijska orijentacija anketiranih nije bila značajna za procenu uspešnosti telepsihologije. **Zaključak.** Rad daje pregled aktuelnog stanja u oblasti procene ličnosti i pokazuje da je korišćenje digitalne tehnologije i telepsihologije u Srbiji razvijenije od profesionalne regulative i edukacije psihologa o tom modalitetu. Za široku primenu telepsihologije u radu psihologa potrebno je da se u nastavni plan i program predmeta na fakultetima i u svetu i kod nas uvedu teme vezane za taj specifični modalitet.

Ključne reči:
tehnologija, digitalna; mentalno zdravlje, teleterapija; ličnost, testovi; psihološki testovi; srbija.

Introduction

The development of digital technology and the coronavirus disease 2019 (COVID-19) pandemic have contributed to the growing use of telepsychology in the work of psychologists. Telepsychology is broadly defined as the provision of psychological services through telecommunication technologies, such as telephone, mobile devices, interactive video conferences, e-mail, chatting, text messaging, and the Internet, as well as self-help websites, blogs, and social media platforms [1]. A specific area within telepsychology is teleassessment, i.e., working with a client through the administration of test materials, processing of test data, and report writing using digital technology.

The number of papers dedicated to telepsychology shows that psychotherapy has been the quickest to adopt this new medium of work [2]. As for personality test assessment, computer technology is utilized in various ways within this area of psychology: the use of digital test formats in direct contact with the client or online without direct client interaction, the use of software for the quantitative processing of test results and computerized textual interpretation, the development of software for writing psychological reports, experimental models of personality assessment (the term is broadly defined and encompasses the evaluation of all aspects of personality, including cognitive functions) through virtual reality, and, in behavioral psychology – psychobiological monitoring, where psychological reactions of respondents are recorded digitally throughout the day [3].

Today, it is both ethically and professionally accepted that the use of computers in psychology, including personality test assessment and computer-generated test results, is considered ethically and professionally correct, provided they are used exclusively by trained psychologists who must also be aware of the limitations associated with the use of computers [4].

Clients and psychologists report numerous benefits of telepsychology, which are described in the text that follows. Psychological services have become more accessible to clients living in rural areas or abroad. Telepractice also allows clients to communicate in their native language with a psychologist or examiner who shares their cultural background, an important aspect in modern psychology [5]. The cost of services can be lower because there is no need to rent office space, the participants are in their personal environments, and the sessions take place in virtual spaces. It is more comfortable for the client as there is no need to travel to the psychologist, no waiting in waiting rooms, and no need to take time off work. During the pandemic, both users of psychological services and professionals themselves feel safer in terms of health [6]. Clients find it easier to approach a psychologist because they perceive the situation as less intimidating and less obligatory. Clients have the impression that they have control over the communication, so they are less anxious [7]. Sometimes, the physical distance from the examiner makes respondents feel more relaxed, leading them to provide more honest answers to items involving intimate content during computer-based testing compared to interviews. Computer-assisted testing is faster, and test administration is standardized using publishers' platforms, which increases the validity of results. The use of computers also enables more precise measurement of respondents' reactions and allows the testing process to be adapted to individual respondents based on their answers [8].

The use of virtual reality in personality assessment holds particular significance [1], which allows performance-based tests with greater ecological validity to be used instead of self-reporting [9]. The application of virtual reality generates new ideas in the field of psychological science and inspires a large number of new studies. There are already attempts to examine various phenomena using virtual reality [10], most commonly cognitive functions such as memory [11, 12] and executive functions [13, 14], but also social interactions [15], anxiety, and social phobias [16].

Clients and psychologists frequently cite technical difficulties that disrupt communication as a weakness of telepsychology. Issues such as slow Internet speed and interruptions, poor video quality, echoing sound, and challenges in presenting test materials on a monitor can disrupt communication. If technical conditions are good, clients often prefer teleassessment; however, if the conditions are poor, they prefer face-to-face assessment [17].

The following observations are also noted as weaknesses of telepractice. Communication occurs differently, being less spontaneous and flexible compared to face-to-face interaction. Observing the client *via* monitor is limited; without personal contact and non-verbal cues, it becomes more challenging to make accurate judgments about the client and diagnostic assessments [18]. Testing the client's honesty and openness becomes more demanding, as does working to develop trust and alliance with the client. Clients who are dishonest or have ulterior motives, such as those involved in legal proceedings, may find it easier to manipulate the process in the absence of face-to-face contact. Telepsychology is not

suitable for certain categories of respondents: acutely psychotic individuals, clients with severe depression, those prone to acting-out behavior, and self-harming individuals [19]. The likelihood of mutual misunderstanding or the client misinterpreting the information provided by the psychologist (e.g., assessment results or recommendations) increases. There are still no specific training programs for providing psychological services online, and psychologists generally have less experience in virtual environments, which increases the likelihood of errors [3].

Globally, there is an increasing number of works focused on the topics of telepsychology, raising questions about the situation in Serbia, especially in the field of personality assessment. Personality test assessment is a fundamental activity for psychologists with a long-standing tradition. Both globally and in Serbia, it is mostly carried out face-to-face and using paper-and-pencil tests [20]. The introduction of the digital paradigm has gradually transformed test administration, blurring the line between traditional and computerized testing. Today, almost all psychologists use computers at some stage of the assessment process, which contributes to the validity and efficiency of testing.

The aim of the study was to include as many psychologists as possible working from various fields to collect, for the first time, data on the extent to which telepsychology and online test assessments are used by psychologists in Serbia. Additionally, the study analyzed the frequency of computer and specialized software use in their work, as well as psychologists' perceptions of the advantages and disadvantages of working with modern technologies.

Methods

Participants and procedure

A hybrid research design was employed, combining survey methodology with content analysis. The survey was conducted in 2023 and 2024 and included 70 questions related to the use of digital technology in psychological practice (e.g., psychotherapy, online teaching), along with 39 questions specifically focused on personality assessment. The study analyzed the use of computers in psychologists' daily work, particularly in personality assessment and writing psychological reports. The study was approved by the Ethics Committee of the Academy for Human Development, Belgrade, Serbia (approval No. 7/21). The study adheres to the ethical guidelines and requirements outlined in the Declaration of Helsinki.

The survey was completed by 340 psychologists living and working in Serbia. A convenience sampling method was used, as the survey was distributed electronically to over 1,000 psychologists *via* e-mail. Recipients included members of professional associations or psychotherapy organizations, professors at faculties of psychology, scientific workers at institutes, and psychologists advertising their services on social media or websites. The applied survey was designed for the purposes of this research. After a brief sociodemographic questionnaire, which included questions regarding age, years of work experience, education level, workplace, and place of residence, respondents answered specific questions related to the use of computers and the Internet in their professional context (e.g., whether they perform personality assessments online, use data processing programs, conduct psychotherapy online, etc.). Additionally, the survey included questions regarding the frequency of use of various psychological measurement instruments (answered on a Likert scale from 1 to 3, where 1 means "never" and 3 means "often"), the therapeutic modalities they apply in practice, and the types of psychological reports they most commonly write. Finally, the survey contained specific items regarding the experience and satisfaction using the Internet in the context of assessment and psychotherapy (answered on a Likert scale from 1 to 5, where 1 means "I am not satisfied at all" and 5 means "I am fully satisfied"). There was also an option for open-ended responses, which were subject to qualitative analysis in order to explore the advantages and challenges of online work in the context of assessment and psychotherapy.

Statistical analysis

Descriptive analyses were conducted on the survey responses. Additionally, scale measures obtained from the survey were standardized to facilitate comparison both between age groups and between psychologists working in smaller towns. Finally, in order to determine differences in satisfaction with telepsychology based on gender, place of residence, years of professional experience, and applied therapeutic modality, the Chi-square test was used. Data analysis was conducted using IBM SPSS version 26.0.

Results

Of the total respondents, the majority were female, reflecting the fact that women are more represented among psychology students and in the profession as a whole. In the sample, there was an equal number of respondents younger (50.6%) and older than 40 years (49.4%) (Table 1).

Table 1

Gender and age of psychologists in the total sample (n = 340)

Parameters	Values
Gender	
men	40 (11.8)
woman	300 (88.2)
Age (years)	
less than 30	42 (12.4)
31–40	130 (38.2)
41–50	67 (19.7)
over 50	101 (29.7)

Values are given as numbers (percentages).

Half of the surveyed psychologists (50.0%) were from Belgrade, 12.9% were from Novi Sad, and 5.5% were from Niš. While most psychologists resided and worked in Serbia's largest cities, the sample's diversity was enhanced by the fact that 22.4% of the surveyed psychologists lived in 52 smaller towns across Serbia.

In terms of work experience, 50.3% of respondents had between 11 and 30 years of professional experience. Among the respondents, 37.9% had less than 10 years of work experience, and 11.8% had more than 31 years of experience.

In terms of education, the sample characteristics are as follows: 48% of respondents completed basic studies (four-year), 44% held a master's degree, and 8% held a doctoral degree. Additionally, 20.1% of respondents completed specialization programs, most commonly in medical psychology (18.3%), which prepare them for clinical assessment.

The survey included psychologists working in various fields, as shown in Table 2. One-fifth of the respondents (20.3%) have experience working in different contexts concurrently. Among the survey participants, 14.4% work exclusively in private practice.

Of the 340 psychologists surveyed, 332 (97.7%), as expected, reported regularly or occasionally using computers in their work. Table 3 shows the primary reasons psychologists used computers and the Internet.

Most of the surveyed psychologists worked with clients: adults (82%), adolescents (59.6%), and children (33.3%). Only 2.4% of respondents did not work with clients; instead, they worked solely as professors, researchers, or in fields such as marketing or ministries.

Table 2

Fields of work among psychologists (n = 340)

Parameters	Values
Private practice	120 (35.3)
psychologists working only in private practice	49 (14.4)
psychologists working in multiple fields	69 (20.3)
other (they did not answer)	2 (0.6)
Schools and boarding schools	58 (17.0)
Centers for social work and other social protection institutions (center for family placement and adoption, palliative care, day care for children with developmental disabilities)	55 (16.2)
Health facilities (without psychiatry)	54 (15.9)
Faculties and scientific research organizations	42 (12.4)
Psychiatric institutions	38 (11.2)
National Employment Service	20 (5.9)
Work organizations/human resources	14 (4.1)
Non-governmental organizations/civil sector	11 (3.2)
Army	7 (2.1)
Marketing agencies	6 (1.8)
Prison and prison hospital	5 (1.5)

Values are given as numbers (percentages).
***Note*: Psychologists could indicate that they work in more areas.**

Table 3

Reasons for using computers or the Internet for work ([1]n = 339)

Parameters	Values
Searching for references and information relevant to the job	273 (80.3)
Written part of work: writing reports and scientific papers, making presentations, work plans, and reports	257 (75.6)
Online education and training	210 (61.8)
Online psychotherapy and counseling	148 (43.5)
Using a personal computer (and software developed by home psychologists) to calculate test scores	142 (41.8)
Conducting research (sending surveys, processing data, etc.)	147 (43.2)
Entering patient/client data into the electronic record	59 (17.4)
An electronic form of the test that is completed by the examinee during face-to-face testing	57 (16.8)
Using the service of a domestic test publisher for data processing (without textual interpretation)	48 (14.1)
Test assessment of clients *via* the Internet (interview and test assignment)	46 (13.5)
Using software programs (foreign test publishers) that have textual interpretations of test results	44 (12.9)
Teaching at the university	31 (9.1)
Other: taking notes during the session, communicating with colleagues and clients online or through emails, marketing campaigns, writing for social networks	29 (8.5)

Values are given as numbers (percentages).
***Note*: [1] One respondent did not answer the questions. Respondents could answer multiple questions.**

In the total sample of 340 psychologists, 173 (50.9%) regularly conducted test assessments, 99 (29.1%) conducted them occasionally, and 68 (20.0%) did not use psychological instruments for personality assessment. Out of 272 psychologists who performed assessments, 57 (21.0%) reported that they often or occasionally assessed clients based solely on interviews, without using tests.

In further analyses, only a portion of the sample was used, specifically the surveyed psychologists involved in a personality assessment. Reasons for referral for an appropriate psychological assessment are presented in Table 4.

Table 5 shows the psychological instruments most often used by psychologists in the tested sample. Respondents were allowed to select multiple tests they use in their practice. Instruments reported by fewer than five respondents are not included in the table, nor is the Wechsler Adult Intelligence Scale (WAIS)-IV test, which had only recently begun to be implemented in Serbia at the time of the survey.

According to assessment guidelines, all instruments used should be documented in the report. The majority of respondents (63.2%) consistently followed this rule; however, a substantial proportion of Serbian psychologists reported doing so only occasionally (24.5%) or never (12.3%). Most respondents (42.2%) never included test scores in their reports, while 36.8% reported doing so occasionally, and only 2.9% of those surveyed included them constantly.

An analysis of the subset of respondents involved in test assessment (n = 272) revealed that only 46 (16.9%) respondents regularly or frequently used the personality assessment online. In the total sample, 51% of those

Table 4

Reasons for referral for a psychological assessment ([1]n = 272)

Parameters	Values
Personality exploration	189 (69.5)
Intelligence assessment	160 (58.8)
Assessments related to psychotherapy	136 (50.0)
Diagnosis assessment	114 (41.9)
Professional orientation and training for the unemployed	93 (34.2)
Personnel selection	82 (30.2)
Assessments and training of already employed personnel	72 (26.5)
Assessment for various types of social assistance	68 (25.0)
Assessment of the child's problems in the school system	60 (22.1)
Monitoring treatment progress	59 (21.7)
Neuropsychological assessment	58 (21.3)
Assessment of work ability	58 (21.3)
Forensic assessments	33 (12.1)
Assessment of maturity for starting school	32 (11.8)
Resolving a hold-up in any treatment	32 (11.8)
Assessment of the ability to drive	21 (7.7)
Assessment of the ability to carry weapons	20 (7.4)

Values are given as numbers (percentages).
***Note*: [1] Respondents could mark multiple answers. Not all respondents answered all questions.**

Table 5

Psychological instruments used in psychological assessment ([1]n = 272)

Parameters	Values
Drawing (human figures, families, trees, houses)	228 (83.8)
Wechsler Individual Intelligence Test, Serbian version	175 (64.3)
Modified Minnesota Multiphasic Personality Inventory (MMPI 201 or MMPI 202)	161 (59.2)
Test of Incomplete Sentences or Basic Supports of Personality	156 (57.3)
Revised NEO Personality Inventory [(NEO PI-R/NEO Five Factor Inventory (NEO-FFI)]	145 (53.3)
Child assessment instruments	137 (50.4)
Personality Assessment Inventory (PAI)	119 (43.7)
The Big Five Plus Two Personality Inventory (BF + 2)	114 (41.9)
Neuropsychological tests	110 (40.4)
Rorschach method	82 (30.1)
Sixteen Personality Factor Questionnaire (16 PF)	73 (26.8)
Millon® Clinical Multiaxial Inventory (MCMI-any form)	69 (25.3)
Thematic Apperception Test (TAT)	49 (18.0)
Cybernetic battery of conative tests (KON-6); battery of intelligence tests (KOG-3)	16 (5.9)
Temperament And Character Inventory-Revised (TCI-R)	14 (5.1)
Emotions Profile Index (EPI)	14 (5.1)
Test of Professional Interests (TPI)	12 (4.4)

Values are given as numbers (percentages).
***Note*: [1] Not all respondents answered all questions.**

surveyed reported providing online therapy either consistently or occasionally.

As shown in Table 6, psychologists utilized computers in multiple ways for processing and interpreting test results.

Half of the respondents (55.6%) regularly gave oral feedback to clients about the assessment results, 25.9% frequently did so, and 18.5% of the surveyed psychologists rarely or never provided such feedback. The report was primarily written for the commissioning party, with only 0.2% of respondents indicating that they wrote it directly for the client.

To examine whether satisfaction with telepsychology differed by gender, age, place of residence, years of professional experience, and therapeutic modality used, a Chi-squared test was conducted. A total of 226 respondents answered this question. For easier interpretation, the variable "satisfaction with telepsychology" was summarized into three categories: respondents who rated it as 1 or 2 were grouped as "dissatisfied with telepsychology," those who gave a rating of 3 were grouped as "neither satisfied nor dissatisfied," while those who rated it as 4 or 5 were grouped as "satisfied with telepsychology."

The Chi-squared test showed that psychologists differed in the level of satisfaction with telepsychology concerning age [$\chi^2(6) = 44.17$, $p = 0.00$], place of residence [χ^2 (2) = 31.21, $p = 0.00$], and years of professional experience [χ^2 (6) = 36.93, $p = 0.00$], while there were no differences in the levels of satisfaction concerning gender [χ^2 (2) = 0.23, $p = 0.89$] or therapeutic modality which was used, where cognitive-behavioral therapists were compared to therapists of other modalities [χ^2 (2) = 2.44, $p = 0.30$].

Table 7 presents the number and percentage representation of dissatisfied, indecisive, and satisfied psychologists regarding their age group. Standardized residuals are also presented, allowing us to determine the "source" of statistically significant differences. It can be observed that younger respondents were significantly more satisfied with telepsychology compared to older ones, while almost half of psychologists over the age of 50 were either partially or entirely dissatisfied with telepsychology.

When considering the respondents' place of residence, it can be seen that psychologists from Belgrade were significantly more satisfied with telepsychology compared to psychologists from other places (Table 8).

Table 6

Using a computer in processing the results of psychological assessment ([1]n = 272)

Parameters	Values
The domestic publisher's platforms are used for test application and score processing, based on the Serbian standardization	37 (13.6)
The services (for grading and graphical presentation of results) of the domestic test publisher, based on the Serbian standardization, are used	122 (44.9)
Software programs from foreign publishers that have textual interpretations are used (they are not based on the results of domestic standardizations)	44 (16.2)
Electronic versions of assignments and scores created by local psychologists, which have not been research-verified, are used	37 (13.6)
Data processing programs are used on personal computers, created by local psychologists, and have not been verified by research	142 (52.2)
The results are scored and interpreted without the use of a computer	83 (30.5)

Values are given as numbers (percentages).
***Note*: Not all respondents answered all questions. [1]Respondents could mark multiple answers.**

Table 7

Satisfaction with telepsychology by age ([1]n = 226)

Satisfaction levels	Under 30 years		31–40 years		41–50 years		Over 50 years	
	n (%)	adj. res	n (%)	adj. res	n (%)	adj. res	n (%)	adj. res
Dissatisfied	4 (15)	-0.5	3 (4)	-3.7	6 (10)	-2.1	29 (43)	6.1
Indecisive	3 (11)	-1.5	15 (21)	-0.2	18 (30)	1.6	14 (21)	-0.4
Satisfied	20 (74)	1.7	52 (74)	3.1	37 (61)	0.3	25 (37)	-4.5

n – number; % – percentage; ajd. res. – adjusted standardised results.
***Note*: [1] 226 respondents answered the question about the possible difference in the level of satisfaction with telepsychology considering gender, age, place of residence, years of professional experience, and therapeutic modality used.**

Table 8

Assessment of satisfaction with telepsychology by workplace ([1]n = 226)

Satisfaction levels	Belgrade		Other places	
	n (%)	adj. res.	n (%)	adj. res.
Dissatisfied	9 (7.4)	-4.6	33 (31.4)	4.6
Indecisive	21 (17.4)	-1.9	29 (27.6)	1.9
Satisfied	91 (75.2)	5.2	43 (41.0)	-5.2

For abbreviations, see Table 7.
***Note*: [1] Explanation of the number of respondents is given in the legend of Table 7.**

Table 9

Assessment of satisfaction with telepsychology by work experience ([1]n = 226)

Satisfaction levels	Up to 10 years		11–20 years		21–30 years		Over 30 years	
	n (%)	adj. res.	n (%)	adj. res.	n (%)	adj. res.	n (%)	adj. res.
Dissatisfied	7 (8.4)	-3.0	6 (8.5)	-2.7	15 (34.9)	3.1	14 (48.3)	4.4
Indecisive	17 (20.5)	-0.5	18 (25.4)	0.8	10 (23.3)	0.2	5 (17.2)	-0.7
Satisfied	59 (71.1)	2.7	47 (66.2)	1.4	18 (41.9)	-2.6	10 (34.5)	-2.9

For abbreviations, see Table 7.

***Note*: [1] Explanation on the number of respondents is given in the legend of Table 7.**

Finally, Table 9 shows that as the years of work experience increased, satisfaction with telepsychology decreased.

Discussion

The use of computers is an integral part of psychologists' daily professional activities, ranging from writing scientific papers and reports to education, business communication, and digital presentation of test materials. In this regard, Serbian psychologists do not differ from their colleagues around the world [21]. Based on the survey results, it can be concluded that psychologists in Serbia, much like their counterparts worldwide, have accepted the innovations brought by telepsychology, with this adoption process accelerating during the pandemic. It can also be concluded that telepsychotherapy is far more prevalent among psychologists in Serbia than personality test assessment conducted *via* the Internet. As for online work with clients, it seems that psychotherapists in Serbia have quickly embraced online or hybrid forms of psychotherapy, primarily because they are cost-effective and allow for culturally adapted work with distant clients [2].

Although the number of surveyed psychologists using online personality assessments is not large, those who do report several perceived benefits. These include increased access to clients living in remote areas, shorter sessions, faster data processing, time savings, and the ability to test a larger number of clients. Additionally, telepractice reduces travel time for clients and reduces service costs because there are no expenses for business premises. However, Serbian psychologists also report numerous drawbacks of teleassessment. These include the following: greater difficulty in making accurate diagnostic judgments; the psychologist is more worried about making an oversight because there is less information about the client; concerns are raised about accurately verifying the client's identity; it is more difficult to establish trust; there is a possibility for the client to record the test material and abuse it; the client can interrupt sessions at their convenience; services are more difficult to charge. There are no cultural specificities in the responses of Serbian psychologists. A qualitative analysis of the responses revealed patterns and concerns similar to those identified by the authors referenced in the introductory section of this paper.

The results show that half of the surveyed psychologists use platforms and services from local publishers, and this number is not higher due to economic reasons. The habit of scoring test data manually, without the use of computers or programs created by psychologists, is also a reason why official platforms are not used. In each of these cases, the software in use has not been validated through research. Modern psychological instruments are sophisticated, and it is not economical to process results by counting scores with the help of templates and plotting graphs, especially when working with large groups of respondents. Another reason is that these services often offer textual interpretations that are not based on domestic standardization, which makes the interpretations questionable. Given that these services are charged, the number of users can be considered large, and the credit goes mostly to state institutions that are ready to pay for these services for their employed psychologists. In the area of personality assessment, changes are being introduced significantly slower in Serbia because they require more material resources, such as investment in new forms of tests, technologically improved computers that make it easier to monitor test performance online, investment in platforms, software, or services from publishers that provide scoring or textual interpretation of test results.

The number of studies comparing the adequacy of norms for online and classic test applications remains limited [22], and such research has not yet been published in our region, primarily due to the limited use of online testing. Another reason for the slow changes in this area is the restraint of psychologists. Personality assessment should provide clear and measurable results, which are presented in a written report in an explicit manner, so they may be subjected to later criticism or reevaluation. This leads to the fact that psychologists are more cautious in their work and are aware that they have a smaller range of information in online assessments than in face-to-face testing.

As in the case of the previous survey [23], we can see that psychologists in Serbia are still using older forms of instruments, many of which have not been (re)standardized, and they are not sufficiently educated on new-generation instruments. The main reason for such a situation is that the application of new instruments requires material investments in purchasing tests, education, and the provision of economic data processing. Secondly, for many psychologists, habits and previously acquired practical experience are more important than the question of whether the instrument has been proven valid and standardized in research. When they start their practice, Serbian psychologists usually continue to use the instruments for which they were trained during their studies. Therefore, it is essential to introduce new-generation

instruments into university curricula as soon as possible so that innovations can be implemented more quickly into practical work. Ethical, legal, and practical issues necessitate the introduction of more clear-cut recommendations and regulations [24], and Serbian professional associations should regulate various aspects of telepractice.

The survey provided data showing that some psychologists conduct assessments without using tests, fail to specify the applied instruments in their reports, or create their own electronic versions for assigning instruments or processing data, which have not been research-verified. Another unfavorable indicator is the frequent use of the interview as the sole assessment technique. The survey also indicated that a number of psychologists do not provide feedback to clients regarding assessment results, and reports written solely for the client are extremely rare, even though referral questions in our local community are similar to referral patterns observed globally [25]. Serbian psychologists are not sufficiently informed about the principles of collaborative-therapeutic assessment, which are now considered a standard in the field. The psychologist's professional obligation is to provide the client with information about the results of the test assessment, the only exception being judicial assessments. The modern point of view is that the analysis of the results should be balanced (stating the client's strengths, not only problems and weaknesses), and the assessment should be collaborative and therapeutic – integrated with brief psychotherapy and allowing the client to think about the results and use them in further therapeutic treatment. All these are work principles that deserve attention, and during their studies, students should be educated about the rules and modern trends in the work of psychologists. These survey results suggest that it would be beneficial to introduce theoretical and practical training during studies on how to give both oral and written information about the assessment results. It is part of the therapeutic-collaborative assessment, which is today considered a rule in the area of personality assessment [3].

Clients are referred to psychologists with referral questions that are identical to those found everywhere else in the world [20]. Their review highlights the growing involvement of psychologists across numerous fields and the increasing diversity of questions they are expected to address. In recent decades, there has been an increasing offer of psychological services and society's awareness of the contributions psychologists can make, which will likely continue to strengthen the role of psychologists in many decisions and therapeutic activities important for clients. The pandemic period, as well as major social traumas (bombing, wars, mass murders), have undoubtedly contributed to the increasing involvement of psychologists in the community and outside of traditional institutions.

The survey showed that older and more experienced psychologists are less satisfied with telepsychology, which can be interpreted as a result of their professional habits, i.e., that they have already developed their own way of working with clients and are reluctant to introduce novelties and modify their tried and successful methods. Since they have more work experience, they may perceive more delicately the differences between online work and personal contact with clients. On the other hand, younger psychologists grew up with digital technologies and consider such forms of communication more natural than older generations. Their better command of technique may also be the reason for such survey data. This finding is possibly culturally specific, as other authors [19] have found that older respondents were more satisfied with telepsychology. The authors believe that greater experience and training help older psychologists cope better with problems in telepsychology. In contrast, our more experienced psychologists, despite their greater experience, still value face-to-face work with clients more.

The results also showed that psychologists from Belgrade value telepsychology more than psychologists from other places. Similar reports have been obtained in other studies, possibly because the functionality of internet services is better and more accessible compared to the technical possibilities in smaller towns. Additionally, there are more institutions and workplaces in the cities that allow psychologists to use specialized computer programs for administering test materials, test publisher platforms, and results processing services; therefore, the experiences of psychologists are more positive.

The survey results indicate that the practice of telepsychology in Serbia is ahead of theory and legal regulations. Psychologists already apply telepractice, so our psychological community should formulate ethical and professional working principles in this specific area. The assumption is that a psychologist must be an expert in the field of personality assessment in order to apply that knowledge in teleassessment, which, by its nature, reduces the amount of available information and limits perception and communication with the respondent. Telepsychology requires an experienced psychologist and is particularly challenging due to the limited information about the client's identity and pathology. Furthermore, it is not a simple transposition of assessment into a new medium, but it has specific features that require the psychologist's competencies to be expanded. Therefore, it would be beneficial for university curricula to include new-generation instruments that are also applied in the world, as well as theoretical topics and practical skills related to the use of computers and the Internet in the work of psychologists [26]. Serbian psychologists should be informed during their studies about how the introduction of a digital paradigm into psychology leads to fundamental changes in psychology science, and the innovative use of virtual reality in experimental psychology, personality assessment, and psychotherapy is particularly important.

Limitations of the study

Psychologists in Serbia do not have a chamber, and thus no unified database on the number of psychologists in the country and their territorial distribution, so we can only assume that our sample represented the current situation quite well. Serbian Psychological Society, as the only professional association, gathers slightly more than 600

psychologists, while the actual number of psychologists in Serbia is probably two or three times higher. The survey was sent online to over 1,000 addresses, but only a third of the responses were received. Such a comprehensive survey has not been conducted in our community so far, and we believe that every ten years, a survey should be conducted to monitor the development of psychology in Serbia.

Conclusion

Overall, the findings suggest that the introduction of the digital paradigm into psychological science has sparked the development of new ideas in the field. Psychologists in Serbia have begun to implement telepsychology in practice; however, there remains a need for greater educational, theoretical, and research support to enhance its effective use. The obtained reports provide an overview of the current state of psychological practice in Serbia and indicate that the implementation of telepsychology is ahead of research, ethical, and professional regulations. The widespread application of telepsychology in our country requires the inclusion of topics related to this specific modality of psychological work in university curricula.

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