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REMOTE TESTS ADMINISTRATION: RISKS AND RECOMMENDATIONS

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La necesidad de continuar ofreciendo servicios profesionales de evaluación en situaciones de pandemia ha favorecido la aplicación remota de test diseñados para un uso presencial. Esta práctica de tele-evaluación modifica las condiciones en las que el test fue construido, estandarizado y validado, y por consiguiente conviene que vaya acompañada de un análisis de sus potenciales riesgos. En este trabajo se describen las amenazas asociadas con el uso remoto de test, y se apuntan algunas recomendaciones para mitigarlas. Cuando un profesional opte por la aplicación remota de test que han sido construidos para ser utilizados en modo presencial, conviene que sea consciente de los riesgos y beneficios asociados a esta práctica, y una vez evaluados estos, actúe en consecuencia.
Palabras clave: *Telepsicología, Uso test, Directrices, Tele-evaluación.*

The need to continue to offer professional assessment services in pandemic situations has given rise to the remote use of tests designed for face-to-face administration. This practice of tele-assessment modifies the original conditions in which the test was constructed, standardized, and validated, and therefore should be accompanied by an analysis of the potential risks. This paper describes the threats associated with remote test use, and suggests a number of recommendations to mitigate them. When the remote administration of tests that have been constructed to be used in person is considered, the professional should be aware of the risks and benefits associated with this practice, and once these have been evaluated, he or she should act accordingly.
Key words: *Telepsychology, Test use, Guidelines, Tele-assessment.*

The first guides published in *Papeles del Psicólogo* about digital resources showed lists of web addresses, highlighted the need for a computer to connect to the Internet (Cubo, 1996; Prieto & Correas, 1998), and foresaw the development of an area of psychological action for which deontological codes began to be created (Jarne, 2001).

Telematic psychology or telepsychology is now a recognized practice that has spread, during the COVID-19 pandemic, to professionals who a few months ago did not consider it an option. The need to offer psychological evaluation services in a scenario where there are limitations of face-to-face consultations urges the professional to adopt new practices or adapt the usual ones. Think for example of the restrictions on access to hospitals, social health or prison centers, cancellations of appointments, and risks of contagion. Telepsychology is defined as the provision of psychological services using information and telecommunication technologies (ICT), which include, among others, the use of telephones, mobile devices, videoconferencing, e-mail, chats, and text messages, and covers a wide spectrum of actions, both synchronous (interactive videoconferencing, telephone, chat, etc.) and asynchronous (e-mail, forums, etc.), in which information can be transmitted in written or oral form and include images, sounds, or other types of data (American Psychological Association, APA, 2013). Several professional organizations have developed and disseminated best practice guidelines for telepsychology (American Academy of Child and Adolescent Psychiatry, 2008; American Psychological Association, 2013; American Telemedicine Association, 2013; Canadian Psychological Association;2006; Inter Organizational Practice Committee, 2020; New Zealand Psychologists Board, 2011; Ohio Psychological Association Communications and Technology Committee, 2010). In Spanish, in 2017 the General Council of the Spanish Psychological Association published an extensive document that includes an adaptation of the APA guidelines, as well as a detailed analysis of the state of the art. The Madrid Psychological Association has published a booklet describing the basic competencies for the remote provision of services (Colegio Oficial de Psicólogos de Madrid [Madrid Psychological Association], 2017), and a guide aimed at telepsychological intervention (De la Torre & Pardo, 2018), which focuses primarily on video conferencing and includes aspects of psychological assessment and treatment in clinical settings.

The codes referring to telepsychology cover aspects related to the legislation applicable to the professional practice, the ethical and deontological principles that govern it, and the safeguarding of the laws on security and data protection. They present the risks and difficulties associated with a practice that generates specific questions with respect to its in-person

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correlation, and that in one way or another, include the following points:

1. Professional competence in relation to both the use of technology and the professional field.
2. The standards of care in the provision of telepsychology services should never be lower than those applicable in face-to-face practice.
3. Informed consent, with explicit reference to particular issues related to the telepsychology services to be provided.
4. The profile of the recipient of telepsychology: Aspects such as neurodegenerative diseases, cognitive development, emotional stability, etc. may be obstacles or even impediments that limit the provision of telepsychology services.
5. The confidentiality of data and information, which requires specific measures to protect its integrity.
6. The security and transmission of data and information that in ICT environments must be protected against threats such as viruses or hackers, to name the two main ones.
7. The use of testing and tele-assessment that is associated with specific risks.

TELE-ASSESSMENT AND REMOTE TEST ADMINISTRATION

Within the field of telepsychology there are few guides that have specifically developed the subject of tele-assessment. The document prepared by the British Psychological Association (2020) and the article by Wright, Mihura, Pade, and McCord (2020) edited by the American Psychological Association, complete the work published in 2014 by Luxton, Pritu, and Osenbach. With reference to specific areas of action, recommendations have been published for educational (Farmer et., al. 2020) and forensic (Drogin, 2020) tele-assessment. In the general guidelines on telepsychology published by the APA (2013), the seventh point is dedicated to the use of testing and tele-assessment; in this guideline psychologists are recommended to judge the specific problems referring to the use of tests and evaluative approaches designed to be implemented in person when offering telepsychology services.

An analysis of these problems allows us to classify them according to the focus on which the threats are centered; we could talk about threats related to the use of ICT, to the environment and personal/environmental characteristics, to the psychometric properties of the test, and finally to the evaluation process:

Technology:

Availability and access to resources. Access to any telepsychology service requires that both the professional and the client/patient have the technological means (equipment and connectivity) to provide a stable connection.

Security. The use of ICT is associated with risks to the security of data and transmissions that may be intentional (virus attacks, malware, hackers etc.) or unintentional (use of obsolete devices or software, network failures, human errors, etc.).

Personal/situational characteristics:

Familiarity and competence in the use of technology. The use of ICT requires a certain competence that guarantees the viability of the practice of telepsychology. If the psychologist or the person receiving the service has not developed the minimum competences the assessment process will be affected. This circumstance is especially applicable to children or the elderly, people with cognitive impairment or sensory-motor disabilities, etc.

Environment: In face-to-face administration situations the evaluation environment is subject to extreme control that in tele-assessment contexts is dispersed. It is necessary to assess the risks related to the presence of distracting elements or external aids that could contaminate the evaluation process. Think, for example, of a reasoning test in which the client can look for solutions to the items on the Internet.

Test:

Change in administration conditions. The change in the conditions of administration could cause alterations in the psychometric properties of the test to be used (reliability, validity, and norms).

Copyright. The copyright of the test limits its use to specific conditions and situations that are usually described in the test manual.

Process:

Confidentiality. The entire evaluation process is confidential, and the information generated must be saved in accordance with the data protection law (Organic Law 3/2018).

GENERAL RECOMMENDATIONS

The control of these threats to the scientific and ethical validity of the evaluation process (Fernandez-Ballesteros et al., 2003) could be summarized in a single guideline that focuses on professional performance and awareness of the situation of tele-assessment. In this sense, the professional is asked to be aware of the problems that may arise from the use of tests designed for administration in person under conditions of remote administration, and to act accordingly, respecting the laws, the deontological codes, and the professional guidelines.

Based on this and in relation to the risks mentioned, the following recommendations can be specified:

1. Previous considerations

a. Assess the need to administer the test remotely with reference to the particular circumstances of the case. Analyze the impact of cancellation or postponement. If it is considered necessary to apply the test remotely, consider the following points:

2. Technology

a. Ensure that the person being assessed and the professional providing the service have stable access to the necessary resources during the assessment (software, hardware, and Internet).

b. Make sure you have the means to guarantee the security of the data (personal, test items) against possible external attacks (viruses, hackers, screen captures, etc.) or unintentional accidents (network failures, connection loss, hardware or software failures).
c. Make sure alternatives are available in case of a possible loss of connection or network failure.
3. Personal/Situational Characteristics
a. Ensure that the physical and psychological conditions of the person receiving the service are compatible with remote test administration.
b. Ensure that the person receiving the service understands and accepts the conditions under which the service will be provided (informed consent).
c. Ensure, if necessary, that the required personal support is available for the correct carrying out of the tests (linguistic competence, disability, cognitive impairment, etc.).
d. Ensure that the environment in which the tests are carried out is suitable for optimal execution (discretion, privacy, distracting elements, etc.).
4. Test selection
a. Always respect the intellectual property rights of the test. The responsibilities of the test user are different depending on whether the test is copyrighted or not. In the first case the test use is subject to the restrictions imposed by the copyright holder. Copyrighted works must not be reproduced, distributed, or publicly displayed; nor may derivative works be made without the permission of the copyright holder (International Test Commission, 2014).
b. Prioritize the use of tests and questionnaires adapted and validated to tele-assessment conditions. In any case, always ask if the test editor has recommendations or test adaptations.
c. If it is strictly necessary to use questionnaires designed for face-to-face administration, ensure their quality and justify the decision (Hernandez, Ponsoda, Muñiz, Prieto, & Elosua, 2016).
5. Test administration
a. Consider the possible impact of the change in the conditions of administration of the test on its psychometric properties.
b. Ensure that the confidentiality of the data is maintained (Data Protection Act).
6. Final Report
a. When reading and interpreting scores, be aware of any alterations made to the conditions described in the test manual.
b. Document the change in administration conditions.

DISCUSSION

The construction and administration of psychological tests has evolved with the incorporation, among other things, of new psychometric models and advances in information and communication technologies. The conjunction of these two fields has enabled the development of digital platforms for online test administration, the design and construction of new item formats, the implementation of adaptive tests, or the generation of automated reports that, both together and partially, have a direct impact on the improvement of psychological and educational assessment (Association of Test Publishers & Institute for Credentialing Excellence, 2017; Parshall, Harmes, Davey, & Pashley, 2010; Sanz, Luzardo, García, & Abad, 2020; Seelow, 2019; Wan & Henly, 2012). Although there are marked differences between the areas of professional psychology with respect to the needs and uses of the tests, and the characteristics of one of these areas cannot be generalized to the rest, their online administration is emerging as the prevailing mode in the area of organizational psychology (Bartram, 2016). Given this finding, the latest study on use and attitudes to tests in Spain (Muniz, Hernandez, & Fernandez-Hermida, 2020) concludes by recommending the containment and caution of professionals when incorporating new technologies in test practice, such as online assessment via the Internet or the automation of reports (average of 2.89 on a scale with a range of 1-5). This skepticism is greater among professionals in clinical practice.

In a market dominated by face-to-face testing, the pandemic situation has led to the emergence of the practice of remote test administration. In situations where face-to-face evaluation is not possible, and the psychologist has to respond to a demand that requires the remote administration of a test, it is necessary to consider and evaluate the risks and benefits of this practice in order to guarantee the validity of the assessment process. In this work we have described some of the risks that can affect this practice and we have offered tools that could allow us to deal with these risks and thus reduce their impact. All of them rest on a single premise: the awareness of the professional about the situation. The recommendations described complement and are supported by guidelines already published on the use of tests; see, for example, the work of Muñiz and Bartram (2007), the websites of the International Test Commission (www.intestcom.org), the European Federation of Psychologists' Associations (www.efpa.eu), the section dedicated to the Test Commission of the General Council of the Spanish Psychological Association (www.cop.es), or ISO 10667 Standard (AENOR, www.aenor.es), which offers a synthesis of good evaluation practices adapted to the organizational environment.

Psychology professionals are aware of the importance of test data to provide empirical evidence to help them make decisions (Muniz, Hernandez, & Fernandez-Hermida, 2020). For these data to fulfill their function it is important that the test scores demonstrate adequate psychometric properties, that the professionals have rigorous training in psychometrics and psychological assessment, and that they are competent in the use of ICT. Only by being aware of our practice will we be able to offer a scientifically valid and ethical service; the studies provided indicate that we are working in this direction.

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